



GOVERNMENT OF ANDHRA PRADESH

PLANNING DEPARTMENT



SOCIO ECONOMIC SURVEY 2018-19

మా తెలుగు తల్లికి మల్లెపూదండ
మా కన్నతల్లికి మంగళారతులు,
కడుపులో బంగారు కనుచూపులో కరుణ,
చిరునవ్వులో సిరులు దొరలించు మాతల్లి.

గలగలా గోదారి కదలిపోతుంటేను
బిరాబిరా క్రిష్ణమ్మ పరుగులిడుతుంటేను,
బంగారు పంటలే పండుతాయీ,
మురిపాల ముత్యాలు దొరలుతాయి.

అమరావతినగర అపురూప శిల్పాలు
త్యాగయ్య గొంతులో తారాడు నాదాలు,
తిక్కయ్య కలములో తియ్యందనాలు,
నిత్యమై నిఖిలమై నిలచి వుండేదాకా

రుద్రమ్మ భుజశక్తి మల్లమ్మ పతిభక్తి
తిమ్మరసు ధీయుక్తి, కృష్ణరాయల కీర్తి,
మా చెవులు రింగుమని మారుమ్రోగేదాక
నీపాటలే పాడుతాం, నీ ఆటలే ఆడుతాం
జై తెలుగు తల్లి, జై తెలుగు తల్లి...



PREFACE

At the national level, the Ministry of Finance, Government of India presents the Economic Survey in both houses of the Parliament every year, just before the Union Budget. It is the ministry's view on the annual economic development of the country. Annual document of the Ministry of Finance, Government of India, Economic Survey, reviews the developments in the Indian economy over the previous 12 months, summarizes the performance on major development programs and highlights the policy initiatives of the government and the prospects of the economy in the short to medium term. It contains certain prescriptions that may find a place in the Union Budget which is presented a day or two later.

The Government of Andhra Pradesh publishes 'Socio-Economic Survey' report every year and places it in both Houses of the State Legislature along with the budget documents. The report is a unique volume that captures the socio-economic changes took place in the state since the beginning of the financial year. The report essentially attempts to present the growth performance of the state economy by capturing the progress under key macro-economic aggregates and physical outcomes because of implementation of various programmes / schemes during the year 2018-19.

The Socio Economic Survey 2018-19 is an outcome of the collective effort of all the stakeholders including the government departments, consultations made with experts from research bodies and interested readers who have offered their valuable advice.

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Geographic, Demographic and Socio-Economic profile of Andhra Pradesh

With a geographical area of 1,62,970 Sq Km, Andhra Pradesh ranks as the 8th largest State in the country. Situated in a tropical region, the state has the 2nd longest coastline in the country with a length of 974 Km. As per the forest records, the state ranks 9th in India having forest cover area of 37707 Sq. Kms which accounts to 23.54% of the total geographical area.

In terms of population, Andhra Pradesh is the tenth largest state in the Country accounting for 4.10% of the total population of the country, as per 2011 Census. The decadal growth of population rose from 18.88% during 1961-71 to 21.13% during 1981-91. Subsequently a significant decline was observed in the rate of growth of population and decline is even more prominent at 9.21% during 2001-11, lower than the All-India's growth rate of 17.70 percent.

The density of population for Andhra Pradesh is 304 persons per square kilometer, as against 382 persons per square kilometer at all India level in 2011. The sex ratio in the state was up from 983 in 2001 to 997 in 2011 and is higher than all India figure of 943.

The literacy rate of the State is 67.35 percent in 2011 as compared to 62.07 percent in 2001. The literacy rate of the State is lower than the all India literacy rate of 72.98 percent. Literacy in Andhra Pradesh increased over 37 percentage points from 29.94 percent in 1981 to 67.35 percent in 2011. Female literacy rate has gone up from 52.72 percent in 2001 to 59.96 percent in 2011.

Urbanisation has been regarded as an important component for growth realization. The percentage of urban population to the total population in the State is 29.47 percent in 2011 as compared to 24.13 percent in 2001.

Sand, silt, and clay are the basic types of soils and most of soils are made up of a combination of these three. The texture of the soil, how it looks and feels, depends upon the amount of each one in that particular soil. There are various types of soils and the formation of soil is primarily influenced by major factors such as climate, altitude and composition of bedrock etc. Disproportion in the distribution of rainfall in the country and excessive heat contribute special characters to the soils.

The land utilization classification reveals that 37.08% of the state geographical areas is under net area sown (60.43 lakh hectares), 22.63 % under forest (36.88 lakh hectares), 8.91% under current fallow lands (14.51 lakh hectares), 12.63% under land put non-agricultural uses (20.58 lakh hectares), 8.25 % under barren and uncultivable land (13.45 lakh hectares) and remaining 7.03% is under other fallow land, cultivable waste lands like permanent pastures and other grazing lands (11.46 lakh hectares) and land under miscellaneous tree crops and groves are not included in the net area sown which is around 3.47% (5.66 lakh hectares).

Macro-Economic Aggregates - Current Scenario

The GSDP of Andhra Pradesh at Current Prices for the year 2018-19 (Advance Estimates) is estimated at Rs.933402 Crores as against Rs.809548 crores for 2017-18 (First Revised Estimates).

As per the Advance Estimates, the GSDP at constant (2011-12) prices for the year 2018-19 is estimated at Rs.6,80,332 crores as against Rs.6,12,793 Crores for 2017-18 (FRE) indicating a growth of 11.02 percent in comparison with the All India GDP growth rate of 7.0% for 2018-19 as per Advance Estimates.

The sectoral growth rates of GVA of Andhra Pradesh for 2018-19 at constant (2011-12) prices are Agriculture: 10.78%, Industry: 10.24% and Services sector: 11.09%. The Per Capita Income (NSDP) of Andhra Pradesh at current prices has registered a growth of 13.96 percent as it increased from Rs.1,43,935 in 2017-18 (FRE) to Rs.1,64,025 in 2018-19, as compared to the Per Capita Income of All India which has increased from Rs. 1,14,958 in 2017-18 to Rs. 1,26,699 (AE) in 2018-19.

Public Finance

The revenue composition of the state in FY 2017-18 indicate that Rs.49813 crores accrued from Own Tax sources, Rs.3814 crores from Own Non-Tax sources and Rs.51250 crores of Central Transfers.

As per the Revised Estimates of FY 2018-19, the total Own Tax Revenue is Rs.58125 crores-up from Rs. 49,813 crores in 2017-18. The Sales Tax accounted for 38 percent and GST at 35% for 2018-19 RE. The State's Own Non Tax Revenue in FY 2018-19 (RE) is Rs.4391 crores and Resource flow from the Centre is Rs. 52963 crores in FY 2018-19 (RE).

The Total Expenditure by the State (excluding ways and means advance) has increased from Rs.1,37,486 crores in the FY 2017-18 to Rs.1,48,697 crores in FY 2018-19 (RE). Of this, the revenue expenditure was Rs.1,21,214 Crores in the FY 2017-18 and was Rs.1,26,410 crores in FY 2018-19 (RE). The Total Debt of the State at the end of the FY 2017-18 was Rs.1,94,862 crores and has increased to Rs.2,58,928 crores at the end of FY 2018-19 (RE). In the FY 2017-18, Andhra Pradesh faced a Revenue Deficit of Rs.16,152 crores and a Fiscal Deficit of Rs.32,373 crores.

Prices

Consumer Price Indices for Industrial Workers grew by 4.20% and 5.63% in the state and All India level respectively during the year 2018-19 over the corresponding period of previous year. WPI (Base Year 2004-05) for All Commodities increased from 117.3 in Apr 2018 to 119.9 in March, 2019.

Public Distribution

The new government has decided to radically transform the public distribution system and deliver essential commodities at the doorsteps of common man in every village and town through village/ward volunteers. 28510 Fair Price (FP) shops are currently functioning in the State as on March, 2019. Government has enhanced the scale of distribution of Redgram dal through Fair Price Shops. Unpolished rice (Brown Rice) is being distributed to BPL card holders. Allotment of commodities under e-PDS and distribution of commodities through e-PoS cum e-weighing devices

Seasonal conditions

Rainfall received during the South West Monsoon period for 2018-19 was 456.6 mm as against the normal rainfall of 556 mm, recording a deficit of (-)18%. The rainfall received during the North East monsoon period for 2018-19 was 124.1 mm as against the normal rainfall of 296 mm, recording a deficit of (-)58%.

Agriculture

The area under food grains is estimated to be 40.26 lakh hectares in 2018-19 as against 42.06 lakh hectares in 2017-18, showing a decrease of 4.27%. The total production of food grains in 2018-19 is estimated at 151.12 lakh tonnes while it was 167.22 lakh tonnes in 2017-18 showing a decrease of 9.63%. The cropping intensity for the year 2018-19 has marginally declined to 1.24 from 1.26 of the last year. The number of holdings has been increasing - from 76.21 lakh holdings in 2010-11 to 85.24 lakh in 2015-16. This huge rise in the number of holdings coupled with a decline in the area operated has contributed to a fall in the average size of the holding from 1.06 hectares in 2010-11 to 0.94 hectares in 2015-16.

The "YSR RythuBharosa" Scheme to be implemented in the state from October 15th, 2019 will help the farming community in a big way. Government will provide financial assistance to the farmer families @ Rs. 12,500/- per year including to Tenant farmers across the state. The Government has taken up a new initiative to extend Interest free loans to all the farmers who avail crop loans during 2019-20.

In a landmark decision, the new government in the state has decided to facilitate "Crop Insurance Premium payment by the government itself instead of farmers for the entire notified area", setting standards for new generation of welfare oriented reforms.

During 2018-19, (2nd cycle) 6.80 lakh soil samples were collected & analyzed and 34.62 lakh Soil Health Cards (SHCs) were distributed to the farmers. A quantity of 7748 Qtl. of various Navadhanyalu seeds was distributed with a subsidy value of Rs.444.64 Lakhs which benefitted 0.90 Lakh farmers. The Government had supplied 11030 big tractors with an outlay of 168.05 Cr. during the year 2018-19 in order to increase the farm power availability.

The government is committed to end the distress among farmers and decided to constitute 'State Agriculture Mission' as a Policy advisory body to address the issues of farmers and to have better coordination among the sectors allied to agriculture. The main aim of the Mission is to overcome the challenges in delivering quality and timely services to the farming community and also look into all aspects of production, marketing and pricing of Agriculture and Horticultural commodities to mitigate the agrarian issues.

GENERAL REVIEW

Horticulture & Sericulture

The area under Horticulture crops in the state is 17.62 Lakh Hectares with a production of 327.57 Lakh MTs. Total Exports in Horticulture sector was worth Rs.256 Crores during 2018-19. Andhra Pradesh stands at 1st position in productivity for Chillies, Cocoa, Lime, Oil Palm, Papaya and Tomato, 2nd in Cashew, Mango, Turmeric and Sweet Orange in India. An area of 1,25,317 Ha., was newly brought under perennial, non-perennial fruit and plantation crops. Micro-Irrigation was implemented in about 2 lakh ha. during 2018-19, showed an increase of 8% achieved over previous year.

Andhra Pradesh is the Second largest producer of silk in India. 8560 acres of Mulberry gardens were covered with Drip. The total Mulberry in the State stands at 1,04,790 acres. 7476 MTs of Raw Silk (BV+CB) was produced in the State with a growth rate of 10.35% over the corresponding period of 2017-18. Implementation of Yarn Support price scheme benefitted 35,069 Silk Handloom Weavers in the State.

Livestock and Fisheries

Andhra Pradesh is one of the advanced states for Animal Husbandry sector in the country. Under this sector, Milk, Meat and Egg are the key Growth Engines. Milk is the single largest commodity contributing highest economy to the State. The State stands 1st in Egg production (2036.94 Crores), 4th in Meat production (8.03 Lakh Metric Tons) and 4th in Milk production (150.44 Lakh Metric Tons) in the country during 2018-19.

The fodder security policy, which is first of its kind in the country, having various components to provide quality feed and fodder to the Livestock will be implemented. Feed and fodder of different categories to the farmers / Goshalas will be provided on subsidy basis. Distributed 45,058 MTs of TMR, 1.32 LMTs of Silage and 62,000 MTs of cattle feed on concessional prices.

Under Animal induction policy, 31,082 high yielding animals have been inducted from other States in convergence with Welfare Financing Corporations as a part of poverty alleviation program.

AP ranks 1st in total fish and shrimp production and contributes more than 65% of cultured shrimp produced in the country. AP is contributing 1.61% of global and about 24% of national fish production. This sector is providing

employment to 14.5 lakh persons and contributing 7.4% to State's GSDP. The State stands 1st in Aquaculture area and Production. Power tariff concession provided to 53,500 aquaculture farmers. Government has decided to supply power at a subsidized price.

Forests

As per the forest records, the state ranks 9th in India having forest cover area of 37707 Sq. Kms which amounts to 23.54%, of which the Very Dense Forest is 1957 Sq. Kms, the Moderate Dense Forest is 14051 Sq. Kms, Open Forest 12139 Sq. Kms and Scrub Forest 95.60 Sq. Kms. The State has 13 wildlife Sanctuaries and 3 National Parks covering an area on 8139.89 Sq. Kms which is 22.53% of the State's Forest area and 4.44% of the State's Geographical area. There are two zoological parks and two deer parks functioning, with another 2 deer parks functioning under the control of private organizations.

Agriculture Marketing

Andhra Pradesh state stood 1st place in terms of the total value of trade done on e-NAM. Market Yard, Guntur stands at 1st position with total Trade Value of Rs.6440 Cr and also stood 1st place in terms of online payments made. Market Yard, Duggirala stands at 1st place among all markets in country, in terms of number of online payments made to farmers with 2,817 No's of lots for which online payments were made.

Industrial Development

Andhra Pradesh is one State in India to have taken up the initiative in bringing A.P. Single Window Clearances system under e-Biz project of National e-Governance plan of Government of India. With nearly 6 lakh new persons joining the workforce every year, about 30 lakh jobs are to be created in next five years. The government is planning to identify areas that promote job opportunities.

During 2018-19, 44 Large and Mega industrial projects are established with an investment of Rs.16925.08 crores and providing employment to 14130 persons. Similarly, during this period, 10068 Micro, Small and Medium Enterprises were established, providing employment to 93240 with an investment of Rs.3443.57 Crores.

Visakhapatnam-Chennai Industrial Corridor (VCIC), is a key part of the East Coast Economic Corridor (ECEC),

designed to complement the ongoing efforts of the Government of Andhra Pradesh (GoAP) to enhance industrial growth and create high quality jobs. Two Nodes, i.e., Visakhapatnam Node and Yeperdu-Srikalahasthi Node were prioritized for making initial investments.

Chennai-Bangalore Industrial Corridor(CBIC) is one of the mega infrastructure projects of Government of India which passes through the State with the main objective of increasing the share of manufacturing sector in the GDP of the country and to create smart sustainable cities which will have world-class infrastructure, convenient public transport power management and an efficient water and waste management system. Under CBIC project, three Nodes have been identified in Phase-I: Krishnapatnam Industrial Node (KPTIN) is a planned area located in south of Krishnapatnam port as industrial development of around 12,000 ha.

Industrial Infrastructure

Out of 19 operational SEZs, 3 are IT/ITES SEZs, 5 Multi Product SEZs, 4 Pharmaceuticals SEZs, 2 Textile, 2 Leather Products, one Building Products, one Port based SEZ and one Food Processing SEZ. GoI sanctioned Mega Food Park at Mallavalli, Krishna District with an estimated cost of Rs. 125.25 crores and the projected Investment is Rs.400 crores. All the infrastructure works at Central Processing Centre (CPC) are nearing completion and going to be operational very shortly.

Mines and Geology

Minerals & Agriculture are one of the sources of revenue to Andhra Pradesh with minerals forming the major contributor for the economic growth of the State. The Mining Sector is identified as one of the growth engines and certain minerals have been identified as focus minerals. There are 380 mining leases for major minerals, 1735 quarry leases for cut and dressed blocks of granites and 1083 quarry leases for industrial minerals and 4177 Quarry leases for other Minor Minerals (Construction Minerals).

The State Mineral and Mining sector contributed Rs.2,147 crores of Mineral Revenue to the state exchequer during 2017-18 and earned Rs.2,463 crores as Mineral Revenue during 2018-19. The percentage growth compared to last year was 14.71%.

A new sand policy is to be implemented to monetize exploitation of Sand Reaches of Andhra Pradesh. The new

Sand policy will come into effect from September, 2019.

Commerce and Exports

The Exports from the state for the year 2018-19 have recorded Rs.98983.95 Crore as compared to Rs.84640.56 Crore last year. The Major exports from the state are Drugs & Pharmaceuticals, Marine, Agriculture and Agro based products, Handicrafts, Minerals and Mineral products and Software products.

Water Resources

Andhra Pradesh is utilizing 308.703 TMC under existing projects and 468.688 TMC is planned utilization under ongoing projects. So far 105.36 lakh acres of irrigation potential has been created upto March 2019 under major anicuts on Krishna, Godavari and Pennar rivers. 14 New Projects are taken up during 2018-19 at an estimated cost of Rs. 26,942.75 Crs for creating new ayacut of 2.88 lakh acres and to stabilize 14.82 lakh acres.

12 Projects (11 Projects under Jalayagnam and 1 New Project) are proposed for speedy completion. Sangam and Nellore Barrage Works are programmed for completion by Rabi season of this year. Boddepally Raja Gopal Rao Vamsadhara Project (Stage II- Phase - II), Sardar Gouthu Latchanna Thotapalli Barrage project, Modernization of Godavari Delta System, Modernization of Krishna Delta System, Korisapadu LI Scheme, Galeru Nagari Sujala Sravanthi Phase -I and Handri Neeva Sujala Sravanthi Project Phase-I are programmed for completion by next Khariff Season. The Remaining ongoing Projects will be completed in a Phased manner in the next 2- 3 years.

State has received 34% deficit rainfall against the normal rainfall during 2018-19. About 79% of the area is under falling category from May-2018 to May-2019. 57% of the area was more than 8 m. water level in May-2018 whereas it is 66% during May-2019.

The average groundwater level for the State in May-2019 is 16.19 m., whereas it was 12.80 m during the same period in the previous year and observed a net fall of 3.39 m from the previous year water level.

Power

The installed capacity in the Andhra Pradesh state is 19160 MW. The Government of Andhra Pradesh is contemplating to give 9 hours per day free agricultural power supply as part of Navarathnalu during day time.

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86,430 agricultural services have been released during 2018-19. The energy met has increased to 63144 MU during 2018-19, and the per capita consumption of electricity is 1,147 units.

The State is promoting energy conservation and efficiency measures in a big way. Under these schemes, 2.20 crores LED bulbs have been distributed to households as a replacement for incandescent bulbs, 6.21 lakh street lights have been replaced in urban local bodies with energy efficient lights, 25.60 lakh street lights have been replaced in Gram panchayats with energy efficient lights and 3.23 lakh energy efficient fans and 1.48 lakh numbers of energy efficient tube lights have been distributed to the households.

AP showed good performance in the country in LED Street lighting with AP having more than 33% of total LED street lighting in the country in both urban and rural areas. As on 26.06.2019, of the total 78.60 LED street lights installed in the country, 26.40 Lakhs were installed in AP alone.

Roads

The total R&B road network (excluding NH roads) in the state was 46237.65 Kms as on March 2019, comprising 13500.45 Kms of State Highways, 32737.20 Kms of Major district road and Rural roads. There are 36 National Highways in the state covering a length of 6859.66 km. The density of National Highways is 13.72 Km per lakh population (2011) in the State as against all India average of 10.89 Km and in terms of area coverage, a length of 41.46km is available for every 1,000 Sq. Km in the State as against all India average of 40.00 km/1,000 Sq.Km. Out of 6859.66 Km National Highways in the state, a total length of 2267.593 Km are under the control of NHAI and 461.56 Km with MoRT & HPIU, Machilipatnam.

Transport

The State has 119.96 lakh registered vehicles. About 89% of the vehicles on road are two wheelers, followed by cars, tractor trailers, three wheelers, buses and goods carriages. The government is committed to reduce the road accidents as AP stands at 7th position with 8,060 fatalities (5.4% share). The government is committed to take a positive view on bringing improvement in the living conditions of the staff of the State Road Transport Corporation. APSRTC has 4 Zones, 12 Regions and 128 Depots with a total fleet

strength of 12027 buses and 53263 employees on rolls as on March, 2019. The average vehicle productivity per day of its fleet is 365 Kms and the Corporation achieved 99.71% fleet utilization in 2018-19.

Airports

Currently there are 6 operational Airports in Andhra Pradesh which connect with major cities. Passenger movement at AP Airports enhanced to 5.44 MPPA (FY18-19) at a CAGR of 37% in the past 5 years (about 1.1 MPPA in FY13-14) in comparison to national growth rate of 12% in the same period. Air traffic movements recorded during 2018-2019 is 70,000.

Sea Ports

Andhra Pradesh has 974 Kms long coast line with a major Port at Visakhapatnam under Government of India control and 14 notified ports under State Government. Of these, 5 are functional ports. The Government declared the Kakinada SEZ Port in East Godavari District as minor Port to facilitate transportation of refinery products and to handle all special Economic Zone Cargo. The Government of India shall develop a new major port at Dugarajapatnam in the successor State of Andhra Pradesh to be completed in phased manner".

Tourism

APTDC operates Hotels/Resorts, Wayside Amenities and Restaurants at various destinations of the State to provide hassle free facilities to the tourists visiting the State. APTDC has established Transport Units at Visakhapatnam and Tirupathi. APTDC has established a biggest water fleet and operates river Cruises, speed boats etc.

Information Technology

The State has been successful in generating realized employment of 30,656 with investment of Rs.1,030 crores in the IT sector and an employment of 18,750 with a realized investment of Rs.397.70 Crores in the Electronics sector.

Special stories are being prepared on government's initiatives like "YSR Raitu Bharosa, YSR Pensions, YSR Asara, Amma Vodi, Pedalandariki Illu, Madya Nishedam, Jalayagnam and Aarogyasri" and some of these have been transmitted through SAPNET channels. Mee-Seva currently has 460 high impact services and the project has

already completed 14.44 crore transactions and most of the government departments are now on board.

Digital literacy is a key component of the Government of India's vision of building an empowered society as envisaged under "Digital India" initiative. Under e-Pragathi, more than 12 departments are on-board on this platform with 100+ services, in the first quarter of Year 2019-20.

School Education

The government is keen to bring all out of school children to the school. Out of the total enrollment of 70.41 lakhs in the schools, 36.08 lakhs are in I-V classes; 20.95 lakhs in VI-VIII classes, 13.12 lakhs in IX-X classes. Annual average dropout rate at I-V classes (Primary Level), I-VIII (Elementary Level) was 0% and 3.94% at IX-X (Secondary Level). Necessary measures have been taken to retain children into schools by conducting Rajanna Badi Bata etc. The pass percentage of students in S.S.C examinations during 2018-19 was 94.88. Under Mid meal scheme 37.22 lakh children were covered during 2018-19, out of which 17.61 lakh are in Primary including NCLP, 12.42 lakh in Upper Primary and 7.18 lakh children in High schools in the state

Digital Class Room (DCR) equipment is provided in 5000 schools, Virtual Class Room system integration is completed in 3938 Schools. Bicycles were distributed to 3.75 lakh girl students of 8th and 9th classes studying in government schools under the scheme 'Badikosta' in 2018-19.

The Government is planning to implement flagship programme, 'Amma Vodi', as part of Navaratnalu with an intention to extend financial help to the mothers who send their children to school.

Sarva Shiksha Abhiyan

There are 352 KGBVs are running for dropouts, orphans, semi orphans, SC, ST, OBC girl students. 71495 children enrolled in 2018-19. 31 KGBVs upgraded to Intermediate level education in 2018-19. Pass percentage in SSC in 2018-19 was 95.69. In 2018-19, advanced Digital Class rooms (DCRs) were sanctioned for 2000 Model Primary schools.

Intermediate Education

There are 457 Government Junior Colleges and 124 Aided Junior Colleges functioning in the state. 15.02 lakh Intermediate text books of various groups were distributed for the year 2018-19 to 1.51 lakh students. English Language

Laboratories are introduced in all Govt. Junior Colleges. Government is reimbursing the tuition fee full for students pursuing Post Metric Courses and the programmes will be strengthened under the Navaratnalu.

Collegiate Education

There are 148 Government degree colleges and 137 Private aided colleges functioning in the state with 1,92,340 students. Andhra Pradesh State Skill Development Centre (APSSDC) established 50 training centres in Government Degree Colleges. To improve communication skills, 72 English Language Labs (ELL) were established in Government Degree Colleges. 44 Degree colleges (16 Govt. and 28 Pvt. Aided) attained Autonomous Status. 25 Key Performance Indicators were designed and colleges were ranked based on indicators.

Virtual Classrooms were established in RUSA funded Colleges. 54 Govt. Degree Colleges were provided with AP Fibre Grid connectivity with 10 mbps. Introduced 'Solar Equipment' solution in 49 RUSA colleges.

Technical Education

There are 84 Government Polytechnics, 2 Aided Polytechnics and 201 Private Polytechnics functioning in the State with a sanctioned strength of 73476 and 41 Skill Development Centers have been established in Polytechnics across the State. Technical courses that supplement regular Diploma Courses are offered. Pradhan Mantri Kaushal Vikas Yojana' (PMKVY) etc., are initiated to bridge the gap between Industry needs and output from the Educational Institutions.

Health and Family Welfare

The government is committed to ensure access for all to the government hospitals. Maternal health care, child health care and family welfare services are provided through 7458 Sub-centers, 1148 Primary Health Centers, 198 Community Health Centers, 28 Area Hospitals, 14 District Hospitals, 3 Mother and Child Health Centres. The estimated Crude Birth rate, Crude Death rate and Infant Mortality Rates for the year, 2017 in the state are 16.2, 7.2 and 32 respectively while it is 20.2, 6.3 and 33 for All India (as per Sample Registration System, bulletin May 2019).

26 Special New Born Care Units (SNCUs), 21 Mini Special New Born Care Units(Tribal), 18 Nutrition Rehabilitation

GENERAL REVIEW

Centres, 95 Newborn Stabilization Units (NBSUs) and 789 New Born Care Corners (NBCCs) are established. 243 Urban Primary Health Centres (UPHCs) were established in 54 ULBs under National Urban Health Mission.

Dr.YSR Aarogyasri Health Care Trust Services are provided through 1,459 Network Hospitals empanelled under the Trust. 22.35 Lakh therapies were pre-authorized benefitting 13.97 Lakh patients during 2018-19 under this health scheme. Under employees health scheme, 9.05 Lakh therapies were pre-authorized benefitting 3.22 Lakh patients during 2018-19.

117 new procedures added to the existing 942 procedures under Dr. YSR Aarogyasri scheme to provide more health services to the BPL families. The total procedures under Dr.YSR Aarogyasri are 1059.

Under the AP Vasidya Vidhana Parishad (APVVP), at present, there are 242 hospitals with 1620 doctors (including specialists), 2689 nursing, 1213 paramedical staff and 496 administrative staff are working for Health care Hospitals. There are 26 blood banks and 93 blood storage centers are functioning in APVVP Hospitals in the State. Under National Health Mission, 23 Sick Newborn Care Units (SNCU), 9 NRCs, 118 Newborn Stabilization Units (NBSU), 86 Comprehensive Emergency Obstetric and Newborn Care (CEMONC), 26 Tribal Hospitals are functioning in APVVP Hospitals. At present 4 Trauma Care Centers are functioning. Hospital wise estimates of all APVVP hospitals for face lifting services as a part of "NAVARATNALU" are called for.

Several schemes like National Leprosy Eradication Programme, Integrated Disease Surveillance Project, National Iodine Deficiency Disorders Control Program and National Programme for Prevention and Control of Diabetic, Cancer, Cardiovascular Diseases and Stroke are being implemented in the state. At present 8 Cardiac Care Units are functioning in the State. Screening facility is provided in 1147 PHCs across the state. 3.28 Lakh cataract operations were conducted during 2018-19 National Programme for Prevention and Control of Fluorosis is being implemented in Guntur, Prakasam and Nellore districts.

Women Development and Child Welfare

Andhra Pradesh is implementing 257 ICDS Projects (200 Rural, 33 Urban & 24 Tribal) with 48,770 Main AWCs and 6,837 Mini AWCs (total 55607AWC) in 13 Districts. Supplementary Nutrition Programme is one of the prime services rendered under ICDS and implemented all ICDS projects covering 55607 Anganwadi centres. For ensuring

quality hot cooked Mid-Day Meal, 1622 Panchayats started growing Nutri Gardens. A total of 2168 extension centres have been functioning in the tribal areas since last 8 months providing nutrition to 23225 beneficiaries. 46 Children homes are functioning in the State with 1886 inmates at present against the sanctioned strength of 3110.

Welfare of Disabled

The government is planning to give special emphasis to the differently abled persons. There are 3 homes for Blind and one for Aged and Differently Abled with a sanctioned strength of 335 inmates. Pensions are being sanctioned to 5.61 lakh Differently Abled persons and 20.84 lakh Senior Citizens in the State through Panchayat Raj and Rural Development every month. 18 Pre-matric and 2 Post-matric hostels are working with a sanctioned strength of 1780 boarders. Scholarships are sanctioned to the Differently Abled students including Mentally Retarded, covering 7044 beneficiaries for the year 2018-19.

BC Welfare

At present, there are 773 Govt. B.C. hostels, (594 hostels for boys and 179 hostels for girls) with a total strength of 86158 boarders. During 2018-19, Post Matric Scholarships were sanctioned to 8,16,448 students incurring an expenditure of Rs.333.32 Crores. During 2018-19, tuition fees of Rs.1108.92 crore was reimbursed to 8,16,448 students. At present, 69 BC Residential Schools (56 Residential schools, 11 Upgraded to Jr. Colleges and 2 Independent Jr. Colleges) are functioning in the State. Reimbursement of tuition fee for BCs, EBCs & Kapus is one of the main scheme under Navarathnalu.

Social Welfare

As per the 2011 Census, Scheduled Castes population forms 17.08 percent of the total population of Andhra Pradesh and 79.98% of the Scheduled Caste people live in rural areas. 759 Pre-metric hostels are functioning in the state, with an admitted strength of 73,600 in 2018-19. 38 integrated hostel welfare complexes are functioning with an admitted strength of 8149. The overall pass percentage is 91.22% as against the State average 94.88%. Under Jagjeevan Jyothi Scheme (Free Power) an amount of Rs.108.96 crores was spent benefitting 13.85 Lakh SC households.

Tribal Welfare

The tribal population of Andhra Pradesh according to 2011 Census is 27.39 lakh constituting about 5.53% of the total population of the State. Social Security Assistance, Inter & Intra caste Marriage Incentives and Free power are extended to STs and Implementation of Navaratnalu on a priority basis. All the 134 Hostels in plain districts were converted into (80) Residential Schools and 45 Hostels in Agency districts into (30) Ashram schools. There are 378 Ashram Schools, 23 Hostels, 4 IWCH (including merged Mandals) and 1,12,562 students have been enrolled so far. Under health, all 158 PHCs in tribal areas are converted as 24x7 PHCs. School Health Programme (Adivasi Aarogyam) has been implemented in (969) TW Educational Institutions covering 2.29 lakh students. 8181 ST candidates are trained through APSSDC in 2018-19, with an amount of Rs.15.72 Crores and 3306 are placed in various fields.

Minorities Welfare

There are 13 Pre -matric and 10 Post matric Hostels for Minorities are functioning in the State for educational and social development of the poorest of the poor minority students and 6 Residential schools in the state aiming for the educational and social development of Minority students with residential facility. YSR ASARA (SHG Scheme for Minority Women) will be implemented to further strengthen the systems. Under Overseas Educational Scholarships Scheme, 116 students were benefitted and an amount of Rs.13.66 Crores was spent during the year 2018-19. During the year 2018-19 an amount of Rs.50.34 Crores was released to 162 Urdu Ghar-Shadi Khanas.

Housing

4,38,024 houses pending for completion as on 01.04.2014 under Pre NTR Housing (State schemes). 1,46,517 houses under IAY and IAY-PVTG were allotted for the years 2013-14, 2014-15 & 2015-16. In all total 5,84,541 houses in Rural and Urban areas have been taken up for completion. The new government is planning to construct 25 lakh houses in 5 years as a part of "Navaratnalu", in line with the government of India's vision of Housing for all.

Rural Water Supply and Sanitation

The government is planning to provide every rural person with adequate safe water for drinking, cooking and other basic needs on sustainable basis and by 2024 every rural person will have access with 70 LPCD within their

household premises. 2,00,565 hand pumps were fitted to bore wells, 12,721 with direct pumping, 35,241 PWS/MPWS Schemes, 574 CPWS Schemes and 107 Water Testing Laboratories existing as on 1.4.2018, 2258 works were sanctioned to cover 2373 habitations with an estimate cost of Rs. 374.28 crores under all programmes during 2018-19. Currently, 52 % of habitations are covered with 55 LPCD and 47% of habitations are covered with 40 LPCD service level. 1% (401) habitations are quality affected. Out of 90 Lakh rural households, about 25 Lakh households are having house connections.

Municipal Administration

There are 110 Urban Local Bodies i.e., 14 Municipal Corporations, 71 Municipalities and 25 Nagara panchayaths in the State. Out of the total 36,19,838 households, door to door garbage is collected covering 35,36,363 households achieving 97.69%. All the 110 ULBs in the State have been declared as ODF.

Database of all Black spots in all 110 ULBs identified to convert them into Green Spots. So far, total 14,469 black spots were converted as Green Spots, out of total 18,625 black Spots.

MEPMA

The main objective is to organize poor women into SHGs by covering all families living in slums and enable them to become self-reliant. So far 2,16,810 Self Help Groups have been formed with 22,64,158 members upto 30th March' 2019, with 7577 SLFs and 170 TLFs in 110 ULBs. Under Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) programme. 48,65,714 members were enrolled by covering SHG Members. So far, 15,30,815 members have grounded livelihood units through SHG Bank Linkage, Sthreenidhi, Mudra loans, Kapu Corporation, SC, ST, BC, Minority loans and SHG Corpus. MEPMA has planned to establish Swasakthi Canteens. MEPMA has formed and strengthened 10,900 Mahila Arogya Samithis.

Rural Development

The Government of Andhra Pradesh is committed to the Welfare and Development of all segments of the society. Government has announced YSR Pension Kanuka as part of Navarathnalu comprising of various welfare and developmental activities.

GENERAL REVIEW

Government enhanced the Social Security Pensions amount for Old Age Persons, Widows, Toddy Tappers, Weavers, Single women, Fishermen, ART (PLHIV) Persons, Traditional Cobblers to Rs.2250/- per month, Disabled persons to Rs.3,000/- per month, and also for people affected with Chronic Kidney Disease who are undergoing dialysis in both Government and network hospitals to Rs.10,000/- per month.

The reduction of the pension eligibility age from 65 years to 60 years is a landmark decision of the government which will act as a more secure safety net measure. Under this social safety scheme for poor and vulnerable, authenticated Aadhaar linked pensions will be provided to 58 Lakh beneficiaries with a monthly outlay of over Rs.1374.67 Crores and an annual outlay of Rs.16,496.04 crores.

MGNREGS is being implemented in 12,915 Gram Panchayats in 661 mandals of 13 districts. Under MGNREGA, 1,65,975 Separate Job Cards have been issued to PWDs to provide wage employment in all 13 districts. 14,985 Shrama Shakti Groups of workers with disabilities are formed in 661 mandals of 13 districts. e-FMS has been established with the objective of implementing an efficient fund transfer system through online money transfers.

It is proposed to take up construction of 5000 Kms of Internal CC Roads, 1 lakh Farm Ponds under Panta Sanjeevini, 3000 Anganwadi Buildings, 1 lakh IHHLs (Housing Beneficiaries), 1300 Mini Gokulams, 500 Animal Hostels, 2000 Play Fields, 661 Village Parks, 3000 Burial Grounds, laying of 3000 Kms of WBM Roads, 2000 Kms of BT Roads and 1 lakh acres of Horticulture Plantation and 10000 Kms of Avenue Plantation under MGNREGS converges during 2019-20.

The Government proposes to support the SHG women by reimbursement of loans outstanding in their accounts as on 11.04.2019. The outstanding balances in the SHG women accounts as on 11.04.2019 will be paid to the SHG women by the Government in four instalments. The loan reimbursement and VLR interests are covered under YSR Aasara scheme.

Under Watershed development programme, 3907 watersheds with an area of 19.54 lakh Ha were completed so far. Due to Water Harvesting and Plantation works, so far an additional ayacut of has been brought under irrigation, benefiting farmers.

Poverty

For the year 2011-12, the poverty ratios for rural and urban areas of united Andhra Pradesh were 10.96% and 5.81% respectively and combined ratio stands at 9.20%. The corresponding figures for All India during the same period were 25.70%, 13.70% for rural and urban areas and the combined was 21.92%

The overall Work Force participation Rates (WFPRs) as per Current Weekly Status (CWS) were about 32.7 % for all India level and 41.8% for Andhra Pradesh. In rural areas, it is 44.4 % for Andhra Pradesh and 32.6 % for India and 36.8% for Andhra Pradesh and 32.9% for India in urban areas.

Employment – Unemployment

As per the National Sample Survey Office (NSSO) of 68th Round (during 2011-12) the unemployment rate for Andhra Pradesh State for Rural and Urban sectors stood at 12 and 43 respectively. Similarly, for All India, the corresponding estimates are 17 and 34 in respect of Rural and Urban areas.

Skill Development

The objective of the Skill Development Corporation is skilling the youth for Employability. Under Andhra Pradesh State Skill Development Corporation 99,591 unemployed youth were trained and 31,817 got placements during 2018-19. Under SC training programmes 11,110 were trained and 2,919 got placements during 2018-19. 438 Job Melas have been conducted in 2018-19 and facilitating jobs for 38,850 unemployed youth.

Prioritized Perspective on Governance

Government has decided to go all out with Navarathnalu, an integrated scheme with themes covering agriculture, health, education, housing, welfare sectors. The government is committed to uplift the downtrodden and the deprived with corrupt free and inclusive governance while dispensing the welfare measure to the eligible without any prejudices of caste, colour, creed or political affiliation. This will ensure removal of discretion while sanctioning the benefits, which will always give scope for corruption.



State Economy

The government has recognized the importance of maintaining high economic growth and as an imperative for sustained development by adopting innovative policies. Besides continuing the focus on Agriculture, Industries and Services sectors, the government is committed to give special thrust to focus on all the key sub-sectors and give a big push.

Capturing the changes in economy

Improvement in availability of basic data over the years has helped in reviewing the methodology from time to time for estimating the State Domestic Product. Periodic updation of data and shifting base year to a more recent year are being undertaken regularly so that the structural and sectoral shifts taking place can be properly gauged and captured.

The State Domestic Product (SDP) is estimated usually by income originating approach wherein income generated by the factors of production physically located within the geographical boundaries of the state are aggregated. It represents the value of all goods and services produced within the state, counted without duplication during a specified period of time, usually a year. The estimates of SDP, its related aggregates are generally compiled at current as well as constant prices.

These estimates of economy over a period reveal the extent and direction of changes taking place in the level of economic development. Sectoral composition of SDP gives an idea of the relative position of different sectors in the economy over a period of time, which not only indicates the real structural changes taking place in the economy but also facilitates formulation of plans for overall economic development. The SDP estimates when studied in relation to the total population of the state indicate the level of per capita net output of goods and services available or the standard of living of the people in the State. These are referred as estimates of Per Capita Income (PCI).

With a view to take into account the structural changes taking place and thereby project a realistic picture of the economy in terms of the macro aggregates viz., Gross State Domestic Product (GSDP), Per Capita Income, Government Final Consumption Expenditure (GFCE), Private Final Consumption Expenditure, the Base year of the GDP Estimates is generally shifted to a latest year.

Improvements in the New Series with 2011-12 as Base Year

The Central Statistical Office (CSO), Government of India have shifted the Base year of the GDP Estimates from 2004-05 to 2011-12, duly incorporating recommendations of System of National Accounts (SNA) 2008, adopting the results of latest surveys and studies and also espoused some critical methodological changes to bridge the data gaps and to improve the quality of data sets. In the new series, the industry-wise estimates are presented as “Gross Value Added (GVA) at Basic Prices” and GSDP at Market Prices shall be referred as “GSDP-Gross State Domestic Product”, which is a practice at international level.

Thus, ‘GSDP’ is the sum of GVAs at basic prices net of product taxes and product subsidies

Compilation of Estimates of GSDP

The Gross State Domestic Product (GSDP) of Andhra Pradesh is arrived at as per the methodology given by the Central Statistical Office (CSO). The Advance Estimates for every financial year are being compiled in the month of February with the data available till that period and these will be revised from time to time as First Revised Estimates, Second Revised Estimates and finally after reconciliation with CSO as Third Revised Estimates after a gap of 2 years. The data pertaining to Inputs, Consumption of Fixed Capital (CFC), Supra Regional Sectors, Central Non Departmental Enterprises (CNDEs), Autonomous Bodies, Financial Intermediation Services Indirectly Measured (FISIM), Central Government Administration & Private Corporate Sector etc., is provided by CSO.

Estimates of GSDP at Constant (2011-12) Prices

The GSDP of Andhra Pradesh at constant (2011-12) Prices for the year 2018-19 (Advance Estimates) is estimated at Rs. 6,80,332 crores as against Rs.6,12,793 crores for 2017-18 (First Revised Estimates) indicating a growth of 11.02% in comparison with the All India GDP growth rate of 7.0% for 2018-19 as per Advance estimates.

It is to be understood that the GSDP estimates may undergo revision until they get firmed up in the stage of 3rd revision (TRE). Thus in the latest estimates now presented here, the

GSDP growth for 2015-16 (TRE) has shown an upward revision to 12.16% from 10.60% previously mentioned (as SRE). However, for the years 2016-17 (SRE) and 2017-18 (FRE) the growth rates of GSDP respectively underwent downward revision to 10.40% (from 11.07%) and upward revision to 11.32% (from 11.22%).

for the year 2017-18 (FRE), a growth rate of 10.77 percent compared to the India growth rate of 6.8 percent.

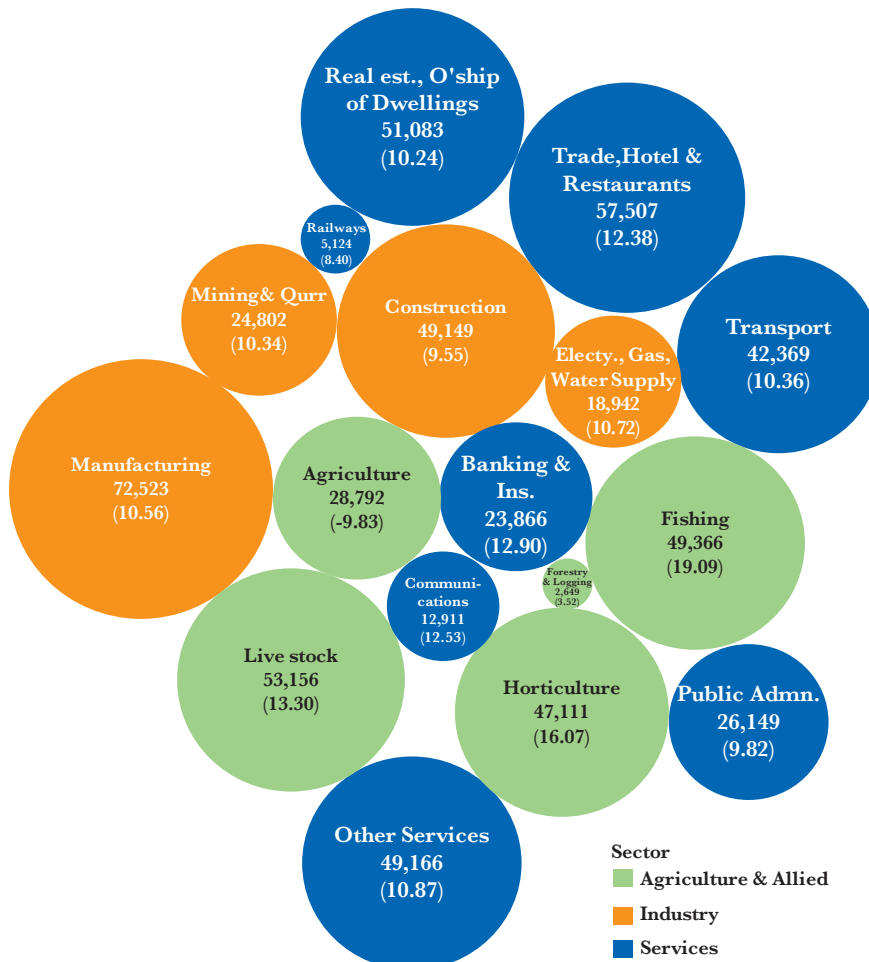
The economy is classified into three broad sectors: Agriculture & Allied, Industry and Services. There are sectors within each of these broad sectors. The sectors that registered a good growth in the year 2018-19(AE) include: Horticulture (16.07%), Livestock (13.30%), Fishing and Aquaculture (19.09%), Mining & Quarrying (10.34%), Manufacturing (10.56%), Electricity, Gas & Water supply (10.72%), Trade, Hotel & Restaurant (12.38%), Transport (10.36%), Communications (12.53%), Banking (12.90%), Real Estate and Ownership of Dwellings (10.24%) and Other Services (10.87%).

Estimates of GVA at Constant (2011-12) Prices

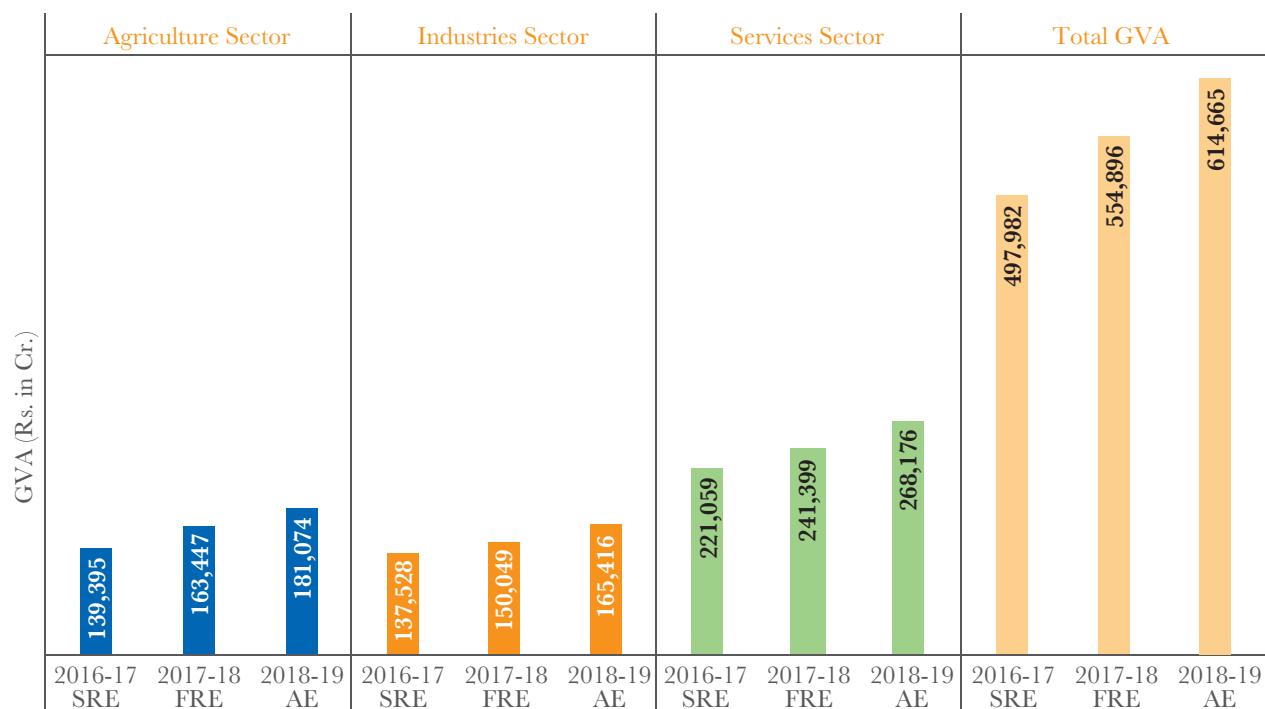
As per the Advance Estimates, the GVA at Constant (2011-12) Basic Prices for Andhra Pradesh for the year 2018-19 is estimated at Rs.614665 crores as against Rs.554896 crores

GVA Estimates for 2018-19(AE) Rs. in Crore and its growth rate (%) at Constant (2011-12) Prices

GVA Estimates for 2018-19(AE) and its growth rate at Constant (2011-12) Prices



A year-wise snapshot of broad sector-wise GVA estimates at Constant (2011-12) Prices:



Agriculture broad sector:

Agriculture broad sector comprises of Agriculture, Horticulture, Livestock, Forestry & Logging and Fishing sub-sectors. The Agriculture & Allied Sectors as a key sector supporting about 60% of the population, registered a growth rate of 10.78% in 2018-19 (AE) at Constant (2011-12) Prices with a GVA of Rs. 1,81,074 crores as compared to Rs.1,63,447 crores during 2017-18 (FRE).

Deficit rainfall of (-) 34.3% during this year resulted in a negative growth rate of (-) 9.83% in the Agriculture sub sector.

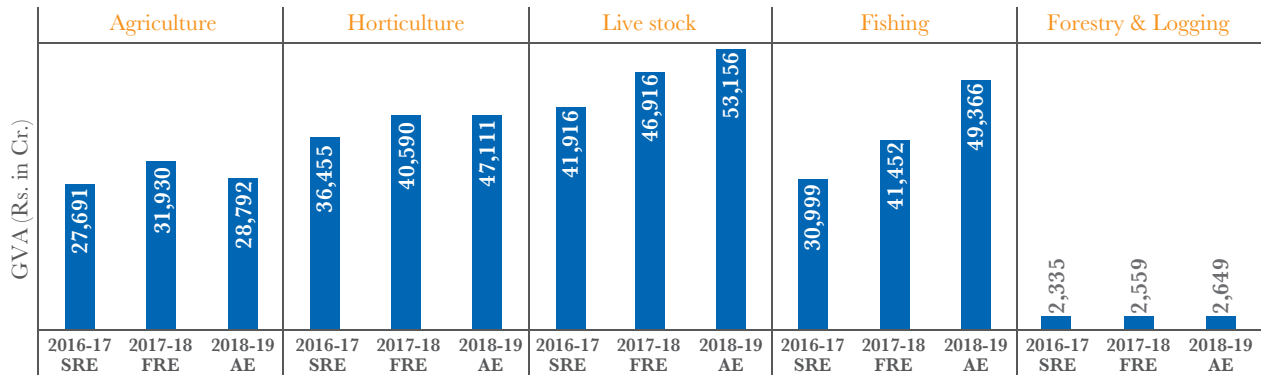
The agrarian state of Andhra Pradesh is heading towards a value addition platform from the conventional

production approach. 'Horticulture' sub sector, recognized by the government as is an essential component for food and nutritional security in the State, grew at 16.07%. Horticulture, no longer a sub sector to agriculture sector has crossed agriculture in terms of value addition.

The livestock sector has emerged as an alternative and dependable source of income generation even during the times of severe drought. Increase in the production of Milk (13.54%), Meat (12.83%) & Egg (14.58%) contributed to a growth rate of 13.30% in the livestock sector.

Fisheries sector registered growth rate of 19.09%. Forestry & Logging Sector registered growth rate of 3.52% in 2018-19 (AE).

Year-wise subsector-wise GVA Estimates at Constant Prices (2011-12) - Agriculture broad sector

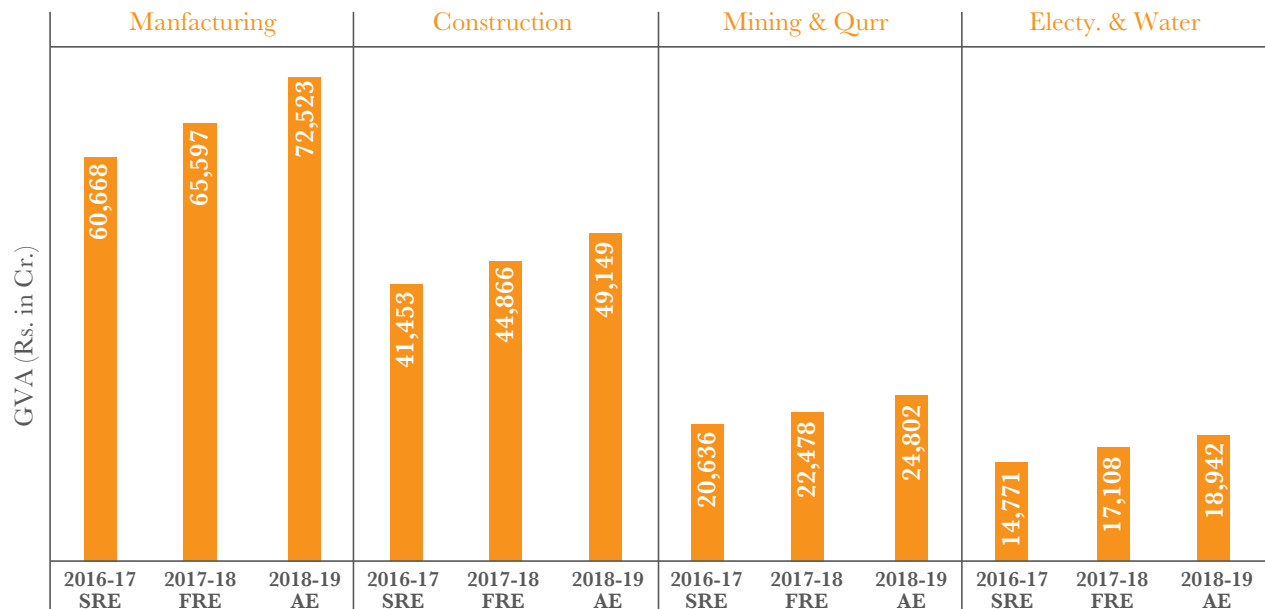


Industry Sector

Industry broad sector comprises of Mining & Quarrying, Manufacturing (Organised & Un-Organised), Electricity, Gas & Water Supply and Construction. As per the Advance Estimates for the year 2018-19 at Constant (2011-12) prices,

the GVA of Industrial sector is estimated at Rs.165416 crores, registering a growth rate of 10.24% over the previous year. All the sub sectors of Industry sector have posted growth performance of more than 9.10% over the previous year.

Year-wise subsector-wise GVA Estimates at Constant Prices (2011-12) – Industry sector



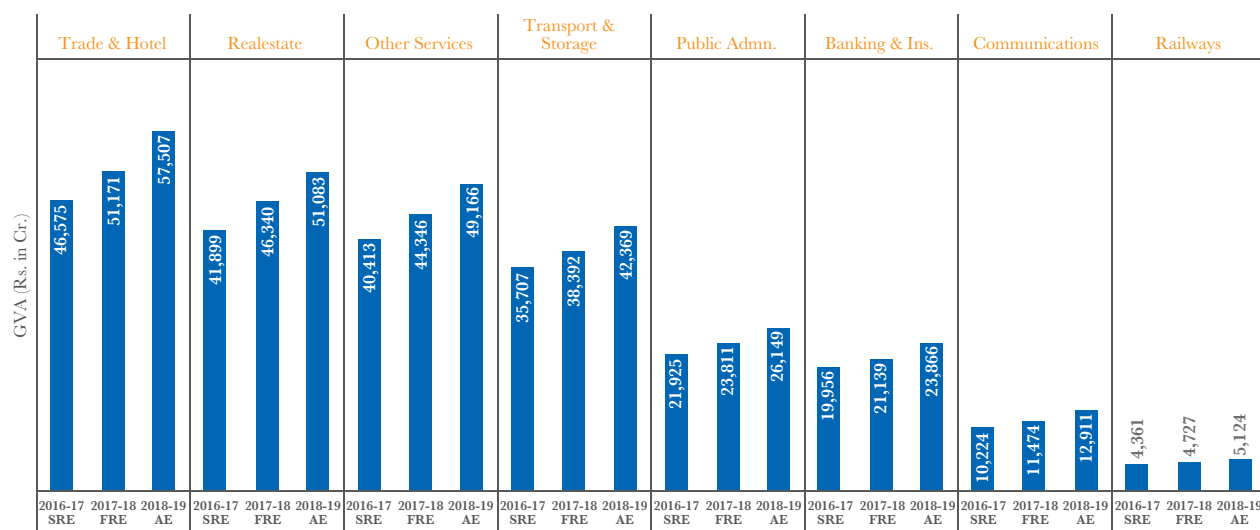
MACRO ECONOMIC AGGREGATES

Services Sector

Services sector, as ever has a surging share in the State GVA. The Services sector comprising of Trade, Hotels & Restaurants, Transport by other means & Storage Communications, Banking & Insurance, Real Estate &

Professional Services and Community, Social & Personal services registered a growth rate of 11.09% in 2018-19 (AE) over previous year. The GVA as per Advance Estimates for the year 2018-19 is estimated at Rs.268176 crores as against Rs.241399 crores in 2017-18 (FRE).

Year-wise subsector-wise GVA Estimates at Constant Prices (2011-12) – Services sector



Estimates of GVA at Current Prices

The GVA for Advance Estimates at Current Prices for the year 2018-19 are derived by using the IPD (Implicit Price Deflators) at sectoral level from the relevant price indices and it is estimated at Rs.855045 crores as against Rs.741588 crores of 2017-18 (FRE).

Estimates of GSDP at Current Prices

The GSDP at Current Prices for the year 2018-19 (Advance Estimates) is compiled by adding Product taxes and by deducting Product subsidies to the GVA at current basic prices and estimated at Rs.933402 crores as against Rs.809548 crores for 2017-18 (FRE).

A snapshot of broad sector-wise GVA estimates at Current Prices:

(Rs. in Crores)

Sub-sector	2016-17 SRE	2017-18 FRE	2018-19 AE	
Agriculture & Allied	Live stock	66,440	79,116	92,768
	Horticulture	58,415	71,436	77,963
	Fishing	42,190	58,721	72,962
	Agriculture	38,072	41,413	38,264
	Forestry & Logging	4,754	5,244	5,702
Industry	Manufacturing	65,544	72,305	83,217
	Construction	47,657	52,584	62,575
	Mining & Quarrying	19,356	24,501	30,648
	Electricity, Gas, Water Supply	16,310	19,863	23,447
Services	Other Services	59,389	68,774	79,942
	Real est.,O'ship of Dwellings	56,234	64,742	74,631
	Trade,Hotel & Restaurants	52,061	58,832	69,138
	Transport by Other means & Storage	44,828	50,247	57,987
	Public Admn.	28,368	32,008	36,757
	Banking & Ins.	21,476	24,292	28,679
	Communications	11,375	11,952	14,064
	Railways	5,126	5,557	6,299



MACRO ECONOMIC AGGREGATES

Per Capita Income:

The Per Capita Income is an indicator of the standard of living of the people. As per the CSO guidelines, the PCI is estimated by dividing Net State Domestic Product (NSDP) with midyear projected State population. As per the Advance estimates of 2018-19, the Per Capita Income (NSDP) of Andhra Pradesh at current prices increased from Rs.1,43,935 in 2017-18 (FRE) to Rs.1,64,025 in 2018-19 (AE), registering a growth of 13.96 percent. The Per Capita Income (NSDP) at constant (2011-12) prices, has also gone up from Rs.106864 in 2017-18 (FRE) to Rs.117261 in 2018-19 (AE) registering a growth rate of 9.73 percent.

Sectoral Contribution in 2018-19 (AE) of AP & India at Current Prices

As the state became more agrarian post the state re-organisation in 2014, the contribution from agriculture

sector to the state GVA in the new state has been above 30%. As per the Advance estimates of 2018-19, at current prices the contribution from the Agriculture sector is Rs.287659 crores (33.64%). The contribution from the Industry sector for the same period stood at Rs.199887 crores (23.38%) while it is Rs.367498 crore (42.98%) from the Service sector. For All India, the share of the three broad sectors in the GVA at Current prices stands at - Agriculture 16.0%, Industry 29.8% and Services sector 54.2%.

The time series showing the values of various economic aggregates for Andhra Pradesh state are given at Annexures – 2.1 to 2.5 and for All India the estimates are shown at Annexures - 2.6 to 2.10.

The Estimates of GVA by Economic Activity of Andhra Pradesh from 2011-12 to 2018-19 (AE) at Current & Constant (2011-12) Prices are given in the following table

AP-Broad sector wise GVA at Current Prices (Rs.in crores & growth rate in percent)

Sector	Item	2011-12	2012-13	2013-14	2014-15 (TRE)	2015-16 (TRE)	2016-17 (SRE)	2017-18 (FRE)	2018-19 (AE)
Agriculture	Value	94008	111864	128956	148196	173167	209870	255931	287659
	Growth Rate		18.99	15.28	14.92	16.85	21.20	21.95	12.40
Industry	Value	112659	101687	107408	124282	134301	148868	169253	199887
	Growth Rate		-9.74	5.63	15.71	8.06	10.85	13.69	18.10
Services	Value	143086	165925	190359	215230	248953	278857	316404	367498
	Growth Rate		15.96	14.73	13.07	15.67	12.01	13.46	16.15
Gross State Value Addition (GSVA) at Current Prices	Value	349753	379477	426722	487709	556421	637595	741588	855045
	Growth Rate		8.50	12.45	14.29	14.09	14.59	16.31	15.30

AP-Broad sector wise GVA at Constant Prices (Rs.in crores & growth rate in percent)

Sector	Item	2011-12	2012-13	2013-14	2014-15	2015-16 (TRE)	2016-17 (SRE)	2017-18 (FRE)	2018-19 (AE)
Agriculture	Value	94008	97831	108353	112200	121518	139395	163447	181074
	Growth Rate		4.07	10.75	3.55	8.31	14.71	17.25	10.78
Industry	Value	112659	97387	99345	111842	123855	137528	150049	165416
	Growth Rate		-13.56	2.01	12.58	10.74	11.04	9.10	10.24
Services	Value	143086	155796	167887	182970	205080	221059	241399	268176
	Growth Rate		8.88	7.76	8.98	12.08	7.79	9.20	11.09
GSA at Constant Prices	Value	349753	351014	375585	407011	450453	497982	554896	614665
	Growth Rate		0.36	7.00	8.37	10.67	10.55	11.43	10.77

GSDP of Andhra Pradesh and GDP of All India – a Snapshot:

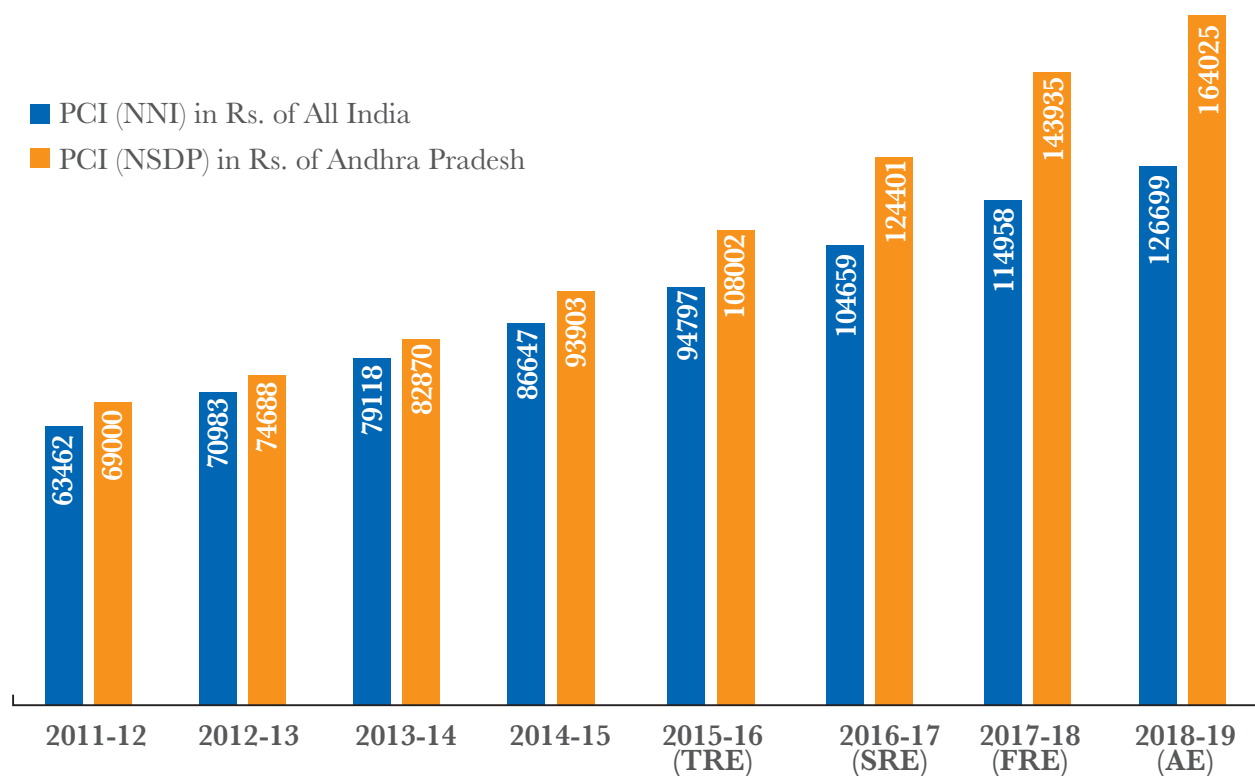
The GSDP of Andhra Pradesh and GDP of All India at Current & Constant (2011-12) prices (Rs.in crores & growth rate in percent)

	Andhra Pradesh				All India			
	GSDP at Current Prices	Growth (%)	GSDP at Constant Prices (2011-12)	Growth(%)	GDP at Current Prices	Growth(%)	GDP at Constant Prices (2011-12)	Growth (%)
2011-12	379402		379402		8736330		8736330	
2012-13	411404	8.43	380629	0.32	9944013	13.80	9213017	5.50
2013-14	464272	12.85	407114	6.96	11233522	13.00	9801370	6.40
2014-15	524976	13.07	444564	9.20	12467959	11.00	10527673	7.40
2015-16	604229	15.10	498607	12.16	13771876	10.50	11369495	8.00
2016-17 (SRE)	697508	15.44	550467	10.40	15362387	11.50	12298329	8.20
2017-18 (FRE)	809548	16.06	612793	11.32	17095004	11.30	13179858	7.20
2018-19 (AE)	933402	15.30	680332	11.02	19053968	11.50	14100119	7.00

A comparative picture of Per Capita Income (PCI) at Current Prices of All India & Andhra Pradesh is tabulated below

Year	Andhra Pradesh PCI (NSDP) in Rupees	All India PCI (NNI) in Rupees
2011-12	69000	63462
2012-13	74688	70983
2013-14	82870	79118
2014-15	93903	86647
2015-16 (TRE)	108002	94797
2016-17(SRE)	124401	104659
2017-18(FRE)	143935	114958
2018-19 (AE)	164025	126699

Comparative trends of Per Capita Income at Current Prices from 2011-12 to 2018-19 (AE):





Introduction

The State bifurcation in June 2014 resulted in several hardships. At the time of the State's bifurcation, the Union Government acknowledged that fiscal, economic and social conditions of residuary State of Andhra Pradesh will be adversely affected. In order to rectify these conditions, during the discussions on the AP Re-organisation Bill in Rajya Sabha, the Prime Minister gave assurances to provide assistance to the State. Provisions have also been made in the Andhra Pradesh Re-organisation Act 2014 for assistance/incentives and development of the State. But Government of India did not fulfill the same and not extended their assistance and assurances in full.

The State finances have been under stress on account of various factors such as shrinking of revenue base,

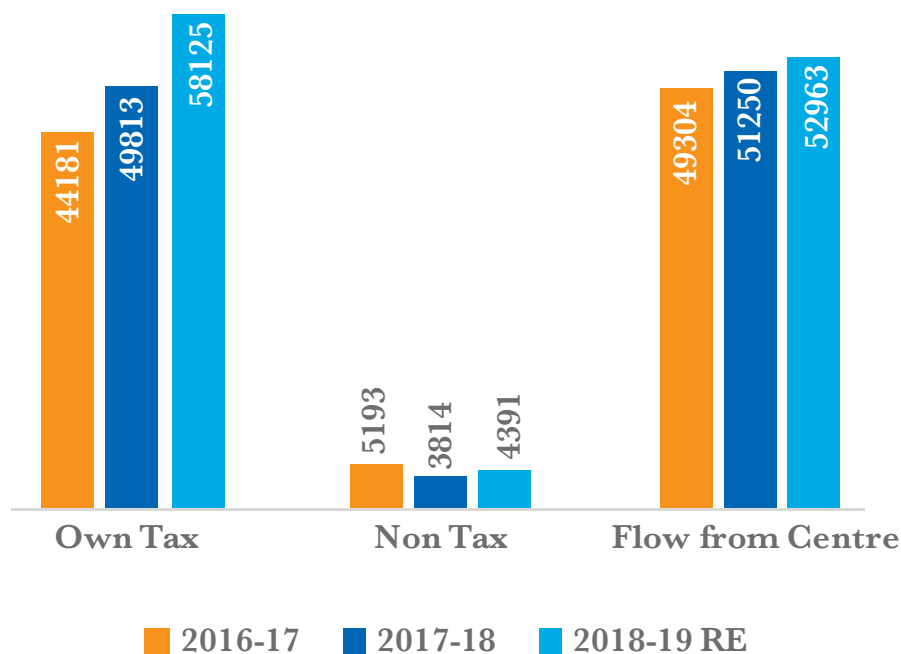
bludgeoning expenses and due to various factors such as increase in the establishment costs, interest payments, welfare commitments and loss of capital city as a major commercial hub. This fiscal stress is the result of huge expenditure commitments, lesser than promised and anticipated flow of funds from Government of India.

The State's Revenue

The revenue for the state in FY 2017-18 stood at Rs.49,813 Crores from Own Tax sources, Rs.3,814 Crores from Own Non Tax sources and Rs.51,250 Crores of Central Transfer. The details of the State's Own Tax Revenue, Own Non Tax Revenues and Resource flow from the Centre for the FY 2018-19 (RE) is given in Chart 3.1. The details of the same are given as Annexure 3.1, Annexure 3.2 and Annexure 3.3 respectively.

Chart 3.1 Comparison of State's Total Revenues for FY 2016-17 to FY 2018-19 (RE)

(Rs.in Crores)



State's Own Tax Revenue

The total Own Tax Revenue was Rs.49,813 Crores in FY 2017-18 and Rs.58,125 Crores in FY 2018-19 (RE). The composition of individual components of Own Tax Revenue for FY 2017-18 and 2018-19 (RE) is shown in

Chart 3.2. It is to be noted that the Sales Tax accounted for 38 percent and GST at 35 percent of the State's Own Tax Revenue for FY 2018-19 RE. The State's own tax revenue for the FY 2016-17 to FY 2018-19 (RE) have been detailed in Annexure 3.1.

Chart 3.2 Composition of State's Own Tax Revenue – FY 2018-19 (RE)

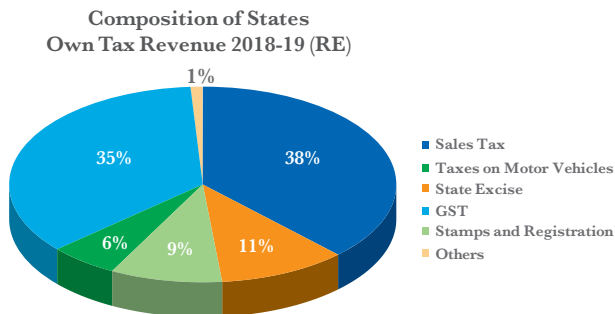
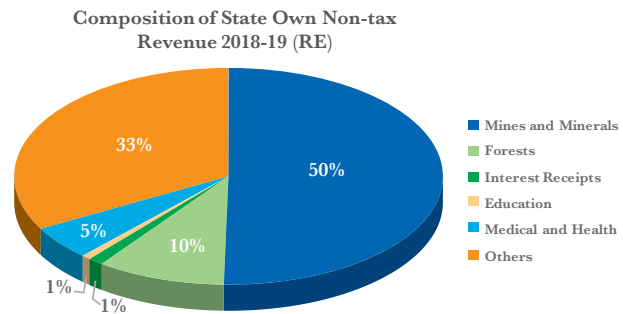


Chart 3.3 Composition of State's Own Non Tax Revenue – FY 2018-19 (RE)



State's Own Non Tax Revenue

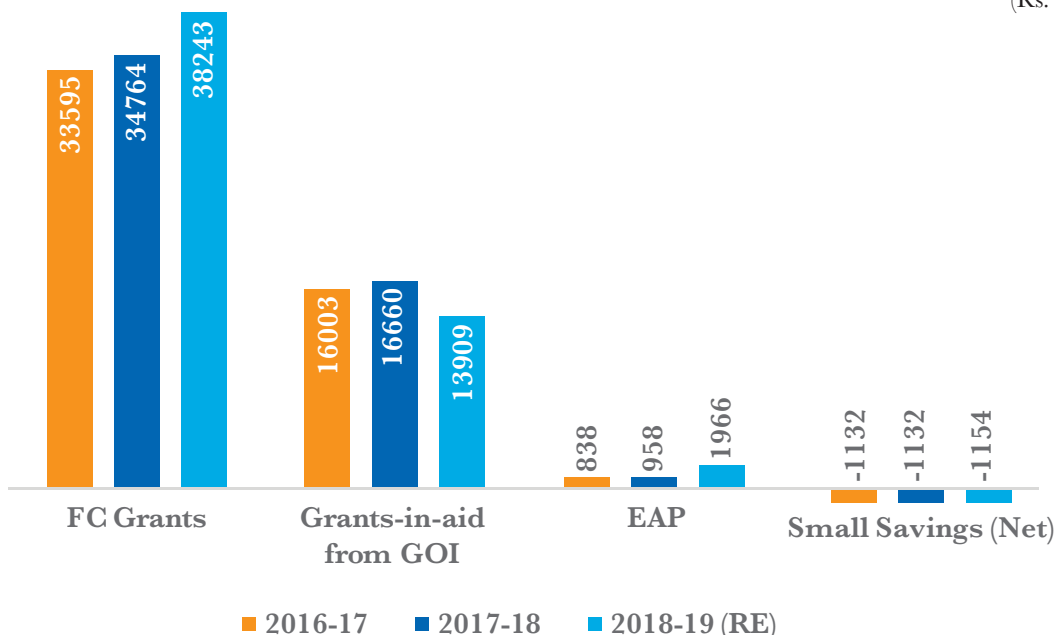
State's Own Non Tax Revenue was Rs.3,814 Crores in the FY 2017-18 and was Rs.4,391 Crores in FY 2018-19 (RE). The main contribution towards the State's Own Non Tax Revenue included the Mines and Mineral, Forests, Education and Other revenue sources. The composition of these revenue sources are given in Chart 3.3. The other major receipts are Rural Development Cess, Forest, Education etc. The details of the own non tax revenue for the FY 2016-17 to FY 2018-19 (RE) are given in Annexure 3.2.

Central Transfers

Resource flow from the Centre was Rs.51,250 Crores in the FY 2017-18 and was Rs.52,963 Crores in FY 2018-19 (RE). Finance Commission allocation constituted a major portion of this Central Transfers, which was Rs.34,764 Crores in the FY 2017-18 and Rs.38,243 Crores in FY 2018-19 (RE). The central transfers for the FY 2016-17, 2017-18 and FY 2018-19 (RE) are depicted in Chart 3.4. The details of the same for the FY 2016-17 to FY 2018-19 (RE) are given in Annexure 3.3.

Chart 3.4 Central Transfers for FY 2016-17 and FY 2018-19 (RE)

(Rs. In Crores)

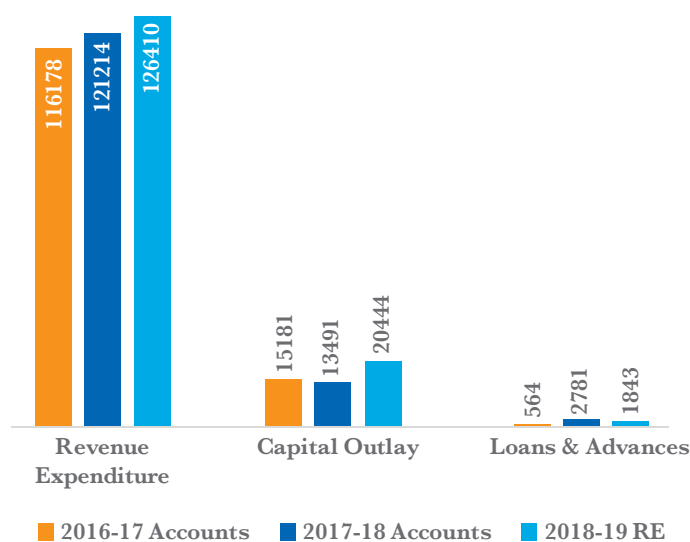


The State's Expenditure

The Total Expenditure by the State excluding ways and means advance was Rs.1,37,486 Crores in the FY 2017-18 and was Rs.1,48,697 Crores in FY 2018-19 (RE). The revenue expenditure was Rs.1,21,214 Crores in the FY 2017-18 and was Rs.1,26,410 Crores in FY 2018-19 (RE). It is important to mention that in its endeavor to build a developed Andhra Pradesh, the state spent Rs.13,491 Crores

on its Capital Outlay in FY 2017-18. This was mainly spent on capital works like irrigation, roads and infrastructure. Revenue expenditure through welfare schemes like subsidy rice, power subsidy, pavalu vaddi, old age pensions, housing programs etc. The state expenditures for the years 2016-17 to 2018-19 RE are compared in Chart 3.5. The details of the same are given in Annexure 3.4.

Chart 3.5 State Expenditure for FY 2016-17 and FY 2018-19 (RE)

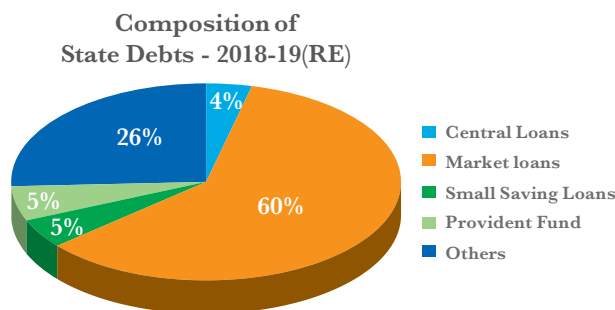


Rs. in Crores

Debts and Interest payments

The Total Debt at the end of the FY 2016-17 of the State was Rs. 1,94,862 Crores and was Rs.2,58,928 Crores at the end of FY 2018-19 (RE). The outstanding debt includes the un-apportioned amount of Rs.23,483 in 2016-17 and Rs.17,031 crores in 2018-19 (RE) respectively between two States of Andhra Pradesh and Telangana. The composition of debt sources like Market Loans, Central Loans, Small Saving Loans, PF and other sources. The Market borrowing outstood at Rs.1,12,630 Crores in the FY 2016-17 and at Rs.1,55,376 Crores in FY 2018-19 (RE). The state paid Rs.14,303 crores as interest towards its debts in the FY 2018-19 (RE) wherein it had paid Rs.13,847 Crores towards interest payments in the FY 2017-18. The Debt outstanding as percentage of GSDP was 27.83 percent in FY 2017-18 and 28.18% in FY 2018-19 (RE). Chart 3.6 shows the composition of outstanding debt in the state for the FY 2018-19 (RE). The details of the outstanding debt for the years 2014-15 to 2018-19 RE are given in Annexure 3.5.

Chart 3.6 Composition of State's Debts – FY 2018-19 (RE)



Revenue and Fiscal Deficits

In the FY 2017-18, Andhra Pradesh faced a Revenue Deficit of Rs.16,152 Crores and a Fiscal Deficit of Rs.32,373 Crores as compared to the Revenue Deficit of Rs.11,726 crores and Fiscal Deficit of Rs.33,736 crores in 2018-19 RE. The details are given in Annexure 3.6.



Prices

Various economic, social or political factors result in fluctuations in prices which therefore do not remain constant and tend to change over a stretch of time. Apart from rise in population which itself is a major cause of rising demand, changing food habits also contribute to demand related price-change. Prices will also be impacted by various activities resulting in a spike in consumption of certain products. In respect of essential commodities, both demand as well as supply are responsible for change in prices,

which force the governments to have periodic check on the movement of prices of essential commodities since change in price level is likely to have an impact on the pattern of consumption.

The Directorate of Economics and Statistics reports the prices of essential commodities periodically. Monitoring of prices of six essential commodities from selected centres across the state on daily basis is being done for tracking the changes. The state average daily retail prices of essential commodities are shown in Table 4.1.

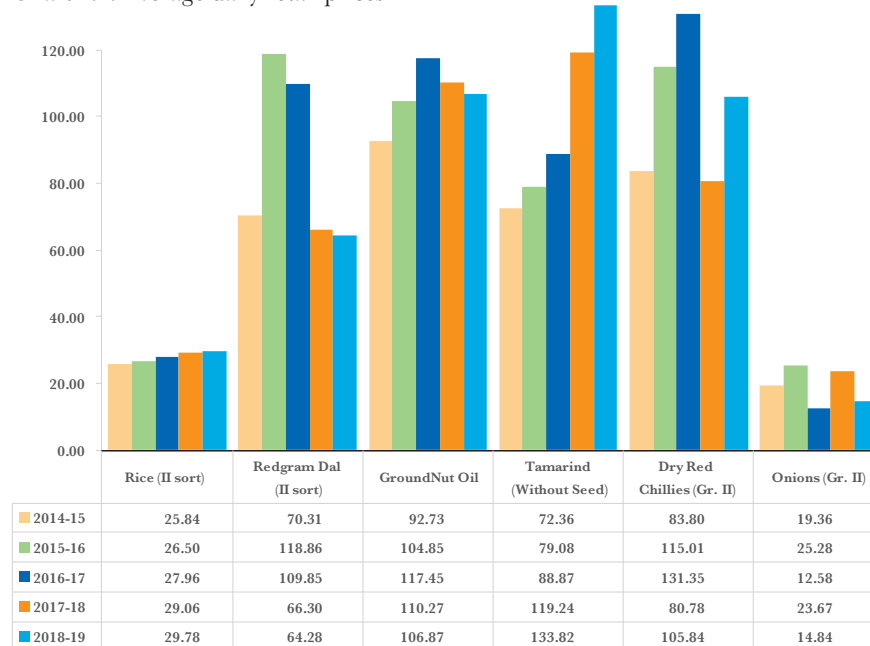
Table 4.1: State average daily retail prices of essential commodities

Commodity	(Rs./Kg)		
	2017-18 (Apr to Mar 2018)	2018-19 (Apr to Mar 2019)	Variation (%) of Apr- Mar 2019 over Apr to Mar 2018
Rice (II sort)	29.06	29.78	(+)2.48
Redgram dal (II sort)	66.30	64.28	(-)3.05
Groundnut Oil	110.27	106.87	(-)3.08
Common Tamarind (Without seed)	119.24	133.82	(+)12.23
Red Chillies Dry (Gr II)	80.78	105.84	(+)31.02
Onions (Gr II)	23.67	14.84	(-)37.30

Source: Directorate of Economics and Statistics, Vijayawada

Price trends indicate that the Average Daily Retail Prices of essential commodities like the prices of Rice (II sort), Common Tamarind (without seed) and Red Chillies Dry (Gr II) have shown an ascendancy and the prices of Redgram dal (II sort), Groundnut Oil and Onions (Gr II) have shown a decline during the period from April,2018 to Mar,2019 when compared to that of corresponding period of last year.

Chart 4.1. Average daily retail prices



Source: Directorate of Economics and Statistics, Vijayawada

Price Index– an economic barometer

Price Index is a statistical tool for measuring the relative change in price level with reference to time, geographical location and other characteristics. It is also considered as a barometer of economic activity.

Consumer Price Index is of great relevance for this purpose and is used as a device for measuring changes in the level of retail prices of goods and services consumed by different population segments. Industrial workers and agricultural labour, rural labour from the main population groups are usually covered by these indices. These indices measure relative changes in prices of selected goods and services consumed by indexed population over a period of time.

Consumer Price Indices for Industrial Workers:

The Consumer Price Indices for Industrial Workers (CPIIW) are being constructed and compiled at the base 2001=100. The data is collected from seven centres selected from Andhra Pradesh under Central and State Series based on Industrial workforce. The centres are 1. Visakhapatnam 2. Guntur 3. Vijayawada 4. Vijayanagaram-Chittivalasa 5. Kakinada-Rajahmundry 6. Jaggaiahpet and 7. Tirupati-Renigunta. Of these, Labour Bureau, Simla compiles the index for the first three centres since they come under Central Series, while the State Directorate of Economics & Statistics compiles the indices covering the remaining four complexes in Andhra Pradesh.

Consumer Price Indices for Industrial Workers grew by 4.20% and 5.63% in the state and All India level respectively during the year 2018-19 over the corresponding period of previous year. Details about the Consumer Price Indices for Industrial Workers from 2013-14 to 2018-19 are shown in Table 4.2.

Table 4.2: Consumer Price Index Numbers for Industrial workers (Base:2001=100)

Year	Andhra Pradesh	All India (*)
2013-14	239	236
2014-15	257	251
2015-16	269	265
2016-17	278	276

Year	Andhra Pradesh	All India (*)
2017-18	286	284
2018-19	298	300
Growth of 2018-19 over 2017-18 Index	4.20	5.63

Source:(*) Labour Bureau, Simla

Consumer Price Index Numbers for Agricultural Labour

The Consumer Price Index Numbers for Agricultural Labour (CPI-AL) with 1986-87 as base year are compiled by the Labour Bureau, Simla. The Table 4.3 given below gives the indices during April, 2018 to March, 2019 and the data relates to the combined state of Andhra Pradesh. The Consumer Price Index Numbers for Agricultural Labour increased by 3.17% in the State (Combined AP) and 2.02% at All India compared to the corresponding period in the previous year.

Table 4.3: Consumer Price Index Numbers for Agriculture Labour(Base:1986-87=100)

Year	Andhra Pradesh	All India
2013-14	805	750
2014-15	860	800
2015-16	914	835
2016-17	955	870
2017-18	979	889
2018-19	1010	907
Growth rate (%)		
2018-19 over 2017-18	3.17	2.02

Source: Labour Bureau, Simla

Consumer Price Indices for Rural, Urban and Combined

Since the Consumer Price Index (CPI) Numbers reflect the fluctuation in retail prices pertaining to the specified segments such as industrial workers, agricultural labourers and rural labourers only and do not encompass all segments of the population, these numbers do not capture the holistic picture of price behavior in the country. Thus, in order to reflect changes in price levels of various goods and services

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consumed by respective population groups in rural and urban areas, a new series of CPI for urban population, i.e., CPI (Urban), and CPI for the rural population, i.e., CPI (Rural) are compiled.

The Central Statistics Office (CSO), Ministry of Statistics and Programme Implementation has revised the base year

of the Consumer Price Index (CPI) from 2010 to 2012 with effect from 2015 for release of indices and the base is being followed by the States & UTs.

The average indices for the period from Apr 2018 to Mar 2019 in AP and All India are shown in Chart 4.2, Table 4.4 and month wise index also given in Annexure - 4.2

Chart:4.2 Consumer Price Indices

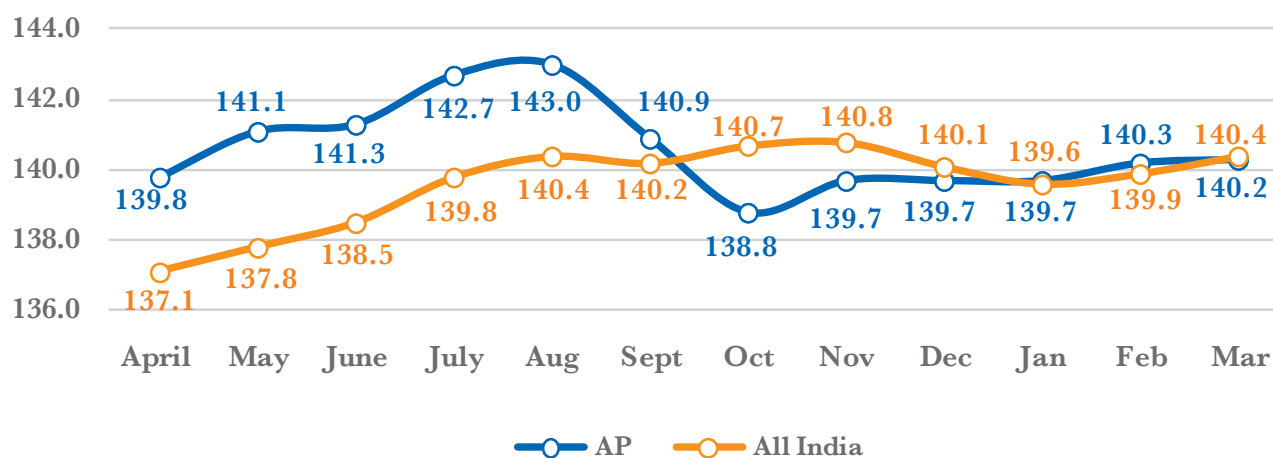


Table 4.4: Average Consumer Price Index Numbers for Rural, Urban and Combined for 2018-19

(Base:2012=100)

	Andhra Pradesh	All India
Rural	141.8	141.3
Urban	138.5	137.7
Combined	140.6	139.6

Source: CSO, New Delhi, Note: Index is for AP (13 districts)

Wholesale Price Index

Wholesale Price Index (2011-12=100) serves as an important determinant in formulation of trade, fiscal and other economic policies by the government. It is also used by banks, industry and business circles. It is released on monthly basis by the Office of the Economic Adviser, Ministry of Commerce & Industries, GOI. It covers 697 commodities as classified below:

- 117 are from 'Primary Articles' group
- 564 from 'Manufactured Products' group and
- 16 from 'Fuel and Power' group.

WPI for All Commodities increased from 117.3 in Apr 2018 to 119.9 in March 2019. It increased from 130.7 to 134.5 for Primary Articles group and from 116.3 to 118.3 for Manufactured Products and from 99.0 to 102.5 for Fuel & Power group during the same period.

Wages

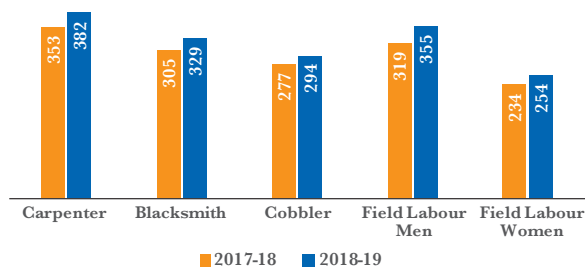
Agricultural labour and Artisans in the rural areas are considered to be the weakest segment of rural labour force in the Un-organised Sector. The wages data is being collected from 44 centers spread over the State covering 42 divisions and 23 occupations. Average daily wages of artisans and field labour in the State are presented in Table 4.5 and depicted in the Chart 4.3 below.

Table 4.5: State average Daily Wages (Rs.) of artisans and field labour

Category	2017-18	2018-19
Carpenter	353	382
Blacksmith	305	329
Cobbler	277	294
Field Labour - Men	319	355
Field Labour - Women	234	254

Source: Directorate of Economics & Statistics

Chart 4.3: Average daily wages (Rs.) of artisans and field labour



Source: Directorate of Economics and Statistics

Public Distribution System

Andhra Pradesh has been implementing the electronic modules in PDS, such as, linkage of Aadhaar with ration card data, allotment of commodities under e-PDS and distribution of commodities through e-PoS cum e-weighing devices throughout the state through supply chain management, enabling end-to-end computerization of the public distribution system (PDS). Portability was also provided to draw their commodities from any of the e-PoS enabled FP shops. SMS facility was also provided to the beneficiaries. Due to these reforms, the state has ensured better delivery of essential commodities to the entitled households as per the scales indicated under the National Food Security Act, 2013.

Home Delivery of Essential Commodities

The state government has decided to deliver essential commodities under PDS at the doorsteps of common man in every village and town through village/ward volunteers. Quality rice in 5,10 and 15 kg packets, edible oil, pulses, salt and tamarind will be delivered at the doorsteps at subsidized rates

GOI is allocating 1,54,148 MTs of rice and 1870 MTs of wheat per month to 268.23 lakh members. However, State Govt. is distributing rice to all the 420.83 lakh members covered in 1.47 crore BPL cards duly incurring the expenditure additionally. Total requirement of Rice under PDS is 2,30,778 MTs. Deficit quantity of 76,630 MTs of rice is being procured from open market under DCP @ Rs.32,000/- per MT. Apart from Rice, Sugar, Redgram dal, Wheat Atta, Salt, Ragi, Jowar and Double fortified

salt are being distributed to the card holders under PDS on subsidized rates.

Ration Cards

Category-wise ration cards in existence in the State during 2018-19 are shown in Table 4. and district wise card position is given in Annexure 4.3.

Table 4.6: Ration Cards Position (Lakh No.)

Fair Price shops	0.29
No. of Ration Cards	
White ration cards	137.68
Annapurna	0.11
Antyodaya Anna Yojana Cards	9.14
Total	146.93

Ragi (Millet) and Jowar under PDS

To improve the Health standards and Nutritional Food habits, Government introduced distribution of Ragi in Ananthapuramu and Chittoor and Jowar in Kurnool & Kadapa districts & (03) mandals of Krishna district to BPL families through Fair Price Shops to change their food habits. Ragi up to 3 kgs and Jowar up to 2 kgs per card @ Rs.1 per kg in lieu of rice. Allocation of Ragi and Jowar was extended to all the districts from October,2018 onwards.

Double Fortified Salt (DFS)

To eradicate the longitudinal anemia due to deficiency of Iron, Double Fortified Salt (DFS) was introduced in Public Distribution System on pilot basis for distribution to the BPL card holders (1 kg per card @ Rs.12) of West Godavari, Krishna, Guntur and Kurnool districts from the month of October,2018 onwards. Allocation of Double Fortified Salt was extended to all the districts from November,2018 onwards.

Distribution of Redgram Dal:

Government has enhanced the scale of distribution of Redgram dal from 1 kg to 2 kgs per BPL card per month from July,2018 onwards and margins of the dealers also enhanced from September,2018.

Festival kanuka

Government has distributed four commodities (Sugar 2Kg, Wheat Atta 5Kg, Vermicelli (Semiya) 1 Kg and Ghee 100ml

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in a non woven carry bag) to the Muslim BPL card holders as Ramzan Thofa at free of cost in the year 2018 by incurring an expenditure of Rs.35.29 crores.

Government has distributed six commodities (Redgram Dal ½ Kg, P.Oil ½ Ltr., Chana Dal ½ Kg, Jaggery ½ Kg, Wheat Atta 1 Kg and Ghee 100 ml in a non woven carry bag) to all the BPL card holders as Sankranti Kanuka / Christmas Kanuka in 2018-19 at free of cost by incurring Rs.320 crores, in addition to regular PDS commodities.

Food Basket Scheme

Distributed (06) commodities (viz., Ragi powder - 2kgs, RG dal - 2kgs, Sunflower Oil - 1 liter, Double fortified Salt - 1 kg, Groundnut seeds - 1 kg, Jaggery - 1 kg in a carry bag)(worth of Rs.530/-per pack) under Food Basket Scheme at free of cost to the 4.40 lakh tribal families in the 7 ITDA / agency areas in 77 mandals of Seethammapeta (Srikakulam), Parvathipuram (Vizianagaram), Paderu (Visakhapatnam), Rampachodavaram & Chittoor (East Godavari), KR puram (West Godavari) and Srisailem (Kurnool / Guntur / Prakasam districts).

Sanitary Napkins

Sanitary Napkin Pack is being distributed to white cards covered with female member and VO's of the SERP @ Rs.10 per packet with 50% subsidy.

Supply of unpolished rice (Brown Rice) in identified villages.

Government has decided to supply unpolished rice which contains rich nutrients such as Vitamin B12, B6, Fiber and Minerals and other health benefits under PDS on pilot basis in identified villages of West Godavari district. Under pilot project, distributing 10 Kgs per family at Rs 1.00 per Kg in lieu of existing polished rice as per the choice of beneficiary in West Godavari district.

Mid-Day Meal & ICDS

Government allocated a quantity of 66,349.320 MTs of rice for the year 2018-19 for providing Meal (cooked) to the students up to 8th class and NCLP under MDM Scheme and the same was released to School Education department. Government also supplied a quantity of 23707.778 MTs rice to the 9th & 10th class students under MDM for the year 2018-19.

Rice fortification in MDM and Anganwadi centers

To avoid the Micronutrient deficiencies and to improve the essential vitamins and minerals required for healthy growth, Govt. ordered to introduce the fortification of food grains on pilot basis in West Godavari and Krishna districts for distribution in the Government projects like Mid Day Meal, PDS and AWCs with the support of TATA Trusts from July, 2018. Extension of supply of fortification rice to all the districts is under examination.

Welfare Institutions & Hostels

GOI allocated 113598 MTs of rice for the year 2018-19 and the same was released to Welfare Institutions & Hostels.

The supply of Essential commodities under PDS are shown in the Table 4.7 below

Table 4.7 Supply of Essential Commodities under PDS

Sl. No	Name of the Scheduled Commodity	Scale of distribution	End Consumer Price per Kg (in Rs.)
1	Rice to Priority / White Cards	5 kgs per card	1.00
2	Rice to AAY Cards	35 kgs per card	1.00
3	Rice to Annapurna Cards	10 kgs per card	Free of cost
4	Sugar	1 kg per AAY card only	13.50
		½ kg per ANP, WAP / PHH card	10.00 (1/2 kg)
5	Wheat Atta	1 kg per card	16.50
6	Redgram dal	2 kgs per card	40.00
7	Ragi	Upto 3 kgs per card (in lieu of Rice to AAY & PHH / WAP cardholders only)	1.00
8	Jowar	Upto 2 kgs per card (in lieu of Rice to AAY & PHH / WAP cardholders only)	1.00
9	D.F.Salt	1 kgs per card	12.00

Source: Civil Supplies Department

Price Monitoring and Market Intervention Scheme

Prices of essential commodities including vegetables are being monitored daily and analyzed. For better monitoring, including price forecasting, intervention strategies and predictive modelling and analytics, the services of M/s Agriwatch are also utilized.



Agriculture

“Agriculture is our wisest pursuit, because it will in the end contribute most to real wealth, good morals, and happiness.”----- Thomas Jefferson

Agriculture is the primary source of livelihood for about 60 per cent of India’s population. India’s production of food grains has been increasing every year, and India is among the top producers of several crops such as wheat, rice, pulses, sugarcane and cotton. However, the agricultural yield (quantity of a crop produced per unit of land) is found to be lower in the case of most crops, as compared to other top producing countries such as China, Brazil and the United States.

India is expected to achieve the ambitious goal of doubling farm income by 2022. The agriculture sector in India is expected to generate better momentum in the next few years due to increased investments in agricultural infrastructure such as irrigation facilities, warehousing and cold storage. India is expected to be self-sufficient in pulses in the coming few years due to concerted efforts of scientists to get early-maturing varieties of pulses and the increase in minimum support price. Andhra Pradesh is also aiming to this task of doubling the farmer’s income in sync with the national agenda.

Key issues affecting agricultural productivity include the decreasing size of agricultural land holdings, continued dependence on the monsoon, inadequate access to irrigation, imbalanced use of soil nutrients resulting in loss of fertility of soil, uneven access to modern technology, lack of access to formal agricultural credit, limited procurement of food grains by government agencies, and failure to provide remunerative prices to farmers. Some of the recommendations made by committees and expert bodies over the years include bringing in agricultural land leasing laws, shifting to micro-irrigation techniques to improve efficiency of water use, improving access to quality seeds by engaging with the private sector, and introducing a national agricultural market to allow the trading of agricultural produce online.

The focus has shifted from production to processing, packaging and marketing through a strengthened supply chain. The Indian food industry is poised for huge growth, increasing its contribution to world food trade every year

due to its immense potential for value addition, particularly within the food processing industry. Andhra Pradesh also joins the national endeavour.

Agricultural transformation – focused approach

Andhra Pradesh state is committed to provide agricultural extension services to farmers and to transfer the latest technical knowledge to the farming community; introduction of high yielding varieties, laying demonstrations, imparting training to farmers to improve skills & knowledge to boost up the agricultural Production and productivity. The State is committed to transform the Primary Sector. The focused areas under Primary Sector are:

- (a) Increasing productivity
- (b) Mitigating the impact of droughts through water conservation;
- (c) Post-harvest management to reduce wastage; and
- (d) Establishment of processing, value addition capacity and supply chain of the identified crops.

Land Utilization

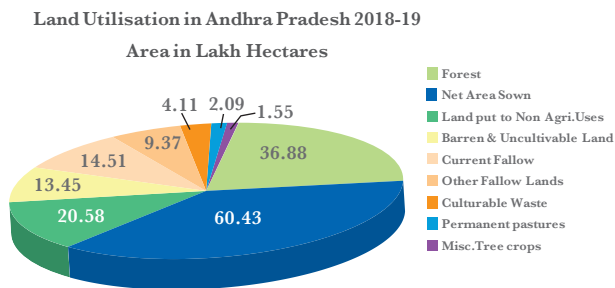
The percent share of different segments of land use of the total geographical area of the state of 162.97 lakh hectares is as follows:

Sl. No	Area Classification	Area in Lakh Ha.	Percentage to Total Geographical Area (%)
1	Net area sown	60.43	37.08
2	Forest	36.88	22.63
3	Land put non-agricultural uses	20.58	12.63
4	Barren and uncultivable land	13.45	8.25
5	Current fallow lands	14.51	8.91
6	Other fallow	9.37	5.75
7	Cultivable waste lands	4.11	2.52
8	Remaining land	3.64	2.23

The Land utilisation particulars from 2008-09 to 2018-

19 are given in the Annexure 5.1 and district wise land utilisation particulars for 2018-19 are given in Annexure 5.2. The following Chart. 5.1 depicts Land utilisation details for 2018-19.

Chart 5.1 : Land Utilisation in Andhra Pradesh 2018-19



Source: Directorate of Economics & Statistics department

Soil Types

There are various types of soils and the formation of a soil is primarily influenced by major factors - climate, altitude and composition of bedrock etc. Disproportion in the distribution of rainfall in the country and excessive heat contribute special characters to the soils. Most of soils in the State are made up of a combination of three basic types, namely, sand, silt, and clay. Category-wise soils are given in Annexure 5.3. Of the 22 categories of soils adding to the total geographical area of the state, six types are predominant and together account for over 88% of the area.

Agro Climatic Zones

The following are the Six Agro climatic zones in the State.

Sl. No.	Name of the zone	Districts
1	North coastal zone	Srikakulam, Vizianagaram, Visakhapatnam
2	Godavari zone	East Godavari, West Godavari
3	Krishna zone	Krishna, Guntur, Prakasam
4	Southern zone	Chittoor, YSR, SPS, Nellore
5	Scarce rainfall zone	Kurnool, Anantapuramu

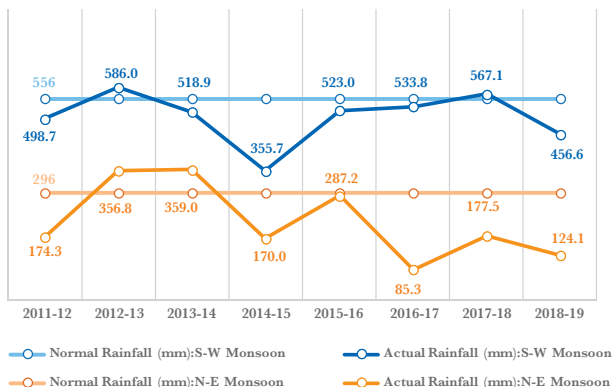
Sl. No.	Name of the zone	Districts
6	High altitude & tribal areas zone	High Altitude & tribal areas of Srikakulam, Visakhapatnam, East Godavari districts

Land Holdings

The data on landholdings in the state is being collected since 1970-71 through a quinquennial census of land holdings, the latest available data relates to 10th Agriculture Census 2015-16. While the area operated has declined by about 90,000 ha. between the two census periods (2010-11 to 2015-16), the increase in the number of holdings is alarming as it has increased from 76.21 lakh holdings in 2010-11 to 85.24 lakh in 2015-16. This huge rise in the number of holdings coupled with a decline in the area operated has contributed to a fall in the average size of the holding from 1.06 hectares in 2010-11 to 0.94 hectares in 2015-16. Distribution of land holdings and area operated according to size classes is given in Annexure 5.4 and District - wise distribution of land holdings and area operated according to size classes are given in Annexure 5.5.

Rainfall scenario:

Chart 5.2: Rainfall during South-West Monsoon and North-East Monsoon



AGRICULTURE AND ALLIED ACTIVITIES

Year	Monsoon-wise Rainfall (in mm)		
	South West Monsoon (Normal 556.0)	North East Monsoon (Normal 296.0)	Total (Normal 966.0)
2017-18	567.1: Deviation to normal (2%)	177.5: Deviation to normal (-40%)	826.9 Deviation to normal (-14%)
2018-19	456.6 Deviation to normal (-18%)	124.1 Deviation to normal (-58%)	635.0 Deviation to normal (-34%)

Source: Directorate of Economics & Statistics.

Season wise and region wise rainfall details are given in the Annexure 5.6 and district wise rainfall is given in Annexure 5.7.

Comparative picture of Area and Production under food grains and paddy

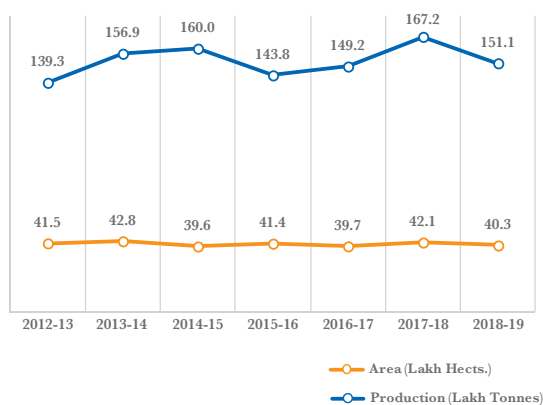
The area as well as production of food grains for the year 2018-19 are expected to show decrease in comparison with the previous year achievements viz, 2017-18. However, a marginal decline of -4.27 lakh ha. in area took place in case of Paddy crop during 2018-19.

Year	Food grains						Paddy			
	Area (lakh ha.)			Production (lakh, tonnes)			Area (lakh ha.)			Production (lakh,tonnes)
	Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif	Rabi	Total	Kharif
2017-18	20.65	21.41	42.06	82.49	84.73	167.22	14.77	7.41	22.18	74.12
2018-19	21.02	19.24	40.26	84.44	66.68	151.12	15.65	6.44	22.09	78.70
% Change	1.79	-10.14	-4.27	2.36	-21.30	-9.63	5.96	-13.09	-0.41	6.18

(Fourth advance estimates 2018-19 provisional)

During 2018-19, the production under Food grains showed a decrease of 9.63% due to decrease of Area under Paddy and Major millets. The time series trends in area and production of food grains and the Season wise area, production and productivity of selected crops are presented in Annexures 5.8, 5.9, 5.10 and 5.11 respectively.

Chart 5.3: Area and Production under food grains



Source: Directorate of Economics & Statistics

Cropping Intensity

The cropping intensity, the ratio of gross cropped area to net cropped area, which is a measure of assessing efficiency of agriculture sector, has not undergone much change in the recent past. However, the cropping intensity for the year 2018-19 has marginally declined to 1.24 from 1.26 of the last year.

Gross and Net Area Irrigated

The gross area irrigated in the State decreased to 36.45 lakh hectares in 2018-19 from 37.30 lakh hectares in 2017-18. The net area irrigated in the state stands at 28.06 lakh hectares in 2018-19. The source-wise district wise Gross and Net area irrigated in the State from 2010-11 to 2018-19 are given in Annexure 5.12, 5.12 A and 5.13, 5.13A respectively.

Key strategies to make agriculture profitable:

- Distribution of Soil Health cards.
- Correction of Micro nutrient deficiencies in major crops based on soil test results on saturation mode.
- Supply of seed of new varieties.

- Creating awareness on departmental activities and innovative technologies.
- Demonstration of climate resilient, low cost cultivation, quality produce and high yielding technologies through best practices and agriculture demonstrations.
- Promotion of inter cropping, poly cropping and mixed cropping.
- Encouraging Organic farming / Zero budget natural farming.
- Adoption of Soil & Water conservation measures (Dead furrows, recharging of bore wells, Recharge of Groundwater, Farm ponds, Rain guns etc), drought proof measures in case of contingency.
- Issue of Certificate of Cultivation(CoC) to tenant farmers for obtaining Institutional credit and other benefits.
- Pest control by monitoring pest forecast and adopting appropriate control measures.
- Promotion of Green Manure crops on a Mission mode.
- Involvement of ANGRAU and other National and International Institutes.
- Periodical crop advisories to the farmers.

YSR Rythu Bharosa:

The government of Andhra Pradesh has decided to implement 'YSR Rythu Bharosa' Scheme from 15th October, 2019 i.e. from Rabi 2019 to provide financial assistance to the farmer families @Rs.6,500/- per year in addition to the amount of Rs.6,000/- per farmer family per year given by the GoI. In case of tenant farmers, the state government has decided to give the entire amount of Rs.12,500/- per year to each farmer family across the state. A farmer family is defined as " a family comprising of husband, wife and minor children having cultivable land".

As such, it is estimated that, the total number of farmers families in the State stands at 53,48,069 as per the available data. An amount of Rs. 3,476/- crore is estimated to implement the scheme.

Tenant Farmers:

The Government has decided to amend the Act in such a way by giving full rights on crops grown (for not more than 11 months) to Tenant farmers, without affecting the interests

of land owners and their ownership rights on their lands. During the crop period, the tenants will be made eligible for the all subsidies and benefits with regard to crops.

The tenants will be made eligible for interest free loans. Also all the promises to farmers in Navaratnalu, i.e., from Crop Insurance to Interest Free Loans, from 9 Hours free power to guaranteed support price to the produce, and amount of Rs 7 lakhs from YSR Bhima to the accidental or suicide victims' family will be given to all Tenant Farmers. As per the estimate of CCLA after Andhra Pradesh Land Licensed Cultivators Act came into force (during 2011), there are 15,35,642 farmers cultivating land on Tenancy in AP. An amount of Rs.1919.55 Crore is needed to extend the benefit to the Tenant Farmer Families. To implement the said scheme for 68,83,711 the farmer families including the tenant farmers, a total amount of Rs.5,396/- Crore is needed per year.

Agricultural Credit:

The Annual Credit Plan for the year 2018-19 was Rs.1,01,564 cr. towards Agriculture Credit. Rs.106560 crores (104.92%) was disbursed up to March 2019 under Agriculture Credit. An Amount Rs.76721 crores was disbursed towards crop loans (short term loans) against the target of Rs.75000 crores and an amount of Rs.29839 crores was disbursed against the target of Rs.26564 crores under Agriculture Term Loans including allied activities. Details about Agricultural Credit disbursement during 2018-19 are given in Annexure 5.14.

As per the NABARD Focus Paper, the Annual Credit Plan for 2019-20 for the State is Rs.1,13,977.21 Crores towards Agriculture Credit. Of this, an amount of Rs. 88,362.71 Crores is allotted for Kharif and Rs. 25,614.50 Crores is allotted for Rabi season.

Credit to Land Licensed Cultivators (Tenant farmers):

The State Government has taken up a major initiative to facilitate financing to the land licensed cultivators (tenant farmers) through passing an act named the "Andhra Pradesh land licensed cultivators Act No. 18 of 2011 to provide loan and other benefit eligibility cards to land licensed cultivators (tenant farmers).

During 2018-19, Loan Eligibility Cards (LECs) were issued

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to 5,14,014 (Fresh & Renewal) Land licensed cultivators. An amount of Rs.1545 crores was disbursed under crop loans to 2,67,053 LEC holders.

During 2019-20, the Revenue Department has set a target of issuing 5,96,739 Loan Eligibility Cards (Fresh: 1,63,220 and Renewal: 4,33,519) to the Land Licensed Cultivators (Tenant farmers) in the state. The Revenue Sadassus have been conducted to achieve the said target of issuing LECs to facilitate tenants to get crop loans prior to the land owners.

Issue of “Certificate of Cultivation” to tenant farmers:

During 2018-19, 5,81,635 Certificate of Cultivation (CoCs) were issued to the tenant farmers. An amount of Rs1,237 Crores was disbursed to 2,61,418 CoC farmers. During 2018-19, loan amount of Rs.5081.00 crores were provided to 11.27 lakh Tenant farmers. Details are given in Annexure 5.15

Vaddileni Runalu and PavalaVaddi Scheme on Crop Loans:

To mitigate the financial burden of the farmers, the Government had announced Rythu Sri (Vaddileni Panta Runalu/Pavala Vaddi) Scheme on crop loans disbursed. The Government had announced Interest Free Crop Loans to all the farmers up to Rs.1.00 lakh and Pavala Vaddi for crop loans from Rs.1.00 lakh to Rs.3.00 lakhs if repaid in time (maximum period of one year). During 2018-19, an amount of Rs.4.02crores was settled to 68,660 farmers under Pavala Vaddi. An amount of Rs.122.84 Crores was settled to 6,56,303 farmers under Vaddileni Runalu.

The Government of Andhra Pradesh has taken up a new initiative to extend Interest free loans to all the farmers who avail crop loans during 2019-20. An amount of Rs.3534.53 Crores has been allotted under YSR Rythu Bharosa against the crop loan target of Rs. 88,362.71 Crores to 65 lakh farmers under Vaddileni Runalu. During 2018-19 Rs.126.86 crores Interest subsidy was provided to 7.24 lakh farmers.

Crop Insurance:

Kharif 2018:

- The new PMFBY portal was developed by GoI and 16.52 lakhs of farmers have been enrolled under PMFBY & RWBCIS during Kharif, 2018.
- Target for coverage of area under crop insurance was fixed as 25.57 Lakh ha, which is 50% of the gross cropped area, as per the guidelines issued by GOI.
- Mid-Season Adversity is invoked for Paddy Crop in 473 Insurance Units covering 759 villages in 18 Mandals of Srikakulam District affected with Titli Cyclone and Notification was issued on 19.10.2018. An amount of Rs.16.13 Cr of state share of Premium was paid to the insurance company for settlement of Mid-season adversity claims.

Rabi 2018-19

- For the Rabi season, an area 11.50 Lakh Ha. And 5.00 lakh farmers have been fixed. “Crop Insurance awareness and Spot enrollment campaign Week” was conducted at GP level and involved all the officers of Agriculture Dept, representatives from Insurance companies and CSCs in the weekly campaign.
- Crop insurance Scheme (PMFBY & RWBCIS): This scheme is being implemented to cover the farmers against crop losses due to adverse weather aberration.
 - o PMFBY: 7.82 lakh farmers are enrolled in an extent of 7.12 lakh ha during Rabi 2018-19.
 - o RWBCIS: 14265 farmers are enrolled in an extent of 4.57 lakh ha during Rabi 2018-19.

Kharif 2019:

- State has been logically divided into 4 uniform insurance clusters under PMFBY and 2 clusters under RWBCIS for the year 2019-20.
- As per the PMFBY operational guidelines of GoI, 13 Districts have been grouped into four clusters with balanced risk profile and sum insured as shown below

Scheme	Cluster Number	Districts	Implementing Agency
PMFBY	1	West Godavari, Prakasam, Kurnool	SBI General
	2	Visakhapatnam, SPS Nellore, YSR Kadapa	Oriental Insurance Company Ltd.,
	3	Vizianagaram, East Godavari, Guntur, Anantapuramu	SBI General
	4	Srikakulam, Krishna, Chittoor	IFFCO-TOKIO
RWBCIS	1	Ananthapuramu	IFFCO-TOKIO
	2	Rest of the Districts	SBI General

- Under PMFBY, Rice Crop is covered in 12 Districts & Redgram crop in Anantapuramu district under “Village Insurance Unit” and other crops covered under as Mandal/District Insurance Units.
- The process of issue of notification orders of Crops/Districts/Premium Rates/Seasonality Discipline for Kharif, 2019 & Rabi 2019-20 seasons have been completed.

Crop insurance claim details under different schemes from 2013-14 to 2018-19 are given in Annexure 5.16

In a landmark decision, the new government in the state has decided to facilitate “Crop Insurance Premium payment by the government itself instead of farmers for the entire notified area”, and it will be implemented during the year 2019-20, as such 55 lakh farmers will be enrolled.

Commitments of the Government under Navarathnalu

- YSR RythuBharosa Scheme to be implemented from 15th October, 2019. Under the scheme, all farmers (including tenant farmers) will get Rs. 12,500 per year as an incentive before the sowing seasons begin
- Interest-free loans – under this scheme crop loans will be given with free of interest government will pay the interest to the banks
- RythuBima (Crop Insurance): Government will pay the premiums for the crop insurance and at the same time will facilitate in settling the claims in case of losses due to calamities
- Free bore wells will be allotted for farming lands. Government will purchase 200 rigs one each for 175 Assembly constituencies and 25 Parliamentary constituencies
- 9 hours of free electricity will be provided for farming sector in the day time
- Price stabilization fund with Rs. 2000 crore corpus
- Natural disaster relief fund with Rs. 4000 crore corpus
- Construction of food processing unit in each assembly constituency
- If a farmer commit suicide or die accidentally, the farmer’s family will be given insurance of Rs 7 lakh.
- AP Rythu Commission will be constituted for the progress of agriculture sector, farmer welfare and price stabilization.

Polam Pilusthondi:

The main objective of the scheme is to strengthen the extension reach to farmers so as to increase the productivity in agriculture and allied sectors and thereby increase income of the farmers.

Focused Areas:

During the Polam Pilusthondhi Programme, the main emphasis was given on the following issues:

- Distribution of Soil Health Cards and Soil Test based fertilizer application

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- Correction of Micro nutrient deficiencies.
- Encouraging the Organic farming / Natural Farming/ Zero based natural farming
- Soil & Water conservation measures (Dead furrows, Recharging of Bore wells, Recharge of Ground Water, Farm ponds, Rainguns etc)
- Issue of CoC to Tenant Farmers for obtaining Institutional Credit and other benefits.
- Pest and Disease Attack and Remedial measures through Drones.
- Drought proofing and mitigating the distress of farmers in drought prone districts through APDMP

Procedural guidelines, Approach, Action Plan and Workshops:

- During 2018-19, the Polam Pilusthondi programme has been conducted for a period of eight months i.e 4 months during Kharif and 4 months during Rabi by the Agricultural Department along with the officials of the allied departments and scientists of the Agricultural, Horticultural and Veterinary universities with the consent of the concerned people representatives at Mandal level.
- The programme was organised @ two days in a week and each day two villages were covered. The posters, pamphlets and village specific materials have been prepared on the schemes implemented by the Government and distributed to the farmers attending the programme.
- The programme was organized in 85264 villages covering 26.95 lakh farmers (including 4.44 lakh women farmers) during 2018-19

Extension Trainings:

- Training programmes are being imparted to the farmers/Farm women/RMGs on the latest production technologies on various crops with the main emphasis on the principal crop.
- The trainings are organized covering 30% trainings to the farm women, 10% trainings to RMGs and remaining to the farmers out of the total budget allocated. An amount of Rs. 78.00 lakhs allotted to conduct 1,300 trainings in the districts @ Rs.6,000/- per training covering 65,000 farmers.

- District specific topics for trainings are being selected as per the location specific/crop specific situations. The trainings covered all the aspects based on the critical interventions identified in the villages as per the Action Plans prepared.
- Monthly workshops were held regularly at identified research stations of ANGRAU in all districts on first Saturday.
- 1273 trainings were conducted covering 63650 farmers during 2018-19.

Multi-Purpose Extension System:

The Government introduced Multi-Purpose Extension Officers system @ one MPEO for every 1000 Ha. of cultivable area. In all 4109 Multi-Purpose Extension Officers (MPEOs) were working in the State. The Performance of these MPEOs is assessed every month as per the Key Performance Indicators and the MPEOs were graded accordingly for providing incentives.

Inculcating best management practices

In Andhra Pradesh important crops like Paddy, Pulses Coarse cereals, Oil seeds and cotton are cultivated in a considerable area. The production and productivity in majority of crops is found to be below the possible potential. There is every need to motivate and sensitize the farmers regarding the best management practices and the importance of location specific critical interventions for achieving enhanced productivity in different crops. In order to enhance the productivity of these crops, special programme involving the grass root level functionaries and farmers, On-Farm Demonstrations were conducted with latest technological interventions. Rythu Kshetralu is an On Farm Demonstration programme implemented in the farmers field itself to promote best agronomic and farm management practices for achieving increased productivity and reducing cost of cultivation. 2600 Rythu Kshetralus were organized in all the 13 districts in the State during the year 2018-19 covering major crops i.e., Rice, Groundnut, Pulses, Maize, Cotton and Sunflower.

Soil Health Card Scheme- Soil Testing 2018-19:

- Soil Sampling and testing programme is being organized to evaluate the fertility status and to identify the problems (Alkalinity/Salinity) and deficiency of nutrients if any,

and to improve fertility as well as to promote fertilizer recommendations based on soil test data.

- During 2018-19, (2nd cycle) 6.80 lakh soil samples were collected & analyzed and 34.62 lakh Soil Health Cards (SHCs) were distributed to the farmers.
- 4206 demonstrations were conducted in all 13 districts under SHC scheme duly assisting the farmers (Rs.2500/- per ha) on supply of Zinc Sulphate (21%) as basal application @50kgs/ha in deficit fields for the year 2018-19 with an average increased yields up to 13-15%.

2019-20:

- Govt. of India instructed to select one village per block/mandal for a pilot project and collect the soil samples in all farm holdings, analyse the soil samples and distribute the SHCs on war foot basis and also to organize demonstrations for SHC recommendations in selected villages during Kharif 2019.
- 663 villages/663 blocks are selected for collection of 2,32,694 soil samples for analysis.
- As per the extent available in selected villages, 60,647 demonstrations of one ha is planned to be conducted during Kharif 2019.

Project for enhancing Agricultural Productivity- Integrated Nutrient Management Scheme

Analysis of soil samples has indicated that 35-40% of soils in Andhra Pradesh are potentially deficient in Zn, 24% in Iron(Fe), 8% in Manganese(Mn), 5% in copper (Cu), 20% in boron (Bo) and 18-22 % of soils in AP are deficient in Sulphur. Basal application to soil of Zn, B, and Mo., and foliar sprays of Fe and Mn have been recommended as the most suitable methods for correcting such deficiencies which has shown significant effect on crop yields. These large scale deficiencies of multiple nutrients such as micro and secondary nutrients are reducing the response to added N, P, K nutrients also. In most of the cases farmers attribute the deficiencies caused by micronutrients to macronutrients and in turn add more quantities of NPK fertilizers to soils which do not result in increased crop yields. Hence it was planned to take up a massive programme in the districts, where micronutrient deficiencies are high.

To rectify micro nutrient deficiencies, 9452 MTs of Zinc Sulphate, 255 MTs of Borax and 79512 MTs of Gypsum were distributed with 100% subsidy to cover the 801941 Ha. of deficiency area through Aadhar enabled biometric system based on soil test results on production of Soil Health Card. Yield impact studies taken up under the project in the recent past has shown 8-15% yield increase over the control plots.

Information and Communication Technology in Agriculture:

New IT Initiatives:

Project -1: Satellite based Crop Area Estimation & Damage Assessment:

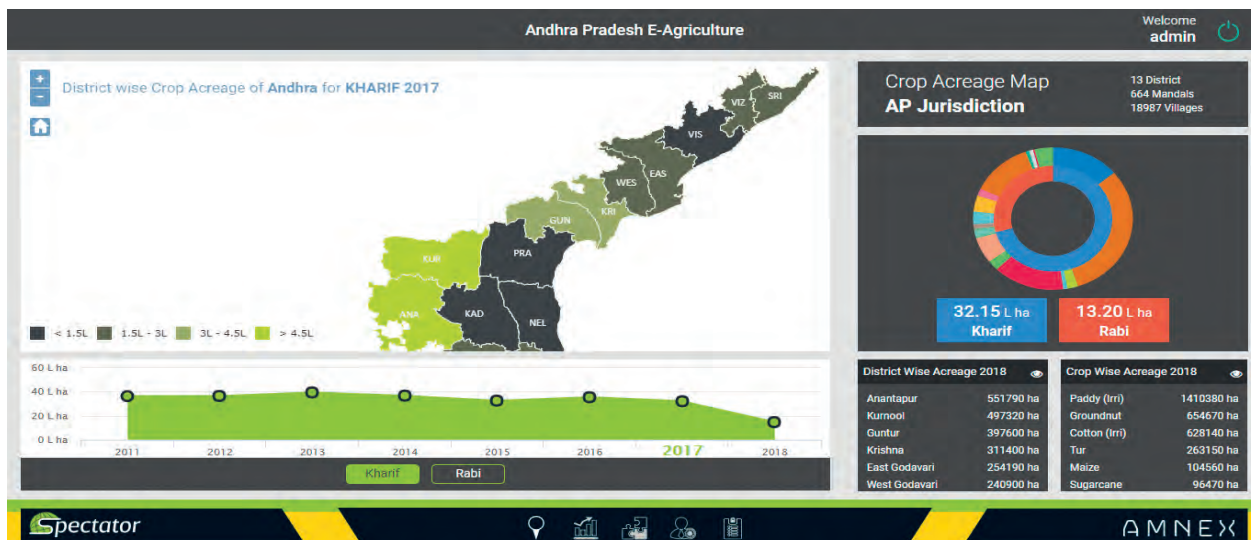
The Objectives of the Work: (Major Expectations from this project)

- Timely, Accurate & Reliable information on crop area acreage, crop health condition and soil type (Soil Health report) mapping at regular intervals
- Season wise monitoring of the crops District / Mandal/ Village wise
- Forecasting/ Prediction of adequate crop acreage information (Agriculture & Horticulture), pre/post harvesting, Weather & Market risks at different administrative levels. (Prediction Analysis Tool)
- Accurate incidents assessments like Drought affected Agriculture Area, flood affected Agriculture zones or damages due to other Natural calamities or pest incidence etc. by using Drone and Satellite Image Technologies.
- Reduction and Proper estimation of Crop Cutting Experiments (CCE) by using satellite Image Technology. Single Seamless Dashboard for GoAP in web & GIS application for decision support system in Agriculture.

Out Comes / Benefits of the Project:

- Crop Acreage Estimation using Satellite-based remote sensing technology can reduce the use of valuable manpower and time on collection of crop coverage data on fields.
- Crop health Monitoring and Optimization of Crop Cutting experiments

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Pic-I: Dash board Analytics on Crop Acreage from 2011 to 2018 Kharif Season for AP state.

Project-2: Satellite enabled Agriculture Risk Management:

The Objectives of the Work: (Major Expectations from this project)

- Mechanism to track and monitor crop growth across different locations of the state on **weekly basis**.
- Pradhan Mantri Fasal BhimaYojana (PMFBY) crop related solutions:
 - o Verification of Crop Cutting Experiments (CCE) data (whether the crop was growing at the CCE Point) provided to the Government by its vendors
 - o Remote Analysis of loss & damage for dispute resolution purposes with insurance companies
 - o Acreage monitoring of crops for identifying potential sown area corrections
 - o Crop health monitoring for vigor and potential water stress due to drought-like conditions

Out Comes / Benefits of the Project:

- Satellite Image Acquisition, Satellite Image Processing and Interpretation (For both Kharif& Rabi)
- Land Use Land Classification
- Crop Identification and crop coverage estimates for all crops of Agriculture & Horticulture during Kharif&

Rabi-2018-19.

- Field Survey of crop Information collection(Ground Truthing)
- District / Mandal/ Village wise Crop Area Estimation (For Kharif& Rabi-2018-19)
- Enhanced crop monitoring- District wise land use classification, district wise, village wise weekly crop health, Damage Assessment, Relative Crop yield.
- District/ Mandal/ Village wise weekly Crop Health, Sowing Intelligence,Early / Late sowing intelligence,Early / Damage Assessment,Early / Relative Crop Yield
- District /Village wise CCEs Optimization
- Design & Development of the web based UI Dashboard for the Department and for other stake holders.

Project-3: Decision Support System (DSS) Technology interventions for crop cycle management: IoT Solutions for Agriculture:

This technology is developed for timely decision to raise advisories to MPEOs to be eventually communicated to farmers to help in taking decisions and interventions, and to provide a system with various agriculture analytics using available soil health card and crop sown data and sending advisories on early drought by automation of drought manual and it should have GIS portal to host all the agriculture related assets information.

A. Analytics Module

- o Dynamic Agri Crop Zone based on changing weather conditions
- o ACZ deviation
- o Ongoing Crop sown analysis
- o SHC Recommendation vs. Aadhar based usage
- o Suitable Sowing week of rainfed crops based on historical success factor
- o Nursery timing based on MI Tank runoff estimation
- o Impact parameters for yield
- o Crop wise production, price forecast and market linkage

- o Qualitative yield estimation for Rice
- o DES vs. ePanta vs. Satellite Data
- o Farm Mechanization

B. Farm Advisories Module

- o Field Preparation Advisories
- o Date of Sowing Window
- o Crop Stress Advisory
- o Pest and disease alerts

C. Drought Manual Automation

D. Agriculture Geo Portal Module

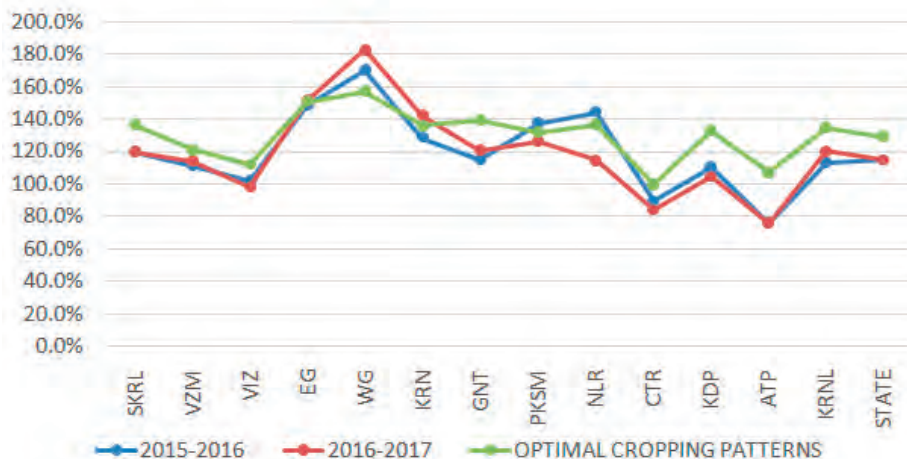


Fig: Cropping Intensity Comparison 2015-16, 2016-17& Optimal Cropping Pattern

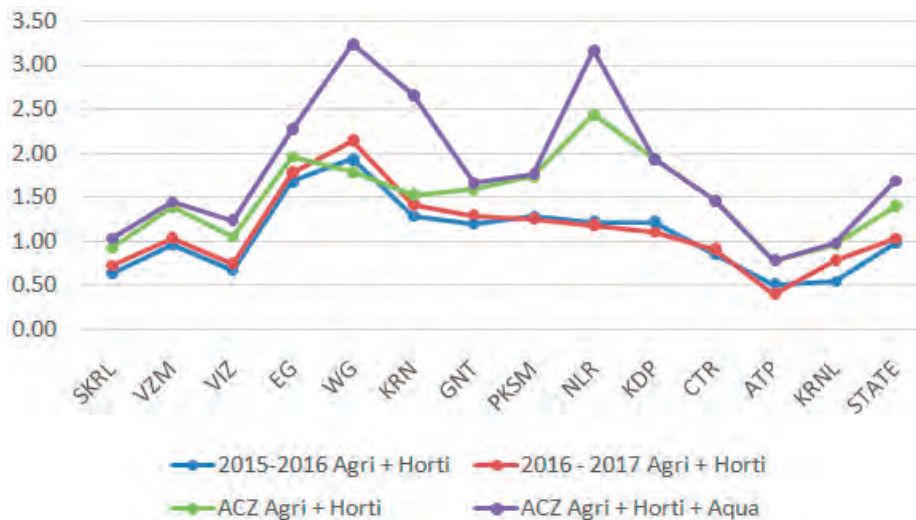


Fig: Optimised per Hectare GVA vs.2015-16 & 2016-17 (Agriculture & Horticulture)

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Other IT Applications:

Subsidy/Contingency Seed and Micro Nutrients Distribution (D-Krishni):

Objective: Plan, execute and monitor subsidy seed, contingency seed and micro-nutrients distribution to eligible farmers.

- Distribution of seeds to eligible farmers is linked to farm size. As of now rationing is done for 2.5 ac. (Marginal farmers), and a maximum of 5 ac. (Small farmers).
- Application facilitates Aadhar eKYC verification to authenticate farmer identity.
- Web Land is integrated to the application in order to verify the land ownership of the farmers.
- Physical verification of Passbook for Land owners and verification of Aadhaar and CoC for tenant farmers is done in addition to Aadhar eKYC and Web Land authentication.

Supply of seed to farmers

Season	Total No. of Farmers	Total Quantity Lifted in Qtls	Total Subsidy Amount (Rs.in Lakhs)
Rabi-2016	333292	308006.5	12613.939
Kharif-2017	1078818	685332.56	27081.882
Rabi-2017	380386	325132.76	11356.467
Kharif-2018	1130307	631142.6	19864.424

Interest Waiver on Crop Loans – Vaddi Leni Panta Runalu (VLR)&PavalaVaddi (PV)

Objective: To implement interest waiver on Crop loans effectively – ensure benefit to right target group and faster delivery.

- Interest on crop loans to be paid by the government to the Banks, subject to criteria (it should be a crop loan, amount less than I lakh and should be repaid within 1 year) and banks transfer the benefit to farmers.
- The service facilitates banks to consolidate and submit the Crop loan data and avail interest reimbursement from the Government.
- Data from the bank branches is consolidated at the nodal branch and sent to the department for reimbursement of interest.

- Bank branches, nodal agencies and department staff are the users of the software application.

Vaddi Leni Panta Runalu (VLR) & PavalaVaddi (PV) amount settled to beneficiaries

Financial Year	VLR (in Rs.)	PV (in Rs.)	VLR Farmers	PV Farmers
2014-15	44310000	1020000	442463	7510
2015-16	31100000	870000	242345	12030
2016-17	249480000	5440000	2113018	83670
2017-18	182430000	5340000	778897	72073
2018-19	122750000	4010000	656003	68559

Input distribution 2018-19:

The distribution status of various agriculture inputs during 2018-19 is presented below:

Seeds: Subsidy Seed Distribution through Adhar Based Bio-Metric Authentication

Kharif-2018

A quantity of 5.588 Lakh Qtl. of various crop seeds were distributed with a subsidy value of Rs.16033.42 Lakhs (in co-ordination with the seed supplying nodal agencies i.e. APSSDCL, APOILFED, NSC Ltd and WASSAN, an NGO organization) which benefitted 7.90 Lakh farmers.

Navadhanyalu Seeds distribution during Kharif, 2018

A quantity of 7748 Qtl. of various Navadhanyalu seeds was distributed with a subsidy value of Rs.444.64 Lakhs which benefitted 0.90 Lakh farmers in Srikakulam, Vizianagaram, East Godavari, Prakasam, Chittoor, Kurnool, YSR and Ananthapuramu in co-ordination with the seed supplying nodal agency (APSSDCL).

Seeds distributed under Contingency during Kharif-2018

Under contingency 63628 Qtls of different crop seeds on 100% subsidy were distributed to 2.27 Lakh farmers in 6 districts (Prakasam, Nellore, Chittoor, YSR Kadapa,

Kurnool and Ananthapuramu) incurring Rs.3336.9 Lakhs towards subsidy in co-ordination with the seed supplying nodal agency (APSSDCL).

Rabi 2018-19

A quantity of 3.93 Lakh Qtl. of various crop seed was distributed with a subsidy value of Rs.11643.74 Lakhs benefiting 4.57 Lakh farmers in co-ordination with the seed supplying nodal agencies i.e. APSSDCL, APOILFED, NSC Ltd and WASSAN an NGO organization.

Seed Supply plan for 2019-20

S. No	Season	Qty of seed required (in Qtls.)	Subsidy value (Rs. in Lakhs)
1	Kharif	751678	21092
2	Rabi	431557	12857
Total		1183235	33949

Kharif-2019

A quantity of 7.51 Lakh Qtl. Seed of various crops seed was indented for distribution to the farmers on subsidy during 2019-20 with a subsidy value of Rs.21092 Lakhs in co-ordination with the seed supplying nodal agencies i.e. APSSDCL, APOILFED, NSC Ltd, HIL and WASSAN an NGO organization.

During Kharif, 2019, a quantity of 38768 Qtls of various seeds namely Paddy and Green Manure has been distributed to the farmers with a subsidy value of Rs 1704 Lakhs.

Seed Village Programme:

The Seed Village scheme ensures supply of quality certified seed of notified varieties to the farmers in time at their places at affordable prices besides ensuring quick multiplication of new seed varieties in a shorter time in that mandal /district based on the crop situation. Compact area approach was followed under this scheme. The number of farmers for a unit of 10 ha. may be minimum of 50 and also subject to a maximum of 150.

Guidelines of the Scheme:

- Supply of Foundation seed on 50% subsidy for cereals and 60% subsidy for oilseeds and pulses for Seed Village

Programme (SVP) and 75% subsidy for Certified Seed Production through Seed Villages.

- Trainings: 3 one day trainings will be conducted to the farmers on seed production technology.
- Major Crop of the village should be selected under Seed Village Programme where programme is being organized.
- The seed village plots should be selected on soil test basis where good soil fertility is observed and where sufficient ground water facility is available and which is best suited for seed production.
- The foundation/certified seed -1 supplied by the agencies will be utilized under SVP and the seed that is produced in the SVP units will in turn be used for supply of seed under subsidy seed programme in the ensuing Kharif 2019 and Rabi 2019-2020.

In order to achieve 100% seed replacement rate in coming year, it is planned to implement the programme in 42020 ha area with targeted certified seed production of 8.56 lakh qtls with a budget Proposals of Rs. 1021.33 lakhs during 2019-2020.

Fertilizers:-

Fertilizer Policy Initiatives:

Fertilizer consumption during the year 2018-19 in terms of product was 32.82 LMT (Kharif 14.79 LMT and Rabi 18.03 LMT) and in terms of nutrients (N,P,K) was 15.59 LMTs. The Consumption during the year Kharif 2019 in terms of product is 17.39 LMT (tentative) and in term of Nutrient (NPK) is 8.33 LMT. Details of consumption of Fertilizers and in terms of nutrients are given in Annexures 5.17 and 5.18 respectively

Nutrient Based Subsidy (NBS) Policy

The Department is implementing NBS Policy for P&K fertilizers w.e.f. 1.4.2010. Under the NBS Policy, a fixed rate of subsidy (in Rs. per Kg basis) is announced on nutrients namely Nitrogen (N), Phosphate (P), Potash (K) and Sulphur (S) by the Government on annual basis.

The fertilizer companies will decide MRPs based on the prices of the raw materials in the international market and cost of production of finished goods, based on demand and supply.

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The Government of India communicated per kg subsidy fixed on nutrients for the year 2018-19 w.e.f from 16.04.2018 Viz. Nitrogen, Phosphorous, Potash and Sulphur as:

S. No	Nutrients	NBS (Rs. Per Kg of Nutrient)
1	N	18.901
2	P	15.216
3	K	11.124
4	S	2.722

Pesticides:

In Andhra Pradesh, there was reduction of 49 MT Pesticide Consumption (1689 Active Ingredient) during 2018-19 compared to the last year's 1738 MTs of Active Ingredient. The reduction in consumption of chemical pesticides was attributed to awareness created among the farming community by promoting the activities like Integrated Pest Management practices, Organization of Polam pilusthundi, Rythu Kshetralu and Polam badi programmes, Usage of bio pesticides, change in cropping pattern, Zero Budget Natural Farming and through the extension functionaries.

The pesticide consumption has shown a decline during the recent past with the consumption falling from 4050 MTs in 2014-15 to 1689 MTs in 2018-19.

The % reduction of Pesticide Consumption over previous year is detailed below:

Year	Pesticide Consumption in MTs of active ingredient	% Pesticide reduction over previous year
2014-15	4050	-
2015-16	2713	33.01
2016-17	2015	25.72
2017-18	1738	13.74
2018-19	1689	2.82

Drought proofing measures

Drought Proofing Pilot Project in Andhra Pradesh

National Rainfed Area Authority (NRAA), has been assigned the task of providing technical inputs in the area

of Water Management, Rainwater conservation, watershed Development and Integrated Farming System (IFS) as well as extending advisory to States for implementation and monitoring to undertake demonstration on package of practices to address the issues of most vulnerable drought prone districts across the country.

To disseminate such best practices for integrated development in 24 districts of three States namely, Andhra Pradesh, Karnataka & Rajasthan during the year, a budget provision of Rs. 25.00 crores has also been made in 2017-18.

The following broad objectives have been set by NRAA to start the work in these districts:

- Develop area specific farming system particularly for these 150 vulnerable drought prone districts to achieve goal of making agriculture sustainable and profitable.
- Piloting the best practices available in these districts to demonstrate their efficacy.
- Suggest short and long term plans for sustainable development of rainfed area by promotion of efficient use of water for ensuring per drop more crop.
- Monitoring and supervision of programme implementation in identified 150 most vulnerable drought prone districts.
- Identification and recommendations of various agro forestry models suitable to 150 most vulnerable districts across the country; and
- Developing various modules for capacity building of Masters Trainers for farming systems, water budgeting and accounting for these areas.

It is proposed to develop an innovative work plan (Action plan) based on the specific requirements of Andhra Pradesh (04) districts namely; Ananthapuramu, Chittoor, Kurnool & Prakasm. Two mandals from each district and three villages from each mandal are to be identified for implementation of this pilot project. The work plan includes specific interventions of Center /State for drought proofing, and convergence of various activities of line departments related to drought proofing programmes & resources in these districts in order to avoid duplicacy of developmental drought proofing work.

Further, MANAGE, Hyderabad, an autonomous organization under Ministry of Agriculture and Farmers Welfare, Government of India, has organized a "Two- day

training –cum- Orientation workshop on Drought Proofing Plan” for four Districts of Andhra Pradesh in collaboration with NRAA for the Officers of Districts concerned from Agriculture and Allied Departments (i.e Agriculture, Horticulture, Animal Husbandry, Fisheries, Sericulture, Irrigation, Ground Water, MGNREGA, Soil conservation/ Watersheds, Revenue, Marketing, PD-ATMA, KVK, DRDA, NGOs and Lead farmers, etc) and Two officers from state headquarters during January, February and March, 2019.

On 10.05.2019, the meeting was convened under the Chairmanship of Principal Secretary, A&C Department during the visit of Technical Consultant NRAA, GOI with all pilot district officers of Agriculture and line departments to discuss the Drought Proofing Action Plan and its operationalization.

National Mission for Sustainable Agriculture(NMSA)- Rainfed Area Development(RAD) component

Government of India had introduced National Mission for Sustainable Agriculture (NMSA) during 2014-15. Under this mission, Rainfed Area Development (RAD) component is being taken up in convergence with other schemes to promote Integrated farming system and to provide value added developmental activities to the rainfed farmers to improve their economic status, despite failure of crop due to insufficient rains or drought.

Implementation Strategy: The following strategy is being followed. The financial pattern for implementation of RAD program is shared at 60:40 between Central and State Government.

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Other Interventions:

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – A centrally assisted state program is being implemented in the state through the department of Agriculture since 2016-17 for improving the water use efficiency (Per Drop More Crop). Per Drop More Crop is implemented for water conservation works, drought proofing measures and supplementation of watershed interventions undertaken through MGNREGS and IWMP for ground water recharge.

The objective of the scheme is to provide assured irrigation to each and every cultivable land to increase the productivity through convergence of funds earmarked by various Ministries involved in water resources development and to increase the assured irrigated area and also to improve the farmers' income.

Soil and Water Conservation Program

The Soil and Water Conservation Program was introduced under State Development Plan for activities proposed on climate resilience and water conservation activities to improve the Productivity from Rainfed areas and to take up the activities.

The major objective of the program is

1. To improve in –situ soil moisture in the cropped area dependent on Rainfed Agriculture.
2. To conserve water, a precious natural resource to make it available during the critical stages of crop growth through construction of water harvesting structures.
3. To improve the livelihood status of the farmer in rainfed areas by reducing crop failures, reducing cost of cultivation through suitable approach.

Farm Mechanization:

Agronomically designed tools and equipment for reducing drudgery, enhancing safety and comfort and to suit the needs of women workers have been recognized to help better adoption of technologies in agriculture. Mechanization includes introduction of better equipment for each farming operation to improve efficiency by saving on time and labour; improve productivity, minimize wastage and reduce labour costs for each operation. Another important aspect in our agriculture sector is the high proportion of female workforce in both the cultivation and processing stages of farming. Subsidy is increased from 50% to 70% to SC and ST farmers on farm mechanisation components except tractors and combined harvesters. DBT System was introduced by GOI, through which online application system was introduced to help farmers to avail the equipment on time and also more transparent manner.

Rythu Radham Scheme:

The Government of Andhra Pradesh supplied 11030 big tractors with an outlay of 168.05 Cr. during the year 2018-19 in order to increase the farm power availability.

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Sub Mission On Agricultural Mechanization (SMAM):

41029 individual implements like Rotovators, Powertillers, Multi Crop Threshers, Tractor Drawn Implements, Mini Tractors, Reapers, Seed Drills and Power weeders were supplied during 2018-19. 801 CHCs under SMAM and 807 CHCs under Rashtriya Krishi Vikas Yojana (RKVY) were supplied to farmer groups during 2018-19. It is proposed to cover 723 groups under SMAM and 502 groups under RKVY during 2019-20.

4399 custom hiring centers are being established at village for the Paddy, Maize, Groundnut crops and harvesting package and marginal high cost machinery is made available to small and marginal farmers.

Agricultural Debt Redemption Scheme to farmers:

Government of AP planned to implement the Agriculture Debt Redemption scheme with an outlay of Rs.24000 Crores. 3 instalments of Debt Redemption is being released for the farmer families who are entitled for Debt Redemption of more than Rs.50000/-. Including the 3rd installment so far released, in to Rs.15279.34 Crores has been released. While releasing the II instalment of Debt Redemption the farmers are given interest @10% for one year on 2nd instalment and for 2 years @10% while releasing the 3rd instalment.

In respect of Horticultural crop loan, Debt Redemption it is considered upto maximum of Rs.50000/-@ Rs.10000 per acre and so far Rs.400.59 Crores was released in favour of 2.29 lakh Loan accounts of horticulture farmers. The individual tenant farmers as well as the members of Rythu Mithra Group and Joint Liability groups are also considered for Debt Redemption. Details are given in Annexure 5.19

Rashtriya Krishi Vikasa Yojana(RKVY)- A GoI Initiative:

Rashtriya Krishi Vikas Yojana (RKVY) - is one of the flagship programmes of Government of India with Central and State sharing of 60:40. An amount of Rs.325.07 Crores was allocated for implementation of Normal RKVY during 2018-19. Of this, Rs.140.52 crores has been allocated to Agriculture Sector projects.

State Initiatives

Mechanization:

An amount of Rs.60.52 Crores was allocated for implementation of Farm Mechanization project, where 902 Custom Hiring Centres for different crops are established to make mechanized services for different farm operations availability to the farmers at affordable prices.

Zero Budget Natural Farming

An amount of Rs.63.00 Crores was earmarked for implementing Zero Budget Natural Farming (ZBNF) during 2018-19 to motivate farmers towards ZBNF in 131 clusters.

National Food Security Mission (Rice, Pulses, Coarse Cereals, Nutri-Cereals & Commercial Crops including Additional Areas Coverage of Pulses)

Objectives:

- Increasing production of rice and pulses through area expansion and productivity enhancement in a sustainable manner in the identified Districts in the State.
- Restoring soil fertility and productivity at the individual farm level.
- Creation of employment opportunities and
- Enhancing farm level economy i.e. farm profits to restore confidence amongst farmers.

Strategy:

- Implementation in a mission mode through active engagement of all the stakeholders at various levels.
- Promotion and extension of improved technologies i.e., seed, Integrated Nutrient Management including micro nutrients, soil amendments, IPM and Resource Conservation Technologies along with capacity building of farmers.
- Flow of fund would be closely monitored to ensure that interventions reach the target beneficiaries on time.
- Various interventions proposed would be integrated with the district plan and targets for each identified district would be fixed.
- Constant Monitoring and Concurrent Evaluation for assessing the impact of the interventions for a result-oriented approach by the implementing agencies.

Districts identified for Implementation:

Government of India have identified 11 Districts in the combined state of Andhra Pradesh for implementation of National Food Security Mission-Rice that have potential but where the present productivity is less than the state average. Similarly, 14 districts for pulses were identified till 2009-10, later pulses programme was implemented in all 22 districts from 2010-11 to 2013-14.

After bifurcation of the AP state, the NFSM Rice scheme is being implemented in 5 districts and NFSM- Pulses in all 13 districts. Technology mission on Cotton & Jute was also brought under NFSM Commercial Crops (Cotton, Mesta & Sugarcane). During 2018-19, Sub Mission was created to focus specially on Nutricereals cultivation for achieving nutritional security and it is implemented in 7 districts. The details are given in Table 5.3,

Table 5.3 NFSM - Component

NFSM - Component	Districts covered	
	No.	Names of districts
Rice	5	Srikakulam, Vizianagaram, Visakhapatnam, Ananthapuramu & Kadapa.
Pulses	13	All districts in the state.
Coarse Cereals (Maize)	5	Vizianagaram, West Godavari, Guntur, Kurnool, & Ananthapuramu.
Nutri-cereals	7	Visakhapatnam, Guntur, Prakasam, Kurnool, Kadapa, Chittoor & Ananthapuramu.
Cotton	6	Srikakulam, Vizianagaram, Krishna, Guntur, Prakasam, & Kurnool.
Mesta	2	Srikakulam & Vizianagaram.

Table 5.4 Target vs Achievement of NFSM Scheme

S. No.	Year	Targets		Achievements	
		Phy.	Fin.	Phy.	Fin.
1	2018-19	1692976	12320.26	1587418	11552.09
2	2019-20 (As on 01.06.2019)	531577	9279.71	Yet to commence	

(Physical in No.s & Financial Rs. in lakhs)

NFSM - Component	Districts covered	
	No.	Names of districts
Sugarcane	11	Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Nellore, Kadapa, Kurnool & Chittoor.

National Food Security Mission (NFSM) – Additional area coverage under Pulses:

- NFSM-Addl. area coverage under pulses is another step forward for vigorous implementation of the pulse development under the NFSM – Pulses.
- NFSM-Addl. area coverage under pulses has been conceptualized to take up the active propagation of key technologies such as Integrated Nutrient Management (INM) and Integrated Pest Management (IPM) in a manner that creates catalyzing impact by assuring farmers of the higher returns from the identified pulse crops and bringing additional area during rabi/summer season.
- Each NFSM-Addl. area coverage under pulses unit form of a village level block demonstration covering an area of 100 hectares.
- Kits containing critical inputs including Seeds, Gypsum, Micronutrient, Rhizobium culture, PSB, P.P. Chemicals etc. to be given to all the farmers in each unit on subsidized cost for a maximum area of 2 hectares.

Seeds were supplied through APSSDC and other Minikits were supplied through APSAIDC to the beneficiary farmers.

Target vs Achievement of NFSM Scheme (Including all Sub-Schemes) for the year 2018-19 and 2019-20 Targets are shown in Table 5.4

Sub Mission on Agricultural Extension (Agriculture Technology Management Agency- ATMA)

Under the scheme of “Support to State Extension Programmes for Extension Reforms” (ATMA), the entire state of Andhra Pradesh (13 districts) is covered with 60:40 central and state share. The Extension Reforms (ATMA) has been included in the National Mission on Agricultural & Extension Technology (NMAET) as Sub Mission on Agricultural Extension (SMAE).

Objectives of the programme:

- To develop an efficient, effective, demand driven, research integrated and financially sustainable public extension system
- To revitalize the Agricultural Technology Generation Assessment refinement and Dissemination Systems
- Reforming Public Sector Extension. Promoting private sector to effectively complement, supplement and wherever possible to substitute public extension.
- Mainstreaming Gender Concerns in Extension.
- Capacity Building/ Skill up-gradation of farmers and extension functionaries.
- Increase the Quality and Type of Technologies being disseminated by the Extension System.
- Strengthen Research-Extension-Farmer (R-E-F) Linkages

Benefits of the programme:

- Well Integrated technology development and transfer system Decentralized decision-making.
- Financially sustainable extension system.
- Bottom-up Planning.
- Increased Use of Information Technology.
- Emphasis on In-Service Training.
- Developing New Public-Private Partnerships.
- Strengthening Key Institutions.
- Broad based Extension Delivery

ATMA is a district level autonomous Institution having membership of all key stakeholders involved in agricultural activities. It has the flexibility to receive funds directly. It

has the key responsibility of disseminating all technology activities at the district level. It has linkages with all the line departments, research organizations, non-governmental organizations and agencies associated with agricultural development in the district and farmer organizations. Research and extension units within the district, such as KVKs, Department of Agriculture, Horticulture, Animal Husbandry, Fisheries, Sericulture, Marketing, etc. are its constituent members.

ATMA is supported by a Governing Board (GB) and a Management Committee (MC). Block level Farm Information and Advisory Centers (FIACs) have been created which are operated by a Block Technology Team (BTT) of technical advisors and a Farmer Advisory Committee (FAC), a group exclusively of farmers. Commodity oriented Farmer Interest Groups (FIGs) are being promoted at block / village level to make the technology generation / dissemination farmer driven and farmer accountable. In order to provide needed HRD support in innovative areas of extension delivery, a State Agricultural Management and Extension Training Institute (SAMETI) has also been established in the project states.

Strategic Research and Extension Plan (SREP):

One of the first tasks of ATMA is to facilitate the preparation of Strategic Research and Extension Plan (SREP) of the district. The SREP is prepared through participatory methodologies such as Participatory Rural Appraisal (PRA) involving all the stakeholders and farmers. The SREP contains detailed analysis of all the information on existing farming systems in the district and research – extension gaps required to be filled-up. It also prioritizes the research – extension strategies within the district. It becomes the basis for development of work plans at blocks/ district level. All the (13) ATMA districts have developed their respective Strategic Research and Extension Plans. As the validity of SREPs is five years, the State has already initiated the revisiting of the SREPs.

State Extension Work Plan (SEWP):

Based on the research-extension strategies given in the SREPs, the Block / district level plans for the year 2018-19 were developed by all the (13) ATMA districts as per the revised ATMA scheme guidelines and cost norms. The consolidated State Extension Work Plan for the year 2018-19 was developed at state level with an out lay of Rs. 4016.11 Lakhs. The District Action

Plans developed under the scheme should be processed consistent with Article 243 ZD of the Constitution.

GOI has given administrative approval for Rs. 4016.11 lakhs for the year 2017-18 and released an amount of Rs 942.79 lakhs as Central Share (State has also released an amount of Rs. 628.53 lakhs towards Matching State Share) as 1st spell duly revalidating the unspent balance amount of Rs 2690.34 lakhs for implementation of the activities. Accordingly the districts are organizing the need based activities like farmer trainings, demos, exposure visits, Kisanmelas, field days, farmer scientist interaction etc.

Digital Soil mapping:

In digital soil mapping (DSM) samples are collected where variability is observed and samples are analyzed using a spectroscope to create spectral libraries. Then predictions will be made for the entire area (state) by running some statistical models on the data for subsequent production of digital soil maps.

Advantages:

- Digital soil maps are relatively more accurate (reportedly 80%).
- Requires less time. Less human intervention there by less number of errors.
- Relatively less number of soil samples is required as compared to manual methods.

Constraints:

- Though the initial cost is more, the running costs are less due to less number of samples required for production of DSM.
- DSM requires state-of-the-art soil testing labs and more skill full and technically sound manpower as compared to manual methods.

Current Status:

- The Bill and Melinda Gates Foundation (BMGF) in collaboration with CIMMYT held a series of discussions mainly on the current methods and technology being used in AP with respect to soil analysis against the advantages of DSM.

Future Strategies:

- Setting up of a Gold standard soil testing labs at RARS Tirupati, LAM ANGRAU Guntur and STL Visakhapatnam in AP under the guidance of CIMMYT.
- Developing technically sound manpower by imparting trainings.
- Generation of DSMs and subsequent production of soil health cards.
- Area based micronutrients planning based on crops requirements.
- Component wise targets and achievements are given in Annexure 5.20

Externally Aided Projects:

1. Andhra Pradesh Integrated Irrigation and Agriculture Transformation Project (APII & ATP)

The newly formed State of Andhra Pradesh has proposed a next generation irrigated agriculture transformative project with climate resilience as its cross-cutting theme. Accordingly, it is proposed to integrate both Agriculture and Irrigation activities and the project is titled as Andhra Pradesh Integrated Irrigation and Agriculture Transformation Project (AP-IIATP). All the 5 Departments namely Common Area Development Authority (CADA), Departments of Horticulture, Agriculture, Fisheries and Ground Water are the Implementing Agencies for APIIATP.

- The proposed project is to be implemented over a period of 6 years (i.e from 2017-18 to 2023-24) covering about 1 lakh ha of agriculture land in 1,000 tanks of Andhra Pradesh (12 districts except Guntur).
- The funding of the project is in the ratio of 70:30 with 70% loan Component from World Bank and 30% State Government share with an outlay of Rs.1600 crores. An amount of Rs. 400 crores were allocated for Agriculture sector.
- There are two sub components
 - o Component B - Promoting Adaptive Sustainable Agriculture Practices
 - o Component C - Climate-friendly Market and Agribusiness Promotion

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- Under Component B, seed production & seed supply, crop production technology demonstrations, trainings and capacity building and infrastructure support are included and expenditure is incurred under trainings only.
- Under Component C, Value chain analysis, market linkages and market intelligence consultancy, exposure visits to FPOs, construction of rural godowns and supply of secondary processing units are included. No expenditure is incurred so far.
- Orientation Trainings were conducted at district level for the WUA presidents and field staff in all the 12 districts on the components and implementation of the activities and preparatory action to be taken for implementing Annual Plan 2019-20.

2. AP Irrigation Livelihood Improvement Project (APILIP) – Phase II

The Government of Andhra Pradesh is implementing “Andhra Pradesh Irrigation and Livelihood Improvement Project Phase -II (APILIP –II)” from 21st December 2017 with assistance from Japan International Cooperation Agency (JICA). This project is continuation to the APILIP Phase –I and envisages the rehabilitation and improvement of one major, 19 medium and 445 minor irrigation projects and improve the livelihoods of farmers through agriculture, animal husbandry and fisheries interventions. The Project Management Unit (PMU), Water Resources Department, Government of Andhra Pradesh is the executing Agency.

The objective of the project is to increase the local productivity, strengthen institutional and marketing capacities by rehabilitating existing irrigation systems, supporting integrated farming systems and strengthening value chain development, thereby contributing toward improvement of livelihoods of farmers and other rural communities in Andhra Pradesh state.

The project covers five major components viz. (i) Rehabilitation of Irrigation Projects (ii) Participatory Irrigation Management (iii) Promotion of Farmer Producer Organizations (iv) Livelihood Support Program and (v) Pilot Programs.

Under Pilot Program, the APILIP-II intends to establish Agriculture Mechanization and Technology Centres (AMTCs) at two locations one each at Rice Research

Institute (RRRI), Maruteru, West Godavari District for rice and Agriculture College, Naira, Srikakulam District for irrigated dry crops with an objective of promotion of agricultural mechanization and dissemination of other agriculture technologies through provision of technical training on machinery’s operation and maintenance for users of farm machinery and timely monitoring on farming activities including operational performance and constraints of machineries.

3. Andhra Pradesh Drought Mitigation Project

Objectives: The main objective of APDMP is to improve the incomes and strengthen the drought resilience of 165,000 farm households in 315 GPs of 105 clusters in 105 mandals.

Components of the Project: The three major components of the project are:

- (1) Climate resilient production systems: The component aims to increase the resilience of crop and livestock production systems to climate change (drought).
- (2) Drought proofing through NRM & governance: Aquifer Mapping, ground water budgeting and need to ensure participation of panchayat in owning and governing the use of Ground Water and water sharing
- (3) Lesson learning & Management: The framework of best practice would be introduced all districts and the adoption would take place based on local demographics and priority

Andhra Pradesh Zero-Budget Natural Farming (APZBNF)

Background

Government of Andhra Pradesh, through its programme ‘Zero-Budget Natural Farming’ (APZBNF), has been addressing the core reasons of farmers’ distress which is characterized by high-input resource-intensive chemical farming and that has over time resulted in losses and high debts for farmers, soil degradation, pollution of waterways, encroachment of forest-land, biodiversity loss, and water scarcity. Government of Andhra Pradesh has mandated RythuSadhikaraSamstha (a not-for-profit company registered under the Companies Act) to implement APZBNF programme.

ZBNF is one of the innovative alternatives to chemical-free agriculture which is rooted in Indian tradition and broadly classified as agroecology. ZBNF is a concept promoted by Shri. SubhashPalekar, a Padma Shri Awardee. ZBNF involves four principles (Beejamrutham, Jeevamrutham, Achhadana and Waaphasa) that enhances soil microbiome which contributes to plant health, human health and environmental health.

ZBNF knowledge and package of practices is a very rich and distinctive body of knowledge. This is transferred through farmer-to-farmer extension in APZBNF programme.

Current Status – Outreach, Coverage, Extension

APZBNF programme has been initiated in June 2015 by Department of Agriculture and the field level implementation has commenced from Kharif 2016 on a pilot-basis in 704 villages with funding from GoI and GoAP through RashtriyaKrishiVikasYojana (RKVY). The programme has been extended to additional 268 villages in Kharif 2017 with funding support from GoI and GoAP through Paramparagat Krishi Vikas Yojana(PKVY). By 2018, the programme works in 3,015 villages reaching out to 5,23,000 farmers across 13 districts of the state making it one of the largest agroecology programmes in the world.

Farmer Enrolment over the years from 2016-17 till date (Cumulative numbers)

Farmers	2016-17	2017-18	2018-19
		40,656	1,63,000
Gram Panchayats	704	972	3,015

The exponential growth is largely attributed to highly motivated and strongly committed Community Resource Persons (CRPs) who are taking this programme to the last mile. Currently, 5,600 CRPs are identified, trained and deployed by the programme. This includes 284 Natural Farming Fellows who are young agriculture graduates on fellowship that transforms them as farmers which involves practicing ZBNF farming on a leased land, and also provide managerial support to a cluster of 5 Gram Panchayats.

The role of women is at the front end of the programme leading to the entire community's transformation in the

village. Currently, 161,296 women SHGs and their 7,106 federations at village level (Village Organizations) are leading the programme implementation, developing farming plans, collectively preparing inputs, learning from peers, monitoring and verifying farmers and marketing the produce.

The programme has been organizing mega training events delivered by Padma Shri Dr Subash Palekar. So far, four mega training events (Tirupati, Kakinada, Guntur (Twice)) have been organized in Andhra Pradesh to about 27,000 best-practicing farmers directly while several thousands of farmers also watched electronically. These trainings add a huge impact on farmers in building their motivation and commitment levels to improve their own farming methods and also to take this programme to other farmers.

Drought Proofing Strategy – A breakthrough in APZBNF

Over the last few years, drought has become a common phenomenon. Prolonged dry spells have been witnessed in many parts where programme is being implemented. Rainfall as minimum as 5 days and dry spell of 306 days have occurred in most parts in Ananthapuramu district.

In order to address this issue, APZBNF has embarked on a plan to cover the agriculture land for 365 days in a year with a green cover. This programme began in May 2018 with experiments conducted by young agricultural graduates inducted as Natural Farming Fellows (NFFs). The experiment was conducted by 11 NFFs who started pre-monsoon sowings and have found encouraging outcomes. This has resulted in 42 NFFs and iCRPs (Internal Community Resource Persons) to take up dry-sowing in December 2018. Gradually, 1341 farmers began practicing dry sowing after the pre-monsoon success.

During April 2019, a workshop was conducted at Ananthapuramu chaired by Advisor (Agriculture) and Principal Secretary (Agriculture) to work out an action plan for implementing 365-day green cover (merging pre-monsoon and dry-sowing learnings).

A plan has evolved in all districts wherein field functionaries (CRPs, iCRPs, NFFs) and few pioneer farmers have come forward to take up 365-day green cover using ZBNF practices during 2019.

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Green cover is created by these initial adopters through 5-layer model and other continuous crop growing models. The initial enrollment came from 23,693 farmers and field functionaries in an extent of 6,318.6 acres (approx.) as committed by them from all 13 districts.

Funds for Programme Implementation and Technical Assistance

Funds were received from RKVY and PKVY since 2015-16. From 2017 onwards, RySS has been receiving the funds directly and is implementing the programme. Details are shown in Table 5.5

Table 5.5: Year wise details of RKVY & PKVY (Rs. in Crores)

Year	RKVY	PKVY	Total
2015-16	34.04	18.34	52.38
2016-17	45.91	13.30	59.21
2017-18	38.38	10.93	49.31
2018-19	63.00	56.66	119.66
Total	181.33	99.23	280.56

Technical support grants of Rs. 22.88 Crore has been provided by Azim Premji Philanthropic Initiatives.

Key Results

The findings from internal experiments conducted in 1,614 Crop Cutting Experiments (CCEs) and 1,088 CCEs in Kharif 2017 and Kharif 2018 respectively shown that there is increase in average yields and decrease in costs across all major food crops, cash crops and horticulture crops under ZBNF compared with Non-ZBNF crops. The summary of the results is:

1. Majority (around 88%) CCEs have shown increase in Net incomes due to increase in yield value and decrease in cost of cultivation
2. A very few (about 10%) CCEs have indicated increase in Net incomes although there was a decrease in yield value but was compensated by reduction in costs thus resulting in overall increase in net incomes. Only in 2 % cases, was there decrease in net incomes – the cost reduction was not compensated by reduction in the yields.

Plans for 2019-20

The vision of the government is to scale up ZBNF to all 60 lakh farmers and entire 80 lakh hectares by 2024. In line with the vision, RySS has planned to achieve the following goals by 2019-20:

1. Reach 10 lakh farmers (cumulative) by year 2019-20.
2. Cover 6,034 Gram Panchayats
3. Continue to work in all 664 Mandals
4. Work with 2,50,000 women Self-help Groups (SHGs)
5. Create employment opportunities to youth @ 20 youth per GP through
 - a. Promotion of 365-day pre-monsoon dry sowing to every enrolled farmer
 - b. Promotion of RFSA models
 - c. Promotion of rainfed 5-layer models
6. Give special emphasis to mainstream about 2 lakh poorest of the poor by promoting:
 - a. ZBNF Kitchen Gardens for securing essential food and nutrition
 - b. Land Lease facilitation through CRPs and SHGs
 - c. Development of assigned lands through ZBNF practices
 - d. ZBNF entrepreneurship as a source of livelihood – this includes ZBNF shops, seed supply, input preparation/procurement services
 - e. Off-farm livelihoods such as backyard poultry, ZBNF paddy-fish farm ponds.
7. Conduct large-scale mega training event by SubashPalekar for CRPs and Lead farmers
8. Conduct community driven planning and verification in all ZBNF GPs.

Cooperation

In a democratic structural framework like India, Cooperatives have traditionally been promoted and organized for achieving social and economic uplift of the people. Different types of cooperatives are organized essentially to provide agricultural credit to member-farmers so as to enhance employment to its members and for alleviating rural poverty.

Co-operative movement has completed over 100 years of service to farmers and other weaker sections of the society. Cooperative Week is celebrated every year starting from November 14th to promote better understanding of the principles and philosophy duly highlighting achievements of various sectors of the Cooperative movement.

The Cooperative Credit Structure at present is a three tier structure with the Andhra Pradesh State Cooperative Bank at the APEX level with 13 District Cooperative Central Banks (DCCBs) at the district level and with 423 branches located in district headquarters and small towns and semi urban areas and 2051 Primary Agricultural Credit Cooperatives at village level. Kisan Credit Cards have been issued to 15.54 lakh (as on 31.03.2019) farmer members of the PACS. The total financial assistance received so far under Revival package for rural cooperative credit structure is Rs.935.00 Crore including the State Government share of Rs.146.31 Crore. The PACS are also actively participating in distribution of Agricultural inputs and also doing other non-credit business. The PACS are to provide more services to their members and generate income for themselves and NABARD providing assistance to develop PACS as Multi Service Centers. The APCOB & DCCBs have been providing service to their customers through ATMs also. The total 16 ATMs installed by APCOB so far and DCCBs are 238. In addition to the ATMs, APCOB is providing services through 2 Mobile ATMs and DCCBs services through 2520 Micro ATMs in the State.

Loans to farmers (Navaratnalu)

- Under Raithu Bharosha (Vaddileni Runalu to the farmers) scheme an amount of Rs. 228.44 cr are to be received from Government.
- Koulu Raithuluku (Tenant Farmers) Vaddileni Runalu: Tentative loans disbursed to Tenant Farmers during the year 2018-19 is Rs.359.30 Cr and the interest burden on the said loan is Rs.25.00 Cr. the total estimates to Tenant Farmers are Rs.384.30 Cr.
- Andhra Pradesh State Cooperative Bank (APCOB), provided Rs.10551.68 Cr as Short Term Credit, an amount of Rs.904.37 Cr as a Long Term Agricultural Credit to 16,38,369 farmers through the PACS & DCCBs during the financial year 2018-19. Provided an amount of Rs.579.51 Cr as short term credit and Rs.51.00 Cr as a

long term agricultural credit to farmer borrowers during the year 2019-20 by the end of May 2019.

Integrated Cooperative Development Projects

Under this scheme, assistance is provided for development of Agricultural production, supply of Agriculture inputs, Marketing, Storage and processing activity. ICDP Scheme under Phase-I (1989-2016) was implemented in all Districts in the State with outlay of Rs.168.39 Crores. Under phase II 03) Districts i.e. Chittoor, Kurnool and East Godavari sanctioned by NCDC with an outlay of Rs. 609.39 Cr. The Project period is five (05) years. Under this project 473 PACS along with 16.34 lakh members are to be benefited. DCCB, PACS, Coop. Joint Farming Societies, DCMS, Weavers Coop. Societies, Fisheries Coop. Societies, Dairy and Mandal Mahila Coop. Samkhyas sectors are covered under scheme II.

Marketing Cooperatives

There are 13 District Cooperative Marketing Societies (DCMSs), which undertake procurement of agricultural produce to enable farmers to get minimum administered prices for their produce. Besides this, the DCMSs procure seeds on behalf of AP Seeds Development Corporation and also undertake procurement activities on behalf of MARKFED in addition to carrying on local business activities viz sale of Fertilizers, seeds, Consumable articles, Stationery items etc., to various departments which are available in the districts. The performance status of DCMSs is given in Table.5.9.

Table: 5.9: District Marketing Cooperative Societies, AP:

(Rs. in lakhs)

Sl. No	Particulars	2017-18	2018 -19
1	Share Capital Contribution	267.91	353.50
2	Business Turn over	42593.99	27276.53
3	Profit	560.31	645.87
4	Loss	189.48	75.22
5	Accumulated losses	84.55	155.85
6	Assets	17969.18	17061.88
7	Liabilities	13683.40	16445.37

Source: Cooperative Department

AGRICULTURE AND ALLIED ACTIVITIES

A.P. MARKFED

MARKFED is an apex organization for the Co-operative Marketing Societies (CMS) in the state for supplying agricultural inputs, cattle feed, fertilizers, gypsum, provisions and other requirements to private run institutions and government hostels. MARKFED offers its services through PACS at the primary level and DCMS in the district level. It undertakes procurement of other commodities under commercial account every year depending upon the market situation.

Co-Operative Union

There are four Cooperative training Centres (CTCs) located at Vijayawada, Rajamundry, Ananthapuramu and Y.S.R. Kadapa, district in the State working under APSCU offering Diploma in Co-operative Management and Computer Applications. The APSCU Union is also publishing a Cooperative monthly magazine titled as "Sahakara Samcharam" for awareness building and propagation of Cooperative Principles and Cooperative Movement in the State.

Ap State Co-Operative Rural Irrigation Corporation Ltd: -

Cooperative Rural Irrigation Corporation Ltd., undertakes drilling of check dams etc. in Agriculture sector. The State Horticulture Mission/Horticulture department has identified the APSCRIC Ltd. as the "Nodal Agency" for construction of Farm ponds in Horticulture fields. It was included in IX Schedule of AP Reorganization Act. Demerger proposal was submitted to the Government and the same was approved.

Rural Electricity Supply Cooperative Societies: -

The Rural Electricity Supply Cooperative Societies is to purchase electricity in bulk from nearest DISCOM and distribute it to domestic industrial and agricultural control of Cooperative Department through RESCOs at Kuppam (Chittoor district), Anakapalli RECS Ltd., Kasimkota (Visakhapatnam) and RECS Cheepurupalli (Vizianagaram district).

Cooperative Tribunal

There was only one Cooperative Tribunal in the State located at Vijayawada. Section 76 of the AP Cooperative

Societies Act, 1964 provides two different forums for appeal on the orders passed by the officers under the provisions of the appeals against orders, decisions, awards etc. passed under APCS Act, 1964 and they have original jurisdiction over of the disputed filed under AP MACS Act, 1995.

Labour contract Cooperative Societies

Labour Contract Coop. Societies function in a 3-tier structure i.e., Primary Level 1923 LCCS with 59072 members in the State. Now all the District Level Federation and State Level Federation are under Liquidation.

Cooperative Joint Farming Societies

Joint Farming Cooperatives also work in the three-tier structure i.e., Primary Level-1452 CJFS and membership of 1,35,334. Joint Farming Societies on the representation of the members of the societies. The process is under progress.

Consumer Cooperative Stores

Consumer Cooperative Stores have been assigned an important role in distribution of good quality consumer articles at competitive prices to control price line in both urban and rural areas. About 221 Consumer Cooperative Stores are functioning in the State. Consumer Cooperative Stores are also undertaking distribution of textbooks, note books, cloth, crackers and supply of various stationary items and provisions to Government hostels etc.

Audit

For the year 2018-19, 17903 Cooperative Societies were programmed for audit, of which 5479 are under aided category and remaining 124240 un-aided category. Audit of the Cooperative Societies for the year 2018-19 is under progress.

Horticulture

Over the years, there has been a structural shift in the cropping pattern in the state and horticulture sector is growing at a faster pace than agriculture towards making Andhra Pradesh a major horticulture hub. The agrarian state of Andhra Pradesh is heading towards a value addition platform from the conventional production approach. The returns from Horticulture per unit

of land are higher as compared to Agriculture. Horticulture, as a climate resilient alternative involving less risk, assures higher income to farmers. In the context of global warming & climate change and increasing per capita income of middle class, this sector has more potential as food habits are changing and people are becoming more health conscious. Horticulture sector turned out to be an essential component for food and nutritional security in the state.

The Government of Andhra Pradesh is committed to farmer centric programmes and identified Horticulture sector as one of the top priority sectors. The government is planning to expand the area under horticulture crops considerably. Incentives like extending 90% Subsidy on micro irrigation drip and sprinkle have dramatically improved the horticulture production significantly.

In the state area under Horticulture crops is 17.62 Lakh Hectares with a production of 327.57 Lakh MTs.

Details of area and production are given in Annexure 5.21. and shown in Table 5.6

Table 5.6 Area and Production in 2018-19

Sl. No	Crop	2018-19 (2 nd Advance Estimates)	
		Area in Lakh Ha.	Production in Lakh MTs
1	Fruits	7.08	171.48
2	Vegetables	2.60	99.19
3	Flowers	0.27	4.28
4	Plantation Crops	4.83	32.66
5	Spices	2.77	19.86
6	Medicinal & Aromatic Plants	0.07	0.10
	Total	17.62	327.57

Productivity enhancement and export potential

Andhra Pradesh stands at 1st position in productivity for Chillies, Cocoa, Lime, Oil Palm, Papaya and Tomato, 2nd in Cashew, Mango, Turmeric and Sweet Orange in India. The State stood 2nd in implementation of Micro-Irrigation at national level. In area coverage, out of 10 top districts in the Country 6 districts are from Andhra Pradesh. Total Exports in Horticulture sector was worth Rs.256 Crores during 2018-19.

District wise productivity of growth engine crops are given Annexure 5.22

Key Achievements:

Additional Area through rejuvenation under horticulture

An area of 1,25,317 Ha., was newly brought under perennial, non-perennial fruit and plantation crops like Mango, T.C Banana, Papaya, Oilpalm, Cocoa, Acid Lime etc. Old and unproductive orchards of Mango, Cashew & Sweet Orange are converted to productive orchards through implementation of Rejuvenation activity in 22,834 Ha. Under Protected Cultivation, Poly Houses and Shadenet Houses are promoted in an extent of 9.45 Lakh Sq. Mtrs.

Micro-Irrigation was implemented in 2,00,274 Ha during 2018-19 when compared to 1,86,397 Ha (2017-18), an increase of 8% achieved over previous year.

Higher crop per drop: An amount of Rs. 460.00 Crores was released by GoI under Pradhan Mantri Krishi Sanchayee Yojana (PMKSY). Per Drop More Crop during 2018-19 was highest in the country.

FPOs for Productivity & quality enhancement:

In pursuance to the state policy, 151 Farmer Producer Organisations (FPOs) were organized with 89,390 farmers in Horticulture Sector and interventions planned for productivity & quality enhancement with marketing linkages for higher income to the farmers. Rs.17.15 Crores was provided to 118 FPOs to implement Business plans.

Infrastructure and support to horticulture farmers:

- 684 post-harvest infrastructure facilities like Pre Cooling and Cold Storages, Ripening Chambers, Refer Vans etc. were developed during 2018-19.
- 749 Farm Ponds were taken up under Creation of Water Resources activity during 2018-19.
- Since 2014, an amount of Rs.288.75 Crores was released towards Input Subsidy to the Horticulture crops affected due to different Natural Calamities.
- Input support for programmes like Area Expansion, Rejuvenation, Protected Cultivation is being implemented through Direct Benefit Transfer (DBT).

Initiatives taken up by the Department are shown in Table 5.7:

AGRICULTURE AND ALLIED ACTIVITIES

Table 5.7 Initiatives of the Department

Name of the Company	Interventions	Crop & Extent	Activity
Future Group	Fruit care, Capacity Building, R&D, Post-Harvest infrastructure for Banana and Pomegranate in Ananthapuram District	Banana-200 acres and Pomegranate 50 acres	Procured 5688 Mt of Banana and 78 Mt of Pomegranate out of which 3300 Mt of Banana exported to Saudi, Muscat, Oman,UAE and Kuwait Exported 5600 MTs during the year 2018-19.
DESAI Fruits Private Limited	FPO Promotion, Fruit care, Capacity Building, infrastructure and Marketing	Banana 500 Ha.	Exported 12000 MTs during the year 2018-19.
LEAF	FPO Promotion, Capacity Building, production of exotic vegetables and marketing for Tribal Farmers of LAMBASINGI in Visakhapatnam.	100 acres	Production of exotic vegetables and marketing of 550 MTs through LEAF organization.
JAIN	Ultra High density Mango Plantation	220 acres	Under UNNATI Project with buy back by JAIN Irrigation
ITC	Quality improvement for production of Food Safe Chilli in Guntur, Prakasham, Krishna & Kurnool	3000 acres	3500 MTs of Food Safe Chilli has been procured at premium price @Rs 62-89 per kg.
BAYER	Quality improvement in chilli in Prakasham& Guntur Districts.	2175 Acres	1200 MTs has been procured from farmers and premium price paid for Tejavariety @ Rs.90/- per kg and Rs 65-70 per kg for US 341 and DD varieties.
Mondalez	Cocoa area expansion and procurement.	42,000 Acres	5700 Mt Cocoa beans were procured from farmers @ Rs 175/- per kg.
Sreeni Food Park	Introduction of processing varieties in Tomato in Chittoor District.	110 Acres	SAKATA variety of Emerald company has been introduced with high yield.
Big basket	Collection centres &Packhouse in Ananthapur (Garladinne)	10200 farmers	Procurement of Coconut, Melons Tamarind and Capsicum.
Ninja Cart	Collection centres &Packhouse in Ananthapur (C.K. Dinne, Battalapalli), Punganuru, V. Kota, Kothakota of Chittoor District	6700 farmers	Procurement of Vegetables and Greens.

Key infrastructure related interventions:

- Solar Poly Dryers for Chillies were provided in Guntur district for better quality Chillies to ensure higher price.
- Solar dryers provided for preparation of Mango jelly in East Godavari district which not only improves quality of Mango jelly but also promotes hygiene in the processing facility.
- Solar Powered Cold Rooms provided to 3 FPOs in

Chittoor & YSR Kadapa Districts for storage of Vegetables, Flowers & Fruits and to increase the shelf life.

- Coconut Pack houses, Coconut de-husking and drying units in East Godavari district. Promotion of Coconut Producer Companies.
- Onion ventilated storage structures provided in Kurnool district to store onion during glut so that farmers realize a better price.

Exports and technology support to farmers:

- 8500 MTs of Banana exported to various countries.
- 380 MTs of Onion exported to various countries.
- Roses and culinary herbs being exported from Ananthapuramu District.
- Cold Chain Corporation is being setup to reduce post-harvest losses and add value to the produce.
- Centre of Excellence for Vegetables & Floriculture in Kuppam with State of Art facilities to disseminate latest

technologies to the Horticulture farmers of Andhra Pradesh.

Targets for the year 2019-20

Several farmer oriented activities are being taken up to encourage adoption of modern technologies, evolving sustainable farming practices, provision of post-harvest infrastructure facilities and supplying knowledge inputs to the farming community.

Action Plan 2019-20-Physical and Financial Targets

Sl. No	Component	Units	Physical Target (No.)	Financial Target (Rs.in Lakhs)
1	Plantation Infrastructure-Small Nurseries (Private Sector)	Ha	5	37.50
	Tissue Culture Units (Private Sector)	Nos	1	100.00
	Seed Infrastructure	Nos	5	500.00
2	Area Expansion	Ha	25741	3868.61
3	2 nd & 3 rd Yr Maintenance	Ha	32579	1747.28
4	Rejuvenation	Ha	6896	1212.83
5	Canopy Management	Ha	6570	394.17
6	Creation of Water Resources	Nos	574	951.38
7	Protected Cultivation	Ha	86	2388.89
8	Plastic Mulching	Ha	5243	838.93
9	Post-Harvest Management	Nos	1182	5516.78
10	Estt. of Marketing Infrastructure	Nos	78	334.25
11	Farm Mechanization	Nos	6626	2036.72
12	Human Resource Development	Nos	47164	840.20
13	Other Innovative schemes	Ha	12126	599.61
14	Integrated Pest Management	Ha	11739	586.96
15	Permanent Pandals	Ha	363	907.09
16	Hybrid Vegetable Seed	Ha	5100	153.00
17	Hybrid Vegetable Cultivation	Ha	200	40.00
18	Other Minor Components (Plastic Crates, Vegetable Minikits, Trellies etc.,)	Nos		1210.68
19	Micro Irrigation	Ha	240000	154730.59
	Total			178995.47



Animal Husbandry

Livestock sector is one sector where the poor contribute to growth directly instead of getting benefit from growth generated elsewhere. Livestock have been an integral component of India's agricultural and rural economy since times immemorial, supplying energy for crop production in terms of draught power and organic manure, and in turn deriving their own energy requirements from crop by products and residues. The progress in the sector is inclusive in nature as it results in balanced development of the rural economy particularly in reducing poverty amongst the weaker sections. Livestock provides stability to family income especially in the arid and semi-arid regions of the State.

Animals provide nutrient rich food products, draught power, dung as organic manure and domestic fuel hides and skin as a regular source of cash income for rural households. Livestock are a natural capital, which can be easily reproduced to act as a living bank with offspring as interest and the best insurance against the vagaries of nature.

Growth in livestock - inclusive and pro-poor

Most of the animal farming activities such as fodder

collection, feeding, watering, and healthcare, management, milking and household-level processing, value addition and marketing are performed by women. The growth in livestock sector is demand-driven, inclusive and pro-poor. The rate of return on investment from Livestock sector is comparatively very high. Livestock sector apart from contributing to the state economy in general and to agricultural economy in particular, also provides employment generation opportunities, asset creation, coping mechanism against crop failure and social and financial security. Livestock is the main source of animal protein for the population. Demand for animal food products is responsive to income changes, and is expected to increase in future.

Milk, Meat and Egg – the key growth drivers

The Animal Husbandry, from a humble beginning of backyard poultry, has grown into a dynamic industry. Milk and Meat production have also made a quantum leap with the production increasing substantially. Andhra Pradesh has some of the richest livestock resources in the country and is one of the most advanced states in Livestock sector. The State attained a prominent position in the country in Livestock Sector over the years because of its increasing livestock resources, gradual enlightenment of farmers and dedicated and sustained efforts of the Government. Milk is

the single largest commodity contributing highest economy to the State.

Effective veterinary and animal husbandry services are critical in achieving the significant production levels. Welfare schemes implemented by the Government for dairy, sheep and poultry units helped the rural masses enormously in bridging income gaps. This, besides conserving domestic biodiversity has become a means of producing food in dry lands without depleting ground water resources. A sizable number of families owning sheep and goat have already been covered with livestock insurance.

The key objectives of the government include building the health of the Nation by increasing the availability & quality of animal origin foods like Milk, Meat and Eggs to the human population through scientific breeding, feeding and health management of livestock & poultry. Efforts are being made to improve the wealth of the nation by providing necessary technical support to Livestock bearers thereby improve livelihoods of farm families.

Status of Livestock Sector

The State stands 1st in Egg production (2036.94 Crores), 4th in Meat production (8.03 Lakh Metric Tons) and 4th in Milk production (150.44 Lakh Metric Tons) in the country during 2018-19.

Popular breeds – pride of the state

Andhra Pradesh takes pride in having famous and world renowned Livestock breeds like Ongole and Punganur in cattle, Godavari Buffaloes, Nellore in sheep and Aseel in poultry. As per Livestock Census 2012, 62.54 lakh out of 126.65 lakh (49.38%) households in the state are engaged in Livestock / Livestock related rearing activities. The Livestock resources in the state include 47.42 lakh Cattle, 64.65 lakh Buffaloes, 135.67 lakh Sheep (1st in country), 45.06 lakh Goats, 1.57 lakh pigs, 0.13 lakh other Livestock, 294.37 lakh total Livestock & 817.85 lakh poultry (3rd in country).

Support to the livestock sector

Animal Husbandry schemes have been formulated to attain well-laid National policies aimed at improving livestock production, fighting protein hunger, improving

nutritional standards of human population and provision of technical support for the maintenance and improvement of livestock.

The state government is providing fodder to livestock at the doorsteps of the farmers below poverty line (BPL) with 50% subsidy ensuring fodder security. The government endeavours to insulate the farmers from the vagaries of agriculture by focus on livestock sector to ensure that every household has a monthly income not less than Rs.10,000.

Livestock population as per 2012 Census is shown in Table 5.8. District wise Livestock population as per 2012 Census is given in Annexure 5.23.

Table 5.8 Livestock population in A.P

(No. in lakh)

Category	As per 2007 census	As per 2012 census
Cattle	54.73	47.42
Buffaloes	82.30	64.65
Sheep	121.20	135.67
Goat	48.24	45.06
Pigs	2.06	1.57
Poultry	745.37	817.85

Source: Directorate of Animal Husbandry

Though there is reduction in the total Cattle and Buffalo Population, the production and availability of nutritious food and supplemental income to farmers has increased due to perceptible increase in Crossbred Cattle and Graded Murrah Buffalo population especially female / Milch animals as per the Livestock Census, 2012.

The production of Milk, Eggs and Meat is shown in the following Table 5.9 and chart 5.4.

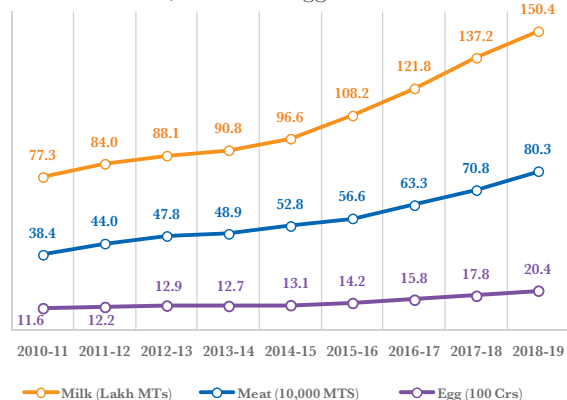
Table 5.9: Production of Milk, Meat & Eggs

Growth Engine	Unit	2016-17	2017-18	2018-19
Milk	L.MTs	121.78	137.25	150.44
Growth	%	12.58	12.71	9.61
Meat	L.MTs	6.32	7.08	8.03
Growth	%	11.68	12.05	13.29
Eggs	Cr.Nos	1582.75	1777.76	2036.99
Growth	%	11.64	12.32	14.58

Source: Animal Husbandry Department.

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Chart 5.4: Milk, Meat and Egg Production



Source: Animal Husbandry Department

Production estimates of milk, meat and eggs from 2009-10 to 2018-19 are shown in Annexure 5.24 and district wise production are given in Annexure 5.25. Details of district wise Veterinary institutes are given in Annexure 5.26.

State Schemes 2018-19 – Broad objectives

1. Cattle & Buffalo Breed Development

- a) New Artificial Insemination Centres (Coverage of Additional breeding stock through NGO):

This scheme is meant for expansion of breeding operations involving NGOs with experience in implementation of livestock projects.

- b) Promotion of Indigenous Breeds:

Under the scheme, breed improvement activity will be taken up for conservation of Desi /Indigenous cows and promotion of sustainable Organic farming.

- c) Interest Subsidy for Dairy farms:

This scheme is designed to promote entrepreneurs in dairy farming for establishment of new Dairy farms / expansion of existing Dairy farms in the State. Interest subsidy will be provided over and above 3% interest charged by the banks. The animals will be procured from other states

- d) Sexed Semen/Sexed semen Lab/ ET lab:

This scheme will be implemented in selected pockets of the State involving AP livestock Development Agency (APLDA).

- e) Performance based incentives to Gopal Mithras:

Under this scheme, grants will be utilized to extend performance-based incentives to the Gopal Mithras towards calf births.

2. Feed and fodder Development Programme:

The fodder security policy, which is first of its kind in the country, having various components to provide quality feed and fodder to the Livestock will be implemented.

- a) Promotion of Silage

This is an ongoing scheme with the objective of making nutritious green fodder available to the livestock throughout the year. Through this activity, the department will promote silage production activity in the form of bales/pit silage/tower silo /Bunkers etc., The activity will be implemented through involvement of farmers / entrepreneurs / NGO / SERP / PPP partners/any other agency. It will be promoted in PPP mode wherever possible. The existing subsidy pattern will be followed and the beneficiary contribution @ Rs.2/- per kg silage will be borne by the beneficiary.

- b) Hydroponics & Azolla

Hydroponics technology will be promoted to enable the farmers to produce green fodder where there is constraint for land to grow fodder. Azolla, an algae will be promoted as an alternative to replace oiled cakes in the concentrate feed to some extent to reduce cost of production in the Livestock Production.

- c) Total Mixed Ration

The scheme enables farmers to get access to the balanced / complete ration to the animals, particularly to those farmers who do not own land (for fodder production) and to enable them confidently take up dairying activity.

- d) Convergence with MGNREGS to match for material cost

The scheme is meant to promote largescale fodder production in convergence with Rural Development Department by promoting Ooroora Pasu grasa Kshetralu. The AH department will provide matching funds of material component over and above the 40% material cost involved under MGNREGS.

e) Ration Balancing Programme(RBP)

Under this component, promotional activities to create awareness amongst the farmers for optimization of milk production will be taken up with the objective to reduce the production costs.

f) Fodder Seed Supply

Improved fodder seed will be supplied 75% subsidy to the farmers to take up largescale fodder production to meet the fodder requirement of high yielding animals.

g) Fodder Banks

Storage facilities for fodder will be created in strategic locations to supply fodder to livestock farmers during critical situations. Infrastructure facilities will be provided by the Department through RIDF / MGNREGS in convergence with Rural Development Department)/ State fund.

h) Feed and fodder supply

Under this program, feed and fodder of different categories to the farmers / Goshalas will be provided on subsidy basis. Apart from this, to promote usage of technology, funds will also be utilised for supply of chaff cutters, milking machines, harvesters & other farm equipment to conserve fodder on 75% subsidy.

i) Oorura Pasu graasa Kshetralu (OPGK)

This is a new scheme aimed to promote the availability of green fodder in villages throughout the year and to make livestock rearing a sustainable activity and also to increase the livestock holding capacity among landless labour.

3. Implementation of Livestock Development Programmes Management / Health Care

a) Pregnant and Lactating Animal Care (Ksheerasaagar)

This is an ongoing scheme, designed to reduce inter calving period in milch animals and to increase the life time milk production.

b) Animal Hostel

This scheme aims to create basic infrastructure facilities needed for integrated dairy activity with biogas production, vermi compost, value addition to

milk etc., Common infrastructure facilities required for animal management, dung & urine management will be provided free of cost, working capital in the form of revolving fund will also be provided. This scheme is implemented in convergence mode with RD department involving SHGs/ unemployed youth/ Dairies/ NGOs, etc.

c) Suphalam

The objective of the program is to get one calf once in 15-18 months from milch animals /heifers through fertility Management of infertile animals.

d) Mobile Veterinary Services (Sanchara Pashu Vyadya Sevalu)

The Mobile Veterinary Services will provide service to the farmers in the state, at the rate of one each per Animal Husbandry division for 45 divisions in the first phase.

4. Infrastructure support to Dairy/Sheep/Poultry Sector:

The government is extending infrastructure support through implementation of various schemes. The key schemes include: BMCU in potential villages, milk processing units/equipment, Farmer Producer Organisation (FPO), milk market outlets breeding rams production/replacement and exchange, Jeevamithra, sheep shelters, interest subsidy for setting up of new sheep / goat farms, feeding support to pregnant ewes, meat market outlets/ meat processing unit/ mobile sheep health care units, cold storage facilities/ support to small vendors and hatchery (Rural Backyard Poultry), disease diagnosis, relief to EMU farmers, Subsidized Power Tariff to Dairy, Sheep and Goat and Poultry farmers etc.

Scheduled Caste Sub-Plan (SCSP)

Integrated Livestock Management

Towards feeding support to animals owned by SCs and for the fertility management of animals, various schemes like calf rearing programme (Sunandini), Ongole male calf rearing programme, pregnant and lactating animal care (Ksheerasagar), heifer induction and rearing programme are being implemented.

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Tribal Sub-Plan (TSP)

Integrated Livestock Management

Various components of schemes such as strengthening of backyard poultry for livelihood & nutritional security, establishment of integrated livestock development centre, integrated mini dairy complexes, fertility management of animals owned by STs and for their feeding support, are being implemented.

Livestock Health Care

Mass vaccinations in campaign mode for Livestock is done by implementing Livestock Health Calendar covering various diseases like Foot and Mouth Disease, HS, BQ, Anthrax in Cattle, PPR, ET in Sheep and Goat and RD and Fowl Pox in Poultry to protect the health of animals and poultry birds.

Zoonosis day is celebrated in a big way to bring awareness on the spread of diseases from animals to humans and vice-versa and a total of 47,300 doses of Anti Rabies vaccinations conducted. Apart from this, various wings of VBRI, Vijayawada are attending Disease Diagnostic and Preventive Health Care measures through the laboratories of Quality Analysis Lab for export oriented livestock products, Disease Monitoring & Surveillance and Zoonotic lab, Microbiology Lab, Pathology Lab, Parasitology Lab, Toxicology & Feed Analysis Lab (TFAL), Sero Epidemiology Lab, FMD lab, Virology.

Livestock Breeding Activities:

Artificial Insemination Centres

The Artificial Inseminations (AI) facility is made available to more than 80% Breedable Cattle and Buffaloes in the state through **6598** Artificial Insemination centers which include **3031** Animal Husbandry Departmental Institutions; **2738** Gopal Mitra/ MAITRIs; and **829** other AI Centres (Dairy Union, BAIF, RASS, JK Trust & Veterinary College) Centres.

43.86 Lakh Artificial Inseminations were conducted and 15.75 Lakh improved progeny calves were born during 2017-18. During 2018-19 30.04 Lakh Artificial Inseminations were conducted up to December 2018.

To provide Artificial Insemination services to cattle and Buffaloes in remote areas, 156 Integrated Livestock development centres (NSP) in Srikakulam, Vijayanagaram,

Visakhapatnam, East Godavari and West Godavari, Krishna, Kurnool and Anantapuram districts in 2017-18 are established through NGO named JK Trust. These centres provide breed improvement services to those areas for 6 years.

Organization of Fertility Camps

2914 Fertility camps organized at Gopala Mitra Centers for treating infertility animals and bringing them to conception under supervision of Technical guidance of local Veterinarian. During this year, 140 fertility camps are organized.

National Kamdhenu Breeding Centre

Govt. of India has sanctioned National Kamdhenu Breeding Centre to the State of Andhra Pradesh for Southern Region with the financial outlay of 36.12 crore with the objective to conserve and development of Indigenous Bovine breeds, to enhance production and productivity, to supply certified elite germplasm and to protect threatened breeds from extinction. 232 indigenous breed animals of 17 Breeds were procured and rearing at NKBC Chintaldevi.

Progeny Testing Programme

APLDA has been identified as End Implementing Agency (EIA) for implementing the Sub Project Plan on "Production of High Genetic Merit Crossbred Jersey bulls through Progeny Testing" under National Dairy Plan-I during the years 2013-14 to 2018-19

Status of implementation of the Sub Project

The sub project is being implemented in Chittoor district. There are 107 PTP centres were established in Chittoor district. 107 Gopalmitras, 08 Exclusive Milk Recorders and 13 Supervisors are working for the project. 273825 Test AI done, 28345 daughters registered and 11934 cows put under milk recording under this Program.

Bull calf procurement is the ultimate aim of the project and so far, 174 HGM CBJY bull calves have been procured from the field after parentage testing and disease screening and 121 bulls have already been distributed to different agencies.

National Mission on Bovine Productivity

In order to improve productivity and enhance milk production, thereby making dairying more remunerative to the farmers, a new scheme “National Mission on Bovine Productivity” has been initiated by Government of India.

Components of the Scheme

- PashuSanjivni: Animal Wellness Programme encompassing provision of Animal Health cards (“NakulSwasthyaPatra”) along with UID identification and uploading data on National Data Base;
- Advanced breeding Technology: including Assisted Reproductive Technique- IVF/MOET and sex sorted semen technique to improve availability of disease free high genetic merit female bovines;
- Creation of “E- PashudhanHaat”-NakulPrajnanBajar: an e-market portal for bovine germplasm for connecting breeders and farmers and National Bovine Genomic Centre for Indigenous Breeds (NBGC-IB).

Fodder Management and Fodder Security to Livestock

The State Government has approved Fodder Security Policy to ensure fodder security to the animals. The Government has targeted massive fodder production in 30,000 acres under “Oorura Pashu Grasa Kshetralu” (OPGK) in the needy villages engaging the services of entrepreneurs interested to produce green fodder for the consumers who are willing to buy green fodder @ Rs.1/- per Kg from the entrepreneur and this initiative of fodder security to the animals has bagged “10th Global Leadership Award – 2017”.

The State Government is implementing the policy of distribution of feeding inputs @ Rs. 1/-Kg of Green Fodder, @ Rs. 2/- per Kg Silage, @ Rs.3/- per Kg of Dry fodder, @ Rs. 3.50/- per Kg Total Mixed Ration and @ Rs. 4/- per Kg concentrate feed to reduce the cost of production in order to make livestock enterprise viable to the farmers.

The Fodder Security Policy supports for propagation of world best practices such as Silage & TMR feeding to the cattle in addition to the utilisation of crop residues otherwise wasted in coastal districts for fodder management in summer season especially in Rayalaseema districts of Andhra Pradesh.

- 4065 MTs of fodder seed is distributed on 75% subsidy to individual farmers and promoted fodder cultivation in 81,300 Ha. with an expected fodder yield of 8.13 LMTs.
- Distributed 45,058 MTs of TMR, 1.32 LMTs of Silage and 62,000 MTs of Cattle feed on concessional prices.
- 83,396 acres of land under fodder cultivation under OoruraPasuGrasaKshetralu (OPGKs) with an expected green fodder yield of 9.36 LMT.
- Supplied 1184 No of 2 HP, 152 No of 3 HP and 48 No of 5 HP chaff cutters under farm Mechanization to minimize fodder wastage.
- 56 Mobile Veterinary Clinics are catering livestock health care to 8.0 lakh livestock covering 990 remote and agency villages benefitting 2.50 lakh farmers
- “Meat Development Corporation of Andhra Pradesh” was established under company act to export meat and meat products.
- Livestock Loss Compensation Fund of Rs.50 Crores has been established for loss compensation of productive cattle owned by small and marginal livestock farmers as a “risk management relief”.

Action Plan for the year 2019-20

- To strengthen Primary Dairy Co-operative Societies registered under APCS Act, 1964, affiliated to District Milk Unions registered under APCS Act, 1964 in turn affiliated to APDDCF in order to strengthen the dairy industry particularly in co-operative sector in the current financial year, 2019-20 and later to encourage milk pourers who pour milk to these co-operative societies by giving bonus of Rs.4/- per litre in the subsequent years as a part of Navaratnalu.
- Welfare of the Sheppard is considered as priority and a new scheme is to be introduced Sheep & Goat Loss Compensation Scheme for Sheppard to cover accidental loss of their sheep and goat with loss compensation of Rs.6,000/- persheep or goat with total coverage of all sheep and goat population in the State as a part of Hon’ble Chief Minister’s promises.

To increase Milk production to 199.00 LMTs in 2019-20 from the current year (2018-19) production of 150.44 LMTs.

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- To increase Meat production to 10.00 LMTs in 2019-20 from the current year (2018-19) production of 8.03 LMTs.
- To increase Egg production to 2560 Crore eggs in 2019-20 from the current year (2018-19) production of 2036.94 Crore eggs.
- To distribute 3 LMT silage and 4.5 LMT green fodder to SHG woman farmers
- To induct 50000 high yielding animals from other States

Under Scheduled Castes Component and Scheduled Tribe Component the distribution of feeding inputs to the cattle owned by SC and ST farmers on 87.5% subsidy and to organize demo centers for feeding inputs in SC/ST colonies.

Dairy Development

Key achievements of Andhra Pradesh Dairy Development Cooperative Federation (APDDCF):

- APDDCF is supplying Vijaya Vajra+ UHT Milk (enriched with vitamin A & D) of 38 lakh liters per month to more than 25000 AWCs across 257 Projects covering 13 districts of Andhra Pradesh. The preliminary studies have shown that the acceptance by the target group is good and had good impact on improving maternal nutrition & improved birth weights.
- A Dairy Plant of 50,000 LPD capacity at an outlay of Rs. 6.50 Cr. is being established under RKVY at G.Kothapalli in West Godavari.
- An Ultra High Treated (UHT) Milk packaging plant of 80,000 LPD capacity is being established through IDMC on turnkey basis at an outlay of Rs. 26.42 Cr. under RKVY at Madanapalle in Chittoor District.
- Rs. 2.50 Cr. was sanctioned for implementation of Ratio Balancing Programme (RBP) covering 50 villages in each of the four(4) districts of East Godavari, West Godavari, Ananthapuramu and Kadapa.
- Revived Milk Procurement operations in 10 BMCUs through Public Private Participation; 5 BMCUs in Kadapa procuring 6000 LPD and 5 in East Godavari procuring 6000 LPD.

Sheep and Goat Development Activities

The State has brought out a Small Ruminant Development

Policy (2015-2020) with an allocation of Rs. 575 Crores to tackle inbreeding problems in Sheep flocks and to check migration of flocks during summer season through supply of Silage & TMR to the shepherds at affordable prices. The policy is also aimed to encourage stall feeding and housing to the Sheep flocks. The Government has also decided to promote Meat sector in the State through establishment of Meat Development Corporation of Andhra Pradesh.

Sheep and Goat Deworming

Every year, government is taking up 2 times free mass sheep & goat deworming covering 180 lakhs Sheep & Goat population. The main objective is to reduce internal parasite burden, improved immunity, improved nutrient absorption leading to about 1 Kg improvement in body weight.

Implementation of NCDC Scheme

The National Co-operative Development Corporation has sanctioned Financial Assistance of Rs.35.74 crores under Integrated Small Ruminants Development (ISRDC) to be implemented by the Federation in Prakasam and Chittoor districts through the District Unions. 146 shepherd families of Prakasam district and 120 of Chittoor district were benefited with the 1st installment of NCDC amount of Rs.265.20 lakhs. In the 2nd phase an amount of Rs.750.54 lakhs has been released to Prakasam & Chittoor districts for grounding of units.

Strengthening of sheep breeding farms under Integrated Development of Small Ruminants & Rabbits (IDSRR)

An amount of Rs.25.46 lakh has been released to Government Sheep Farm, Penugonda of Ananthapuramu district towards construction of new sheds, purchase of Breeding Rams, fodder production, purchase of feed.

The A.P Sheep & Goat Development Cooperative Federation Ltd has organized exposure visit to (13) districts to the Presidents, DSBCUS of Andhra Pradesh with the objective to create awareness on technical aspects of sheep farming i.e., latest technologies & scientific management practices, innovations, new breeds of Sheep & Goat etc., to improve the small ruminant sector in the state.

Poultry Development

The Poultry Development Policy (2015-2020) will support poultry farmers through sanction of interest subsidy on working capital and also offer incentives to the entrepreneurs who wish to establish processing plants for eggs and chicken and to reduce the cost of production in poultry farming through concessional power tariff.

Under TSP, each district with 2400 units of Rural Back Yard Poultry units (Manakodi), targets were fixed to the Srikakulam, Vizianagaram, Visakhapatnam, East Godavari & West Godavari districts. Under SCSP, nearly 15000 units of MANAKODI targets were given to the all the districts in the state.

Rural Poultry Development through WASSAN:

Government of Andhra Pradesh entered into an MoU with the voluntary organization 'Watershed Support Services and Activities Network (WASSAN) for "strengthening of Back Yard Poultry & Nutritional Security to Tribal Areas". This organization will cover the 5 Tribal Districts viz. Srikakulam, Vizianagaram, Visakhapatnam, East Godavari and West Godavari districts.

Poultry Interest Subvention

Poultry Development Policy 2016-20 has a provision of Interest Subvention to the newly establishing Poultry Farms in the state. For the year 2016-17, Interest Subvention is 4.5% & for the year 2017-18 is 3.3% is permitted based on MCLR.

Livelihood activities:

Under Animal induction policy 31,082 high yielding animals have been inducted from other States in convergence with Welfare Financing Corporations as a part of poverty alleviation program.

Farmer Producer Organisations (FPOs)

The collectivization of producers, specifically marginal and small farm holders into producer's organizations is emerging as the effective possible pathway to address improved access to investments, technologies, knowledge support, inputs and markets to the farming community in Livestock sector.

The areas identified are: Indigenous Breed Development, Crop residue Procurement, Fortification & TMR manufacturing, Dairy Sector, Procurement, Marketing of Desi Eggs & Meat, Livestock Breeding and Health Services, (Gopalmitra / Paravet / Village level Worker), Integrated Small Ruminant Production and Marketing; Management of Community Pastures Establishment of Community Fodder Banks linked with Complete Feed Production; Custom Hiring Services/Centers. Livestock Satellite Units-SEZs. Rural slaughter Houses. Meat processing Units, Marketing, Sales Counters etc.

Infrastructure Development

Most of the Veterinary Institutions in the State are in dilapidated condition, so far 1357 buildings have been constructed replacing dilapidated buildings in the state by the assistance of NABARD under various phases of RIDE.

Animal Welfare Activities:

Establishment of SPCAs

The basic activities include:

- a) Allotment of 3 to 5 acres of land for each district with shelter for animals with feed and water facilities along with veterinary aid.
- b) Allotment of required staff for functioning of SPCAs.
- c) Taking up Animal welfare activities with coordination of Transport and Police Department, NGO's involved with Animal welfare activities (Recognized by AWBI Chennai).
- d) Conducting awareness activities to enlighten public about Animal Protection Laws/Acts through print electronic media and seminars etc.

Animal Husbandry Day

First Saturday of every month is being observed as Animal Husbandry day as part of Publicity & Extension designed to bring all the departmental activities to the door step of the farmer and create awareness among the livestock owners.

AP Centre for Advanced Research on Livestock PVT LTD (APCARL)

The existing name of the company changed from "Indira Gandhi Centre for Advanced Research on Livestock Private

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Limited” to “Andhra Pradesh Centre for Advanced Research on Livestock Limited” was approved by the Ministry of Corporate Affairs. Partners Joined with AH Dept and APCARL during 1st partnership summit held on Jan 2016 were Genomix Molecular Diagnostics Pvt Ltd for vaccines, Diagnostic kits, Animal Nutrition, Therapeutics, Green cell incubator pvt ltd - Animal Nutrition, Therapeutics, Ahara Technology Group-Swine Genetics and Meat processing and ICAR – National research center on meat Hyderabad. During 2nd partnership summit Tropical Animal Genetics Pvt Ltd. – Bovine & Poultry ART.

Fisheries

The State of Andhra Pradesh is endowed with highly diversified and potential water resources and offering immense scope for expansion of fisheries sector for socio-economic growth of the State. Fisheries sector aims to be best utilise the natural resources for generating rural employment, production of protein rich food, valuable contribution to GSDP and source of foreign exchange through sea food exports. Fisheries sector has been identified as vibrant sector among the Primary sector. The state government has initiated plans to make Andhra Pradesh the ‘Aqua Hub’ of the World. Development of fisheries through effective value chain and boosting exports, government is committed to invest to create infrastructure, promote welfare of fishermen and set up institutions to build skills.

Growth promoter, Income and employment generator

AP ranks 1st in total fish and shrimp production and contributes more than 65% of cultured shrimp produced in the country. AP is contributing 1.61% of global and about 24% of national fish production. This sector is providing employment to 14.5 lakh persons and contributing 7.4% to State’s GSDP. AP is the largest shrimp exporter in the country. There is gradual increase of marine Sea food exports from the State. Aquaculture has contributed significantly for employment generation and infrastructure development of the coastal community. This sector is also promoting the local economy by the growth of ancillary industries and development of infrastructure in rural areas.

Key Achievements

Production increased from 19.78 Lakh Tonnes in 2014-15 to 39.92 Lakh Tonnes in 2018-19. The State stands 1st in

Aquaculture area and Production. Power tariff concession provided to 53,500 aquaculture farmers by reducing the unit rate from Rs.3.86 to Rs.2.00 from August 2018 duly bearing the additional burden of Rs.500 crores per annum.

The relief during marine fishing ban period was increased from Rs.2000/- per family to Rs.4000/- from 2016. (31kgs of Rice per family was distributed before 2014). An amount of Rs. 31.95 Crores was provided as relief to 79875 fishermen during marine fishing ban period. AP Centre for Aquaculture was registered for promoting sustainable aquaculture in the State with quality seed of fish and shrimp and inputs. For Regulation and promotion of Sustaining Aquaculture, declaration of Aqua Zones has been taken up in the State as an innovative model.

Proposed Action Plan for 2019-20

- The target envisaged for achieving the fish and Prawn production during 2019-20 is 45.91 LMT.
- 15,000 Ha of area is targeted for aquaculture expansion
- About 30 crore advanced size fish seed is proposed to stock in all potential inland public water bodies to improve productivity
- It is targeted to achieve Marine Sea food exports worth of Rs. 22,000 Crore during the year
- To make AP as Aquaculture capital of the world and marine processing hub of the country

Strategies: The important strategies for realizing the goals are development of marine infrastructure, promotion of deep sea fisheries, Open Sea cage culture, promotion of alternate species for brackish water aquaculture, establishment of SPF Brood Stock Multiplication centres and aquatic quarantine centres for P.vannamei for production and supply of SPF brood stock to hatcheries to supply quality seed, Aqua Zonation for area expansion, Organic Aqua farming, Farm enrollment for Traceability, Promotion of Value added products, Integration of innovative practices like Nursery management and Grow out pond management. Environmental friendly Sustainable Aquaculture Practices, examining opportunities for reduction of cost of production of fish/shrimp. Under NAVA RATNALU the assurances given to fisherman and fish farmers will be taken up by the government.

Fish Production

39.92 lakh tonnes of fish and prawn are produced in the state in 2018-19 as against the target of 44.85 lakh tonnes. Production of fish /prawn in the state has increased from 17.69 lakh tonnes in 2013-14 to 39.92 lakh tonnes in 2018-19. Details of District Wise Fish and prawn Production for the year 2017-18 & 2018-19 is given in Annexure 5.27.

Registration of Aquaculture

As per the Government of India Coastal Aquaculture Authority Act and rules 2005, land within a distance of 2 KM from high tide line (HTL) of seas, rivers, creeks, and back waters comes under the purview of Coastal Aquaculture Authority (CAA). The District Level Committee (DLC) has recommended applications for farms above 2 ha. water spread area, to State Level Committee for further recommendation to CAA for consideration of registrations.

Important schemes and programmes

1. Assistance for livelihood Enhancement of Fishermen –

- a) Exemption of Sales Tax on HSD oil: Supply HSD oil on subsidy @Rs.6.03 per litre to all the 1938 registered and active mechanized and 15804 motorized and fishing vessels. The ceiling limit is 3000 litres per month per boat for mechanized boats and 300 litres per month per boat for motorized crafts.
- b) Deep sea Fishing Implements: Accessories for long line fishing and for gill nets will be provided for 420 mechanized / motorized boats. Subsidy will be 75% on unit cost or actual whichever is lower.
- c) Fibre Boats to Marine Fishers: Supply of 200 fibre boats to marine fishers at the unit cost of up to Rs.5.00 lakhs. Subsidy is 75% on unit cost or actual whichever is lower.
- d) Nets and ice boxes to Marine Fishers: supply of 480 units to fishermen. The unit cost is up to Rs.0.50 lakhs. The subsidy will be 75% on the unit cost with ceiling of Rs. 0.375 lakhs per unit whichever is less.
- e) Supply of OBMs and IBMs to Marine Boats: The scheme is to provide Out Board Motors (OBMs)

and Inboard Motors (IBMs) to traditional boats and replace the aged motors to the existing motorised boats on 75 % subsidy. The unit cost is Rs.1.20 lakhs.

- f) Deep Sea Fishing Vessels: Supply of Deep Sea Fishing Vessels with a unit cost of Rs. 25.00 lakhs. The subsidy is 50% on unit cost or actual whichever is less.

2. Relief to Marine Fisher during ban period:

Government is planning to cover 80,000 sea going marine fishers operated on motorised and mechanised boats with a relief (@Rs.4000/- per fishers during 61-day marine fishing ban period (15th April to 14th June) with an objective of conserving the fishery wealth and to sustain the fish production from marine waters.

3. Scheduled Caste Component (SCC) and Scheduled Tribes Component (STC):

Under SCC and STC, fishing inputs like Bicycle with nets and Ice boxes, 2 or 3 or 4 wheelers with Ice boxes/freezer mounted mopeds for fish retail marketing, mobile fish retail outlets, Fish seed stocking, Development of Model SC Fishermen Co-operative Societies are proposed on 90% subsidy.

4. Fisheries Development Scheme: under fisheries development scheme the following are the beneficiary oriented sub-schemes:

- a) Revolving fund for MMGs: 100% grant to assist 1200 MMGs / Women Groups by providing revolving fund of Rs.0.50 lakh per group to engage in gainful income earning activities like retail fish vending, net mending
- b) Enhancement of production, productivity of inland water bodies: To meet the expenditure on Government farms, maintenance for fish seed production, 100% Grant for seed rearing in cages, pens, farm ponds, captive seed nurseries, village tanks and procurement of spawn, fry, fingerlings for stocking in public water bodies, petty repairs to Govt fish seed farm for seed production etc.,
- c) Mobile vehicles for fish vending / seed transport/ fish transport: To assist the active fishers / FCSs by supply of 2/3/4 wheeler vehicles for fish vending / seed transport/ fish transport on 75% subsidy on unit cost or actual whichever is less.
- d) Supply of Cycles, nets, ice boxes to inland fishers: To

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assist the Inland fishers by providing cycles / nets/ ice boxes / boats to inland fishers on 75% subsidy on unit cost of Rs.0.50 lakhs.

5. Incentives and subsidies under Fisheries Policy:

To extend subsidies and incentives announced under A.P., Fisheries Policy, 2015 to feed manufacturing plants, reefer vans, aqua labs, quality control labs and mechanization of aquaculture etc., the amount sanctioned is Rs.1200.00 lakhs.

6. Under Fishery Policy to meet the operational expenditure of the proposed “AP Centre for Aquaculture” which includes Aquatic Quarantine Facility (AQF), Brood Stock Multiplication Centre(BMC), Sea bass and Mud crab hatcheries, one State Level Apex Society and 6 District Level Societies. The amount sanctioned for the society is Rs.2000.00 lakhs.

7. **Capital Expenditure under RIDF**– Fish Landing centres (FLCs) and Fish Seed Farms (FSFs) –Under Rural Infrastructure Development Fund (RIDF), an amount of Rs.2000.00 lakhs is proposed to be spent for the approved ongoing projects i.e additional shore based facilities, fish seed farms, approach roads and other fisheries projects sanctioned.

Blue Revolution: Centrally Sponsored Scheme on Blue Revolution: Integrated Development and Management of Fisheries” is a scheme in which all the sub sectors of fisheries – inland, marine, welfare, postharvest fisheries etc., are covered. GOI assistance is 24% to general and 36% to SC/ ST beneficiaries of the unit / project cost. GoI released Rs.13.02 crores during 2018-19 to the state.

Schemes under RKVY: Under RKVY Rs.20.20 crores was sanctioned for fisheries sector during 2018-19. The schemes implementing under RKVY are establishment of BMC for P. vannamei, Seabasshatchery, FLC at Matlapalem, Uppalanka and Biyyaputippa and fish brood bank at Badampudi(West Godavari district).

Infrastructure projects under RIDF: Government has sanctioned 67.09 crores under RIDF XX Tranche for taking 47 works and Rs. 43.91 Crores for 9 works under RIDF-XXII in the state. The works of fish seed farms, shore based facilities; fish landing centers, labs, Advanced Research and Training Centre, brood banks, approach roads etc. are taken up by the engineering wings of the PR dept, APEWIDC. Some of the works are completed and the remaining projects are under various stages of execution.

MGNREGS: Under this scheme, 1906 fish ponds, 489 fish drying platforms and 236 approach roads were completed / in progress as on 25.03.2019. The total expenditure incurred for the said works is Rs.51.75 Crores.

Organization of Fishermen Cooperative Societies

The Fisheries Cooperative Societies are formed for the promotion of thrift, self-help and mutual assistance of the members. Government has given great importance to cooperative societies in fisheries sector to empower fishermen to manage aqua resources. Departmental tanks (MI tanks) are given on lease to these cooperative societies for exploitation of fishery wealth for better livelihoods. Assistance is also provided for inputs like fish seed stocking, boats, nets etc on subsidy. While so far 2.45 lakh fishermen have been organized into 2212 societies. The main objective of these societies is not to earn profit but for the welfare of Fishermen. However, in the present context, there is a urgent need to infuse professionalism and good governance so that these Cooperatives can develop on their intrinsic strengths. Details are shown in Table 5.10:

Table 5.10 Fishermen Co-operative Societies

Type of Societies	No.	Members
Inland Fishermen Coop. Societies	1317	133544
Marine Fishermen Coop. Societies	412	79429
Fisherwomen Coop. Societies	483	32847
TOTAL	2212	245820

Source: Commissioner of Fisheries

Forest

Andhra Pradesh state with its diversified topography ranging from the hills of Eastern Ghats and Nallamallas to the shores of Bay of Bengal supports varied ecotypes, which in turn support a rich diversity of flora & fauna. The riverine state has wide and varied vegetation types. Andhra Pradesh located strategically in the central region of the Indian sub-continent, is a microcosm of the Nation with its magnificent Indian plant and animal life.

The role of forests as carbon sinks endows them added recognition as an important environmental factor. Forest cover has been recognized as critical for a living environment

as it influences the quality and quantity of air and water. The Central forest related interventions are directed essentially towards reinforcing the capacity of States to undertake the National Policy mandates towards conservation and sustainable use of resources. The core objective of forest sector development strategy is to enhance green cover by integrating it with livelihood opportunities.

The forests in Andhra Pradesh make for highly rejuvenating get aways Packed with abundance of rich flora and fauna life. The famed wildlife in Andhra Pradesh is mainly scattered across these forests. While the benefits from dense forests are numerous, the tangible benefits like Timber, Bamboo, Fuel wood, Fodder, Non-Timber Forest Products etc., are quantifiable. Intangible benefits like maintenance of ecological balance, conservation of soil and moisture, regulating the water flow, sequestering carbon-dioxide from the atmosphere etc., are not quantified but are of great significance.

As per the forest records, the state ranks 9th in India having forest cover area of 37707 Sq. Kms which amounts to 23.54%. Of this forest area, the Very Dense Forest is 1957 Sq. Kms the Moderate Dense Forest is 14051 Sq. Kms, Open Forest is 12139 Sq. Kms Scrub Forest is 9560 Sq. Kms. District wise forest area is shown in Annexure 5.28.

As per goals and directives set in the National Forest Policy 1988, the 1993 and the revised 2002 State Forest Policy, the forest department implements various development schemes to protect and develop existing forests, to improve its productivity and economic value. The main objectives of programmes like Community Forest Management (CFM), Centrally Sponsored National Afforestation Programme (NAP) through Forest Development Agencies, RIDF Projects, Soil & Moisture Conservation, Social Forestry, Wildlife Development and Human Resource Development are enriching existing low density forests and alleviating rural poverty.

Under RIDF projects and other schemes the department has set a programme having provision for soil and moisture conservation with the financial assistance of NABARD for construction of various types of water harvesting structures such as Check dams, Contour Trenches Rocks fall dams, percolation tanks etc. in forest areas. These structures help recharge ground water, and improve forest vegetation besides stabilizing the status of agriculture in adjoining fields.

The Silvi-cultured research for improvement of natural forests has assumed great significance. Keeping in view recent trends in forest research, the department has laid special emphasis on Forest research to conduct experiments, improve nursery and plantation techniques, vegetative propagation, seed development and natural forest management etc.

Monitoring of vegetation (Forest) Canopy Cover Density, Forest Fire Risk Zonation Mapping, mapping all forest areas with site suitability, Kolleru lake restoration, re-locating & demarcating forest boundaries and Inventory of forest resources are some of the major and important activities taken up by the department using latest information technology.

Forest Produce

The Departmental Extraction of Timber, Fuel and Pulp Wood, Faggot Wood, Long Bamboo and Bamboo Industrial Cuts (BIC) from natural forests as well as plantations was introduced from the year 1976-77, after disbanding the previously existing contractor system.

At present there is a moratorium on extraction of timber from natural forests except for bamboo from overlapping bamboo forests. The major activity comprises harvesting timber and poles from matured plantations of Teak, Eucalyptus, Casuarinas etc. and long bamboos and BIC from bamboo coupes as per prescriptions of the working plan of respective divisions. The physical targets and achievements of Departmental Extraction of Forest Produce of Timber, Fuel, Poles and Bamboos details are given in Table-5.11.

Table 5.11 Forest Produce extraction

Species	2017-18		2018-19	
	Target	Achievement	Target	Achievement
Timber (Cmt)	4800.00	1653.00	3783.94	1905.44
Fuel (Cmt)	40010.00	3974.00	55329.00	89.00
Poles (Nos)	48788	875	88176	91
Bamboo (lakh Nos)	54.25	24.68	49.80	22.01

Source: Forests Department

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Forest Revenue

Forest products in the state include Red Sander, Timber, Bamboo, Firewood & Charcoal etc. The income accrued from forestry sector in the State in 2018-19 was Rs.26.10 crore. Details of the value of forest produce in the State are given in Annexure-5.29.

Production

There is no supply of raw material from the Forest department to all the three major wood based industries in the state. Forests are looked as “Green Capital” and are no more valued as raw material resources for the industries. Industrial requirements are met from other sources like imported pulp, agricultural wastage and plantations raised by farmer with buy-back arrangements.

Forest Development Authority

22 FDAs have been sanctioned by Government of India under the SFDA Society for implementing National Afforestation Programme (NAP), which is a central sector scheme with a funding pattern of 100% Grant from GoI up to 2014-15 and from there onwards since, 2015-16 it has become 60:40 between the Centre and State. Various Plantation activities, SMC works, Awareness Camps for Capacity Building are being done by FDAs through the Vana Samrakshna Samithies.

Centrally Sponsored Schemes like National Afforestation Programme (NAP), National Mission for a Green India (GIM) & National Medicinal Plantation Board (NMPB) schemes are being implemented through FDAs.

National Afforestation Programme (NAP):

During the year 2018-19, GoI have approved the Annual Plan of Operations for an amount of Rs.587.47 lakh to take up afforestation activities in an extent of 1230 ha. and released an amount of Rs.807.76 lakh (Rs.481.27 lakh Central share & Rs.326.50 lakh State share) in 60:40 ratio.

National Mission for a Green India (GIM):

GoI has approved the work programme for the financial year 2018-19 with a total financial implication of Rs.741.00 lakh and released an amount of Rs.444.36 lakh (Central

share of Rs.266.62 lakh and State share of Rs.177.74 lakh) to carry out afforestation activities in an extent of 2203 ha. and further for the financial year 2019-20 proposed an amount of Rs.1379.71 lakh.

National Medicinal Plantation Board: -

Perspective plan was approved in the year 2014-15 to a tune of Rs.1369.91 lakh to raise plantations in an extent of 1900 ha. and an amount of Rs.1027.42 lakh has been released during the financial years 2014-15 & 2016-17 in 2 installments. And the 3rd installment of Rs.342.49 lakh had to be released during the financial year 2017-18 and the same has been released during the financial year 2019-20.

ECO-TOURISM

Andhra Pradesh has started Eco-Tourism initiatives by taking up creation of new community based Eco-Tourism centers and strengthening the existing Eco-Tourism centers with the Forest Department by involving local tribes in implementation and management by CBETs/ EDCs duly empowering their economic status for which the Government of Andhra Pradesh has allotted an amount of Rs.2500 lakh and Rs.1000 lakh Vana Vihari (Eco-tourism)] under Capital Expenditure schemes during the year 2018-19.

(A) Nagaravanams:-

For providing wholesome living environment and contributing to Smart, Clean Green and Healthy cities to urbanites Nagaravanams (City Forests) are proposed. A total of 22 Nagaravanams are proposed and so far, 9 Nagaravanams are got completed and for the remaining works are under progress. In addition to the Nagaravanams, a total of 10 Temple Eco-Parks are proposed to encourage the pilgrims to visit the temples throughout the year by designing the different theme parks to highlight the historical significance of the temple. And they will also get completed by the end of financial year 2018-19.

(B) Vana Vihari (Eco-tourism)

The scheme was proposed for creation of new community based eco-tourism centers and strengthening the existing eco-tourism centers inside the forest and tourism zones of Sanctuaries by involving local tribes. During the year 2018-19 a total of 15 Eco-Tourism sites are proposed and will be get completed by the end of financial year 2018-19

Social Forestry

Public distribution of seedlings, raising community land plantations/ avenue/ shelterbelt plantations; and raising of institutional plantations have been done under Social Forestry programme. The government has organized several eco-friendly initiatives to improve social forestry which involved distribution of saplings, planting trees and celebrating in a festive environment and these include: Vanamahostavam-Vanam-Manam, Prakruti Pilustondi and Karthika Vanamahostavam

Afforestation:

The department has raised 8457 ha of plantation, of which 431 ha. relate to shelter belt plantation, 279 ha. Mangrove plantation, 2874 ha. Greening hillocks, 4873 ha block plantation and 1136 km Avenue plantation and 828 km of Avenue plantation respectively for the year 2018-19. 1081.85 lakh saplings have been utilized for distribution.

Soil and Moisture Conservation works:

Soil and Moisture Conservation works are being taken up under Neeru Pragathi Udyamam i.e., Staggered Contour Trenches --- (10mx0.5mx0.5m), Mini Percolation Tanks ---(10mx10mx1m), Check Dams, Rock Fill Dams, De-silting Percolation Tanks and Check Dams, Water Absorption Trenches --- (3mx2mx3m) and Peripheral Trenches ----(1.5mX1mX1m)

Achievements: -

The department achievements upto 28.12.2018, are shown in Table 5.12

Table 5.12 Achievements of the department

Sl. No	Item of work	2018-19 upto March, 2019	
		No.	Volume (cum)
1	Staggered Contour Trenches(10mx0.5mx0.5m),	223324	562300
2	Mini Percolation Tanks(10mx10mx1m),	2550	256856
3	Check Dams	178	

Sl. No	Item of work	2018-19 upto March, 2019	
		No.	Volume (cum)
4	Rock Fill Dams	753	
5	Di-silting of Percolation tanks and Check Dams	-	99289
6	Elephant Proof Trench/ Water Absorption Trench (in km) (3mx2mx3m)	2116	12088992

Source: Forest department

Seed dibbling:

Forest Department has collected 691.57 Mts. of seeds of native species as against the target of 871.33 Mts. The same is being utilized (of all the soil and moisture conservation works e.g. on the bunds of mini percolation tanks, staggered contour trenches etc.) and in other blank areas for bringing more area under greenery. The main species raised for public distribution and planting in public lands are Teak, Red Sanders, Bamboo, Amla, Seethaphal, Casuarina, Eucalyptus seedlings for planting.

Mahathma Gandhi National Rural Employment Guarantee Scheme Neeru-Chettu Performance

Table 5.13 Performance of Neeru-Chettu (2018-19)

Sl. No.	Activity	Target	Achievement up to March,2019
1	Planting and other interventions to increase green cover in the recorded forest area (ha/km.)	8621	9593
2	Planting outside recorded forest area (Notional) (lakh no)	2400	2638
3	Number of plants planted during 2018 season (No. in crores)	25.00	27.45
4	Soil and Moisture Conservation works (lakh cum.)	217.48	130.07

Source: Forest Department

AGRICULTURE AND ALLIED ACTIVITIES

Wildlife Conservation

The State has 13 wildlife Sanctuaries and 3 National Parks covering an area on 8139.89 Sq. Kms which is 22.53% of the State's Forest area and 4.448% of the State's Geographical area.

There are 1 Tiger Reserve, 1 Elephant Reserve (Koundinya Sanctuary and Rayala Elephant Reserve), 1 Biosphere Reserve (Seshachalam) 3 National Parks and 13 Wildlife Sanctuaries in the State. The State has 2 Zoological Parks, 2 Deer Parks under Government control, 2 Deer Parks under private control and 2 Animal Rescue Centers for Ex-Situ conservation. One in SVZP, Tirupati and one in IGZP, Visakhapatnam with the assistance of Zoo Authority of India.

Important Wildlife Habitats are declared as Sanctuaries and National Parks to ensure higher degree of protection and management of the flora and fauna in the wildlife habitats. Special management status is afforded to important protected areas like Tiger Reserve, Elephant Reserve. Critically endangered wildlife habitats of species like Jerdon's Courser, Great Indian Bustard and wet lands,

In-Situ Conservation:

This involves conserving the wildlife in their natural habitat by giving proper protection and managing the habitat to meet the requirements of the wild animal species found naturally in the area. Areas which are potentially suitable for this type of conservation were identified and notified as Wildlife Sanctuaries and National Parks.

Ex-Situ Conservation:

Wildlife management involves conservation of wildlife outside its natural habitat in places like in Zoo Park, Deer Park and Rescue Centers. The purpose of this type of conservation is to breed the wild animals in such areas to build up their population. The population so built-up is trans-located back to the natural habitat and released for improving densities in the areas. Apart from conservation breeding, ex-situ conservation is also helpful in education, research and recreation.

Zoological Parks in Andhra Pradesh

The 2 zoological parks in the state Indira Gandhi Zoological

Park, Visakhapatnam and Sri Venkateswara Zoological Park, Tirupati are rated among the best zoos of the country with excellent facility for display of animals, conservation breeding, visitor amenities, and conservation education etc.,

Deer Parks

There are 2 deer parks in the state i.e., Kandaleru Deer Park at Kandaleru Dam, Nellore district with an area of 25 ha. and Chittoor RF Deer Park at Chittoor district with an area of 3.25 ha. Kottapakonda Deer Park in Guntur district is under development. Another 2 deer parks are functioning under the control of private organizations i.e., Deer Park, Nagarjuna Fertilizers and Chemicals Limited Green Belt, Kakinada, East Godavari Dist. and Deer Park, GVK Power Plant, Jegurupadu, East Godavari Dist.

Management of Protected Areas

It has been experienced that lack of sufficient water holes and fodder within the Protected Areas and Reserve Forests along the fringe areas that are subjected to over use by the local people result in straying of wild animals outside the forests.

Protection of Wildlife Outside Protected Areas:

It is contemplated to revive the anti-poaching squads, one for each region of north coastal Andhra, South coastal Andhra and Rayalaseema kept under the control of independent divisions. These squads need to be provided with vehicles, weapons, wireless sets and other necessary equipment. Protected areas of the forest department in the State is given in Annexure 5.30

Conservation of Endangered Marine fauna

Hunting of endangered marine fauna like Sea turtles, Dolphins, Whale sharks and ray & shark fish which are listed in Schedule I of Wildlife (Protection) Act, 1972 is increasing in recent times along the Andhra Pradesh coast. A special scheme for conserving endangered marine fauna and to conduct studies for declaring Marine protected areas is an urgent need.

Protection of Migratory birds

Though the important and prioritized wetlands like Kolleru Lake, Pulicat Lake, Nelapattu tank are notified as Wildlife Sanctuaries, there are still many which are identified by the Bird Watchers Society of Andhra Pradesh and SACON, are being declared as Wet lands of Ecological significance.

Wildlife education and awareness

The National Wildlife Action Plan has identified 'Conservation Awareness and Education' as one among the thirteen important strategies to be adopted for implementation of wildlife conservation programme. To inform and involve media on issues surrounding wildlife conservation and to highlight the connections between destabilized ecosystems and the failing quality of human life.

East Godavari Riverine Estuarine Ecosystem (EGREE) Foundation

An initiative of the GoI-UNDP-GEF-GoAP Godavari Project a cross sectoral institutional mechanism established to achieve the goal of "Mainstreaming Coastal and Marine Biodiversity Conservation into Production Sectors" operations in "East Godavari Riverine Estuarine Ecosystem", Andhra Pradesh, India. Main aims of the EGREE Foundation are to mainstream biodiversity conservation into the production sectors of EGREE through: (1) Cross-sectoral planning in the EGREE that mainstreams biodiversity conservation considerations, (2) Enhanced capacity of sector institutions for implementing biodiversity-friendly sector plans, (3) Improved community livelihoods and sustainable natural resource use.

Conservation measures for Sea Turtle along cost line of Andhra Pradesh

To protect Sea Turtles from predators all along the coast line of Andhra Pradesh. A rapid survey was conducted along the coast of A.P. to identify potential nesting sites and NGOs & local communities are involved in protection of nests by In-situ and Ex-situ methods. Efforts have been made to protect Sea Turtles from predators all along the coast line of Andhra Pradesh and nearly 10032 nests and 13,13,452 Hatchlings were released successfully in to the Sea between 2011-16. During 2016-17, 4,32,490 hatchlings released into the

sea. During 2016-17 (142) artificial hatcheries established and maintained by engaging (94) turtle protection and conservation workers in all the 9 coastal districts.

Man-Animal Conflict

To reduce the Man-Animal Conflict, steps are taken to ensure prompt compensation for crop loss, cattle kills and for human deaths. Apart from that measures like creating more water sources in the fringe areas, developing animal rescue teams with full-fledged equipment, and creation of awareness in the public. To mitigate the migratory Elephant problems in Chittoor district immediate special compensation packages are given for crop loss, human injury and death. Elephant proof trench is excavated and solar pulsating current fence are also being put in place to prevent elephants to enter into the agricultural fields and habitations. Elephant Proof Trench has been excavated over 222 Kms. so far by incurring expenditure of Rs.431.92Lakhs.

Eco Tourism

Ecotourism Planning should be ecologically acceptable, economically viable, socially desirable and aesthetically satisfactory. 50% revenue for maintenance and development of the facility. 30% for VSS / EDC members. 20% for CBET members as incentive.

Community Based Eco-Tourism (CBET)

"Responsible travel to natural areas that conserves the environment and improves the well-being of local people." Minimize impact. Build environmental and cultural awareness and respect. Provide positive experiences for both visitors and hosts provide direct financial benefits for conservation provide financial benefits and empowerment of local people by ensuring their direct stake in conservation of local culture, ecology and environment.

The existing CBET circles in the state are: Maredumilli CBET (Rajaumundry Circle), Kambalakonda CBET (Visakhapatnam Circle), Coringa EDC (Rajaumundry Circle), Talakona CBET (WLM Tirupathi Circle), Mamanduru CBET (WLM Tirupathi Circle), Ubbalamadugu CBET (WLM Tirupathi Circle)

AGRICULTURE AND ALLIED ACTIVITIES

Eco-Tourism Centres Developed by Forest Department

Bairlutu EDC (Jungle Camp & Safari) (NagarjunaSagarSrisailam Tiger Reserve), Tummalabyalu EDC (Jungle Safari) (NagarjunaSagarSrisailam Tiger Reserve), Paccherla EDC (GundlaBrahmeswaram Wildlife Sanctuary) (Kurnool Circle), Maredumilli Jungle Star (Rajaumundry Circle).

Forest Protection Schemes Intensification of Forest Management Scheme

The objectives of forest protection scheme include prevention and control of fire, survey and maintenance of boundaries, preparation of working plans, development of infrastructure and protection of forests and wildlife. Under this scheme 1.74 lakh claims with an extent of 10.26 lakh acres are received. Of which 1.63 lakh claims with an extent of 9.81 lakh acres are surveyed. Remaining are under progress.

Information Technology (Geomatics)

The list of IT modules under management Information System (MIS) in Andhra Pradesh Forest department are as follows:

MIS

- Integration of plantation, Nursery and Red sanders offence cases details with CM Core Dash board.
- Implementation of online tree felling permission (EODB).
- Geo tagging of all plantations
- Forest Fire Management and sending fire alerts to Field officers.
- Development and maintenance of AP Forest Department Website.
- Development and maintenance of NeeruChettu, Plantation, Vanammanam Forest protection, Forest Conservation Act, CAMPA, Seed dibblings, wild life management etc MIS modules.

GIS (Completed projects)

- Generation of State of Forest Report for AP 2010, 2011, 2013 and 2014.

- Estimation of Trees outside Forests
- AP Forest Inventory Report Preparation - report preparation is completed and report is under printing stage.
- VSS Asset Survey - almost completed and Attributing is under progress.
- Verification of areas claimed under ROFR Act 2006 using Cartosat 1 Data.
- Survey and verification of Notified Forest Boundary using DGPS.
- Mapping of High fide Line for analysis of Plantations falling within HTL and its 50 m buffer.
- Updation of existing geospatial data.
- Vegetation cover Changes 2005-2006 to 2014-15
- Decadal cover Changes 1988-1998 and 1998-2006
- Mangrove Cover Changes
- Red Sanders Inventory 2014
- The draft APSFR-2015 with the analysis of vegetation cover changes of 2012-13 is completed.
- The draft APSFR-2016 with the analysis of vegetation cover changes of 2013-14 is completed.
- The draft APSFR-2017 with the analysis of vegetation cover changes of 2014-15 is completed.
- The vegetation cover changes for 2015-2016 are identified and communicated to field for ground truthing.

Ongoing projects of GIS

- Fire Monitoring - Daily fire alerts are communicated to the field in fire season.
- The Remote sensing data for 2017, 2018 season (LISS-IV with 5.8 mts in place of LISS - III with 23.5 mts) has been procured for identification of Vegetation cover changes.
- The vegetation cover change detection for 2017-2018 is under progress, changes were identified in 05 divisions and communicated to field for ground truthing.
- Geo referencing of Village maps / Forest block maps for the Digitization of land records as part of Land hub project.
- Trainings to the Field officers/'DEOs on usage of GPS/ GIS technology
- ROFR rejected claim analysis
- Refinement of Water Harvest Structure maps by integrating piezometer data of wells.

- Preparation of plantation layer under all schemes and monitoring of plantations using Google earth.

Forest Research & Development

There are 6 centres in Andhra Pradesh State under the control of 2 Research Divisions located at Tirupathi and Rajahmundry. The main objectives of these Divisions are to attend to forestry problems in their respective jurisdiction and take up activities mainly to establish experimental plots, improved Nursery Technology, Seed collection, Vermi Compost/Organic Compost production and Tree breeding programs etc. An amount of Rs.132.34.00 lakhs incurred expenditure towards Research schemes during 2018-19.

Forest Conservation Act: 1980 Compensatory Afforestation

Forests are a vital component to sustain the life support system on Earth. Forests whether Government, village or private sub-serve the entire community and represent a community resource that meets the need of millions of rural people especially the Tribals. Article 48A of the Constitution of India requires that the State shall endeavour to protect and improve the environment and to safeguard the forest and wildlife of the country. Under Article 51A, it is the duty of every citizen to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.

Forest Conservation Act, 1980 deals with such diversion of forest lands for non-forest purposes so that only minimum and only essential projects are taken up on forest lands. Details of progress on Compensatory Afforestation under Forest (Conservation) Act 1980 in the state for the years 2015-16 to 2018-19 are shown in Annexure 5.31.

Andhra Pradesh State Bio-Diversity Board

Biodiversity profile of AP

- Andhra Pradesh is endowed with varied Eco-systems, habitats and rich heritage of Biodiversity and is a store house of rich flora and fauna (over 2,800 species of plants and over 5,757 species of animals).
- It harbours some of the rare and endangered flora like

Red sanders. It has fauna like Tiger, Gaur, Great Indian Bustard, Lesser Florican, Jerdon's Courser, Golden Gecko, other avifauna like Flamingo, Pelican etc.

- It has the Second Largest Mangrove eco-system in the East coast of India. Besides, A.P. is rich in Agriculture Biodiversity and is home to several varieties of crop plants - Landraces, Food crops, Cultivars, Horticulture crops, Livestock, Fisheries etc.

Objectives:

The Andhra Pradesh State Biodiversity Board (APSBDB) was established in 2006 with an aim to conserving and restoring Biodiversity with the following objectives

1. Conservation of Biological Diversity
2. Sustainable utilization of the Biological resources
3. Fair and equitable sharing of biological resources among all stake holders.

Achievements

So far 7011 Biodiversity Management Committees (BMC) have been constituted at various levels. So far, 100 People Biodiversity Registers (PBRs) have been prepared. 189 Local Biodiversity Funds (LBF's) have been established within the support of NBA / State / UNEP- GEF- MoEF& CC – ABS Grants. 150 Awareness Programmes/ Workshops conducted various stakeholders. Identified about 43 numbers of Endangered & Threatened species (Flora & Fauna) and sent to the government of India for re-designated of IUCN status.

Andhra Pradesh Forest Development Corporation

Objectives of the Corporation:

To raise large scale plantations to meet the demands of forest-based industries with species such as Eucalyptus, Bamboo, Tropical pines, Coffee, Cashew, Casuarina etc. To generate gainful employment to the landless poor, particularly in remote and agency areas. To undertake consultancy services to the industries to raise and maintain plantations in their vicinity. Details about plantations raised by APFDC 2018-19 are shown in Table 5.14

AGRICULTURE AND ALLIED ACTIVITIES

Table 5.14 Plantations raised by APFDC 2018-19

Sl. No	Species	Area (in Ha.)
1	Eucalyptus (Seed origin)	3594.66
2	Eucalyptus (Clonal)	32346.62
3	Bamboo	2416.28
4	Cashew	5778.55
5	Coffee	4010.00
6	Teak	824.70
7	Medicinal plants	581.52
8	Casuarina, Pines and other Misc. species	232.83
	Eco-Tourism Projects	201.32
	Total	49986.48

Source: Forest Department

Achievements during 2018-19 against targets are given in table 5.15

Table 5.15 Achievements under APFDC

Sl. No.	Activity	2018-19		Target for 2019-20
		Target	Achievement	
1	Raising plantations-Ha	380.00	382.43	1122.00
2	Harvesting of Eucalyptus pulpwood – Mt	4,29,073	1,22,714 #	331000
3	Harvesting of Long Bamboo – No.	10,27,000	15,51,930 #	805000
4	Harvesting of Bamboo Industrial Cuts –Mt.	333	192 #	620
5	Harvesting of Raw Coffee – Mt.	375.00	384	425
6	Harvesting of Pepper- Mt.	12	33.35	35

In Progress, Source: Forest Department

Plantation Activities:

Eucalyptus Plantations:

The APFDC has been raising Eucalyptus Clonal plantations and with 32347 Ha. it is the single largest grower among

PSUs in India. There are proposals to raise another 1000-2000 Ha. in the next 3 to 4 years. Due to improved site preparation, use of quality planting material and management practices, optimum yields are obtained from the plantations.

Bamboo Plantations:

Bamboo plantations are raised over an area of 2416 ha. The Corporation is intending to expand the Bamboo plantations over an area of 100 Ha in the next 3 to 4 years to ensure more supply of raw material per annum to the Paper Industries besides raw material to the artisans.

Coffee Plantations:

The Corporation is maintaining about 4,010 ha. of existing coffee plantations in the agency areas of Visakhapatnam and East Godavari Districts with intensive cultivation practices, by following scientific methods. These plantations are generating about 5.00 lakh mandays of employment to the tribals all-round the year

Pepper Cultivation

APFDC has 1.80 lakh Pepper standards in its Coffee Estates in the agency areas of Visakhapatnam and East Godavari Districts comprising of high yielding varieties like Panniyur-I, Purnima, Sreekara, Subhakara, Panchami, Panniyur-5. It is proposed to plant another 1.15 lakh standards with pepper in the next 5 years.

Cashew Plantations:

The Corporation has got cashew plantations over an area of 5779 ha. along the coastal belt in Prakasam and Nellore districts and in the inlands of West Godavari and Chittoor districts. Presently, the older plantations are being replanted with high yielding Cashew varieties using scion banks.

Eco-Tourism:

A.P. Forest Development Corporation Ltd. has developed Rajeev Eco Park at Idupulapaya of YSR Kadapa district. It is proposed to promote Eco Tourism in Muthayapalem, Ananthagiri, Minimuluru and Maredumilli areas by establishing nature Education camps and other amenities.

Other Activities:

- The Corporation has diversified its activities with several schemes such as providing consultancy services in afforestation to the industries such as NTPC, HPCL etc., and supplying high quality Eucalyptus clones to the public and institutions.
- It is also acting as agent to the Govt. in carrying out the export of Red Sanders wood.

Employment Generation:

The Corporation is providing employment to the tribals and Srilanka repatriates almost round the year. In the other areas the employment is provided to the land less and poor during regeneration and harvesting activities.

About 9 lakh man-days of employment (3.00 Lakh mandays in raising and maintainance of plantations 3.50 Lakh mandays in Coffee plantations and 2.50 lakh mandays on harvesting of plantations) per annum are provided to the poor, tribals and Sri Lanka repatriates.

Sericulture

Sericulture is an agro-based activity. The major activities of sericulture comprise foodplant cultivation to feed the silkworms which spin silk cocoons and reeling the cocoons for unwinding the silk filament for value added benefits such as processing and weaving. Sericulture stands for livelihood opportunity for millions, owing to its high employment potential, low capital requirement and remunerative income in frequent intervals.

The very nature of this activity with its rural based on-farm and off-farm activities and enormous employment generation potential has attracted the attention of the planners and policy makers to recognize the Sericulture among one of the most appropriate avenues for socioeconomic development of a largely agrarian economy of India.

Andhra Pradesh is the Second largest producer of silk in India next to Karnataka. Mulberry is grown in almost all the districts of Andhra Pradesh and potential in Ananthapur, Chittoor, East Godavari, Prakasam, Kadapa, Kurnool and Krishna districts.

Mulberry silk is most popular variety and derived from Multivoltine and Bivoltine varieties of silkworms. The

farmers of Andhra Pradesh are rearing both Multivoltine and Bivoltine varieties of Silkworms based on the climatic conditions prevailing around the year. The Department is working with the following goal and to strengthen the farming community through Sericulture activities.

The goal of the department is to produce International Grade (3A and above) Bivoltine Raw Silk.

Strategies

Some of the important strategies for encouraging sericulture in the state include: Promotion of Bivoltine Cocoon Production to increase net income of the farmers, Promoting Chawkie concept through supply of 100% Chawkie worms to farmers instead of Silkworm Eggs (DFLs), Cluster approach, Promoting Organic farming, 100% Coverage of Mulberry Gardens with Drip, Creating demand for the Cocoons through establishment of Multi-end Reeling Units (MERUs), Automatic Reeling Machines (ARMs) under Private sector and Integration of Reeling and twisting activities to increase profit margin to the entrepreneurs.

Table 5.16 Present Status of Sericulture in Andhra Pradesh (2018-19)

Sl. No.	Item	Unit	Present Status
1	Mulberry Plantation	Acres	1,04,790
2	Sericulture farmers	Nos	77,397
2	Mulberry Cocoon Production	MTs	54592
3	Raw Silk Production	MTs	7477
4	Productivity	Kgs/ 100 Dfls	72
5	Tasar Cocoon Production	Lakh Nos	41.00
5	Automatic Reeling Machines established (ARM)	No. of Ends / Unit	3200 ends- 5 units under functioning 2200 ends- 5 units under erecting
6	GVA Realized	Rs. in Crores	973.69

Source: Sericulture Department

AGRICULTURE AND ALLIED ACTIVITIES

Significant Achievements During 2018-19

- **Mulberry Plantation:** 13194 acres of new area was brought under Mulberry cultivation which is 24.79% higher over corresponding period of 2017-18. The total Mulberry in the State stands at 1,04,790 acres.
- **Bivoltine Cocoon Production:** 9527 MTs International Quality Bivoltine cocoons were produced.
- **Bivoltine Raw Silk:** 1465 MTs of 2A & above Grade Raw Silk is produced in the State.
- Total 54594 MTs of Reeling Cocoons (BV+CB) were produced by the Sericulture farmers in the State with a growth rate of 11.60% over the corresponding period of 2017-18.
- Total 7476 MTs of Raw Silk (BV+CB) was produced in the State with a growth rate of 10.35% over the corresponding period of 2017-18.
- 8560 acres of Mulberry gardens were covered with Drip.
- 1458 Silkworm Rearing Sheds have been grounded during 2018-19 extending Sericulture activity in the State.
- Adoption of the concept supplying of Chawkie worms to the farmers instead of supplying DFLs (Silk worm eggs) increased the Cocoon productivity from 70 to 72 Kgs per 100 DFLs contributed to higher net income to Sericulture farmers.
- Establishment of ARMs, MERUs and Twisting Units in the State increased the average net income of Sericulture farmers from Rs. 75,000/- to 1,25,000/- per acre per year.
- Achieved “National Award” as “Best Bivoltine Practicing State” for 2018-19 from Ministry of Textiles, Govt. of India.

District wise achievements under Sericulture are given in Annexure 5.32

Important Schemes Being

State Development Schemes (SDS)

Under State Development Schemes sanctions were obtained for Rs.7497.60 lakhs towards implementation of developmental schemes for Sericulture farmers, reelers and weavers during 2018-19. Cocoon Markets, Chawkie Rearing Centres and Govt. Seed Farms are strengthened by incurring Rs.140.00 lakhs to improve forward and back ward linkages to

sustain the industry in the State. E-Marketing system is being implemented in the Govt. Cocoon Markets for transparent and easy cocoon transactions for the benefit of farmers and reelers in the State. 41.00 lakh Tasar Cocoons were produced by the Tribal farmers in the sub plan areas of East Godavari District. Sanctions were obtained for Rs.4208.28 Lakhs for implementation of Yarn Support price scheme benefitting 35069 Silk Handloom Weavers in the State.

Centrally Sponsored Schemes – SILK SAMAGRA

Rs.493.872 lakhs were received from Central Silk Board, Bengaluru under Silk Samagra towards implementation of various growth sector schemes for the benefit of farmers and reelers in the State.

Rastriya Krishi Vikas Yojana (RKVY)

Funds are sanctioned to the Government Farms for Farm mechanisation under RKVY. 50% (Rs.750 for 100 DFLs) subsidy to BVH Chawkie charges is also being released under the said scheme to the farmers to encourage Chawkie concept. Budgetary support is being given to the sericulture department towards release of subsidy to the farmers for construction of verandas to their existing rearing sheds. Solar Lighting units, supply of additional neetrika to bivoltine farmers are also sanctioned with 50% subsidy under RKVY.

Mahatma Gandhi National Rural Employment (MG-NREGS) (Convergence)

The department is providing financial assistance to the farmers under MGNREGS towards plantation of Mulberry for the first year and the maintenance of garden for second and third years also. The unit cost per acre is Rs.1.54 lakh per 3 years. Assistance is also being extended for construction of silk worm rearing sheds.

Innovations of Sericulture Practices:

- Installation of Turbo Ventilators & Cooling systems in the Rearing Sheds for maintenance of required temperature and humidity during Silkworm Rearing for production of quality cocoons.



- b) Supply of 100% Chawkie worms to ensure increase qualitative and quantitative cocoon production.
- c) Tree Mulberry Plantation to overcome drought / less irrigated conditions.

Mulberry Garden



AGRICULTURE AND ALLIED ACTIVITIES

Research and Development:

Andhra Pradesh State Sericulture Research and Development Institute, Hindupur was established in 1995 with the main intention of evolving new races, to the condition suitable to A.P climatic conditions and capable of producing International Grade Cocoons/ Silk. A new project namely "Identification of DNA markers" for baculovirus resistance in Silkworm was presented to DBT, New Delhi for financial Sanction. Six new Silk Worm hybrid races were developed by the institute and submitted for National Silk Worm Race Authorisation. Bivoltine hybrids with disease resistance races are under field trials. In addition, certain eco-friendly disinfectants such as Seri-Gold, Seri-Clean, Seri- Plus, Shakthi and Abhya etc., are released in the field for increase in Cocoon production from 5 Kgs to 10 Kgs for 100 DFLs.

Agriculture Marketing

Marketing is a key link in the supply chain. Markets functioning effectively are essential for driving up the growth in the agriculture sector and for generating employment and economic prosperity in rural areas. Agricultural marketing infrastructure plays a pivotal role in the fostering and sustaining the tempo of rural economic development and is critical for better performance of the agriculture sector as a whole. Effective marketing infrastructure is essential for cost effective marketing, to minimize post-harvest losses.

It is envisaged that large investments are required for development of post-harvest and cold chain infrastructure nearer to the farmers' field. With rapidly changing production-consumption trends, the requirement of cold storages in markets has increased manifold more so in case of perishable commodities. Successful marketing requires learning new skills, new techniques and new ways for obtaining market price information. With a view to provide dynamism and efficiency into the marketing system, the government has undertaken several measures in the recent past.

The State has 191 Agricultural Market Committees managing 324 market yards including sub-yards, which consists of 19 members viz., 12 members from growers, 3 from traders and the other four from representatives of local bodies and Government departments.

The Market Committees levy and collect market fee at the rate of 1% Ad-Valorem on sale and purchase of notified agricultural produce payable by purchasers of produce. Market fee is the only source of income for Market Committee. The market fee is utilized mainly for development of markets and creation of facilities to users of markets i.e., growers and traders and other functionaries. The Agricultural Marketing department under takes various activities such as regulation of trade in market yards, management of markets, facilitation for procurement operations under Minimum Support Price (MSP), providing loans to the farmers under RythuBandhuPathakam, Market Intervention, Management of Rythu Bazars etc.,

The Market Committees collected Rs.492.39 crore in 2018-19 towards Market Fee. The details of district wise collection of Market Fee are given the annexure.5.33

e-NAM:

Purchase transactions are being conducted through Electronic Platforms (Unified Market Platform) in 22 Agricultural Market Committees (e-Trading).

Government of India have sanctioned National Agricultural Market (NAM) project in 22 markets with an amount of Rs: 6.60 Crores under assistance from Integrated Scheme for Agriculture Marketing (ISAM) Funds from Ministry of Agriculture & Farmers Welfare, GOI, New Delhi. The identified markets are; Adoni, Anapakalli, Ananthapur, Dachehalli, Denduluru, Duggirala, Eluru, Gopalapuram, Guntur, Gurrankonda, Hindupur, Kadapa, Kalikiri, Kalyandurg, Kurnool, Madanapalli, Palamaner, Pattikonda, Punganur, Rapur, Tenali, Yemmiganur.

All trader licences are converted into Unified Licences (2698 No's) in e-NAM, as on 31st Mar 2019 for trading activities with their licence at any market yard in the state and nation under Inter Mandi Trade in e-NAM.

Assaying labs are established in 17 Market Yards in the state in Model Market Yards/e-NAM markets. Among these, 14 No's are presently functioning to cater services to the farmers with assessment of quality and grading parameters to a better price realization in e-NAM to the farmers. Total 1,85,340 lots were Assayed upto 31-03-2019. Total Traded Quantity in e-NAM is 195.39 Lakh Qtls. with a trade value of Rs.9359 Crores upto 31-03-2019.

The Inter Mandi trade in e-NAM has started between Adoni & Yemmiganur of Kurnool District with 10208.81 Qtls & value of Rs.3.44 Crores and between Guntur & Piduguralla of Guntur District with 8818 Qtls. & value of Rs.6.11 Crores and Hindupur and Kalyandurg of Ananthapur District with 258 qtls & Trade value 0.13 Crores upto 31-03-2019.

The Inter State Trade under e-NAM has started from 19-01-2019 between Kurnool (Andhra Pradesh) & Gadwal (Telangana) with 24.30 Qtls. & Value of Rs.108121/- and Guntur (Andhra Pradesh) & Mandore (Rajasthan) 1.2 Qtls & Value of Rs 7456 /-

Eight markets started serving direct online payments to the farmers i.e (Duggirala, Adoni, Ananthapur, Kadapa, Kurnool Palamaner, Hindupur and Yemmiganur). Total 2906 online payments, as on 31 Mar 2019.

Registrations:

Number of Farmers Registered : 13,50,856

Number of traders/CAs/Stakeholders : 4898

Number of unified License Issued in e-NAM markets : 2698

Achievements of the state:

Andhra Pradesh state stood 1st place in terms of the total value of trade done on e-NAM, Market Yard, Guntur stands at 1st position with total Trade Value of Rs.6440 Cr and also stood 1st place in terms of online payments made. Market Yard, Duggirala stands at 1st place among all markets in country, in terms of number of online payments made to farmers with 2,817 No's of lots for which online payments were made.

Adoni Farmer's Success Story:

The MSP for cotton was Rs. 4,320 in Year 2018 but owing to the e-NAM, the farmers realized better price for the cotton crop in Adoni Market. Around 91,859 Farmers realized price above MSP. The extra price realized summed upto Rs.383 Cr.

Additional Markets under e-NAM (during the year 2018-19):

12 Nos of additional Market Yards are sanctioned by the Government of India for integration under e-NAM for the year 2018-19. They are Bobbili, Chilakaluripeta, Ichapuram, Jaggaiahpetta, Parchur, Ponnur, Ravulapalem, Rayadurg, Sattenapalli, Tadikonda, Vizianagaram, and Vemuru. An amount of Rs. 3.60 Crores was sanctioned from ISAM Funds by the Ministry of Agriculture & Farmers Welfare, GOI, New Delhi.

Integrated Weighing Scales (e-NAM):

In all e-NAM and Model Market Yards, weighing scales will be integrated with e-NAM software through Bluetooth headers. This will bring more transparency in trading. In Kurnool, Duggirala and Guntur the integration of weighing machines is already done.

Rythu Bandhu Pathakam:

Under this scheme, an amount of Rs.56.06 crore loans were distributed to 4,534 No's farmers during year 2018-19.

Implementation of Schemes:

Market Intervention Fund

Government is committed to provide an amount of Rs. 3000.00 Crores towards Price Stabilization under Market Intervention Fund as part of Navarathnalu Scheme.

Earlier interventions of price support for Red Chillies, Turmeric and Onions

To support farmers in case of fluctuations in prices, the government had earlier implemented price support schemes in respect of Red Chillies, Onion and Turmeric. To protect the farmer from steep fall of turmeric prices, advance was released from the Marketing Department towards procurement of Turmeric through APMARKFED under Market Intervention Scheme

 AGRICULTURE AND ALLIED ACTIVITIES

Due to hike of onion price, Onions were purchased and distributed in the Rythu Bazars on “No profit and No Loss Basis”. Government has approved the proposal for Price Support Scheme for Onions during the year 2018-19 and implementation of the scheme from 01.08.2018 to 28.02.2019 and total amount arrives at Rs.6,45,23,000/- out of which Government have permitted for Rs.4.00 Crores and an amount of Rs.2,45,23,000/- is due for sanction.

Procurement of Cotton under MSP Operations:

Cotton Corporation of India (CCI) is the procuring agency for Cotton. CCI is issued license as a Direct Purchase Centre for procurement of Cotton in AP. Presently 43 No's of CCI centers are identified for procurement of Cotton for the previous season. TCS developed software with integration of online payment to the farmers and being utilized for the procurement operations for Cotton. Under e-NAM, the payment gateway is yet to be integrated with GOI. The farmers identification is done on Aadhar based web land verification with certificate of cultivation from the Agriculture and Horticulture departments.

Out of 1014 godowns 835 are under utilisation with the capacity of 759402 Mts. Details are given in Annexure 5.34

Action Plan for 2019-20

At present, 126 no of Rythu Bazars are functioning in the state. In addition to these, more have been sanctioned during 2018-19 which are under progress. 20 Mobile Rythu Bazars are functioning under “Farm 2 Home Scheme”.

13 Market Yards has been proposed for Modernization for the year 2018-19. 8 Market Yards are Modernized and remaining 5 No. of Market Yards is under progress. New Market Yards and new Rythu Bazars will be constructed as per the need basis and requests by the AMCs in the State.

Zero Waste Mission: The Bio Compost Digester Units have been installed at Paykapuram Rythu Bazar in Krishna District and at Chuttugunta Rythu Bazar in Guntur district as a pilot project.

75 Nos. of LED display boards are set up in Rythu Bazars for price display and information dissemination of government schemes. Cool Chambers/Visi Coolers, for overnight storage of unsold farmer produce are being set up in all Rythu Bazars. CC TV cameras for monitoring, RO Plant for clean drinking water, LED lights, Toilets, ATM and other general facilities are being set-up at all Rythu Bazars.



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Industries

Andhra Pradesh, despite being a predominantly agrarian state, is keen to undertake structural reforms to accelerate industrialization by creating a good ecosystem for investments. The government is committed to put in place specific initiatives for developing different segments like Agro and Food processing, Biotechnology, Bulk drugs and Pharmaceuticals, IT and ITeS, Textile, Automotive and Auto components and Tourism and thereby create opportunities for entrepreneurs and generate employment.

Manufacturing sector, as an employment provider remains the high focus area. During the last two decades, Indian manufacturing has expanded steadily and grown almost at the same pace as India's overall economy. Despite this encouraging growth, dashing hopes of an economy based on manufacturing-led growth, the relative share of manufacturing in the Indian economy has remained unchanged. Meanwhile, several economies across the globe have increased their share of manufacturing to above 20 percent of their GDP. This shift of manufacturing capacities and technology from the developed nations is expected to rapidly change the dynamics of the developing economies.

The government is planning to lay emphasis on the manufacturing sector and to develop plug and play MSME clusters to nurture the MSMEs. Creation of economic cities, identifying value creation and enhancement opportunities, redesigning the Vizag-Chennai Industrial Corridor (VCIC) and making the Chennai-Bangalore Industrial Corridor to be regionally competitive are some of the viable options to promote growth and enhance the employment avenues.

The new government is determined to pursue relentlessly with the Government of India in regard to Special Category Status (SCS) for Andhra Pradesh, as this will not only attract better industrial incentives but also create additional job opportunities.

Harnessing the Demographic dividend

Government has recognized that there is need to plan for utilise the huge demographic dividend currently available with the state. With the working age population showing an increasing trend and projected to touch nearly 60% of the population by 2026 from its share of 54% in 2011, there is a need to upskill and reorient the existing workforce so as to

ensure that their skills are not obsolete. Further with nearly 6 lakh new persons joining the workforce every year, about 30 lakh jobs are to be created in next five years.

District Industries Centres

These centres provide all required approvals/ clearances for setting up Industries under a Single Window. The District Industries Centres are implementing agencies of MSMED Act, besides maintaining effective liaison with various financial institutions in arranging required credit facilities. The information pertaining to Industrial development of districts is maintained in these centres. All MSME claims are now sanctioned at district level as compared to earlier process of sanctioning claims of Micro enterprises only.

Industrial Investment Promotion Policy 2015-20

The State Industrial Investment Promotion Policy 2015-20 encompasses various Incentives/Concessions to new industries set up in the State. The Government is striving towards creation of quality infrastructure coupled with congenial industrial environment in the State to make Andhra Pradesh an attractive destination for both foreign and domestic investors.

As a part of facilitation through e-Governance, sanctions of industrial incentives pertaining to industries department are processed through online submission of applications.

Special emphasis is given for establishment and enhancing production capacities of Micro, Small & Medium Enterprises with huge employment potential. In order to create hassle-free environment for the investors, Government of Andhra Pradesh is implementing Single Window Act and arranging various industrial clearances through online submission of applications.

Andhra Pradesh is one State in India to take up the initiative in bringing A.P. Single Window Clearances system under e-Biz project of National e-Governance plan of Government of India. This provides efficient, convenient, transparent and integrated electronic services to investors and industrialists covering 40 services, of which 13 are Central Services, 21 are State Common Services and 6 State specific services, covering 18 Departments.

Ease of Doing Business

The Government is committed to attract and facilitate industrial investments in the state by ensuring ease of doing business. Review of all questions as part of DPIIT assessment - Analysis of each DPIIT question and interaction with relevant departments to improve the overall Ease of Doing Business score Digital Signatures - Mapping of all departments and their respective systems to understand the current process of digital signatures and whether guidelines are followed Government will initiate online services for filing, processing and sanction of incentives, allotment of scarce raw materials, land allotment to industries, and monitoring of industrial projects

As result of implementation of various reforms by the State Government, Andhra Pradesh has performed well on the DIPP assessment framework. Andhra Pradesh was ranked no. 1 in the country in the years 2016 and 2017.

Single Desk Policy

The Single Desk Policy aims to create a conducive ecosystem to provide all clearances required to setup industry within 21 working days. The main focus for attracting investments is the strategy of “Ease of doing Business”.

A. State Level

During the period 2018-19, 430 Large and Mega Industries have filed their proposals for 837 clearances / approvals from various departments. 830 cases were given clearances / approvals by different Competent authorities, with an investment of Rs. 321671 crores providing employment of 134278 persons.

B. District Level

During the period 2018-19, 5336 Micro & Small and Medium Enterprises have filed their proposals for 8999 clearances / approvals from various Departments. 8908 cases were given clearances / approvals by various competent authorities with an investment of Rs.26,458.12 crores, providing employment to 1,64,424 persons.

Large & Mega Projects

During 2018-19, 44 Large and Mega industrial projects are established with an investment of Rs.16925.08 crores and

providing employment to 14130 persons. It is planned to continue the focus on Large and Mega industrial projects during 2019-20. The District wise details are given as Annexure. 6.1.

Micro, Small & Medium Enterprises (MSME)

Investment limits were enhanced with the enactment of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006. Micro, Small and Medium Enterprises (MSMEs) Sector has emerged as a highly vibrant and dynamic sector of the Indian economy over the last five decades. MSMEs contribute to approximately 8% of the Country's GDP, 45% of the manufacturing output and 40% of exports. MSMEs provide the largest share of employment after agriculture and hence, the development of MSME sector can contribute enormously to the socio-economic development of the country.

The MSME sector in Andhra Pradesh manufactures a variety of products with a high concentration of Micro and Small units belonging in the Sectors of food, mineral and building materials, drugs and pharmaceuticals, fabricated materials, trading and service sector. Andhra Pradesh has identified development of MSMEs as a catalyst for job creation and balanced regional development.

The MSME policy offers incentives, infrastructure development, technology up-gradation, skill development and marketing support, simplification, administrative reforms and rehabilitation of sick industries in the State.

Government of India has introduced Udyog Aadhaar Memorandum (UAM) in place of Entrepreneur Memorandum Part –I & II. UAM registration is on-line and user friendly and is filed on self-declaration basis and no supporting documents are required.

During 2018-19, 10068 Micro, Small and Medium Enterprises were established, providing employment to 93240 with an investment of Rs.3443.57 Crores. Providing employment by investing in MSMEs will be given adequate attention during 2019-20. District wise details are given as Annexure.6.2.

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AP Micro, Small Medium Enterprises Facilitation Council

The Micro, Small and Medium Enterprises Development Act 2006, provides for constitution of Micro and Small Enterprises Facilitation Council by State Governments in their State for redressal and recovery of amount due to delayed payments. APMSE Facilitation Council, a quasi-judicial body, provides impetus towards facilitating the payments to MSEs from their buyers.

Prime Minister's Employment Generation Programme

The scheme is implemented by KVIC in association with KVIBs and State Governments through District Industries Centres. The subsidy component under the scheme is placed at the disposal of participating banks by the KVIC with regard to targets that will be allocated to DICs.

The objective of the PMEGP is to generate employment opportunities in rural and urban areas through self-employment ventures and to increase wage earning capacity of artisans. The programme aims to contribute to increase the growth rate of rural and urban employment, self help groups (including those belonging to BPL provided that they have not availed benefit under any other scheme). Beneficiary's contribution is 10% of project cost for general categories and 5% for Special Categories (including SC/ST/OBC/Minorities /Women, Ex-servicemen, physically handicapped, NER Hill and Border area etc.). Margin Money (rate of subsidy) for general categories is 15% in urban, 25 % in rural areas. For special categories, it is 25% in urban and 35% in rural areas and is a 'one-time assistance' and normal rate of interest shall be charged. Re-payment schedule ranges between 3 to 7 years.

The persons should possess at least VIII standard pass educational qualification for setting up projects costing above Rs.10.00 lakh in manufacturing (Industry) sector and above Rs.5.00 lakh in Business/ Service sector. The maximum cost of the project/unit admissible under manufacturing (industry) is Rs.25.00/ Rs.10.00 lakh under Business/ Service sector. District wise details are given as Annexure.6.3.

MSME Policy 2015-20

Micro, Small and Medium Enterprises (MSME) Policy 2015-20 offers fiscal benefits covering the categories of (a) Micro and Small Enterprises (b) Medium Enterprises (c) Service Sector Enterprises (d) Swachh Andhra Initiatives (e) MSME Parks (f) Marketing assistance (g) Awards & Recognitions (h) Sick Units Revival.

Industrial Incentives

The Policy of State Incentives/ facilities announced will be in operation from 01.04.2015 to 31.03.2020. The areas and components of the policy include: Industrial Development Policy (IDP) 2015-2020, Automobile & Automobile Components Policy 2015-2020, Textile & Apparel Policy 2018-23, Biotechnology Policy 2015-2020, MSME Policy 2015-2020, Andhra Pradesh Single Desk Policy 2015, Aerospace & Defense Manufacturing Policy 2015-2020, AP Electronics Policy 2015-2020, Retail Trade Policy, AP Information Technology Policy, Backward Areas Ultra Mega Integrated Automobile Projects Policy, Food Processing Policy of Andhra Pradesh State - 2015-2020, M-Parks Policy -2018-23, Electronic Mobility Policy 2018-2023 and Stressed Enterprises Policy 2018-20.

Concept and categorization

a. Eligible Industrial Enterprise

Any industrial undertaking and servicing enterprise/ industry, other than those run departmentally by Government of India / State Government or having equity of State Government / GoI.

b. New Industrial Enterprise

An Industrial Enterprise which has been established in the State with new machinery and commenced commercial production on or after 01.04.2015 and before 31.03.2020 holding valid approvals from the concerned authorities is a new enterprise. Micro Industries, Small Industries, Medium Industries and Large Industries/Enterprises are those wherein Investments on plant and machinery is up to the limit as defined by the Government of India from time to time.

c. Mega Projects

Mega Project refers to the Industrial Enterprise which is set up with a capital investment of Rs.500 crores and above or the Industrial Enterprise which creates direct employment to more than 2000 persons.

d. Biotechnology Industries

Projects with capital investment of Rs.50 crores and above or creating local employment for 200 people will be accorded mega project status.

e. Textile Industries:

Projects with capital investment of Rs.125 Crore and above or providing employment to 2000 people or more, will be accorded mega industry status.

f. Mega Integrated Automobile Project

Automobile projects that will have engine plant, press shop, body shop, transmission line, assembly line, paint shop etc. either on its own or as consortium or joint venture mode in the same location with investments over and above Rs.1500 crore and which will bring ancillary units of a minimum of Rs.500 crore investment within 3 years, will be accorded mega Integrated Automobile Project.

g. Incentives

Incentives of 967 claims with Rs. 5712.44 lakhs under SC Sub Plan and 172 claims with an amount of Rs. 825.00 lakhs under Tribal Sub Plan were released.

MSME Cluster Development Programme

Government of India has adopted the cluster development approach as a key strategy for enhancing the productivity and competitiveness as well as capacity building of Micro and Small Enterprises (MSEs) and their collectives in the country. Clustering of units enable providers of various services, including banks and credit agencies, to provide their services more economically, thus reducing costs and improving the availability of services for these enterprises.

Objectives

To support the sustainability and growth of MSEs by addressing common issues such as: improvement of technology, skills and quality, market access, access to

capital, to build capacity of MSEs for common supportive action through formation of self-help groups, consortia, upgradation of associations, etc., to create/ upgrade infrastructural facilities in the new / existing industrial areas / clusters of MSEs and to set up common facility centres (for testing, training centre, raw material depot, effluent treatment, complementing production processes, etc).

12 Cluster proposals are sanctioned by the DC-MSME during the year 2018-19, of which, 8 Infrastructure Development (ID) Projects and 4 Common Facility Centres. Further, 31 new ID project proposals are identified and the DPRs yet to be prepared.

Industrial Infrastructure Scheme

Clusters/Industrial locations were identified for development based on the diagnostic study on providing physical infrastructure as identified in the cluster. Priority was given to develop clusters having small industry concentration. The Scheme is implemented on a public-private-partnership model i.e. user-driven with the support of the Government.

The salient features of the Scheme are

- a) Physical Infrastructure.
- b) Common facilities for fuel/gas supply system, ETP & Solid waste disposal.
- c) Information and Communication Technology Infrastructure.
- d) R & D Infrastructure.
- e) Quality Certification and Benchmarking Center.
- f) Common Facilities Center.
- g) Information dispersal /International Marketing infrastructure
- h) Small Industry Cluster Development Programme.

M-Parks

The Andhra Pradesh government has come up M-Parks (Micro, Small and Medium Enterprises Parks) Policy with the objective of creating at least one MSME Park in each 175 Assembly constituencies with a newly-created AP MSME Development Corporation overseeing the process. Each M-Park is proposed to be set up in an extent of 100 acres in each of the 175 constituencies with the state government

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providing 10 lakhs per acre as subsidy for infrastructure development.

The state government has mooted the idea of promoting large and mega enterprises as anchor investors in the proposed M-Parks so as to enhance the market prospects of the MSMEs. The main Focus of the M-Parks Policy will primarily be on manufacturing and the state government has identified sectors like small engineering, fabrication, plastics, automobiles and textiles that have large scope for employment creation.

Industrial Infrastructure Development Fund (IIDF)

The State Government has provided financial assistance as a grant to the new industrial enterprises for the development of Infrastructure facilities up to the doorstep of the proposed Industrial Enterprises. These include: Drinking Water and Industrial Water, Electricity – Power connection, laying of drainage line from the Enterprise/ Industry/ Industrial Estate to the existing Point or to the natural drainage point, Approach Road to the Enterprise/Industry and any other infrastructure facilities as approved by the Government / SLC.

Infrastructure like roads, power and water will be provided at doorstep of the industry for standalone enterprises/ industries by contributing 50% of the cost of infrastructure from IIDF with a ceiling of Rs.1.00 crore, subject to the conditions (a) the location should be beyond 10 km from the existing IE/IDA/IPs having vacant land/shed for allotment and (b) cost of the infrastructure limited to 15% of the eligible Fixed Capital Investment made in the Industry.

Chennai Bangalore Industrial Corridor (CBIC)

CBIC is one of the mega infrastructure projects of Government of India which passes through the State with the main objective to increase the share of manufacturing sector in the GDP of the country and to create smart sustainable cities which will have world-class infrastructure, convenient public transport power management and an efficient water and waste management system.

Sectors of focus include general manufacturing; automobiles

& auto ancillary, agro and food processing, metals and metallurgical products; biotech and services sector. The Japan International Cooperation Agency (JICA) has agreed in principle to support the Chennai- Bangalore Industrial Corridor (CBIC).

The Department of Industrial Policy and Promotion (DIPP) and the Japan International Cooperation Agency (JICA) through their consultants M/s. Nippon Koei Limited and PWC have prepared a Comprehensive Integrated Master Plan (CMP). The study team has completed the Part-A of CMP for CBIC region and selected 3 potential Industrial nodes – (1) Krishnapatnam in Nellore District, (2) Kalikiri in Chittoor District and (3) Hindupur in Ananthapur District.

Under CBIC project, three Nodes have been identified in Phase-I: One node each in Andhra Pradesh, Tamilnadu and Karnataka. Each node is to be developed as an industrial township. In Andhra Pradesh, Krishnapatnam Node has been selected for development in Phase-I. Draft Final Report (DFR) covering the critical gap assessment along with concept master plan and development plan is prepared for Krishnapatnam node.

Krishnapatnam Industrial Node (KPTIN) is a planned area located in south of Krishnapatnam port as industrial development of around 12,000 ha. The estimated project cost for the development of Infrastructure in KPTIN is around Rs.13,716 crores in 3 phases spanning around 25 years. Proposals for considering Krishnapatnam Node as NIMZ and to form the Special Purpose Vehicle (SPV) are under process. The Conceptual Master Plan for CBIC has been completed and presented to DIPP along with all state stakeholders workshop in New Delhi on 21st August 2015.

DMICDC has also been engaged as Nodal agency for expediting environmental impact assessment study and also for carrying out detailed engineering plan for the identified 3 Nodes in CBIC. CBIC project has reached implementation stage. The formation of SPV has been started in the CBIC project. Government of Japan has been asked to indicate their financing support for this project.

A total of 26 priority projects across various sectors have been identified for debottlenecking in the CBIC region, out of which following two projects pertain to AP state (Roads sector) and sanction is awaited from Ministry of Road Transport & Highways (MoRTH).

- 4 Laning of NH-18A from Chittoor to Renigunta and SH-61 (now NH-71) from Renigunta to Naidupeta (Estimated cost Rs.600 Crs).
- 4 Laning of NH-4 from Km 133/360 to 216/916 in the State of A.P. (from Karnataka/ AP border to AP/ Tamilnadu border via Chittoor - Estimated cost Rs.1214 Crs).

Out of (11) additional Projects-A under CBIC, two projects are concerned to A.P State i.e (1) Chittoor Drinking Water Supply (Implementing Agency is INCAP) and (2) 6 Lane access road to Krishnapatnam (Implementing Agency is GoAP/Private). Project is under process

Out of (08) additional Projects-B under CBIC, two projects concerned to A.P State i.e (1) Sewage Recycle and Industrial Wastewater Recycle in Andhra Pradesh (Implementing Agency is APIIC) and (2) Power Plant/ Transmission project in Andhra Pradesh (Implementing Agency is GoAP/ Private). Project is under process

Each node is envisaged to be implemented by a Special Purpose Vehicle (SPV) set up as a joint venture between the GoI (to be represented through the Fund/Trust) and the concerned State Government. It is to state that about 60-65% of the infrastructure projects are proposed to be implemented on PPP basis and rest relating to trunk infrastructure on assistance from Government.

The Govt. of India has appointed DMICDC as a technical advisor for the CBIC project. APIIC and DMICDC have jointly prepared and finalized the State Support Agreement (SSA) and Stake Holders Agreement (SHA) for the project which is under process of approvals and signing. As per the broad terms of the SHA, Govt of India shall be contributing Rs.5,000 crores as its equity contribution and soft loan funding for the development of the requisite project infrastructure. GoAP shall contribute the land required for the project as its equity.

Visakhapatnam Chennai Industrial Corridor Development Program (VCICDP):

Visakhapatnam–Chennai Industrial Corridor (VCIC), is a key part of the East Coast Economic Corridor (ECEC), India's first coastal corridor. VCIC is aligned with the Golden Quadrilateral and is poised to play a critical role in driving India's Act East Policy and Make in India campaign.

The nearly 800-kilometer corridor links India with the Association of Southeast Asian Nations (ASEAN) and East Asian economies that form the bedrock of global manufacturing economy. The corridor traverses nine districts of the state of Andhra Pradesh. VCIC intends to complement the ongoing efforts of the Government of Andhra Pradesh (GoAP) to enhance industrial growth and create high quality jobs.

VCIC Development Program supports Government of India (GOI)'s strategy to develop industrial corridors of international standards for expanding its manufacturing and services sectors, and creating modern urban centers connected by state-of-the-art infrastructure. GOI has selected the Asian Development Bank (ADB) as the lead partner for developing the ECEC, which will run from Kolkata (in West Bengal) to Kanyakumari (in Tamil Nadu). The conceptualization and development of VCIC has received major support from ADB, which carried out analytical work determining the kind of infrastructure and institutional investments necessary to drive manufacturing-led growth in consultation with the Department of Industrial Policy and Promotion, GOI.

VCIC's long coastline and strategically located ports allow development of multiple international gateways to connect India with global value chains (GVCs) in Southeast and East Asia. VCIC aligns with the national objectives of expanding the domestic market and supports India's port-led industrialization strategy (Sagar Mala initiative). It has Influential area of about 1,10,000 sq. km, (3.5% of India's area). It is estimated that the VCIC attracts about Rs.1,00,000 Crores additional investments and generates additional employment to the tune of 110 Lakh persons. The corridor contributes to 5% of national GDP and has potential to increase GDP in the Corridor by 6 times. The strategy to develop VCIC is part of the plan to achieve accelerated development and regional industry agglomeration in the focus state. Regional industry agglomeration could be achieved by attracting companies in the value chain of other companies already based in the corridor, attracting particular industries that the corridor provides with geographical advantages, or building and maintaining advanced infrastructure to support industries.

The objective of VCIC Development Program is to increase the manufacturing sectors, improve labor productivity, and enhance international competitiveness. Metallic and

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non-Metallic Minerals, Chemicals and Petrochemicals, Pharmaceuticals, Agro-Processing, Food-Processing, Automobile & Auto components, Renewable Energy, Textile, Electrical and Electronics have been identified as key industrial sectors in the corridor.

The key objectives of VCIC are: Increase the manufacturing sector's contribution to state and national output, employment opportunities in formal sector, labour productivity & wages, promoting dynamic SMEs and integrating India and the VCIC region in global production networks, particularly East and Southeast Asia.

The VCIC is proposed as a node centric development platform with four nodes: (i) Vishakhapatnam Node, (ii) Machilipatnam Node, (iii) Donakonda Node and (iv) Yeperdu – Srikalahasti Node. Two Nodes, i.e., Visakhapatnam Node and Yeperdu-Srikalahasthi Node were prioritized for making initial investments.

ADB has approved on 20th September 2016 the Visakhapatnam–Chennai Industrial Corridor Development Program (VCICDP) comprising of Multitranches Financing Facility (MFF 0093-IND) of \$500 million, Policy Based Loan (PBL Loan 3424-IND) of \$125 million, and Capacity Building Technical Assistance (TA 9173-IND) of \$1.0 million. Subsequently, ADB approved on 26th September 2016 Project 1 of the MFF comprising a loan (Loan 3430-IND) of \$245 million, and a Grant from the Urban Climate Change Resilience Trust Fund (UCCRTF) (Grant 0495-IND) of \$5 million. Project-1 Loan and Grant Agreements were signed on 23rd February 2017 and declared effective on 5th May 2017. The TA agreement was signed on 3rd March 2017 and was effective from the signing date.

Source	Amount (USD Million) and Share (%)		
	Policy Loan	Project Loan	Total
Asian Development Bank	125.0 (100.0%)	500 (70.0%)	625 (74.4%)
Government of Andhra Pradesh	0 (0.0%)	215.0 (30.0%)	215.0 (25.6%)
Total	125 (100.0%)	715 (100.0%)	840 (100.0%)

Policy Based Loan: Supports the Government in policy, institutional, and governance reforms to promote accelerated industrial development

1. Investment climate- 'Ease of doing Business'.
2. Strengthening of institutional structures for corridor management
3. Capacity building and skill development
4. Policy reforms & investment promotion

Project Loan: Supports investments in physical infrastructure in the selected nodes.

1. Improvement of road connectivity projects
2. Upgradation of energy transmission and distribution infrastructure
3. Augmentation of urban water supply infrastructure in corridor nodes
4. Internal and common infrastructure for industrial parks

As stipulated by Department of Industrial Policy and Promotion (DIPP), Government of India, GoAP is mandated to prepare three documents with regards to VCIC.

- i) Conceptual Development Plan,
- ii) Regional Perspective Plan and
- iii) Master Plan. Pricewaterhouse Coopers Private Ltd. was appointed by ADB to prepare the Conceptual Development Plan (CDP) and Regional Perspective Plan for VCIC. The draft Regional Perspective Plan was submitted to Govt. of Andhra Pradesh and Asian Development Bank by PwC in March, 2016. In January 2016, a consortium of Jurong Consultants and KPMG was appointed for preparation of Master Plan of the 4 nodes of VCIC.

Through the Conceptual Development Plan (CDP), ADB has identified several infrastructure projects. The identified infrastructure projects by CDP include debottlenecking and capacity augmentation of existing assets and also some greenfield infrastructure projects for future economic growth in the state. Of the identified ones, selected high impact projects have been planned to be developed with financial assistance from ADB.

Project Loan (Tranche-I) : List of Projects and the status:

PIU	Project	Current Status
APIIC	Construction of 1 MLD Common Effluent Treatment Plant (CETP) at Naidupet Industrial cluster (35.60Cr.)	Work in Progress
	Augmenting utility services for Naidupet Industrial cluster. [SWD, power, internal road and one stop centre (179.51Cr.)	Work is in Progress
	Bulk water supply to Naidupet cluster (116.10Cr.)	Work is in Progress
APRDC	Widening and strengthening of Samarlakota – Rajanagaram Road(SH148) to divided four lane from Km 26.4 to Km 56.4 in E. Godavari District. (319.00 Crs.)	Work is in Progress
	Greenfield approach road and providing external water supply to Nakapalli (85.00 Crs.)	DPRs are under preparation.
	Widening of road (single to 2 lane) from Neleballi to Routhusuramala and formation of new two lane road from Srikalahasti Yerpedu (south block) to Pallamala on Kalahasti Tada Road (40.00Cr.)	
	Widening of road (single to 2 lane) from ThimmajiKandriga to NH-5 (AH-45) near Pandlur Railway gate for 6.1 KM length (without RoB) (87.00 Crs.)	
AP TRANSCO	Augmenting power distribution capacity for meeting Industry demand at Kapuluppada, Nakkapalle / Chandanada and Achutapuram (327.00 Crs.) (APTRANSCO. 01)	Work is in Progress
	Augmenting power distribution capacity for meeting Industry demand at Rachagunneri, Naidupeta and Yerpedu (325.00 Crs.) (APTRANSCO. 03)	Work is in Progress
GVMC	Distribution Network improvements for NRW reduction and 24x7 supply in GVMC area. (348.48Cr.)	Work is in Progress
	Watershed Development and Rejuvenation of Mudasarlova lake (Rs 9.50 Cr)	Procurement is under Progress
	Developing a 3 MW Solar Energy Park at Mudasarlova / Meghadri Gedda (Rs 14.50 Cr)	Procurement is under Progress
	Converting 3 streets into non-vehicular zone (Rs 7.00 Cr)	Procurement is under Progress

Industrial Infrastructure

The state government is contemplating to have a plan for infrastructure creation including integrated development of port-based infrastructure, leveraging the state's 974-km-long coastline, part of East Coast which faces progressive south eastern nations and industries that help the state emerge as a logistics and cargo hub. The AP government is developing the new ports—through the public private partnership (PPP) route—modernize existing minor ports and set up port-based industries along the coastal corridor. The state is also working on building a strong inland waterway system that is linked to ports through national highways.

The Special Economic Zones (SEZs) Policy was announced

in April 2000 under Export & Import Policy to make SEZs an engine for economic growth supported by quality infrastructure complemented by an attractive fiscal package, both at the Centre and the State level, with the minimum possible regulations. It is designated as duty free enclave and to be treated as foreign territory for trade operations and duties and tariffs.

Important objectives of the SEZ Act are: Generation of additional economic activity, Promotion of exports of goods and services, Promotion of investment from domestic and foreign sources, and creation of employment opportunities and development of infrastructure facilities. Government intends to exploit the SEZ concept for impacting the state's socio-economic fabric through enhanced job opportunities and industrial development. APIIC has already taken the lead in developing SEZs across various districts in Andhra Pradesh. Details of the SEZs are shown in Table 6.1.

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Table 6.1: Status of Operational Special Economic Zones (excluding de-notified SEZs) as on 31.12.2018:

Description	No. of SEZs	Investment made (including FDI) (Rs. in Cr.)	Employment generated (No.)	Exports from SEZs including deemed exports (Rs. in Cr.)
APIIC	5	4632.74	10234	3666.87
APIIC JVs	3	4475.18	5834	854.93
APIIC Assisted	5	4894.41	42746	2065.04
Private Developers	5	4806.28	14556	5424.24
VSEZ	1	1707.43	3921	149.36
Total	19	20516.04	77,291	12160.44

Source: VSEZ, GoI, Visakhapatnam.

Out of 19 operational SEZs, 3 were IT/ITES SEZs, 5 Multi Product SEZs, 4 Pharmaceuticals SEZs, 2 Textile, 2 Leather Products, 1 Building Products, 1 Port based SEZ and 1 Food Processing SEZ. District wise status of SEZs and area are given in Annexure 6.4.

New Initiatives

Government of Andhra Pradesh has announced additional fiscal concessions to the earlier policy announced in 2015. This policy provides for infrastructure support, stipulating that dedicated MSME Parks shall be established one park each in all 175 Assembly Constituencies. The Government have instituted this new policy for providing infrastructural support to MSMEs titled Policy for Establishment of MSME Parks (MParks) in each Assembly Constituency or M-Parks Policy 2018-23.

To begin with, APIIC has identified 31 areas in various constitutions and obtained layout approvals initiated providing industrial infrastructure in all the MSME Parks and also invited online applications from the needy entrepreneurs for making allotments. These MSME Parks have been approved by Government in the year 2018 and accord administrative sanction for an amount of Rs.270.43 Crores and sanctioned subsidy of Rs.132.30 Crores for development of 31 MSME Parks under Phase-I with 7283 plots in 1334 Acres of land.

MSE – Cluster Development Programme:

Under MSE-Cluster Development Programme of Govt. of India, the following new Industrial Parks have been taken up apart from up-gradation of existing Industrial Parks.

MSE – CDP ID Projects during 2018

Sl. No.	Name & Location of the Industrial cluster	New Industrial parks	Total Project Cost (Rs. in lakhs)	Govt. of India Grant sanctioned (Rs. Lakhs)	State Govt. contribution (Rs. in lakhs)
1	Koparthy , YSR Kadapa Dist.	New Indl. Park	2202.47	736.48	1465.99
2	Gandrajupalli, Chittoor Dist.	Textile & Readymade garments (New estate)	833.71	666.96	166.75
3	Peddapuram, East Godavari. Dist	Traditional Food (New Estate)	690.91	414.55	276.36

Apart from the above, another 23 new proposals for development of infrastructure under MSE-CDP has been submitted to Government of India which are under process.

Mega Food Park:

Ministry of Food Processing Industries, Government of India sanctioned for establishing a Mega Food Park at Mallavalli, Bapulapadu Mandal, Krishna District with an estimated cost of Rs. 125.25 Cr. and the projected Investment is Rs.400 Cr. All the infrastructure works at Central Processing Centre (CPC) are nearing completion and going to be operational very shortly.

Electronic Manufacturing Cluster (EMC):

Ministry of Electronics & Information Technology, Govt. of India sanctioned for establishing Electronic Manufacturing Cluster (EMC) at Vikruthamala, Erpedu Mandal, Chittoor District on 02.08.2017 in 501.40 acres, with an estimated cost of Rs. 339.80 Crores The infrastructure works are under progress and already constructed 7 factory sheds and 2 more sheds are under construction.

AP Gas Infrastructure Corporation

APGIC was incorporated on 2nd September, 2009 under the provisions of Companies Act as a State Government Company, where they stressed the need for participation by the State Government in the Upstream (exploration and production), Midstream (Service sector), Downstream (Distribution) activities of petroleum and natural gas sector playing the role of the facilitator which will help in optimizing the utilization of the Gas in the State. The authorized share capital is Rs.100 crores and paid up capital is Rs.55.44 crore upto March, 2019.

Action Plan

- Develop State Wide Gas Grid /Pipe line network
- Develop City Gas Distribution Network
- Acquiring Gas Blocks alongwith National/ International players
- Explore possibilities for “farming – in” opportunities
- Develop Petroleum Export Zone
- Enable providing of E&P Services
- Infrastructure development for E&P Industry

APGIC participated in Exploration and Production activities in KG basin with other Consortium partners viz. ONGC, OIL and NTPC as 10% equity. APGIC has got four blocks out of five bids it participated along with other consortium partners viz., ONGC, OIL, NTPC and British Gas.

The Hydrocarbon Exploration Blocks KG-OSN2009/1, KG-OSN-2009/2 & KG-OSN-2009/4 situated off the Ongole coast in the shallow waters were awarded under NELP-VIII round to Joint Venture (JV) Consortium. In the Blocks KG-OSN-2009/1, KG-OSN-2009/3 and KG-OSN-2009/4 were relinquished. In Block KG-OSN-009/2 the JV partners are ONGC and APGIC with a Participating Interest of 90% and 10% respectively. This partnership has resulted in establishing oil and gas discovery in well SRI-1 of Block KG-OSN-2009/2. The Well stimulation studies in well SRI-1 to establish the commerciality is currently in progress. So far, APGIC contributed about Rs.30.39 crores in the Exploration and Production activities towards its10% equity.

AP Gas Distribution Corporation

APGIC incorporated AP Gas Distribution Corporation Ltd, (APGDC) in the year 2011 as a Joint Venture Company with an objective to meet the immediate requirement of gas for the power plants and other industries in Andhra Pradesh through implementing City Gas Distribution projects, CNG Stations in Andhra Pradesh in a focused manner, to develop a Regional Gas grid and establish of a fast track FSRU based LNG re gasification Terminal at Kakinada. GAIL Gas Ltd and APGIC are shareholders of APGDC in the ratio of 50% each. APGIC invested Rs. 20.43 Crores in APGDC towards equity. APGIC is also planning to undertake Trading & Marketing of Gas.

Gas Pipeline Network

Immediate need is to develop state wide Gas Grid /Pipeline network for all-round economic development of AP. The window available is about 2-3 years. Once the KG Basin Gas production reaches peak level and is allocated by Central Government, the existing opportunities of getting gas allocation for AP would no longer be available

Benefits of APGIC&APGDC

Govt. of A.P can directly generate revenue to the extent of Rs.1000 Cr per year in the form of VAT/GST. Availability of LNG will boost Power Sector in the state and will also boost industrial development. This Project will generate employment (direct / indirect) upto the tune of 1000. Usage of gas will reduce pollution, improve environment and reduce greenhouse emissions.

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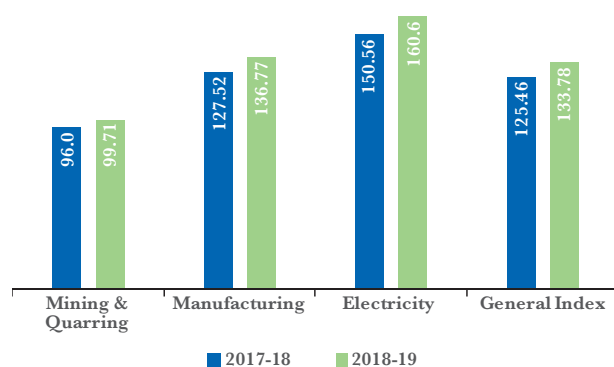
It requires state Budgetary support of. Identification of Gas Consumption Centers in A P / Development of Pipeline Grid/ Network feasibility report and increasing Authorized Capital, Paid Up Capital are the requirements.

Index of Industrial Production

The Index of Industrial Production (IIP) is a yardstick for measuring industrial growth. It includes the relative change of physical production in the field of Industry during specific period as compared to the previous period. The IIP is estimated monthly by collecting data from selected units of Manufacturing, Mining, Quarrying and Electricity. The main objective is to estimate the contribution of Industrial sector to the Gross State Domestic Product. IIP in the State is being compiled with base year 2011-12 for 23 industrial classifications at 2-digit level under manufacturing sector.

As per Quick estimates of IIP, the Mining and Quarrying, Manufacturing, Electricity sectors and General Index registered growth rate of 3.8%, 7.3%, 6.7% and 6.6% respectively during 2018-19 over 2017-18. The indices of IIP of State are given in Annexure – 6.5. Growth in Industrial Production in terms of IIP is shown in chart 6.1. The General Index for the period 2017-18 in Andhra Pradesh stands at 125.46 against 133.78 observed in the same period of 2018-19.

Chart 6.1 Index of Industrial Production



Source: Directorate of Economics & Statistics.

Annual Survey of Industries

The Annual Survey of Industries is the principal source of Industrial Statistics in the State. It provides Industrial

statistical information to assess and evaluate the changes in the growth, composition and structure of organized manufacturing sector comprising activities related to manufacturing processes, repair services, gas and water supply and cold storage. The ASI conducted once in a year to collect the data from the Organized Manufacturing units registered under the section 2 m(i) [10 or more workers with power] & 2m(ii) [20 or more workers without power] of the Factories Act, 1948 and units registered under Beedi and Cigar (condition of employment) Act, 1966.

The main objectives of Annual Survey of Industries are:

1. Estimation of the contribution of manufacturing Industries as a whole and of each type of Industry to the State Income.
2. Systematic study of the structure of the Industry as a whole and each type of Industry.
3. Analysis of various factors influencing Industries in the State.
4. Provision of comprehensive, factual and systematic basis for formulation of Policy.

The data for 16 principal characteristics based on Annual Survey of Industries from 2010-11 to 2016-17 is given in Annexure-6.6.

Highlights of ASI 2016-17

The number of factories registered in the year 2015-16 is 12,864 and in 2016-17 it was 13,084, registering a positive growth rate of 1.71%. The factories in the state generated employment to 5.64 lakh persons by the end of 2016-17 registering a positive growth of 8.45%. The Gross value added is decreased by -8.76% in the year 2016-17 over the previous year 2015-16 and Net value decreased by -16.31% at the end of the year 2016-17.

State Level Public Enterprises

There are 39 State Level Public Enterprises (SLPEs) functioning in the state. As per the working results of these SLPEs, the performance during the year 2015-16 can broadly be summarized as:

Capital Employed

The capital employed by all the state level public enterprises was Rs.32120.26 crore. The top five State Level Public Enterprises with the highest 'Capital employed' are APGENCO, APSHCL, APSFC, APTRANSCO and APMDC. The capital employed by the top five SLPEs constitute 83.77 % of the capital employed by all the SLPEs in the state.

Turnover

The total turnover (including other income) made by all the SLPEs was Rs.57083.80 crore. The top five SLPEs whose turnover is highest are - APSPDCL, APGENCO, APEPDCL, APSRTC and APTRANSCO. The turnover achieved by the top five state level public enterprises to total turnover works out to 66.42%.

Profit

25 SLPEs, out of the total 39, made a profit of Rs.1392.84 crore during 2015-16. Out of these following top five SLPEs made a profit of Rs.1258.91 crore, accounting for 90% of the total profit made by all the 25 profit making SLPEs.

- APEPDCL : Rs.471.86 crore
- APMDC : Rs.364.89 crore
- APGENCO : Rs.207.46 crore
- APFDC : Rs.129.26 crore
- APTRANSCO : RS.85.44 crore

Mines and Geology

Minerals & Agriculture are one of the main sources of revenue to Andhra Pradesh with minerals forming the major contributor for the economic growth of the State. Andhra Pradesh is well known globally for variety of rocks & minerals and called Ratnab Garbha. Minerals form a major contributor to the economic growth of the State. Andhra Pradesh is a mineral rich state containing a vast variety of mineral wealth particularly industrial minerals. The State is a house for various minerals specifically Crude Oil & Natural Gas, Barytes, Bauxite, Heavy Mineral Beach Sand, Manganese, Limestone, Dolomite, Quartz, Feldspar, Silica Sand, Semi-precious Stones, Ball Clay, Laterite, Iron

Ore, Gold & Diamonds, Mica, Asbestos, Calcite, Uranium, Lead, Zinc, Shale, Pyrophyllite, Steatite, Serpentine, Graphite, Kyanite, Vermiculite, Clays, Ochre, Black & Colour Granites, Limestone Slabs, Fullers Earth, Marble, Road Metal/Building Stone/Ballast, Gravel/Earth, Mosaic Chips and Ordinary Sand.

The State is focusing on inventory of mineral resources, key issues of legislation, objective and strategies in tune with the National Mineral Policy for accelerating growth leading to overall development of the mining sector. The main aim of State Mineral Policy is to serve as a guiding force to translate the State's mineral potential into reality with eco-friendly and sustainable mining.

Mineral Resources

- The areas of Agnigundala, Bondalamottu in Guntur district are famous for mining of Copper, Zinc, Silver and other base metals.
- The alkaline and ultra-basic rock formations in Guntur and Prakasam districts are enriched in NephelineSyenite.
- The State contains huge Uranium deposits in Thummalapalli, YSR Kadapa district. The Department of Atomic Energy, GoI already started exploitation of the resources through M/s. Uranium Corporation India Ltd, a Public Sector Undertaking.
- The Dharwar Super Group Meta sediments contain rich deposits of Iron Ore confining to Bellary Reserve Forest and surrounding areas in Ananthapuramu District.
- Number of scattered low grade iron ore deposits are in Prakasam, Krishna, Kurnool and YSR Kadapa districts.
- The State is known for exclusive Granite varieties - Chimakurthy Black Galaxy, Steel Grey, Ocean Blue, Black Pearl in Prakasam, Srikakulam Blue in Srikakulam, Vizianagaram Green in Vizianagaram, River White, Kashmir White & Moon White in Visakhapatnam, Yellow Granite in East Godavari, Silver Pearl, Indian Labrador, Blur Paradise, Copper Green, Platinum Blur in Guntur, Viscon White, Tiger Black, Kuppam Green English Teak in Chittoor, Pista Green in YSR Kadapa Dist, Chilli Red in Ananthapuramu and Chocolate Brown in Kurnool.

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Departmental Functions/Activities

The Department of Mines and Geology looks after overall development of mineral sector and also collection of mineral revenue for the state exchequer. The department is responsible for processing of mineral concession applications, grant of leases for minor minerals, approval of mine plans, inspection of mines, curbing of illicit mining and transportation, vigilance, and other activities.

Leases and Mining

There are 380 mining leases for major minerals, 1735 quarry leases for cut and dressed blocks of granites and 1083 quarry leases for industrial minerals and 4177 Quarry leases for other Minor Minerals (Construction Minerals). Mining for Limestone, Barytes and Natural Gas falls under large scale mechanized sector, while Granite, Dolomite, Quartz, Feldspar, Clays etc. all under semi mechanized medium sector and the other minerals fall under semi mechanized small sector. Nearly 90% of the mines fall under small sector and remaining 10% under medium and large sectors.

Mineral Based Industries

Both Public & Private Sectors established large and medium scale mineral based industries for manufacture of Cement, Steel, Sponge Iron, Ferroalloys, Glass, Ceramics, Refractories, Chemicals, Granite, Marble & Limestone cutting & polishing units, Slate cutting units, Gem Cutting & faceting units, Granite monuments manufacturing units, Pulverizing units, stone crushers, Mosaic & Ceramic tile units, Lime Kilns, and Manufactured Rock sand units in the State.

The Mining Sector is identified as one of the growth engines and certain minerals have been identified as focus minerals viz. Bauxite, Heavy minerals, Beach Sand, Limestone, Gold, Diamond, Dolomite, Oil & Natural gas, Uranium, Garnet, Granite, Titanium, etc. for establishment of Cement, Gas based Thermal Plants, Oil Refinery, Cutting & Faceting, Mining & Refinery, Steel & Sponge, Alumina Smelter and Aluminium Refinery etc., as focus industry for overall development of the Mining Sector in the State.

Vigilance

There are 5 Regional Vigilance Squads stationed at 13 Deputy Directors of Mines & Geology, two integrated check posts and observation check posts at Krishna, Prakasam and Kurnool District for effective vigilance to curb illegal mining & transportation of minerals. The department has booked 7644 cases and collected Rs. 215.20 crore as penalty in 2018-19.

Achievements during 2018-19

Revenue earned

The State Mineral and Mining sector contributed Rs. 2,147 crore of Mineral Revenue to the state exchequer during 2017-18 and Mineral Revenue during 2018-19 earned Rs. 2,463 Crore. The percentage growth compared to last year was 14.71%. GVA in mining sector has been raised to 10.34% compared to the growth of 8.93% recorded during previous year. Details of District Wise Mineral revenue is given in Annexure 6.7 and year wise is given in Table 6.2

Table 6.2 Mineral Revenue Achievement (Rs. in Crore)

Year	Target	Achievement	YoY Growth (%)
2014-15	1235	966.11	9.20
2015-16	1360	1396.05	55
2016-17	1705	1700.70	13.68
2017-18	1960	2147.48	26.27
2018-19	2500	2463.48	14.71

Source: Director of Mines & Geology

Mineral Production and Value

Mineral consumption is increasing due to promotion of various industries and manufacture of Mineral based products. The State produced industrial minerals, dimensional stones, building materials with a value of Rs. 21,475 crores during 2018-19. Production of Crude Oil, Natural Gas and Limestone is given in Annexure 6.8.

Auction of mineral blocks

One Gold Block was successfully auctioned in July 2018, Final Price Offer of 38.25%; Bid-revenue receipt to Government is Rs. 947 Cr. One Limestone block (CAK) was also successfully auctioned in Nov 2018 with Highest Final Price Offer (FPO) of 13.40%; Bid-revenue receipt to Government Rs. 491 Cr.

Other Achievements

About 1072 letter of Intents (LoIs) have been issued intimating the decision of grant of leases in principal till June 2019. About 400 leases have been granted. About 39812 dispatch permits have been issued for mineral transportation

Proposed Action plan for FY 2019-20

- Mineral Revenue is Rs 2,875 and to achieve 15% GVA growth are the target for 2019-20
- Automated -permit system, which was introduced only for key minerals, is being extended for leases of all minerals having clearance of AMP, EC and CFO
- This will enable issue of permits without intervention of the department officers, improving Ease of Doing Business for all the leaseholders in the state.

Mining Surveillance System (MSS) for Minor Minerals

Introduction of Mining Surveillance System on minor minerals is under contemplation and will be launched during this financial year and will effectively be implemented during FY 2019-24. This will help to identify encroachments and mining outside the lease areas, thereby curb illegal mining activity, which causes revenue loss to the state government as well as significant environmental impact on the mining areas

Star Rating for Minor Minerals

The purpose of this system is to enable the state government to institutionalize a statutory mechanism for ensuring sustainable mining which addresses the concerns on environment & socio-economic issues in mining sector. Star rating system for Major minerals implemented by Ministry of Mines, GOI. A similar system is being implemented in

the state for Leases of minor minerals. Government have issued orders for implementation of the system. Online system is developed

New Policy Formulation

A new sand policy is to be implemented to monetize exploitation of Sand Reaches of Andhra Pradesh. The new Sand policy will come into effect from September, 2019.

Initiatives taken to augment revenues

- Amendments to Andhra Pradesh Minor Mineral Concession Rules, 1966 including - Increase in Seignorage fee for 17 Minor Minerals and Revision of Dead Rents for Minor Minerals to discourage blocking of mineral bearing areas
- Enhancement of Application Fees and Introduction of Security deposit to avoid blocking of huge extents by the applicants.
- Lease Area Restrictions introduced with an upper limit of 50 Ha. (100 Ha. for industries with captive leases) to avoid creation of monopoly
- Use of Technology for monitoring of the leases
 - o Geo Referencing of the leases - Mines Surveillance System (MSS) has been implemented for all major minerals leases.
 - o CCTV Cameras were installed at check-posts for live monitoring of Mineral Transportation.
 - o Implementation of Drone surveys for 3D Mine Mapping to monitor mines production and mineral stock
- To expedite grant of new leases, orders issued for issue of NOCs by Tahsildars area-wise to DMG, rather than individual applications.
- Filing of mineral concession application and all payments related to application fee, royalty/ Seignorage fee etc have been made online.
- All the orders related to grant of LoI, lease grant order, and order on appeals have been sent through SMS and Email based Updates
- Golden Master Database for all existing lease in the state has been prepared and put it on department website

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- Automated e-permit system has been implemented for Iron Ore, Cement Grade Limestone, Black Galaxy Granite and Manganese mining leases, enabling issue of permits without intervention of the department officers for Ease of Doing Business and all 4,782 Mineral dealer licenses have been computerized end-to-end and linked to e-Permit system.
- New Departmental Website launched, providing up-to-date details of revenue, lease area details, permits, court cases etc. to bring in transparency and improve Ease of Doing Business.
- Mobile application for randomized inspection of mines and quarries has been developed to keep watch on extraction of minerals
- To control illegal mining and transportation of minerals, all the major mineral leases have been kept under Mine Surveillance System
- AP Mineral Dealer Rule, 2017 has been promulgated to keep surveillance on procurement of mineral by the mineral processing unit
- Orders were issued not allowing transfer of leases for minor minerals in the State except in cases of acquisition of value addition industry along with captive mine to prevent financial speculations involved in transfers & prevent loss of income to the state.
- For private buildings and apartments, a Green fee of Rs 3/ Sq. feet is being collected by local bodies while approving the building plan and will be remitted to Mining Department account. Henceforth, no Vigilance & Enforcement and Mines Dept. action will be allowed in cases where Building Plan has been obtained from local bodies by paying Green Fee.

Initiatives:

- Installation of **GPS based vehicle tracking**, navigate and trace their routes to deter illegal transport and mining movement, and to establish better control on mining activities and its transportation, making the whole system more transparent.
- **DGPS survey** is done to precisely earmark lease boundaries thereby curbing illegal mining activity, which

is helpful for computation of Volumetric analysis of the mineral extracted. Can be leveraged during Drone surveillance.

- Post completion of DGPS survey, MSS will be introduced for minor minerals, in line with the system prevailing for major minerals. Geo Referencing of the leases - Mines Surveillance System (MSS) has been implemented for all major minerals leases.
- **Drone surveillance** can be used for volumetric analysis of mineral extracted and for detection of illegal mining. A pilot project is conducted in Krishna, Guntur districts
- Development of **Single Desk Portal** for mining lease application and processing is under development. Post implementation end to end processing of lease application will be done online with specific timeline at every stage

Operationalization or cancellation of non-working Mines:

Coordinate with lease holders to operationalize non-working leases. Out of 7200 leases, 2000 are non-working leases. Cancel remaining non-working leases to make them available for grant to potential miners.

Social welfare measures

- o District Mineral Foundation Trusts (DMFT) have been established in all the 13 districts of the State. Till May 2019, a total of Rs 739.915 Crores has been collected under the DMF from various districts in the state. So far, Rs 633.29 Crores worth of works have been sanctioned under this program and about 17,965 projects/schemes have been sanctioned. Welfare of the mining affected people, families and areas will be looked after by these foundations by utilizing the contribution collected from the mining/ quarry lease holders.

Implementation of Key Projects

- o Ambulances provided to four Government Health centers in the Mining affected areas of East Godavari district with an estimated cost of Rs. 41.40 lakhs which has benefitted up to 2,58,857 people in the district.

- o 6 additional class Rooms (upstairs) are constructed in Z.P High School Lampakalova village, Prathipadu Mandal of East Godavari district with an estimated cost of Rs. 39 lakhs which has benefited up to 240 pupils.
- o Implementation of virtual class rooms in 9 schools of mining affected Mandals and Villages of Kurnool with an estimated cost of Rs. 43.18 lakhs which has benefitted up to 6,024 students in the district.
- o Augmentation of PWS Scheme in Chinapalakalur Village, Guntur Rural Mandal of Guntur District with an estimated cost of Rs 30 Lakhs which has benefited up to 1,200 people living in the village.
- o Construction of Hostel building and Compound wall for Deaf and Dumb Junior College, RIMS road of Kadapa with an estimated cost of Rs 4.85 Lakhs which has provided better infrastructure, living facility to about 50 disabled students.
- o Providing two 15KWP solar systems for AP social welfare residential school and colleges of Chilukuru and Kota mandals of SPS Nellore District with an estimated cost of Rs 42.35 Lakhs which has benefited up to 300 students of district.
- o Allocations made to projects focusing on Physical Infrastructure & Drinking Water supply - an amount of Rs 346 Crs and Rs 148 Cr respectively. Further, significant allocations of Rs. 38 Crs and Rs. 37 Crs have been made towards Education & Welfare of women and children respectively under PMKKKY implementation till May 2019.
- o Providing employment generation from major mining based projects in Shree Cement (Guntur) and Ramco Cement (Kurnool).

Commerce and Export Promotion

The Exports from the state for the year 2018-19 have recorded Rs. 98983.95 Cr. During the year 2017-18 the state has recorded Rs.84640.56 crore. The Major exports from the state are Drugs & Pharmaceuticals, Marine, Agriculture and Agro based products, Handicrafts, Minerals and Mineral products and Software products are shown in Table 6.3.

Table 6.3 Value of Exports

(Amount Rs.in crores)

Sl. No.	Product Group	2017-18	2018-19
1	Agriculture & Agro based and Forest Products	12952.76	16482.47
2	Leather, Animal and Marine Products	17955.78	16229.49
3	Mineral & Mineral Products	4424.69	12084.02
4	Handloom & Textiles	3580.02	5765.78
5	Handicrafts & Carpets	9078.61	1419.17
6	Drugs & Pharmaceuticals and Allied Chemical Plastics.	18767.78	24537.92
7	Engineering Items	15733.20	19554.58
8	Electrical & Electronics parts	894.50	2237.75
9	Misc. (Mfg Goods)	563.21	98.75
10	Software (IT & ITES)	690.00	574.02
Total		84640.56	98983.95

Source: Commerce and Export Promotion Department

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India International Trade Fair (IITF)

National and international trade promoted by participating in fairs conducted by India Trade Promotion Organization (ITPO) and other agencies every year in New Delhi. The products particularly of MSME sector, Self Help Group (SHG) manufactured in the state are exposed to domestic and international market at New Delhi during this event. Commerce and Export Promotion Department has participated in IITF-2018 during Nov.2018.

Trade Infrastructure for Export Scheme (TIES)

The objective of the scheme is to enhance export competitiveness by bridging gaps in export infrastructure, creating focused export infrastructure, first mile and last mile connectivity for export oriented projects and addressing quality and certification measures including SPS/TBT compliance. The Export Commissioner of the state is the Nodal officer for the projects proposed by a State Govt. Agencies. This fiscal 2018-19 projects of Fisheries Dept. worth Rs.62.00 cr. are taken up for financial assistance under the TIES.



ECONOMIC INFRASTRUCTURE

Countries like China, South Korea, Japan and other developed countries have experienced impressive economic growth on a sustained basis. This became possible with planned investments in physical infrastructure such as irrigation projects, dams, roads, bridges, ports, airports and other logistics relating to connectivity and communications. The multiplier effect of infrastructure on growth has become evident in various instances. The state government is committed to take cognizance of the changing patterns of government regulation globally and transform itself into a strategic and value enhancing facilitator.

Irrigation

Andhra Pradesh is a land of many rivers and lakes and it is popularly referred as the “Riverine State”. There are 40 major, medium and minor rivers in the state, of which Godavari, Krishna, Pennar, Vamsadhara and Nagavali are prominent in peninsular India.

Out of 40 rivers, 15 are interstate rivers and these are: 1.Bahuda River (AP & Orissa), 2.Mahendra Tanaya River (AP & Orissa), 3.Poondi Minor Drainages(AP & Orissa), 4. Vamsadhara River (AP &Orissa), 5.Nagavali River (AP & Orissa), 6.Godavari (AP, Maharashtra,

Orissa, Karnataka, Chattisgarh & Madhya Pradesh), 7. Krishna (AP,Maharashtra& Karnataka), 8. Pennar River (AP & Karnataka), 9.Aranar River (AP & Tamilnadu), 10.Kortaliar River (AP& Tamilnadu), 11. Palar River (AP, Karnataka & Tamilnadu), 12.Ponniar River (AP, Karnataka & Tamilnadu), 13.Budameru (AP, Telangana), 4.Errakalava (AP, Telangana), 15.Tammileru (AP ,Telangana). Of these, utilisation of Krishna and Godavari river waters are covered by the Tribunal Awards. The Bahudha, Vamsadhara, Nagavali, Pennar, Palar, Ponniar River waters are covered by Agreements among basin states.

The entire share of 512 TMC of dependable water out of 811 TMC in the State of A.P in Krishna basin is fully harnessed. In the AP Reorganization Act, 2014 under Section 89, KWDT-II is mandated to make project specific allocation in Krishna basin for both successor states of AP and Telangana and determine operation protocol for project wise releases in the event of deficit flows. Andhra Pradesh is utilizing 308.703 TMC under existing projects and 468.688 TMC is planned utilization under ongoing projects.

Utilization of water for irrigation under existing projects, ongoing projects and contemplated Projects in the river basins are shown in table 7.1 below.

Table 7.1: River Basin wise utilisation

S. No	Name of River Basin	Utilisation for irrigation (in TMC)		
		Existing projects	Ongoing projects	Contemplated Projects
1	Krishna river	512.040	150.500	----
2	Godavari river	308.703	468.688	119.756
3	Pennar river	128.94	58.12	6.750
4	Vamsadhara river	28.605	12.142	6.935
5	Other rivers	322.839	32.082	-
	Total	1301.127	721.532	133.441

Irrigation Potential created

Creation of Irrigation Potential continued to be the most prioritized area. So far, 105.36 lakh acres of irrigation potential has been created up to March 2019 under major anicuts on Krishna, Godavari and Pennar rivers and projects like NagarjunaSagar, Telugu Ganga, Somasila, SRBC, Vamsadhara, Medium Irrigation projects and Minor Irrigation schemes. The details of sector wise irrigation potential created up to March 2019 are shown in Table 7.2 and district-wise irrigation potential created in the state are given in Annexure 7.1

Table 7.2: Sector Wise Irrigation Potential created up to March 2019

Sector	Ayacut (lakh acres)
Major Irrigation	65.87
Medium Irrigation	5.55
Minor Irrigation	25.60
APSIDC	8.34
Total	105.36

Source: Water Resources Department

Contemplated Irrigation Potential under Major & Medium Projects:

Out of 60 Projects taken up during 2004-2018 period, 17 Projects were completed and 19 projects are giving partial benefits by creating new ayacut of 16.34 lakh acres and stabilization of 20.14 Lakh Acres. After completion of the 43 ongoing projects, 31.36 lakh acres of new ayacut will be created and 4.79 lakh acres of ayacut will be stabilized. 14 New Projects are taken up during 2018-19 at an estimated cost of Rs 26,942.75 Crs for creating new ayacut of 2.88 lakh acres and to stabilize 14.82 lakh acres.

The following are the salient achievements during 2018-19.

Completed projects:

Purushothapatnam Lift Irrigation Scheme

The scheme is intended to utilize the flood water of River Godavari and to get the early benefits of the Polavaram Left main canal, by constructing a lift irrigation scheme near Purushothapatnam (V), Seethanagaram (M) of East Godavari District. The objective is to irrigate an ayacut of 2,15,000 Acres under Polavaram Irrigation Project Left Main Canal, Yeleru Reservoir and Pithapuram Branch Canal during contingency besides providing water for industrial and domestic needs of Visakhapatnam City duly utilizing the existing Left Main Canal infrastructure.

Kondaveeti vagu Lift Irrigation Scheme

The scheme is intended to save the capital city from inundation by lifting of 5000 Cusecs of flood water of Kondaveeti vagu and letting into River Krishna at

Undavalli Village on U/s of Prakasam Barrage, when the water level in Krishna River is more than the water level in Kondaveeti vagu. Water is supplied to both Khariff and Rabi crops in Godavari Delta. During last year, 96.94 TMC water is diverted to Krishna River from Godavari through Pattiseema Lift and supplied to Krishna Delta. Early inflows were received in Srisailem Projects and 115.40 TMC water is released from Pothireddipadu and supplied to TGP system, KC canal, SRBC and GNSS.

HNSS - partially completed

33.60 TMC of water is lifted during 2018-19. Water is supplied to Marala Reservoir, Cherlopalli reservoir and Madakasira Branch canal. Water reached Chittoor District border and up to Madanapally and Kuppam Branch canal. Owk bypass tunnel is completed and water is supplied to Gandikota and other Reservoirs in Kadapa Dist. Pulakurthy and Pulikanuma Lift Irrigation schemes are completed, stabilizing 36,230 Acres ayacut in Kurnool District

Targets for the year 2019-20:

12 Projects (11 Projects under Jalayagnam and 1 New Project) are proposed to be completed on war footing. Sangam and Nellore Barrage Works are programmed for completion by Rabi season of this year. Boddepally Raja Gopal Rao Vamsadhara Project (Stage II- Phase - II), Sardar Gouthu Latchanna Thotapalli Barrage project, Modernization of Godavari Delta System, Modernization of Krishna Delta System, Korisapadu LI Scheme, Galeru Nagari Sujala Sravanthi Phase -I and Handri Neeva Sujala Sravanthi Project Phase-I are programmed for completion by next Khariff Season. Details of the projects are in Table 7.3.

Table 7.3: Details of ongoing priority projects

Sl. No	Name of the Project	Admn approval Rs in Crs	% of Progress	IP Contemplated in Acres		IP Created in Acres		Target date of Completion	Remarks
				New	Stab.	New	Stab.		
1	Boddepally Raja Gopal Rao Vamsadhara Project (Stage II- Phase - II)	2038.03	76	45000	0	0	0	07/2020	The scheme benefits 225 Villages in 9 Mandals of Srikakulam District.

ECONOMIC INFRASTRUCTURE

Sl. No	Name of the Project	Admn approval Rs in Crs	% of Progress	IP Contemplated in Acres		IP Created in Acres		Target date of Completion	Remarks
2	Sardar Gouthu Latchanna Thotapalli Barrage project	1127.58	91	131221	64000	69004	64000	06/2020	10 Mandals covering 155 Villages in Vizianagaram District and 7 Mandals covering 132 Villages in Srikakulam District. Apart from providing Irrigation Water, the scheme intends to feed 42 Tanks for Drinking Water Supply in 24 Villages enroute
3	Tharaka Rama Theertha Sagaram Reservoir	471.31	48	16538	8172	0	0	12/2020	Irrigation facilities to new ayacut 16,538 acres and stabilize 8,172 acres under Denkada anicut in Vijayanagaram Dist.
4	Polavaram Irrigation Project	55548.87	71	720000	2350000	0	0	06/2021	<ul style="list-style-type: none"> • Gross storage Capacity of Reservoir 194.6 TMC • Utilization of water under the Project 322 TMC. • 80 TMC of Godavari water to be diverted to Krishna River. • Hydro Power Installed capacity is 960 MW • 7.2 lakh Acres of new ayacut to be created and Stabilization of 23.5 lakh acres under KDS+GDS+Yeleru Delta Systems • 7.2 lakh Acres of new ayacut of PIP includes the ayacut of 1.86 Lakh Acres under Pushkaram LIS and 2.066 Acrs under Tadipudi LIS. • 23.44 TMC of water to the habitations and industries in and around Vishakhapatnam City including Vizag steel plant. • Drinking water facility to 540 villages for a population of 28.5 Lakh enroute canals

ECONOMIC INFRASTRUCTURE

Sl. No	Name of the Project	Admn approval Rs in Crs	% of Progress	IP Contemplated in Acres		IP Created in Acres		Target date of Completion	Remarks
5	Modernization of Godavari Delta System	3361.00	64	0	1013000	0	1013000	06/2020	Stabilisation of Ayacut in East and West Godavari Dists
6	Modernization of Krishna Delta System	4573.00	65		1307882	0	1307882	05/2020	Stabilisation of Ayacut in West Godavari ,Krishna ,Guntur and Prakhasam Dist.
7	Varikapudisela LI Scheme	340.26	0	24900	0	0	0	03/2021	Creating New ayacut of 24900 Acers in Macharla Area in Guntur Dist.
8	Poolasubbaiah Veligonda Project	6017.99	74	447300	0	0	0	12/2020	The Project is contemplated to provide irrigation facilities to about 4.47 Lakh Acres & drinking water facilities to 15.25 Lakh people in drought prone fluoride affected 30 Mandals of Prakasam, Nellore & Kadapa Districts. This project is intended utilising 43.50 TMC of Krishna River flood water by gravity.
9	Korisapadu LI Scheme	177.00	60	20000	0	0	0	06/2020	It envisages utilizing 1.330 TMC of water to irrigate 20,000 Ac under Micro-Irrigation system in Korisapadu & Naguluppalapadu Mandals of Prakasam District.
10	Modernization of Penna Delta System								
	(A) Pennar River Canal System	569.33	87	0	247000	0	0	12/2019	Ayacut of 247000 acres covered in ayacut of 385000 acres of Sangam Barrage
	(B) Sangam Barrage	147.50	68	0	385000	0	0	12/2019	Stabilization of ayacut s under Penna Delta System, contemplating to supply water to Nellore tank supply channel, Kanupur canal on right side, Duvvur canal, Kanigiri main canal and Kavali canal on left side.

ECONOMIC INFRASTRUCTURE

Sl. No	Name of the Project	Admn approval Rs in Crs	% of Progress	IP Contemplated in Acres		IP Created in Acres		Target date of Completion	Remarks
10	(C) Nellore Barrage	192.11	86	0	99525	0	0	09/2019	Stabilization of 99525 Acres in covered under Sagam Barrage.
	(D) Kanpur Canl System	137.70	66	0	64000	0	0	03/2020	64000 Acres of ayacut is covered in ayacut of 385000 acres of Sangam Barrage
11	Galeru Nagari Sujala Sravanthi Phase - I	6361.92	81	35000	0	1500	0	06/2020	Creating New ayacut of 35000 Acres in Kadapa Dist.
12	Handri Neeva Sujala Sravanthi Project Phase - I	4653.64	84	198894	0	25300	0	06/2020	Creating New ayacut of 80000 Acres in Kurnool Dist and 118000 Acres in Anantapur Dist

The Remaining ongoing Projects will be completed in a Phased manner in the next 2- 3 years. New projects taken up outside Jalaygnam projects will be completed in the phased manner.

List of remaining ongoing projects and new projects taken up outside Jalaygnam are shown in Table 7.4 and Table 7.5 respectively.

Table 7.4: Status of remaining ongoing projects

Sl No.	Name of the Project	Admin. Sanction Rs in Crs	Exp.Rs in Crs	% Progress	IP Contemplated in Acres		IP created in Acres		Target Date of completion	Remarks
					New	Stab	New	Stab		
1	Inter linking of Vamsadhara and Nagavali Rivers	84.90	60.66	74	5000	18527	0	0	07/2020	
2	Inter linking of Nagavali Rivers with Champavati	24.80	0.00	4	0	2950	0	0	07/2020	
3	Pushkaram LI Scheme	674.52	621.82	92	186000	0	148154	0		186000Acres of ayacut is covered in 7.2 Lakh Acres contemplated ayacut of Polavaram Irrigation Project.
4	Venkatanagaram Pumping Scheme	124.18	87.35	70	23359	10641	19109	10641		
5	Tadipudi LI Scheme	885.54	580.73	66	206600	0	157544	0		206600Acres of ayacut is covered in 7.2 Lakh Acres contemplated ayacut of Polavaram Irrigation Project.
6	Chintalapudi LIS	4909.80	2698.92	55	200000	280000	0	0	08/2020	

ECONOMIC INFRASTRUCTURE

Sl No.	Name of the Project	Admin. Sanction Rs in Crs	Exp.Rs in Crs	% Progress	IP Contemplated in Acrs		IP created in Acrs		Target Date of completion	Remarks
					New	Stab	New	Stab		
7	Uttarandha Sujala Sravanthi Phase-1	8435.27	12.67	1	800000	0	0	0	09/2020	
8	Gundlakamma Reservoir	753.83	627.85	98	80060	0	68977	0	12/2019	
9	Telugu Ganga	6671.63	5066.78	76	522539	0	441460	0	12/2019	
10	Somasila - Swarnamukhi Link Canal	437.42	204.31	66	12000	78464	0	0	12/2019	
11	Siddhapuram LIS	116.52	84.62	73	20300	1000	18000	1000	10/2019	
12	Somasila	1548.49	1776.62	61	135000	122500	92477	68173	06/2020	
13	Somasila High Level Lift Canal	1532.19		56	43200	0	0	0	03/2020	
14	GNSS (Phase-II)	3575.00	851.12	27	225000	0	0	0	06/2021	
15	GKLIS including Micro Irrigation	983.00	735.71	96	47500	41000	7500	20000	12/2019	
16	HNSS (Phase-II)	7340.87	5509.42	75	404500	0	0	0	12/2020	
17	Chitravati Balancing Reservoir Right Canal (Lingala Canal)	693.20	276.32	77	59400	0	26054	0	09/2020	
18	Gandikota-CBR Lift System (I to V)	1744.00	1519.35	95	12000	0	0	0	12/2019	
	Gandikota-CBR Lift System (IVI)	315.00	36.68	31	8750	0	0	0	12/2019	
19	Pulivendula Branch canal	657.43	176.62	72	36900	60000	0	45000	12/2019	
20	SRBC (Gorakallu Balancing Reservoir)	840.34	592.16	93	0	56475	0	46857	08/2019	
21	PABR - Stage II	768.90	501.04	65	51600	0	9000	0	03/2020	
22	Mylavaram Modernisation	145.45	123.11	81	0	75000	0	73046		stopped the work Since 2013
23	Madduvalasa Stage-II	72.87	42.27	79	12500	0	5200	0	06/2020	
24	Mahendratanaya off shore Reservoir	466.28	298.45	46	24600	0	0	0	07/2020	
25	Jhanjhavathi Reservoir	159.77	118.59	77	5405	19235	1392	7608	05/2020	

ECONOMIC INFRASTRUCTURE

Sl No.	Name of the Project	Admin. Sanction Rs in Crs	Exp.Rs in Crs	% Progress	IP Contemplated in Acrs		IP created in Acrs		Target Date of completion	Remarks
					New	Stab	New	Stab		
26	KC Canal Lift	120.00	77.70	65	0	268268	0	0	Going to completion	
27	Paleru Reservoir	50.50	15.07	17	9500	0	0	0	12/2019	
	Modernisation									
28	Modernisation of Thotapalli old canal system	195.34	0.00	6	0	0	0	0	5/2021	
29	Modernization of Yeleru System	295.83	65.31	29	14000	53017	0	53017	02/2024	Stabilisation of Ayacut in East Godavari Dist.
30	(A) Modernization of TBP-LLC	179.00	159.34	66	0	151	0	0		
	(B) Modernization of TBP -HLC	1265.88								
	Flood banks									
31	Flood Banks of Vamsadhara & Nagavali	1055.60	72.01	25	0	0	0	0	11/2020	
32	(a) Flood Banks of Godavari	617.60								
	(b) Flood Banks of Krishna	398.15	246.90	96	0	0	0	0		
33	Flood Banks in Kurnool	244.70	1.17	1	0	0	0	0		
	Flood Banks in Nandyal	97.51	12.32	13	0	0	0	0		
34	Flood Banks in Nellore District	652.70								
		49024.31								

Table 7.5: New projects

Sl No.	Name of the Project	Admin. Sanction Rs in Crs	Exp.Rs in Crs	% Progress	IP Contemplated in Acrs		Target Date of completion	Remarks
					New	Stab		
1	Inter linking of Vamsadhara and Bahuda Rivers	6329.42	0.00	0	90000	110000	03/2022	
2	Vissannapeta - Chanubanda LIS	698.90	0.00	0	0	50000		
3	Inter linking of Godavari- Penna Rivers Ph-I	6020.15	88.96	1	0	961000	01/2021	
4	Extension of Guntur Channel From Km 47.00 to 76.40	274.53	0.00	0	29000	19000	03/2021	

Sl No.	Name of the Project	Admin. Sanction Rs in Crs	Exp.Rs in Crs	% Progress	IP Contemplated in Acrs		Target Date of completion	Remarks
					New	Stab		
5	Construction of New Barrage across Krishna River Near Vykuntapuram (V)	2169.00	0.00	0	0	0	02/2021	
6	Muktyala LIS	489.28	0.00	0	0	38627	02/2020	
7	Varikapudisela LI Scheme	340.26	0.00	0	24900	0	03/2021	Taken up on war footing by giving Priority
8	Water Supply to Western Mandals of Kurnool dist.	224.31	33.92	42	0	10130	08/2019	
9	Vedavathi (Hagari) river LIS	1945.45	0.00	0	0	80000	12/2021	
10	Rajolibanda Diversion Scheme	1988.51	0.00	0	40000	0	12/2021	
11	Gundrevula Reservoir Project	2890.55	0.00	0	0	265628	03/2024	
12	Lifting of water from Jeedipalli Reservoir to Upper Pennar Project	805.08	55.67	16	15000	10000	07/2020	
13	Lifting of water from Jeedipalli Reservoir to Bhairavanthippa Project	970.31	32.00	15	0	22323	10/2019	
14	Supply of Water from Chitravathi Balancing Reservoir (CBR) to HNSS Main Canal	1797.00	0.00	0	0	12880		
		26942.75						

Hydrology

Hydrology Project Phase-I(HP-I)

HP-I was taken up with World Bank financial assistance for measurement, validation, storage and dissemination of Hydrological, Hydro Meteorological and water quality data and to establish computerized data base network. Under this project, 50 Gauge Discharge sites on various minor streams and 22 Digital Water Level Recorders at various reservoirs have been established. Further 124 standard Rain Gauge stations, 56 Autographic Rain Gauge stations, 3 Full Climatic stations, 9 Water Quality Level I and 2 Water Quality Level II labs were also established.

Hydrology Project Phase-II(HP-II)

The World Bank has approved the Hydrology Project Phase – II in A.P as one of the implementing agencies among 13 states and 8 central departments in the country. This phase was commenced in April 2006. The project development

objective is to extend and promote the sustained and effective use of the Hydrological Information System (HIS) by all potential users concerned with the water resources, planning and management, both public and private, thereby contributing to improved productivity and cost effectiveness of water related investment.

Hydrology Project – III (National Hydrology Project)

NHP is a Central sector scheme with 100% grant to the State/Central Implementing agencies for a period of 8 years from 2016-17. The objective is to improve the extent, quality and accessibility of water resources information, and to strengthen the capacity of water resources management institutions / Departments in India. The Memorandum of Agreement(MOA) is signed between Government of India and Government of Andhra Pradesh for the implementation of National Hydrology Project(NHP). The project implementation plan approved with Rs 80.00 Crores.

ECONOMIC INFRASTRUCTURE

Annual work plan for 2018-19 has been approved by MoWR, RD&GR with Rs.1593.35 lakhs. The Government has constituted State Level Steering Committee (SLSC) to provide policy direction to Implementing agencies of Project, to exercise overall administrative, management and financial control of the project, and State Level Procurement Committee (SLPC) for effective implementation of NHP in both SW & GW sector to advise on the procurement of different items included in NHP. Tenders was floated for RTDAS (Real Time Data Acquisition Systems) to M/s SEBAAZISTA JV to establish and up gradation of Hydrological and Hydro meteorological network stations of Gauge Discharge Stations, Automatic Weather stations and DWLRs at various project sites and at river basins. State Data Centre Server was supplied and supply of goods are under process.

CADA Projects

Accelerated Irrigation Benefit Programme (AIBP)

Government of India launched the Accelerated Irrigation Benefits Programme (AIBP) in the year 1996-97 to provide Central Assistance to major/medium irrigation projects in the country, with the objective to accelerate implementation of such projects which were beyond resource capability of the States or in advanced stage of completion. After launch of PMKSY in 2015-16, AIBP became a part of PMKSY. Out of 99 priority projects across country 8 projects are covered in AP under PMKSY-AIBP.

Present status of Projects

Eight projects are covered in Prioritized projects under PMKSY in the State. Out of 8 Projects, Maddigedda project is completed. The total cost of 8 projects is Rs. 4270.89 Crs. Total cumulative expenditure incurred till March, 2019 is Rs.3208.11 Crs. The total eligible Central Assistance for 8 projects is Rs.498.90 Crs, out of which Rs.468.07 Crs has released by GoI so far. Total Irrigation Potential created till March, 2019 is 2,32,026 Ha. as against the target of 2,96,577 Ha. Balance Irrigation Potential to be created is 64,551 Ha. Musurumilli Project is proposed to be completed. 6 Projects (Gundlakamma, Thotapally, Tadipudi, Pushkara Yerrakalva and Tarakarama Thirtha Sagaram) are programmed to be completed by 2019-2020. The Fast Track Proforma

Proposals of Gundlakamma, Thotapalli and TRTS are approved by CWC, New Delhi. The FTPC proposals for 3 projects (Tadipudi, Yerrakalva and Pushkara) are submitted to CWC, New Delhi.

Command Area Development and Water Management (CAD&WM) Programme

The CADWM works are proposed for 7 projects in PMKSY in Andhra Pradesh State. The total approved cost of the 7 projects is Rs.971.42 crores with Central Share of Rs.349.39 crores and State Share of Rs.622.03 crores. Central Assistance share of Rs.69.18 crores has released by MoWR during 2018-19. The administrative approvals are accorded for all 7 projects by Government of Andhra Pradesh. Tenders are to be called for.

Repair, Renovation and Restoration (HKKP-RRR)

In Prakasam District, 100 Water Bodies are sanctioned under Repair, Renovation and Restoration (HKKP-RRR). The MoWR has released grant of Rs.270.00 lakhs towards 1st instalment for 2018-19. Estimates are under preparation.

AP Irrigation and Livelihood Improvement Project (APILIP-II) with JICA assistance

APILIP - II is taken up with project cost of Rs.2000 crores (JICA share: Rs.1683.30 crores & Govt. of AP share: Rs.316.70 crores). It is intended for stabilization of 1,65,000 Ha ayacut and for bridging the gap ayacut of 40,000 Ha. The Project is covering 13 districts of Andhra Pradesh. Project duration is 7 years (2018 to 2025). Component wise break up involves

1. Modernization of 1 Major, 19 Medium and 445 Minor Irrigation Projects with a cost of Rs.962.39 crores
2. Participatory Irrigation Management (PIM) for Rs.89.43 crores
3. Infrastructure strengthening in Agriculture, Horticulture, Fisheries, Agri business and Marketing support services with a cost of Rs.313.92 crores
4. Institution Development and Project Management Rs.317.56 crores and
5. Administrative cost and taxes of Rs.316.70 crores

The Project is implemented from 2018-19 to 2024-25. Administrative approval accorded for 242 Minor Irrigation Tanks for Rs.160.10 crores and for 19 Major & Medium Irrigation Projects for Rs.608.70 crores 1 Major Irrigation, 4 Medium Irrigation Projects and 124 (33 Packages) Minor Irrigation Tanks are grounded and the balance works are under tender process. The Project gives benefit to 2,70,000 farmer households. Value chain process for 4 crops for Mango (Promoting the brand and strengthening the processing industries), Tomato, Chilli and Coconut in four Districts i.e. Chittoor, Krishna, Guntur and East Godavari is being taken up with a cost of Rs.90.83 crores on pilot basis. Two Agriculture Mechanization and Technology Centres (AMTC) are being supported at Maruteru in West Godavari District and Naira in Srikakulam District for supporting the Mechanization. Fishery production is supported in all Medium Irrigation Projects and potential MI tanks. Budget provided for the year 2019-20 is Rs.399.27 Crores.

AP Integrated Irrigation & Agriculture Transformation Project (APIIATP)

The Objective of the Project is to enhance agricultural productivity, profitability and resilience to climate variability in 1000 selected tanks in 12 districts (except Guntur district) stabilizing an ayacut of 2,26,556 Acres under MI Tanks of Andhra Pradesh. The Project duration is seven years (2018-25) and financed through International Bank of Reconstruction and Development (IBRD) Contribution. Project Cost is Rs.1600 crores. World Bank Share is Rs 1120 Crores (70%). Govt. of AP Share is Rs.480 crores (30%). The Project duration is 6 years i.e., 2018-19 to 2023-24.

By implementing the project, rehabilitation of 1000 tanks will be done. Under this Project 2 lakh farmer family are benefited in 743 Water Users Associations. Productivity in the ayacut area is proposed to be increased by 20% - 25% and household income to increase up to 20%. Farmer producer organizations will be strengthened for marketing their products on their own. Seed Production, Demonstrations, Trainings are in progress and Participatory Hydrological monitoring (PHM) for 320 wells are identified.

Minor Irrigation

Minor Irrigation deals with investigation and execution of Minor Irrigation Sources of ayacut up to 5000 acres. Minor Irrigation plays an important role in the development of agriculture and livelihoods particularly in drought prone areas and areas outside command of Major and Medium projects.

The Minor Irrigation Department maintains all the 40817 tanks with a total registered ayacut of 25.60 Lakh Acres. Minor Irrigation is providing irrigation facilities to increase the agriculture production by means of creating new ayacut, stabilizing the existing ayacut besides maintenance of these sources and also provides drinking water to villages during summer season. The total registered ayacut 25.60 Lakh Acres is not being irrigated every year and hence the gap ayacut is being increased year by year and the average gap ayacut is approximately 57% of total registered ayacut. The department is working to restore the existing M.I sources to original standards wherever necessary, stabilizing the irrigation potential created, controlling the wastage of water through water conservation plans and better water management plans and bridging the gap ayacut.

Minor Irrigation Census

As per the 5th Minor Irrigation Census 2013-14, there were 10.54 lakh minor irrigation sources in Andhra Pradesh against 9.72 lakh sources as per 4th Minor Irrigation Census 2006-07, registering an increase of 8.42%. The statement showing data on Minor Irrigation sources is given in Annexure-7.2

State Development Plan (SDP)

During the financial year 2018-19, government has allocated an amount of Rs. 571.24 Crores and additional funds released is Rs.1999.45 Crores towards normal plan works. The expenditure incurred as on March, 2019 is Rs.2254.08 Crores for stabilization of 144340 Acres.

ECONOMIC INFRASTRUCTURE

National Bank for Agriculture and Rural Development (NABARD)

National Agricultural Bank for Rural Development (NABARD) is assisting the state government in construction of new Minor Irrigation Schemes and Repairs/Improvements of Minor Irrigation Sources under Rural Infrastructure Development Fund (RIDF). Financing the schemes are being continued under different tranches from RIDF-I to XXI.

RIDF-XX:The Government has accorded administrative sanction for 49 projects for Rs107.55 crores for stabilization of ayacut of 9,476 Ha. Out of 49 Projects 27 projects are in progress, 20 projects are completed and 2 projects are dropped. Total Cumulative Expenditure incurred is Rs. 55.83 Crores.

RIDF-XXI:The Government has accorded administrative approval for 41 projects costing Rs 56.73 crores for stabilization of ayacut of 7070 Ha. Out of 41 Projects, 18 projects are in progress, 21 projects are completed, 2 projects are dropped. Total cumulative expenditure incurred was Rs.29.29 crores.

Water conservation activities under Neeru-Chettu/ Neeru Pragathi

Neeru Chettu programme assists in improving the storage capacities of the Minor Irrigation Tanks and improving the ground water table of surrounding areas. The programme is implemented across all the 13 District. The progress made under Neeru Pragathi is shown under Table 7.6

Table 7.6: Neeru-Pragathi—Minor Irrigation-Achievements during 2018-19

Sl. No	Activities	Unit	Achievement during 2018-19
1	De silting of Tanks	Core Cum	14.318
2	Tank Bund Strengthening	Lakh Cum	45.57
3	Concrete for Sluices and Weirs	Lakh Cum	3.13
4	Shutters Repairs and Replacement	Nos	753

Sl. No	Activities	Unit	Achievement during 2018-19
5	Cascades developed	Nos	926
6	Check Dams	Nos	924
7	Farm Ponds	Nos	43
8	Ayacut Stabilised	Lakh Acres	0.897
9	Tanks/Water Bodies Capacity Restored	TMC	13.509
Neeru Chettu -Expenditure			
1	Minor Irrigation Department	Crores	2215.10

Action Plan

The following activities are proposed under Restoration of Minor Irrigation Sources

- Restoring the existing Minor Irrigation Tanks by taking up de-silting of tanks, arresting the leakages from bund, Breach restoration, Repairs and Reconstruction of weirs & sluices
- Restoring irrigation channels, filed channels, canal structures to original standards and improve water use efficiency by lining of canals up to field channels.
- Repairs & Renovation to water harvesting structures, Construction of water harvesting structures and identification of cascades and improvements,

Andhra Pradesh State Irrigation Development Corporation (APSIDC)

The Andhra Pradesh State Irrigation Development Corporation Ltd. has been established for implementation of Lift Irrigation Schemes to provide irrigation facility to upland areas of small and marginal farmers and other weaker sections of the society with the funds provided by government under various programs either directly or through District administration and handing over the same to beneficiaries/agencies for operation and maintenance.

All Lift Irrigation Schemes up to 10,000 acres have to be with APSIDC. Free power supply to all L.I. schemes, 16 hours Power Supply to HT supply L.I. Schemes with dedicated

power lines revival of defunct L.I. Schemes are maintained to keep all the schemes functional. In this process revival of 461 schemes in Phase – I & II completed. APSIDC has so far implemented 1,228 L.I. schemes and created IP of 8.31 Lakh acres.

Ground Water

Groundwater has been occupying a dominant place in state agriculture and accounts for 41 percent of the gross irrigated area in the state with about 15 lakhs agriculture bore wells. The Ground Water department is involved in technical assessment of groundwater resources periodically, conducting investigations for construction of borewells, water conservation structures for various organizations, monitoring ground water regime on real time basis as to facilitate conservation, management and utilization of the groundwater.

Despite series of rainfall deficits of -34%, -5%, -29%, -14% and -35% in the last five years, the groundwater levels are relatively sustained in the state. Over all, due to better water conservation and management practices, the groundwater levels are sustained.

Estimation of Groundwater Resources:

The state has been divided into 748 watersheds (Groundwater Basins or Assessment Units) for estimation of groundwater resources. The estimation was done for the base year 2016-17 which is approved by the State Level Committee and awaiting for approval from National level committee. Categorization of basins/mandals/villages is made based on stage of ground water development and long term groundwater level trends. Details of availability, utilization and stage of ground water resources are shown in Table 7.7. and 7.8

Table7.7: Availability and Utilisation of Ground Water

Ground water Resources	Command Area	Non Command Area	Total
Annual Ground water availability (MCM)	9882	10271	20153
Annual Ground water utilization (MCM)	3108	5789	8897

Ground water Resources	Command Area	Non Command Area	Total
Balance Ground water availability (MCM)	6774	4482	11256
% of utilization stage of Ground water (development)	31	56	44
Category	Safe	Safe	Safe

MCM = Million Cubic Metres.

Category of basins and Mandals:

Table:7.8 Stage of Ground Water Resources

Category	Watersheds (No.)	Mandals (No.)
Over Exploited	74	45
Critical	25	24
Semi-critical	63	60
Safe	586	541
Total	748	670

Over exploited villages notified under APWALTA, 1227 villages as per GEC, 2012-2013.

Source: Ground Water Department.

In terms of quantity, the total groundwater availability in the state is 20153 Million Cubic Meters (MCM), of which 8897 MCM is utilized for various purposes leaving a balance of 11256 MCM. The overall stage of ground water development is about 44%. The stage of ground water development in command areas is 31% and the stage of groundwater development in non-command areas is 56%.

Groundwater Development:

A study of the composite hydrographs of the past and present indicates that the groundwater development is taking place in the state. It is generally observed that more the recharge more will be the availability as well as utilization. At present, on an average, about 1.3 hectares of gross area is irrigated per well and on an average a total of 40,000 to 50,000 new wells are commissioned per year due to which the average

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unit area irrigated per well may decrease. The net area irrigated under groundwater during 2017-18, is 29.12 lakh acres and gross area irrigated under groundwater was 41.44 lakh acres with about 15 lakh bore wells. If micro irrigation practices are adopted on saturation mode, net irrigation potential through groundwater can reach to a level of 40 lakh acres along with additional recharge to ground water by taking up water conservation works in large scales.

Investigations:

The Department is conducting selection of sites for bore wells, artificial recharge structures, implementation of APWALTA and hydrological clearances etc. During the year 2018-19, the Ground Water Department investigated 42,319 sites for construction of different types of wells under Scheduled Castes Sub-plan, Scheduled Tribe Sub-plan, WALTA, Lift Irrigation, Artificial Recharge Structures, Industries, Sand Mining, Drinking water and Jalasiri Phase.II.

Drilling:

During 2018-19, 211 bore/tube wells drilled under Special Component plan as against the target of 200 and 144 borewells/tubewells drilled under Tribal Sub-plan as against the target of 100 wells.

Monitoring of Ground Water Levels and quality:

Department is monitoring ground water levels and water quality from a network of 2986 observation wells which include 1260 piezometers installed with Digital Water Level Recorders with telemetry under Real Time Water Level Monitoring System in all 748 basins and covering all hydrogeological environments in the State. The department collects water samples during pre-monsoon [May] and post-monsoon [November] from all monitoring wells and also during investigations. These water samples are being analyzed in the 4 Chemical Laboratories of the department. In 2018-19, 6935 water samples were collected/analyzed.

Andhra Pradesh Water Resources Information and Management System (APWRIMS)

The State Government is committed to improve the economic status of the farmers by providing the right amount of water

at the right time to entire two crore acres of cultivable land in Andhra Pradesh by using innovative technologies. Towards this goal as a technological intervention, the government entered in to a MoU with NRSC, an ISRO unit, to develop a full-fledged Andhra Pradesh Water Resources Information and Management system by integrating the Geo-Spatial layers, Satellite data, Hydrology models and also to develop a Geo-Portal.

This brings together all water resources related information coming from satellite data, model data, high density real time sensors data, field data, mobile app inputs onto one interactive unified platform. Decision support system for the Stake holders. To make decisions on transfer of water between surplus to deficit basins developed plans for better water conservation, management and groundwater recharge. This is a one stop solution for all water related issues.

Ground Water Level Scenario

In the present water year 2018-19, the State has received 34% deficit rainfall against the normal rainfall. After utilization of groundwater for agriculture and other needs, the net fall in groundwater level from May-2018 water level is 3.39 meters and also observed a net fall of 3.54 m. from November-2018 water level. During water year 2018-19, three districts Srikakulam, West Godavari and East Godavari received normal rainfall whereas the other 10 districts received deficit rainfall. Coastal Andhra region received 27% less rainfall against the normal rainfall during this water year 2018-19 where as it was 19% less during the same period in the previous water year resulted in a net fall of 1.28 m from May-2018 and a net fall of 2.56 m. from Nov-2018. Rayalaseema region received 48% deficit against the normal rainfall during this water year 2018-19 whereas it was 8% excess during the same period in the previous water year and as a result a net fall of 8.14 m from May-2018, fall from Nov-18 water levels.

The average groundwater level for the State in May-2019 is 16.19 m., whereas it was 12.80 m during the same period in the previous year and observed a net fall of 3.39 m from the previous year water level. Net fall of 3.54 m is observed from Nov-2018 average water level. During May-2019, in all districts except Srikakulam net fall is observed in comparison with average water level from May-2018 water levels is

observed. About 79% of the area is under falling category from May-18 to May-19, 57% of the area was more than 8 m. water level in May-18 where as it is 66% during May-19. The district wise groundwater level ranges are given in Annexure 7.3

Command Area Development

The Department takes up studies under four major project commands viz., Nagarjunasagar Right Canal Command, Nagarjunasagar Left Canal Command, Srisailem Right Branch Canal Command, Tungabhadra Project Complex Command area to Study the impact of excessive irrigation, delineate areas already water logged and prone to water logging, recommend conjunctive use of both surface and ground water and suggest other suitable remedial measures to improve productivity.

Monitoring of Groundwater levels are being carried out six times in a year through 759 Command area observation wells to know the impact of canal releases on groundwater regime. The changes in chemical quality of groundwater is being monitored twice in a year and detailed hydrogeological and geophysical surveys are being carried out to recommend sites for construction of irrigation wells. NagarjunaSagar Right Canal Command Area (7%), NagarjunaSagar Left Canal (26%), Tungabhadra Project Complex CommandArea (40%) and Srisailem Right Branch Canal Command Area (32%). The Department is also working out different conjunctive use strategies in the five major commands and preparing conjunctive use plans for each district in the above commands.

Power

Power sector is a critical infrastructure element required for the smooth functioning of the state economy. An efficient, resilient and financially robust power sector is essential for growth and poverty reduction. The availability of reliable, quality and affordable power helps in the rapid Agriculture and Industrial development and the overall economy of the state. Power sector is one sector that has recorded significant performance in terms of generation, transmission and distribution. Andhra Pradesh is the leading state in the country in promotion of Energy Efficiency and Energy Conservation (EE&EC) for the long-term sustainability of

power sector. Various EE&EC programs are under successful implementation in the state which are expected to impact the end consumers and facilitate industrial growth and development for the overall benefit of the State's economy.

In co-ordination with BEE (Bureau of Energy Efficiency), GoI & EESL (Energy Efficiency Services Limited), GoI, many EE&EC activities are being implemented in the state to ensure optimal utilization of available resources and realize the huge scope of energy saving potential in all sectors to the tune of around 15,000MU per annum.

Solar and Wind power will be the focus areas. As a critical infrastructure pushing the state economy upwards, its impact on the agriculture sector has also showed great promise. Various challenges have been faced by the power sector since bifurcation of the state and efforts are being put in to bring major turnaround with apt policy reforms, considerably reducing the AT&C and T&D losses and providing quality power.

Support of Power Sector to Agricultural Sector

Government is committed to the welfare of farmers by way of free power to all agriculture consumers including all the services released. The Budgetary subsidy (electricity) provided for agriculture given by AP Government for FY 2018-19 is Rs 25000 Crores. During the year 2018-19, it is programmed to release 1 lakh new agricultural connections. 86,430 agricultural services have been released during 2018-19. The total agricultural services existing in the state as on 31st March 2019 stands at 18.07 lakhs. The state government has started providing free power to Agriculture Sector with effect from 14.05.2004 in view of the extreme hardships faced by agriculture consumers in the past years.

Nine Hours Power Supply during day time for Agricultural Feeders

The Government of Andhra Pradesh is contemplating to give 9 hours per day free agricultural power supply (only during day time). There are around 18.14 lakh pumpsets in the state which has been fed through 6,663 feeders across the state. Of these feeders, 74% are capable of supplying 9

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hours day time with the existing infrastructure, whereas 26% needs augmentation of its infrastructure to cater to the needs of supplying 9 hours day time supply. This infrastructure augmentation requires additional funds to a tune of Rs.1,700 crores which can be met through the balance available funds from World Bank – 24*7 Power for all project.

Installed Capacity

The installed capacity in the Andhra Pradesh state is 19160 MW (up to 31/03/2019). Krishnapatnam Super Critical Thermal Power Station (2x800MW) RTPP Stage IV (1x600 MW) and Nagarjuna Sagar Tail Pond Hydel Station (2x25 MW) and 405 MW Solar power have been commissioned. The energy met has increased to 63144 MU during 2018-19, and the **per capita consumption** of electricity is 1,147 units.

The Transmission losses decreased to 3.10%(Provisional) during the year 2018- 2019.

Details about APTRANSCO are given in Table 7.9.

Table 7.9 Achievements of APTRANSCO

S. No	Parameters	2018-19(Upto 31st March 2019)
1	Installed Capacity (MW)	19160
2	EHT Substation (No.)	320
3	33/11 Substations (No.)	2949
4	Energy Met (MUs)	63143.56
5	Peak Demand Met (MW)	9453
6	Domestic Services (Lakh)	147.99
7	Agricultural Pump sets energized(Lakh)	18.07
8	Total Consumers served (Lakh)	185.06

Source: AP TRANSCO

R-APDRP

Restructured-Accelerated Power Development and Reforms Programme (R-APDRP) is a flagship programme of Government of India which aims at achieving actual demonstrable performance in sustained loss reduction. It has two parts – Part-A and Part-B.

Part-A -I- IT Implementation

This includes projects for establishment of baseline data and IT applications for Energy accounting/auditing & IT based consumer service centre. An amount of Rs.199.96 crores (i.e., Rs.147.80 crores in APSPDCL and Rs.52.16 crores in APEPDCL) was sanctioned to cover 75 towns in Andhra Pradesh state with more than 30,000 population (as per 2001 census). In all the 75 towns (46 towns in APSPDCL and 29 towns in APEPDCL) IT project works have been completed and declared Gone-Live by 31.03.2015. An amount of Rs.203.01 crores (Rs.150.85 crores in APSPDCL & Rs.52.16 crores in APEPDCL) has been actually spent on the project.

Part-A – II - (SCADA/DMS)

The Supervisory Control and Data acquisition / Distribution Management System (SCADA/DMS) will provide real-time monitoring & control, loss minimization/load balancing and considerable improvement in voltage/VAR profiles. It would also facilitate proper handling of loads while load shedding & restoration, efficient planning of network for future growth by using proven power system planning tools. Scheme consists of installation of Remote Terminal Units (RTU) at each 33/11 kV Substation and integration these RTUs with centralized control centre to manage Distribution system of the town. The eligibility criteria of SCADA/DMS system cover urban areas – towns and cities with population of more than 4,00,000& annual input energy of the order of 350 MU (As per 2001 population). Under SCADA/DMS Visakhapatnam town covered in APEPDCL and 3 town's viz., Vijayawada, Guntur and Nellore covered in APSPDCL. An amount of Rs.48.94Crs was sanctioned by PFC for SCADA/DMS in above 4 Towns (Rs 39.19crs in APSPDCL and Rs. 9.75crs in APEPDCL).

In APSPDCL the scheme was sanctioned in March 2011. As per revised schedule the same is scheduled to be completed by December, 2018. The SCADA project in APSPDCL has been completed in Feb, 2019. Request for time extension is under process. In APEPDCL the Visakhapatnam SCADA Scheme was sanctioned in September 2013. The SCADA project has been completed before stipulated time i.e., March, 2018. Third Party Independent Evaluation Agency (TPIEA) verification is under process. An amount

of Rs.14.16 crore (Rs.4.14 crore in APSPDCL and Rs.10.02 crore in APEPDCL) out of total sanctioned amount Rs.48.94 crores have been spent so far.

Part-B: Distribution System Strengthening and SCADA/DMS enabling Components:

This includes regular distribution strengthening projects such as Renovation, modernization and strengthening of 11kV level substations, Transformers/ Transformer centres, Re-Conductoring of lines at 11 kV level and below, Load Bifurcation, feeder separation, Load Balancing, HVDS (11kV), Aerial Bunched Conductoring in dense areas, replacement of electromagnetic energy meters with tamper proof electronic meters etc. In addition, in certain high-load density rural areas with significant loads, works of separation of agricultural feeders from domestic and industrial ones, and of High Voltage Distribution System (11kV) are also taken up. The SCADA enabling components are also sanctioned under Part-B scheme.

Rs.216.14 crores was sanctioned for 42 towns with more than 30,000 population (as per 2001 census) and Aggregate Technical & Commercial (AT&C) losses of more than 15%, for distribution System Strengthening in the two DISCOMs. DISCOM wise sanctions are in APEPDCL Rs.61.82 crores (10 Towns) and APSPDCL Rs.154.32 crores (32 towns). An amount of Rs.176.66 crores (i.e., Rs.128.45 crores in APSPDCL and Rs.48.21 crores in APEPDCL) has been spent on the project.

In addition to the System strengthening works, an amount of Rs.100.93 crores (i.e., Rs.79.51 crores in APSPDCL and Rs.21.42 crores in APEPDCL) has also been sanctioned under Part-B for providing the SCADA enabling components in the 4 towns where the SCADA project is sanctioned. These towns are not included in the 42 towns covered under System strengthening. An amount of Rs.83.09 crores (i.e., Rs.62.81 crores in APSPDCL and Rs.20.28 crores in APEPDCL) out of total sanctioned amount Rs.100.93 crores has been spent so far. A total project expenditure of Rs.476.92 crores has been incurred by the DISCOMs under R-APDRP so far.

Integrated Power Development Scheme (IPDS):

The Government of India has launched “Integrated Power Development Scheme” (IPDS) with the components as 1. Strengthening of sub-transmission and distribution networks and 2. Metering of distribution/feeders/consumers in the urban area.

IT enablement of distribution sector and strengthening of distribution network for completion of the targets laid down under R-APDRP for 12th and 13th Plans by carrying forward the approved outlay for R-APDRP to IPDS. The existing R-APDRP scheme would get subsumed in the IPDS scheme as a separate component. The scope of work under IPDS scheme would be eligible for funding provided it is not covered under any GoI programmes like R-APDRP/RGGVY/NEF etc., The projects for which any other grant/subsidy from Government of India has already been received/proposed to be received shall not be eligible under this scheme. Distribution Reforms Committee (DRC) should ensure that there is no duplication of works while recommending the projects to the Nodal Agency.

An amount of Rs.690.46Cr has been sanctioned under IPDS Scheme. The IT applications pertaining to ERP and customer care services, Smart meters can also be included in the scope of works under IPDS scheme provided they are not covered under R-APDRP. Accordingly, PFC has subsequently sanctioned an additional amount of Rs.250.38Crores towards IT phase –II, ERP upgradation, provision of smart meters, RT-DAS and GIS Substations in two DISCOMs as indicated below, against DPRs submitted by AP DISCOMs.

IT phase –II:

M/s.PFC has sanctioned an amount of Rs.15.62 crores to APEPDCL against DPR for IT Phase-II in 8 Towns (Rajam, Palakonda, Nellimarla, Yelamanchili, Gollaprolu, Yeleswaram, Mummadivaram, Jangareddigudem) which were converted as Nagar Panchayath from Gram Panchayath and not covered in R-APDRP. Similarly M/s. PFC has sanctioned an amount of Rs.16.87 crores against DPR submitted by APSPDCL for IT enablement in 11 towns (Mangalagiri, Tadepalli, Dhone, Piduguralla, Badvel, Pulivendula, Puttur, Nagari, Palamaner, Pedana).

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M/s.PFC has sanctioned an amount of Rs.10.76 crores to APEPDCL against DPR for upgradation of ERP, Similarly M/s.PFC has sanctioned an amount of Rs.14.28 crores against DPR submitted by APSPDCL for upgradation of ERP.

M/s.PFC has sanctioned an amount of Rs.57.17 crores to APEPDCL against DPR for **Smart meters** in 37 Towns, similarly Rs.5.02 crores to APSPDCL in 1 town. M/s.PFC has sanctioned an amount of Rs.4.82 crores to APEPDCL against **RT-DAS (Real-time Data Acquisition System)** DPR for non SCADA feeders in 36 towns, similarly Rs.10.62 crores to APSPDCL for 54 towns. M/s.PFC has sanctioned an amount of Rs.57.60 crores to APEPDCL against GIS SS DPR for setting up of **new GIS Substations** and connected 33kV and 11kV new feeders in 3 Circles, similarly Rs.57.62 crores to APSPDCL for 2 Circles.

Hence the total sanctioned project cost against IPDS work out to Rs.940.84 crores (Rs.690.46 crores + Rs.250.38 crores) i.e., Rs.465.57 crores in APEPDCL and Rs.475.27 crores in APSPDCL. In addition to the above the smart city project proposals for an amount of Rs.470.05 crores which have been submitted to M/s.PFC are yet to be sanctioned under IPDS.

Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY)

Govt. of India has launched Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) for the rural areas. Project commenced in Dec, 2015. The projects under the scheme shall be formulated for rural areas only and will cover works relating to feeder separation, strengthening of sub-transmission & distribution systems including metering of distribution transformers, feeders & consumers and rural electrification component. Out of the total Project Cost, 60% grant from GoI and 10% from APDISCOMs contribution & 30% loan from Financial Institutions/Banks. In addition to that the maximum grant by GoI including additional grant on achievement of prescribed milestones is 75%. Rural Electrification Corporation Limited (REC) shall be the Nodal Agency for operationalization and implementation of the scheme under the overall guidance of MoP.

Electricity accessibility, reduction of line losses, quality power supply through new substation erection, augmentation of power transformers, erection of Distribution transformers, laying of new lines, reconductoring / augmentation of existing lines, consumer metering, DTR metering, electrification of villages, connection to BPL households etc.

DDUGJY projects to a tune of Rs.593.46 crores were sanctioned, in addition to the Rs.328.64 crores sanctioned earlier for RE portion. Totally Rs.922.10 crores is sanctioned under DDUGJY.

Under intensive electrification, 5,500 villages are covered out of 10,997 villages, 21,125 habitations are electrified covering a total of 7,15,082 rural households and works are under progress in the remaining habitations.

Andhra Pradesh Rural High Voltage Distribution System Project

The High Voltage Distribution System (HVDS) aims at reduction of losses through replacement of the low voltage network with high voltage network and installation of large number of smaller capacity Distribution Transformers viz 25 KVA/16 KVA DTRs in place of higher capacity Distribution Transformers viz., 100 KVA/63 KVA for supply to agricultural consumers. This system is best suited to meet the scattered low-density loads observed in rural areas in India. Based on a sample studies carried out in Andhra Pradesh, the system loss reduction due to adoption of HVDS system is expected to be around 10%.

HVDS implemented to 9.89 lakh. agriculture services with the cost of Rs.4233.51 crores upto 31.03.2018. In addition to the above, during the year 2018-19, HVDS has been implemented to 46,783 Nos. agricultural services up to 31-03-2019 with the cost of Rs.336.85 crores, bringing the total number of agricultural services converted under HVDS to 10.36 lakhs with the cost of Rs.4570.36 crores.

Andhra Pradesh State -APRHVDS Project Cost (ID-P216):

All the works regarding conversion of LT network into HT network under APRHVDS funded by JICA are completed successfully (physically & financially) and disbursement is also completed.

Energy Efficiency Activities:

Unnat Jyothi by Affordable LEDs for All (Ujala)

Two LED bulbs of 9W capacity are distributed at nominal price of Rs.10/- each to the households as a replacement of 60W capacity incandescent lamps (ICLs). Around 2.20 Crs LED bulbs have been distributed so far out of target of 2.32 crores bulbs to ensure 100% coverage of all households. As per 3rd party survey by prestigious agencies like Andhra University, ESCI (Engineering Staff College of India), Siri Exergy & Katyani Energy Solutions the energy savings through each LED bulb is 77.33 units per annum. Monetary saving of Rs.972.6 crore per annum are expected under the project.

25.60 lakh street lights have been replaced in 9,949 Gram panchayats with energy efficient lights out of 12,918 Gram panchayats (Savings of 232 MU annually). 3.23 lakh energy efficient fans and 1.49 lakh energy efficient tube lights have been distributed to the households (Savings of 20 MU annually). 68,211 non-ISI pump sets have been replaced with energy efficient ISI pump sets.

As a special encouragement towards energy conservation & economic savings in SC & ST households, the government has distributed 2 additional LED Bulbs at subsidized price of Rs.10/- for all SC/ST households and around 24 lakhs bulbs are distributed in the state under this special scheme.

In the First phase of LED street lighting Grampanchayat project all the 6 Districts (E.G, W.G, Chittoor, Kadapa, Anantapur and Vizianagaram) have been completed and the remaining 7 districts i.e. Srikalulam, Krishna, Kurnool, Nellore, Guntur, Prakasam and Visakhapatnam in 2nd phase are targeted to complete by the end of August 2019.

East Godavari district was declared as the “First LED street lighting district” in the country to have 100% LED street lighting in both urban and rural areas.

AP stood as front runner in the country in LED Street lighting with AP having more than 33% of total Led street lighting in the country in both urban and rural areas. As on 26.06.2019, 78.60 LED street lights were installed in the total country of which 26.40 Lakhs (33%) were installed in

AP alone.

Installation of LED Street lights in all Municipalities:

All the ordinary street lights were replaced with LED street lights in all 110 Municipalities of the state and out of a Total target of 5.6 Lakh Street Lights set initially, 6.28 lakh (112 %) of Street Lights have been installed in the project.

Centralized Control & Monitoring System (CCMS) for analyzing the energy savings in municipalities on real-time basis apart from centralized control of all the street lights from a single window is also completed.

Agriculture DSM

A pilot project for replacement old and obsolete pumps with new energy efficient pumps was taken up in Rajanagaram Mandal of East Godavari and 973 pump sets were replaced. The new pump sets are yielding about 30% reduction in Energy Consumption and an increased water discharge of 15% and farmers are expressing satisfaction over the increased discharge of water. Considering the success achieved in the pilot project, replacement of One lakh conventional pump sets with EE pumpsets is taken up. (35,000 in APEPDCL Region & 65,000 in APSPDCL Region). As on 25.06.2019, around 68,211 Energy Efficient Pump sets have been replaced. It is estimated to accrue energy savings of 124.5 MU per annum for 68,211 pump sets & around 180 MU for One lakh pump sets. Installation of 200 grid connected brush less direct current (BLDC) Solar pump sets on pilot basis is completed in Vizianagaram district. It is now targeted to scale up the project for 10,000 pump sets in the first phase.

Distribution of Energy Efficient Ceiling Fans

So far, about 3.23 lakh fans have been distributed resulting in annual energy savings of 20MU. The energy efficient fan is of 50W, while an ordinary fan is of 75W resulting in 33% energy savings. It is further targeted to distribute 21 lakhs EE Fans in the state.

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Distribution of LED Tube lights:

Distribution of energy efficient LED tube lights was launched in Vijayawada as a first of its kind in the entire country. 1.49 lakh LED tube lights of 20W distributed till date and it is targeted to distribute One crore LED tube lights.

Energy Efficiency measures in Govt. Buildings:

Implementation of energy efficiency measures in all the state Government Buildings by replacing old/obsolete equipment with Energy Efficient Equipment / Appliances of 5 Star rating in all Government Buildings in the State has been initiated. 48 model schools & hostels buildings with an investment of Rs.1.22 crores which is expected to result in

7.40 Lakhs units and Rs.1.24 crores of monetary savings per annum. The project has been completed in all the district court buildings of the state with Rs.6.86 crores investment to result in expected annual energy savings of 2.2 MU and monetary savings of Rs.2.27 crores.

Energy efficiency measures in Commercial Buildings:

GoAP has mandated compliance of Energy Conservation Building Code (ECBC), issued by the BEE for promoting energy efficiency in the non-residential building sector having plot area of more than 1000 sq mtrs or construction area of more than 2000 sq. mtrs. Impact of Energy Efficiency & Energy Conservation activities implemented in the state so far as on 26.06.2019

Impact of Energy Efficiency & Energy Conservation activities implemented in the state

Name of the Programme	Quantity Distributed/ Installed	Expected Annual Energy Savings (Million Units)	Expected Financial Savings per year (Rs.in crores)	Expected reduction in Co2 emissions per Annum @ (Million Tonnes)
LED Bulbs Distribution in Domestic Sector	2.20 crores	1700	1020	1.4
LED Street Lights in ULBs	6.21 lakhs	133	79.8	0.11
LED Street Lights in GP's	25.6 lakhs	284	170.2	0.3
Energy Efficient Pump sets	68,211 No.s	124	74.0	0.06
Energy Efficient Tube lights	1.48 lakhs	3.41	2.04	0.02
Energy Efficiency Ceiling Fans	3.23 lakhs	20	12	0.03
Total		2264(260MW)	1357	1.92

Action Plan for large scale implementation of energy efficiency measures during 2019-20

Sale of Energy Efficient Appliances on EMI basis to Domestic Consumers.

It is targeted to supply One Crore LED tube lights, 21 Lakhs EE fans, 50 Lakhs LED bulbs under the scheme.

Installation of Energy Efficient Appliances in Government Buildings and Substations etc., in place of existing ordinary

appliances is expected to result in around 30% reduction in electricity bills with reduced energy consumption.

The project is contemplated to be taken up in and around 750 schools & hostels buildings under Tribal Welfare Dept, about 1150 in B.C. Welfare Dept. about 1250 in Social Welfare Dept. and around 5,625 in School Education Dept. The project is also being initiated in Government offices and hospitals. Replacement of old/inefficient lights in Corporate offices/Offices/Substations of APTRANSCO

& APDISCOMs & Power utilities with Energy Efficient Equipment's is also going to be taken up.

Installation of Energy Efficient Water Supply Pump sets:

Energy Efficiency measures are being implemented in Rural Water Supply and Sanitation department through replacement of old conventional pump sets with Energy Efficient pump sets across the state. Installation of 42 pump sets has been initiated in Kurnool, Prakasam, Kadapa districts with an investment of Rs.178.47 lakhs. 33 are installed up to 25.06.2019, similar work is being taken up in all districts of the state.

Campaign through SHG women and Student Community on Energy efficiency

All the women members in the existing Self-Help Groups (SHGs) are proposed to be involved in energy efficiency & conservation movement in order to take up the energy conservation to the grassroots level. Massive Awareness program in various modes is also going to be taken up for Student community in Schools, Colleges and Technical Institutions. AP State Energy Conservation Mission (APSECM) in association with Education department would establish Energy Clubs in schools and colleges across the state and conduct several awareness programmes with the support of AP State Skill Development Corporation (APSSDC).

Utilizing the online video streaming facilities, lectures on significance of energy efficiency will be telecasted through Mana TV to the students of the schools, Industrial Training Institutes (ITI), polytechnics and engineering colleges connected to the APSSDC network. Web based mobile App for conducting quiz programs to students of school & college level, demonstrative models highlighting merits of energy efficient appliances, I.O.T (Internet of Things) for remote operation (Switching Off / On) of EE household appliances, solar based agriculture pump sets in agriculture labs is also being made available to train the students. Essay writing, Slogan on EE etc competitions is also being conducted.

Electric Vehicle & Charging infrastructure

Purpose of the project is to make Andhra Pradesh one of the major hubs for electric mobility. Project commenced in the year 2018 (through Electric Mobility Policy) under this project 274 Electric vehicles are deployed out of signed agreement quantity of 305 across various government organizations like APSPDCL, APEPDCL, VMC, CRDA, GVMC, AMC, NREDCAP in the first phase of EV rollouts. 50 charging stations (Bharat EV Charger DC-001) with CMS (Central Management System), 5 years onsite warranty and AMC (Annual maintenance contract) in six locations (Vijayawada, Visakhapatnam, Amaravati, Guntur, Tirumala and Tirupati) were commissioned during 2018-19. The cars have been procured on Lease rent. 250 Charging stations and 1000 No's EV's are the target of the year 2019-20

Renewable Energy

Government has decided to promote the RE power projects to meet the growing energy needs and to have energy security. In order to accelerate the capacity addition in RE sector particularly in Wind and Solar power sector, the State Govt. has come up with AP Solar Power Policy 2015 and AP Wind Power Policy 2015 with fiscal incentives for large scale promotion of projects.

Solar Power

The objective of the project is to Procure Green, cheap Solar power. The installed ground mounted solar capacity in the state as on is 3,230.74 MW. 4,000 MW capacity of solar parks are developed in the state in N.P. Kunta (Anathapuramu), Talaricheruvu (Anathapuramu), Gani (Kurnool), Galiveedu (Kadapa) and Mylavaram (Kadapa). Out of 4000 MW, capacity of 2250 MW has been commissioned during 2018-19. Results in obliging to Solar RPO targets set by both MoP and MNRE. Commissioning 1750 MW in Solar Parks (@ Rs.2.70 / Unit (500 MW), Rs.2.71 / Unit (250 MW), Rs.2.72 / Unit & Rs.2.73 / Unit (750 MW)) is the target for 2019-20 and subject to APERC approval.

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Wind Power

The installed wind capacity in the state stands at 4,077 MW as on 31.05.2019. Results in obliging to RPO targets set by both MoP and MNRE

Green Energy Corridor

Objective is to synchronize electricity produced from renewable sources, such as solar and wind, with conventional power stations in the grid. Project commenced on October 2015. period of the project is 5 years. Cost of the project is Rs.1289.25 crores. An amount of Rs.428 crores were incurred during 2018-19. For large evacuation of renewable energy duly through erection of 400kV substations, 220kV substations, 315 MVA, 400/220 Kv PTR's, MVAR reactors etc. Works are in progress. Expected expenditure is Rs.600 crores for 2019-20.

New capacity Additions

During the year 2019-20, additional generation capacity of 1,600 MW of thermal power is expected to be commissioned. (VTPS Stage 5 (800 MW) and SDSTPS Stage 2 (800MW)). The Polavaram hydel (960 MW) project is also programmed to be commissioned by 2022-23

Salient features of AP TRANSCO/AP GENCO/DISCOMS are given in Annexure 7.4

APGENCO

APGENCO will make every effort to achieve the generation targets set by APERC for the year 2019-20 and planning to commission 1600 MW in this financial year.

Status of projects as on 31.03.2019

RTPP Stage-IV (1X600MW), Unit# 6: The Commercial Operation Date of the unit was declared with effect from 00.00 hours on Dt.29-03-2018.

Dr. NTPS Stage-V (1x800 MW), Unit# 8: LOI was issued to M/s BHEL for Design, Engineering, Manufacture, Supply including supply of Mandatory Spares and Erection, Testing & Commissioning for coal fired 1x800 MW super-

critical Unit for a total value of Rs.2307.00 crores on 28.10.2015. The Zero date was commenced on 15.12.2015. APGENCO has issued Letter of Intent to M/s BGR Energy Systems Ltd, Chennai for a total lump sum quoted price of Rs.2299.87 crores. The date of LOI i.e., 06.07.2016 is Zero date for BOP. As per the contractual schedule with M/s. BGR Energy Systems Ltd., the completion period of entire BOP Packages is programmed by 05.07.2019 (36 months from the date of LOI). M/s. MCL issued a LoA for the supply of 3.548 Million tonnes per annum of coal to the unit on 12.11.2018. The unit is scheduled for commissioning by December-2019.

SDSTPS Stage-II (1x800 MW), Unit# 3

LOI for the BTG package of 1X800MW SDSTPS- Stage-II was issued to M/s BHEL on 02.11.2015 for an amount of Rs.2307 Crores. M/s. Tata Projects Limited has emerged as L1 bidder. LoI issued to M/s TPL for execution of BOP package for an amount of Rs.2606 crores on 06-07-2016. Standing Linkage Committee has sanctioned domestic coal linkage for 800 MW unit from MCL Commitment bank guarantee was submitted to M/s.MCL for the issuance of LOA. The Letter of Assurance is also issued on 04.03.2019. The unit is scheduled for commissioning by December-2019.

Polavaram Hydro Electric Project (12X80MW)

Polavaram Hydro Electric Project as a part of Polavaram Multi-Purpose Project is proposed across river Godavari at Anguluru village in Devipatnam Mandal of East Godavari district to utilize the monsoon flows for Hydel power generation. With the utilization of the surplus flows, power generation is possible to an extent of 960MW (12X80MW). Government has given concurrence to APGENCO for development of Polavaram Hydro Electric Project.

The Central Electricity Authority (CEA) MOP, Government of India, New Delhi has accorded Techno Economic Concurrence on 21.02.2012 to the ISPHEP at an estimated cost of Rs.3013.68 crores (at 2010-11 Price level), and a levelised tariff of Rs.3.17/Kwh considering mega status to Project. Administrative sanction accorded for implementation of Polavaram Hydro Electric Project at an estimated project cost of Rs.4956.39 Crore.

REC has sanctioned the loan / financial assistance to APGENCO for an amount of Rs.3965.11 Cr. LOI was issued to M/s. Navayuga Engineering Company Limited (L1 bidder) for an amount of Rs.3220.28 Crores (Inclusive of Custom duty, EPF, GIS/ESI and exclusive of other taxes and duties like GST & labour cess) towards implementation of the Polavaram Hydro Electric Project (12X80 MW) on EPC (turnkey) basis on 06.12.2017. The contract agreement was entered on 20.12.2017. Zero date of the contract commenced from 06.01.2018. Revised Administrative approval accorded for implementation of Polavaram Hydro Electric Project at an estimated project cost of Rs.5338.95 Cr inclusive of provisions at price level 2016-17. Total 69 drawings are approved in E&M and 13 Nos in Civil till the end of May – 2019

It is programmed to commission the first three (3) units within 46 months from zero date and the balance 9 Units at an interval of 2 months thereafter. Earth work Excavation of Foundation for Polavaram hydro Electric Project completed in the month of May – 2019 is 1,47,412.50 Cubic Meters.

Roads and Buildings

Roads

Roads are one of the basic modes of transportation system and also a priority sector of Infrastructure. Systematic development of roads is one of the important pre-requisites for development and acceleration of growth in the economy. Among the different modes of domestic transportation systems, road transport carries more than 80 percent of the Goods and Passenger traffic. The network of roads, particularly from rural to urban facilitates speedy movement of goods and services and ensures higher growth prospects, connectivity, social integrity and wellbeing of the society. The productivity and efficiency of road transport is directly linked to the availability and quality of road network. In view of the high potential in agricultural activity, there has been huge increase in road network. The total R&B road network (excluding NH roads) in the state as on March 2019 was 46237.65 KMs. The details are shown in Table 7.10.

Table 7.10: Status of R&B Roads.

Lane	Length of Road (in Kms)	Surface	Length of Road (in Kms)	Type	Length of Road (in Kms)
Four Lane	2688.253	Cement Concrete	2366.705	National Highways	6859.66
Double Lane	11377.061	Black top	48463.888	State Highways	13500.445
Double lane with paved shoulders	1554.061				
Intermediate Lane	3090.774	Metalled & Un mettaled	2266.709	Major District Roads	32737.197
Single Lane	34387.153			-	-
	53097.302		53097.302	-	53097.302

Source: Engineer-in- Chief, Roads and Buildings

State Roads

Construction and maintenance of roads and bridges on State Highways, major district roads, rural roads are taken up by the R&B department. The R&B department maintains a total of 46237.65 Km of roads (excluding NH roads) comprising 13500.45 Kms of State Highways,

32737.20 Kms of Major district roads. The State Roads wing maintains the entire State Roads of 46237.65 Km using the State budget grant. There are two types of maintenance works ie, ordinary repairs (annual maintenance) and periodical maintenance on the roads which are ripe for renewal. The repairs are taken up based on the condition of road, year of last renewal.

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Special Repairs Programme

MDR wing maintains a total of 32737.197 Km of roads comprising 26684.323 Km of Major District Roads and 6052.874 Km of District Other Roads. The following schemes executed under MDR wing of R&B Department.

State Development Schemes (SH & MDR)

Of the total 156 works costing Rs.1755.04 crores, 27 works costing Rs.268.94 crores with 178.416 Kms length are completed as on May 2019 and 129 works costing Rs.1486.10 crores are in progress. It is targeted to complete 250 Kms during 2019-20

Under the **Scheduled Caste Component**, works comprise Laying of CC pavements in SC Colonies, forming approach roads to SC Colonies under Scheduled Castes Component, an amount of Rs.20.84 crores budget was provided during 2018-19 against which an amount of Rs.15.91 crores was spent. It is targeted to complete 25 Km during 2019-20.

Under the **Scheduled Tribe Component**, works comprise widening of roads from Single Lane to Double Lane, formation of roads & construction of Bridges in Tribal Areas. Under Scheduled Tribe Component, an amount of Rs.150.00 crores was provided during 2018-19, against which an amount of Rs.14.13 crores was spent. It is targeted to complete 100 Km during 2019-20.

Road Safety Engineering Works

Works comprise providing Road Safety Interventions, Reconstruction of Culverts, and Improvement of Black Spots on roads etc. An amount of Rs.6.70 Crores budget was provided during the year 2018-19, against which an amount of Rs.4.81 Crores was spent up to March 2019. 12 works costing Rs.13.51 crores were completed and one work costing Rs.2.50 crores are under progress. It is targeted to complete 3 works during the year 2019-20.

National Cyclone Risk Mitigation (NCRMP)

The project is taken up in 9 Coastal Districts. The prime purpose of the project is to provide necessary infrastructure by construction of New Roads/Bridges or improvements of

the existing damaged roads to the habitations and cyclone shelters to facilitate evacuation of people and transportation of relief material quickly and uninterruptedly during Cyclones or Heavy / Flash floods. The Government, Disaster Management (Revenue) have sanctioned 35 Works Costing Rs.386.49 Crores. Out of which 34 works costing Rs.365.92 crores were completed. 1 work costing Rs.20.57 crores is nearing completion

NABARD Works, RIDF & RIAD

The State Government has taken up infrastructure development in rural areas through financial assistance of NABARD with the funds provided under RIDF (Rural Infrastructure and Development Fund) & RIAD (Remote and Interior Area Development). Since inception of NABARD funding to rural area infrastructure, nearly 9300 km of rural roads have been brought to riding surface with BT and connected to nearby towns.

So far, since 1996-97, in all 1928 road and bridge works in 24 tranches i.e., RIDF II to RIDF XXIV (including RIAD Phase I to V) for Rs.4077.36 crores were taken up. 1752 works were completed with a cost of Rs.3400.05 crores and 158 works costing Rs.620.02 crores are in progress. 18 works costing Rs.57.29 crores are at tender stage. Under NABARD, 1490 Kms of road length is improved at a cost of Rs.1291 crores from June 2014 to March 2019.

Rural Development Fund (RDF)

Under this scheme, works relating to improvement of connectivity of rural areas, transportation of agricultural produce to nearby market yards, improving non BT road to BT standard and construction of bridge are taken up. So far, 1169 works costing Rs.1626.36 crores were sanctioned under Rural Development Fund from 2008-09 to 2016-17 and 1162 works costing Rs.1601.15 crores were completed. 6 works costing Rs.13.34 crores are in progress. One work costing 0.70 crores is not taken up due to site issue. Under APRDF, from June 2014 to March 2019, 3072 Kms of road length is improved at a cost of Rs.1005.05 crores.

LWE Works

The work "Construction of High level Bridge across river

Sileru including widening to two lane and improvement from Km 0/0 to 10/0 of Chintur -Motu Road in East Godavari District” in Andhra Pradesh (Bridge work only) was taken up under RRP-I scheme with an estimated amounting of Rs.2805.71 lakhs and the work is completed.

Under Road Requirement Plan Phase II (RRP-II) in LWE affected areas of AP state, centrally sponsored scheme “Road connectivity project for left wing extremism” covering four districts i.e., Srikakulam, Vizianagaram, Visakhapatnam & East Godavari, 39 (22 roads + 17 bridges) works are sanctioned for an amount of Rs.329.28 crores of which 16 road works costing Rs.189.46 crores are in progress, 5 road works costing Rs.57.42 crores + 7 bridge works costing Rs.6.8 crores are in agreement stage and tenders are invited for 9 Bridge works costing Rs.19.94 crores. Tenders are to be invited for balance 2 works (1 Bridge work + 1 Road work).

Rural Road Plan Works

5486.07 kms of Panchayat Raj roads are transferred to Roads & Buildings Department in which around 1800 kms are having non BT surface. Hence it is proposed to sanction works for conversion of non BT roads to BT roads in a phased manner under Rural Roads Plan.

During 2016-17 to 2018-19, 290 works costing Rs.827.25 crores were sanctioned of which 145 works costing Rs.312.58 crores were completed, 87 works costing Rs.291.19 crores are in progress and 58 works costing Rs.223.48 crores are in tender stage. Under Rural Roads Plan, from April 2016 to March 2019, 492 Kms of road length is improved at a cost of Rs.312.58 crores.

Centrally Sponsored Programmes

The Central Government sanctions works under CRF act, Economic Importance and Inter State Connectivity and allocates the fund in 50:50 ratio i.e. (a).50% of the cess on High Speed Diesel (HSD) Oil for the Rural Roads. (b). balance 50% of cess on High Speed Diesel (HSD) Oil and the entire cess of petrol is distributed as per norms for development and maintenance of roads.

The Government has provided Rs.600.00 crores for the year 2018-19 and expenditure incurred up to 31.03.2019 is

Rs.468.87 crores. GoI has sanctioned 132 works in 2016-17 with an amount of Rs.1690.60 crore for a length of 1743.07 km and 3 works in 2017-18 with an amount of Rs.72.90 crore for a length of 50.52 km. Out of 135 works, 80 works completed with a length of 956 km for an amount of Rs.1020.00 crores and 55 works are in progress with a length of 837.52 kms for an amount of Rs.743.50 Crores. Further GoI has sanctioned 41 works during the year 2018-19 for an amount of Rs.843.24 crore for a length of 693.26 km. The works are intended for improving the condition of the roads which benefit large number of population to transport their agricultural produce and other industrial goods to the nearby market yards, towns, cities etc. which help the socio economic growth of the state and in turn the country.

Road Over/Under Bridges (ROBs/RUBs)

Road Over/Under Bridges (ROBs/RUBs) railway safety works are constructed mainly in lieu of busy level crossings (manned) where train vehicular units (TVUs) are more than one lakh. The constructions are being taken up under cost sharing basis with railways on 50:50 basis as per the norms of the railway board. As per public representations, ROBs/RUBs are being taken up at Level Crossings where TUV's are less than 1.00 lakh.

At present, 129 ROBs/RUBs (both 50:50 & 100%) are approved by the Railway Board/GoAP which are at various stages of construction. 65 works costing Rs.1309.94 crore were completed, 14 works costing Rs.748.12 crore are in progress, and remaining works are at stage 1st level i.e., under finalization.

An amount of Rs.120.00 crores budget was provided during 2018-19 against which an amount of Rs.77.17 crores (Rs.51.74 for Construction and Rs.25.63 crores for Lands) was spent. 5 ROBs/RUBs are completed against the target of 14 ROBs up to the end of March, 2019.

RoBs under SethuBharatham on National Highways

Under this scheme, 22 RoBs were sanctioned. Out of which 13 RoBs were grounded. Of the 13 grounded works, one work is targeted to complete by the end of August 2019 and remaining 12 works are in December 2020. The remaining

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9 ROBs are targeted to complete by the end of December 2021. Out of remaining 9 works agreement concluded for 2 ROBs with the EPC Contractor for which Appointed date yet to be fixed, 1 ROBs is in tender stage. 2 ROBs DPRs were submitted and remaining 4 ROBs DPRs to be submitted.

National Highways

There are 36 National Highways in the state covering a length of 6859.66 km of which 2,071.527 km is four-lane and above, 1036.013 km two-lane with paved shoulder, 2507.93 km two-lane, 376.59 km intermediate lane and 867.59 km are of Single lane (as on June 2019). In addition, the government in-principle have declared NHs for a length of 381.00 km for which DPRs are under preparation for two lane with paved shoulders and additional in-principle proposals for 1679.00 km were submitted to MoRT&H for approval.

The density of National Highways is 13.72 km per lakh population (2011) in the State as against all India average of 10.89 km and in terms of area coverage, a length of 41.46 km is available for every 1,000 Sq. km in the State as against all India average of 40.00 km/1,000 Sq.Km.

Out of 6859.66 km National Highways in the state, a total length of 2267.593 Km are under the control of NHAI and 461.56 km with MoRT&HPIU, Machilipatnam.

Road Safety Implementation Programme (MoRT&H)

A. Operational Road Safety Engineering Audits:

Operational Road Safety Engineering Audits and short

term improvements are taken up where execution of major development project on the selected stretches is expected to commence at least after 1 year of implementation of short term measures based on operational audits.

B. Detailed Road Safety Audit:

Stretches where development work like two laning/four laning are neither in Progress nor in pipeline are to be identified and got approved in principle for taking up Detailed Road Safety Audit.

C. Road Safety EPC Works

Most of the Works on National Highways with State PWD is taken up under Engineering Procurement & Construction Mode (EPC), wherein the Road Safety works are taken up as per the Road Safety Audit Consultant Recommendations. The recommendations of the Safety Consultant shall be incorporated during the design construction and commissioning of the Project Highway.

Apart from the above the MoRTH has adopted to take up Road Safety Works after conducting Operational Road Safety Engineering Audit & Detailed Road Safety Audit on National Highways. Road Safety Works taken up with the recommendations of these Audit Reports would considerably reduce the road accidents.

D. Road Safety Amenities and resting places for drivers:

Most of the Works on National Highways with State PWD is taken up under Engineering Procurement & Construction Mode (EPC), wherein there is provision for Road Safety Amenities and resting places for drivers.

Important Activities by NH Wing of R&B Department (State PWD NH) -NHDP IV A/B:

Sl. No	Work	From-To	Km	Remarks
1	Two laning with paved shoulders	Kathipudi to Digamarru on NH 214 (New NHNo.216)	140	Developed by PIU Machilipatnam, MoRT&H /GoI. Preparation of feasibility reports under progress
2		Vijayawada to Bhadrachalam on NH 221 (New NH No.30)	70.60	
3		Digamarru-Ongole Road, NH 214A	entire length of 255 km	
4	Four laning	NH 4 (New NH No. 69&40)	entire length of 84km	Handed over to NHAI
5	Rehabilitation and upgradation of roads NHDP	Nagarjuna- sagar Dam to Yerpedu section of NH 565	6 works to a length of 376.53km - Rs. 1821.59 Crore	1 work is in progress .1 work terminated.4 works completed

Sl. No	Work	From-To	Km	Remarks
6	Rehabilitation and upgradation of NH 67 to two lane with paved shoulders NHDP	1.Mydukur to Dornala T-Junction.2.Dornala T junction toAtmakur.3.Atmakur to Nellore 4.Knk /AP Border-Gooty 4- Lane	4 work on NH-67 to a length of 206.79 km -Rs1817.82 Crore	1works are in progress.3 works completed
7	Rehabilitation and upgradation of NH42EPC NH(O)	1.AP Boarder to Anantapur section 2.Anantapur to Mudigubba3. Mudigubba to Ananthapuramu District Border 4.Rapthadu to Bathalapalli 5.Madanapalli-Punganuru-Palamaneru 6.Palamneru AP/TN Border	6 works on NH-42 under NH(O) EPC to a length of 331.43km--Rs 1537.03 crores	3 works are in progress. 3 works completed
8	Rehabilitation and upgradation under NH67EPCNH(O) Corridor Approach	1.Muddanuru-Jammalamadugu 2.Gooty- Tadipatri	2 work on NH-67 for a length of 95.16 Km -Rs522.11 crores	1 work is in progress. 1work completed
9	Rehabilitation and upgradation under EPCNH(O) Corridor Approach NH 167	1.Chintakunta to Adoni 2.Adoni to Madhavaram via Mantralayam	2 work on NH-167 for a length of 109.86 Km-Rs.224.83 crores	1 work is in progress. 1work completed
10	Rehabilitation and upgradation under EPCNH(O) Corridor Approach NH 40	1.Rayachoty-Kadapa 2.Pileru to Rayachoty3.Puthalapattu-Pilerusec4. Murkumbattu Junction -Rangampeta cross	4 work on NH-40 for a length of 151.89Kms-Rs.779.51 crores	1 work is in progress. 3 works completed
11	Rehabilitation and upgradation under EPC NH(O) Corridor Approach	1.Raipur-Visakhapatnam NH26 2. Bypass to Vijayanagaram Town	2 work on NH-26 Four lane& By pass for a length of 28.80 Kms-Rs.513.55 crores	1 work is in progress. 1work completed
12	Four laning of 5.122 km NH9(New NH 65)(1.40km) with NH5(3.60km)	Bhavanipuram to KanakaghudhammaVardhi Junction in Vijayawada City limits	Sanctioned for an amount of Rs 333.22 crores	Work is in progress
13	Construction of 4-Lane ROB and its approaches in lien of existing LCs	22 no ROBs	Length 23.06km-Rs1049.82 crore	13RoBs in progress, Agreement concluded for 2 ROBs, 1 ROBs are in tender stage, 2 ROBs DPRs were submitted to Ministry, 4 RoBs DPR to be submitted
14	Rehabilitation & upgradation of NH-340 from section) to two lane with paved EPC mode under NH(O)	km 0/0 to km 60/380 (Design Ch. 0/000 to 60/025 excluding Km 55.600 to 57.650 (2.050Km)) (Rayachoty to Angallu	Length 57.65 -Rs.319.28 crores	Work is in progress

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Sl. No	Work	From-To	Km	Remarks
15	Strengthening & Widening to 2 lane with paved shoulders from	Km 552/950 to Km 577/545 of Mangalore -Tiruvanmalai road of NH-234 (New NH -75)	Length 17.95 km – Rs.147.66 Crore	Work is in progress
16	By pass NH 67	Proddatur Bye Pass	Length 8.00km— Rs.53.08 crore.	Work is in progress
17	Rehabilitation & up-gradation of NH-326A from section) to two lane with paved EPC mode under NH(O)	km 0/0 to 41/979 (excluding km 2/255 to 3/372 and km 36/820 to 38/275)	Length 39.045 km ---Rs. 228.32	Work is in progress
18	Rehabilitation & up-gradation of NH-544DD from section) to two lane with paved EPC mode under NH(O)	1.Ananthapuramu–Kalyandurg 2.Kalyandurg-Molakalmuru	2 work on NH-544DD for a length of 102.20.--- Rs. 583.79 crores	Works are in progress.
19	Rehabilitation & up-gradation of NH-544E from section) to two lane with paved EPC mode under NH(O)	Kodikonda – Madakasira	Length 56.803 km ---Rs. 504.19 crores	Work is in progress
20	Strengthening in selected stretches of NH – 716 from section) on EPC mode under Annual Plan 2018-19.	1. Reniguta – Kadapa 2. Renigunta – Kadapa	2 work on NH-716 for a length of Length 61.00 km --- Rs. 60.017 crores	Agreement concluded. Appoint date to be fixed.
21	Improvement the selected stretches of NH – 716A from section) on EPC mode under Annual Plan 2018-19.	1.Puttur - Uthukottai Road	Length 21.20 km ---Rs. 41.963 crores	Agreement concluded. Appoint date to be fixed.

Andhra Pradesh Road Development Corporation

The Road Development Corporation was established in the year 1998 to develop and maintain roads and other allied and incidental activities in the State.

A.P. Road Sector Project

The project was approved by the Government of India and World Bank for widening and strengthening and maintaining certain important and high traffic roads with an objective to ensure smooth travel and to reduce transport cost. The cost of project is Rs.2245.00 Cr. The major components of the Project are Road Improvement, Road Safety and Road Management System.

Up-gradation and improvement component, the following five roads consisting of 7 packages with a cost of Rs.1060.00 crore of road length is targeted for widening and strengthening under the road improvement component.

- a) Chittoor–Puttur Road (CP-01), b) Kurnool–Devanakonda Road (KD-02), c) Mydukur–Jammalamadugu road (MJ-03 & MJ-04), d) Pedana – Nuzivedu – Vissannapeta road and e) Kakinada – Rajahmundry Road (KR-07):

Road Safety Component

Under this component, Renigunta- Rayalacheruvu Road of 140 Km length was identified as Demo Corridor for improving Road safety with the objective of implementation of Road accident mitigation activities through multi sector approach. Civil works of APRDC completed. Certain enforcement measures are taken up on the corridor. Trauma care centre for the Demo Corridor has been established at Rajampeta along with required medical equipment. As per mid-term assessment, there is a decrease in accidents by 31% in the demo corridor i.e., Renigunta – Rayalacheruvu Road. Certain Black spots improvements on State Highways in five districts have been taken up on five identified accident-prone roads and as part of it 15 junctions & 13 curves were improved and widening of 13 narrow culverts are completed.

Road Management System (RMS)

APRDC has taken up the establishment of Road Management System for optimum utilization of funds towards road improvement and maintenance by using RDBMS and HDM-4 software. By using RMS, prioritization of roads requiring immediate maintenance and widening for capacity augmentation can be made and based on budget availability prioritized roads may be improved.

Road Management System (RMS) has been established by obtaining road asset and road condition data using Network Survey Vehicle (NSV) and Falling Weight Deflectometer (FWD). Based on data, Roll-out plans for road maintenance and improvements were developed for 41,000 Km. The road maintenance and road improvement works with the State Government funds are being prioritized and taken up based on Roll-out plans.

PPP Scheme

- A second bridge across river Godavari near Rajahmundry including approaches connecting EGK road under (PPP) project costing Rs.808 crores was substantially completed and the bridge is in operation.
- Narketpally- Addanki -Medarametla Road connecting Narketpally on NH 65 and Medarametla on NH 16 was taken up and substantially completed at a cost of Rs.1197 crores. The road is in operation stage and the length of road in Andhra Pradesh is 125 Km.
- Feasibility studies were taken up for 32 roads of length approximately 2000 Km to take up development under PPP.

Annuity Works

Nine road works of a total length of 163.30 Km at a cost of Rs.393.55 crores were developed and are in Operation & Maintenance stage.

Panchayat Raj Roads

The total length of the rural roads in the state under Panchayat Raj Engineering Department is 79,409 Kms. The surface details of the road length are CC roads – 3,693 Km, BT – 23,219 Km, WBM 9,509 Km, Gravel 20,454 Km and Earthen 22,534 Km.

During 2018-19 (Upto March 2019), 2540 KM length of road is completed incurring an expenditure of Rs.922.00 Crores and 1986 habitations are benefitted. During the year 2019-20, it is proposed to lay the roads to a length of 7600 km with an amount of Rs.5108.00 Crores. Total number of habitations proposed to be benefitted are 5375.

Buildings

The present activities of Buildings wing include execution of building works taken up under Plan/Capital Schemes, Secretariat buildings, Court Buildings and judicial Quarters (under State / Centrally Sponsored Schemes) and Buildings of other Department under Deposit works and Maintenance of Buildings under Non-Plan/Revenue Schemes.

ECONOMIC INFRASTRUCTURE

The present plinth areas of Government buildings in the control of R&B Department are as follows.

1.	Non-Residential	20.20 Lakh Sft.
2.	Residential Buildings:	16.54 Lakh Sft.

Construction of Non-Residential and Residential Buildings

- Construction of buildings for Inspection Bungalows/GHs/ other Buildings where in this Buildings are for providing accommodation to VVIPs and Officials during their tours. The IBs / Guest Houses at Rajam, Narasannapeta in Srikakulam District, Salur in Vijayanagaram, Narsipatnam&Chinthapalli in Visakhapatnam, Mangalari and Sattenapalli in Guntur District, Nandyal in Kurnool District and KarveetiNagaram in Chittoor District are in progress. IBs/GHs at Chimakurthi in Prakasam District is not grounded due to non-finalization of site.
- Construction of new Residential buildings and renovation for existing Govt. residential accommodation for State Government Officials.
- Construction of Integrated Collectorate Complex at Srikakulam is in progress. Construction of Integrated Collectorate Complex at Nellore and Anantapur are not grounded.
- Construction of Buildings for Revenue offices are at various locations in the state.
- The R&B Department has taken up around 100 works belongs to other departments/ Organizations of the Andhra Pradesh as a Deposit Work
- Construction and renovation of buildings for Judicial Department (Law Dept-Home Dept). An amount of Rs. 50.00 Cr is provided in BE 2018-19 and expenditure incurred in this financial year is about Rs.28.24 Crore upto March 2019.

Transport

Road Transport plays a prominent role in the economic development of the State. The transport department plays a key role in granting licenses to drivers, registration of motor vehicles, issue of transport permits, levy and collection of motor vehicle tax, enforcement of vehicle violations, and acts as nodal agency for road safety and motor vehicles pollution control.

The State had a registration of 119.93 lakhs vehicles. About 89% of the vehicles on road are two wheelers, followed by cars, tractor trailers, three wheelers, buses and goods carriages. Details about registered motor vehicles on road are shown in Annexure 7.5.

Out of 1.04 Crore Non-Transport Vehicles, 93.27 Lakh are Motor Cycles (89%), 7.60 Lakhs cars (7%), 0.11 Lakh Jeeps constitute 0.001% in Non-Transport segment.

Out of 15 Lakh Transport Vehicles, 5.68 Lakhs Auto-rickshaws (38%), 3.74 Lakhs Goods Vehicles (25%), 3.07 Lakhs Tractor& Trailers (20%), 0.70 Lakhs Motor cabs (5%), 0.90 Lakhs 3-Wheeled Goods Vehicles (6%), 0.27 Lakhs Educational Institute buses (2%), 0.25 Lakhs Maxi cabs (2%), 0.10 Lakhs Articulated vehicles (1%), 0.19 Lakhs Stage carriages (1%), and 0.06 Lakhs Contract Carriage Buses constitute 0.003% in Transport segment.

Revenue

In discharging statutory functions, the department has shaped up as one of the major revenue earning departments to the government in the shape of taxes on motor vehicles and fee collected to attend various transactions filed by vehicle owners /drivers. Transport Department is the Fourth highest revenue earning department for the state government. An amount of Rs.575.18 crores was realized up to May, 2019 as against the target of Rs.4000 crores in 2019-20.

Year wise revenue received is shown in Table 7.11. District wise revenue received upto May 2019 is given in Annexure 7.5A.

Table 7.11: year wise Revenue

Year	Total Revenue (Rs. crores)	% of Growth
2015-16	2128.43	20.70
2016-17	2463.21	15.73
2017-18	3044.67	23.61
2018-19	3224.97	5.92

Source: Transport Department

Enforcement

Active enforcement enables better compliance of registration, licensing and taxation by operators. In the year 2018-19 department through active enforcement has been able to mobilize revenue of Rs.324.38 crores. During the current year the enforcement wing is focusing on road safety related violations such as 1) Drunken Driving, 2) Carrying passengers on goods vehicles, 3) Over speed, 4) overload, 5) driving without helmet, 6) Not having valid driving license, 7) No reflectors, 8) Not wearing seat belt, 9) Driving in wrong/ opposite direction, and 10) overloading of passengers on vehicles. Transport Department is entrusted with implementation and enforcement of Motor Vehicles Act, 1988, AP Motor Vehicles Taxation Act, 1963 and the rules made there under. Officers of and above the cadre of Assistant Motor Vehicles Inspectors are empowered to book cases for violation of the provisions of the Motor Vehicles Act and AP Motor Vehicles Taxation Act.

Road Safety

Every Year, around 1.50 lakh persons are dying in road accidents in India. AP stands at 7th position (after UP, Tamilnadu, Maharashtra, Karnataka, Rajasthan, and MP), with 8,060 fatalities (5.4% share). Inadequate Road Safety will impact on Gross State Domestic Product. It is estimated that the cost of Road accidents and fatalities is 3% of GSDP.

Andhra Pradesh **Road Safety Policy** was declared in the year 2015 with a targeted annual reduction of 15% in road accident fatalities. During the year 2018, 9% reduction could be achieved in fatalities over the previous year. However, there is a growth of 6% in road accident fatalities during the first 4 months of 2019 over the corresponding period of last year.

District Road Safety Committee meetings were also conducted regularly almost every month except in Chittoor, Kadapa and East Godavari districts.

The **Supreme Court Committee** on Road Safety constituted by the Supreme Court of India had been reviewing the road safety situation in the country on quarterly basis and is issuing directions on various aspects of road safety.

Another important direction of the Committee on Road Safety has been to constitute a **Road Safety Fund** as a regular source of funding Road Safety initiatives by allocating a percentage share of enforcement revenue collected by the enforcement departments. Even though Road Safety Fund was created in principle with an initial allocation of Rs.10 crores, the fund needs to be reinforced with source of funding as directed by Committee on Road Safety. This amount was utilized to purchase 418 breath analyzers, 49 speed guns, 13 towing vehicles both for Police and Transport Department. Effective Enforcement and other measures have reduced the accidents, fatalities and injuries in the State during 2018 by 11.66%, 9.16% and 15.26% respectively.

A comprehensive **Road Safety Audit** conducted by the Transport Department along with officials of Police, NHAI and Civil Engineering wings of the local engineering colleges revealed lot of inadequacies in road engineering on the National Highways. Similar Road Safety Audit needs to be conducted on all the national and state highways (app. 20,000 kms) in the State by engaging a Audit Consultant

Road Safety Enforcement needs to be improved with introduction of latest technology by way of Speed Cameras, Speed Guns, Breath Analyzers, Interceptor Vehicle and Towing Cranes. Allocation of funds for Road Safety Fund will help improve enforcement.

Projects of Transport Department:

i) A driving training institute is being constructed near Darsi, Prakasam district under the Govt of India Scheme: **Institute of Driver Training & Research**, at a cost of Rs. 18.5 Crs out of which Rs. 16.5 Crs is being financed by Govt of India and Rs. 1.5 Crs worth of equipment being arranged by M/s MarutiSuzuki India Limited. The Institute will be run by M/s Maruti Suzuki India Limited on a 'not for profit' basis. The R&B dept which is executing the project had already awarded the tender and the work is going on. The project is expected to be completed by the end of 2019. Once completed, the Institute will have a capacity to train 20,000 persons annually.

ii) Automation of Driving test tracks:

The Transport Department is having Driving Test Tracks in all the district headquarters, where testing is being done

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manually. The proposal of the state government to fund the automation of 9 of such driving test tracks except Srikakulam, East Godavari, West Godavari and YSR districts with an expenditure of Rs.9.00 crores was accepted by GoI and half of the amount was also released by the GoI. The tender process for the project is under progress. The project to be completed within 6 months from the day of award of the Project will make the entire testing process fully transparent and scientific.

iii) I & C Centre:

At present Fitness Certification of Transport Vehicles is mainly by visual inspection. For inspection of Transport vehicles in the Automated Vehicle Inspection & Certification Centre (I&C Centre), a proposal was submitted to Government of India, to establish one I&C Centre at Vishakhapatnam in the Govt. Land already in possession of Transport Department. The proposal envisages that the total cost of about Rs.16.50 Crores will be given by the GoI. The proposal is under active consideration of Ministry of Road Transport & Highways GoI.

Computerisation in the department:

Transport department in A.P. is one of the departments which had pioneered computerization of transactions much before the Government of India took initiative through NIC to develop a Pan - Indian software **Vahan & Sarathi**. The Transport department started CFST (Citizen Friendly Services of Transport department) in 2000 in 2-tier Architecture. In 2009, the department has opted for 3-tier Architecture. In 2016, the department has taken initiative to make Citizen services online apart from doing Business Process Re-Engineering in a big way.

The department has launched a new cloud based online web application. Online web Application enables the citizen to avail the RTA services through web application from anywhere at any time. All 85 RTA services are made online. This online application retrieves the data from various integrations with APIs (Application Programme interface) like Adhar e- KYC, VAHAN, Payment gateways (SBI MOPS, payU), SMS /e-mail gate way, CCTNS and on boarding of Financiers/Bodybuilders etc,..These are instrumental in achieving Zero touch points between citizen and department

Digital Payments: - Life tax, Application fee, other fee is being collected through CFMS includes e-payment gateways-SBI MOPS, Pay-U aggregator Gateway. For digital accessibility to citizen through APRTA has tied up with CSC, e-Seva centers.

New Initiatives

Exemption of Registration Fee and Motor Vehicles Tax in respect of Electric Vehicles:

The Government introduced “Electric Mobility Policy 2018-23” with a view to make Andhra Pradesh one of the major hubs for electric mobility. This Policy aims to support every aspect of Electric Mobility and accelerating adoption of electric vehicles that eventually lead to healthier climate. The Government provided incentives by way of exemption of registration fee and tax on motor vehicles.

Government has granted exemption from payment of registration fee prescribed under Rule 81 of Central Motor Vehicles Rules, 1989 in respect of motor vehicles operated with batteries or ultra-capacitors or fuel cells and registered on or before 7thJune, 2023.

Government has granted Exemption from payment of Motor Vehicle Tax payable in respect of motor vehicles operated with batteries or ultra-capacitors or fuel cells and registered on or before 7thJune, 2023.

Tax exemptions to Auto-Rickshaws, Tractors & LGVs etc

Government of Andhra Pradesh issued orders on exempting the Motor Vehicles tax in respect of three wheeled contract carriages (passenger auto rickshaws) with seating capacity of four, five, six and seven in all; three wheeled Goods carriages (light goods vehicles) up to GVW of 3000 kgs; Tractors and Tractor- Trailers used for agricultural purpose and also written off the cumulative arrears of the Motor Vehicles tax up to the date of the notification.

Reduction of Late fees for FC and other transactions

Upon representations from public the GoI issued permission to reduce levy lower fee than specified by GoI.

Andhra Pradesh State Road Transport Corporation

Andhra Pradesh State Road Transport Corporation is the largest State Road Transport undertaking in the country. The Corporation initially had a fleet strength of 609 buses (16 depots) with a staff of 5,081 in 1958. The needs of transport have increased, forcing implementation of nationalization and increase in fleet strength year after year to meet the needs of traveling public as the State has been growing on all fronts since then. APSRTC has 4 Zones, 12 Regions and 128 Depots with a total fleet strength of 12027 buses and 53263 employees on rolls as on March, 2019.

By virtue of the people friendly policies adopted and practiced by the Corporation ever since its inception the Organization has become an in-separable part in the lives of the citizens of the State. Though Corporation has been adopting different strategies and cost control measures, the losses are piling up due increase in HSD oil prices, personal cost and material cost.

During 2018-19, APSRTC operated 157.63 Lakh Kms and transported 63.00 Lakh passengers daily. The average vehicle productivity per day of its fleet is 365 Kms and the Corporation achieved 99.71% fleet utilization in 2018-19. APSRTC performance is given in Annexure 7.6

Product Achievements

The Corporation has introduced trend setting improvements in the quality of travel in rural urban and ghat road passengers by providing newly designed coaches like Telugu Velugu, Ultra Telugu velugu & Ultra Deluxe, Vennela AC Sleeper, Amaravati, Indra, Metro Luxury AC, “Metro Deluxe”, “Metro Express” “Saptagiri Express” and City Ordinary buses. Corporation has introduced sleeper cum seater services (Night rider) during the year 2018-19. The corporation has increased 35 A/C buses during the year 2018-19. JNNURM Buses were also introduced for urban passengers in major cities like Vijayawada, Visakhapatnam and Tirupathi. The Corporation has introduced On-line

ticket booking system for the convenience of passengers and Thirumala –Thirupathi link. The corporation has realized RS 197.76 crores of commercial Revenue during the year 2018-19 compared to Rs 157.21 Crores of 2017-18.

Special Achievements:

APSRTC has bagged Ashok Leyland “India Bus” Awards for best employee welfare initiatives in APSRTC, highest performance in Vehicle Productivity, ASRTU Award for highest KMPL in City Operations etc.

During the year 2018-19, the Corporation has achieved 157.62 Crores KMs (Volume) as against the target of 157.08 crores and Rs.4842.53 crores revenue as against the target of Rs.4653.97 crores respectively. Corporation has increased the revenue by Rs.335 crores. and increased volume of operation by 1.29 crore Kms over the previous financial year. Due to streamlining of Telugu Velugu Service operations there is an increase of 6 (%) OR and increase revenue of Rs.127 Crores of that product compared to previous year.

Operations are streamlined in a scientific manner after clinically examining each route and corridor to eliminate redundant operations. During the year 2018-19, 136 new buses are introduced and 775 buses are replaced in the organization. As new entrants are joining the fray in the private sector and competing with low cost luxury travel facility in almost all corridors, different models are also being conceptualized like Ultra TVG, Super Luxury A/C cum non A/C, Sleeper Coaches buses with both seats & berths.

Action Plan for 2019-20:

- Corporation is planning to increase AC fleet during the financial year 2019-20 by introducing AC Sleeper and Sleeper cum seater buses.
- A constant vigilant at the field level is to be needed to increase our market share in this segment compared to private operators.
- The Super Luxury and Express Segments which constitute 11.50% and 17% of the total fleet is the major revenue source respectively which is showing positive trend and a surplus is planned to be generated during 2019-20.
- Redundancy in operations shall become “Zero”

Airports and Non Metro Airports

Civil aviation plays a major role for economic development of the State. Apart from serving as hub for the air passengers, Airports are acknowledged as triggers of employment generation, tourism and industrial development in the region. The sector brings multitude of benefits by creating direct and in-direct employment opportunities. Ancillary sectors benefitting from airports include the hospitality, tourism, road transportation services etc.

In Air Transport, every US\$ 100 expenditure produces benefits worth US\$ 325 for the local economy and every 100 additional jobs result in 610 new jobs created in the local economy (Source: International Civil Aviation Organization).

APADCL formerly known as Bhogapuram International Airport Corporation Ltd., is formed in 2015 as a Special Purpose Vehicle under the administrative control of the Energy, Infrastructure & Investment Dept., for implementation of Bhogapuram International Airport project under PPP mode. Subsequently Government has entrusted development of other airports/airstrips also to this Corporation.

Andhra Pradesh Civil Aviation Policy, 2015

Government has brought out Andhra Pradesh Civil Aviation Policy, 2015. As per the said Policy the Government will encourage private participation in airport development, regional/national airline operations and other aviation infrastructure through various initiatives which include provision of fiscal incentives, facilitation of gap in financing through Viability Gap Funding Scheme on a case to case basis. Government has decided to develop new green field airports in the State and also to upgrade existing airstrips into low cost airports for better air connectivity and economic growth of the State.

Key achievements:

- International flight from Vijayawada to Singapore on VGF

- Airport capacity and size increased i.e. Runway length and terminals were expanded to accommodate larger aircraft of code D and E e.g. Boeing 787, A 321 etc.
- Passenger movement at AP Airports enhanced to 5.44 MPPA (FY18-19) at a CAGR of 37% in the past 5 years (about 1.1 MPPA in FY13-14) in comparison to national growth rate of 12% in the same period.
- Connectivity to other cities in India increased from 7 Nos to 15 Nos.
- The State currently handles 1.7% of the total passenger traffic in India and stands at No.2 in terms of number of operational airports in the country.
- Air traffic movements recorded during Apr'18- Mar'19: 70,000

Development of new Greenfield Airport projects:

Andhra Pradesh Airports Development Corporation Limited (formerly Bhogapuram International Airport Corporation Limited -BIACL) is a SPV formed under Companies Act 2013 and is 100% owned by GoAP. APADCL is the project proponent for developing the three Greenfield Airports at Bhogapuram (Vizianagaram District) near Visakhapatnam, Dagadathi (Nellore District) and No-frills Airport at Orvakallu (Kurnool District). Apart from this, APADCL is also the project proponent for development of airstrip at Kuppam and development of airport in partnership with AAI at Donakonda. APADCL is the central agency for facilitation and improvement of aviation infrastructure in the state.

Summary on development of Greenfield airport projects in AP:

Greenfield International Airport at Bhogapuram, Vizianagaram district

The Government has proposed to develop a new Greenfield International Airport at Bhogapuram mandal of Vizianagaram District near Visakhapatnam. Size of the project is 2703 acres and 2400 acres of the land acquired so far. Estimated cost of the Project is Rs.2302 crores. Capacity under (Phase – I) 6 Million and (Phase II): 12 Million. Developed on PPP basis. Tentative Schedule for

commercial operations is 2022. 3 bids received during RFP tender process. Bids are sent to Government for approval for the award of the project. Ground breaking ceremony held on 14th February, 2019.

No-frills Greenfield Airport at Dagadarthi, Nellore district

Size of the project is 1399 acres and 1095 acres of the land acquired so far. Estimated cost of the Project is Rs.363 crores. Capacity ultimate Phase 1.9 Million. Developed on PPP basis. Tentative Scheduled for commercial operations is 2020-2021. Concessionaire Agreement with developer signed in June 2018. Initiated action regarding pre-development works such as removal of obstacles (HT, LT lines, diversion of Munganur channel), electricity & water connections. Ground breaking ceremony held on 11th January, 2019. Financial closure being undertaken by the concessionaire.

No-frills Airport at Orvakallu, Kurnool district

An extent of 980 acres of land acquired for the project. Estimated cost of the Project is Rs.88.5 crores. Developed on EPC mode (Lumpsum contract). Terminal inaugurated in January 2019. MOU signed with AAI for provision of CNS/ATM services and IMD for provision of meteorological services. DGCA licensing for the Airport in progress and security plan approved by BCAS.

Airstrip at Kuppam, Chittoor district

Size of the project is 700 Acres with an estimated cost of Rs.83 crores. Ground breaking ceremony held on 3rd January, 2019. Contract has been awarded to successful bidder, project is estimated to be completed in one year. Scheduled commissioning by 2020.

Airport at Donakonda, Praksam district

Airport project to be developed on 435 acres of land with an estimated cost of over Rs.250 Crores. Airport to be developed through Joint venture / special purpose vehicle proposed by Airports Authority of India. AAI will incur entire capital expenditure and GoAP will only provide land and absorb operational losses for a fixed term for the airport.

Operational Airports

Currently there are 6 operational Airports in Andhra Pradesh which connect with major cities.

Domestic Airports: Rajahmundry, Kadapa, Orvakallu at Kurnool and Puttaparthi (Pvt) **International Airports:** Vishakhapatnam, Vijayawada and Tirupati.

Upgradation of existing Airports in Andhra Pradesh

Vijayawada Airport: Additional land to an extent of about 698 acres has been provided to AAI for expansion of the existing airport. Airport has been accorded International status as per the provisions of the AP Reorganization Act, 2014. Runway for the airport is expanded to handle larger aircraft of code 4E such as Airbus A320 and Boeing B737. A new passenger terminal building along with additional parking bays were constructed. Currently international passenger traffic is being handled in the old terminal building at the airport. A new integrated terminal building is approved and administrative sanction is provided for an amount of Rs.611 crores by AAI board.

Tirupati Airport: The Airport has been granted International Airport status from Ministry of Civil Aviation and has all the support functions for the operations in place. International flights yet to commence. New terminal building has been inaugurated in the year 2015 by the Hon'ble Prime Minister. Additional land to an extent of about 732 acres and provided by the Government to AAI for expansion of the airport. Work completed on extension of 4 additional parking bays. Extension of runway to 3810 m is being undertaken, planned to be completed by Feb 2020. Runway for the airport is expanded to handle larger aircraft of code 4E such as Airbus A320 and Boeing B737.

Rajahmundry Airport: Land to an extent of about 857 acres has been provided by the Government to AAI for expansion of the airport. Runway of the Airport has been expanded to allow landing of aircraft such as Airbus A320. Airport has been upgraded to allow for night landing of aircraft.

Vizag Airport: New International cargo facility established to facilitate cargo movements. Six new parking bays completed and commissioned in September 2018.

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Kadapa Airport: Night landing facilities are being implemented in Kadapa airport, slated to be completed by end of August 2019. 50 acres provided for expansion at a cost of about Rs.40 crores. It is proposed to develop an Aerospace and Defense related museum in Kadapa on the similar lines to the existing museum at Palam Airport at New Delhi. The artefacts for the museum could be supplied by the Indian Airforce along with the models prepared for space flight at the ISRO facility in Sriharikota in Andhra Pradesh. The curation for the museum could be handled by APADCL along with the Department of Tourism for promoting the facility under the supervision of State Government.

Enhancement of regional air connectivity (Domestic and International):

Kadapa Airport:

The Airport has been selected as an RCS Airport under the Ude Desh ka Aam Naagrik (UDAN), a Regional Connectivity Scheme (RCS) under the Ministry of Civil Aviation, Government of India. Under the scheme, 80% of the Viability Gap Funding (VGF) will be borne by GOI and the rest 20% VGF has to be borne by the respective State Governments. RCS flight operations were commenced between Kadapa-Hyderabad, Kadapa-Vijayawada and Kadapa-Chennai routes, won by Turbo Aviation Private Limited for all the routes.

New routes are proposed at Kadapa Airport:

- i. Kadapa – Bangalore – Goa
- ii. Kadapa – Chennai – Puducherry (Karaikal)
- iii. Kadapa – Hyderabad – Shiridi

Vijayawada Airport

Tenders were called for connecting Vijayawada Airport directly with Singapore and Dubai. The bid parameter was per seat cost to be borne by the Government. Successful bid process was concluded for Vijayawada-Singapore sector. Vijayawada-Singapore sector was awarded to Indigo airlines from December 2018 on a 2 round trips per week basis. Indigo operates 180 seater Airbus A320 on the sector.

Kurnool Airport at Orvakallu

RCS flight operations shall be commencing shortly on Vijayawada – Kurnool – Vijayawada sector by Turbo Aviation Private Limited. This is estimated to cost of Rs. 28 lakhs per month of VGF as a share of State Government.

Passenger traffic data recorded at AP Airports:

5.4 Millions of Passenger traffic data recorded at AP Airports during 2018-19.

(in Millions)

Year	13-14	14-15	15-16	16-17	17-18	18-19	CAGR %
Total	1.1	1.3	2.8	3.8	4.1	5.4	37%

Source: Data from AP Airports

Proposed Action Plan for 2019-20:

- **Bhogapuram:** land acquisition to be completed (for airport project) and resolution on closure of existing civil enclave at Vizag.
- **Nellore:** Remaining land) issue to be resolved by District Collector to enable Authority to meet Conditions Precedent and to achieve financial closure by Concessionaire
- **Kuppam:** EPC Contract awarded. Construction activity has not yet started
- **Donakonda:** Government decision on the JV / SPV with AAI
- **Vijayawada:** Extension of contract for International flight operations through VGF by State Government
- **Kadapa:** Commencement of new RCS routes and development of Aviation museum.

Sea Ports

Andhra Pradesh has 974 KMs long coast line with a major Port at Visakhapatnam under Government of India control and 14 notified ports under State Government. Of which 5 are functional ports. Non-Major Port at Ramayapatnam is under consideration by Government as notified Port. A.P. State Reorganization Act is proposed to Developed a Major Port at Dugarajapatnam.

Non-Major Ports in operation

Kakinada Anchorage Port

The Anchorage Port is being operated by the State Government. The Anchorage Port has a capacity to handle about 4 million metric tons of cargo per annum. During the year 2018-19 the port handled 1.64 Million Tonnes of cargo and realized revenue of Rs.40.87 Crores.

Kakinada Deep Water Port

Presently, Kakinada Deep Water Port is under operation with 7 berths and 6 OSV berths and one North return wall berth of 635 Mts. length. So far, an extent of 441 Acres land was given on lease basis. During 2018-19 the Port handled 15.69 Million Tonnes of cargo and realized revenue of Rs.498.00 crores and Government received Rs.102.56 crores as Government share.

Gangavaram Port

The Government of Andhra Pradesh have awarded the development of a green field Deep Water Port at Gangavaram near Visakhapatnam to M/s Gangavaram Port Limited under PPP. Presently, Gangavaram Port is under operation with 9 Berths with a capacity of 45 Million Tons per annum. An extent of 1800 Acres of land was given towards equity and 1052 acres was given on lease basis. During 2018-19, the port handled 30.394 Million Tonnes of cargo and realized revenue of Rs.950.10 crores and Government received Rs.19.95 crores as Government share.

Krishnapatnam Port

The Government of Andhra Pradesh have awarded the development of Krishnapatnam Port to M/s Krishnapatnam Port Company Limited (KPCL) under PPP Mode on Build, Operate, Share and Transfer (BOST) basis. The Port developer has to pay a concession fee @ of 2.6 % of Gross income for 30 years.

Presently, is under operation with 11 berths. Construction of Additional berths under Phase II is under progress and its estimated cost of Phase-II is Rs.6000 Crores. So far, an extent of 4834.25 Acres of land was given against Acres. 6800 approved by the Government. The balance land acquisition is under process. During the year 2018-19 the

port handled 54.37 Million tonnes of cargo and realized revenue of Rs.2233.53 crores and Government received Rs.54.80 crores as government share.

Rawa Port

Rawa Port is located near Surasenayam in East Godavari District and it facilitates to transport Crude Oil from S. Yanam to Chennai / Visakapatnam / Haldia by Sea. The Port is in operation. The port handled 0.80 Million tonnes of crude oil and realized revenue of Rs.3.99 crores to state exchequer.

Other Non- Major Ports under Development

Machilipatnam Port

The Government have awarded development of Machilipatnam Port in Krishna District under PPP Model. Land pooling is under progress to procure lands required for Machilipatnam Port under Machilipatnam Area Development Authority. Further Revenue Department handed over an extent of Acs.2572.47 of Government Lands to Port Department on 18.03.2017. Land acquisition for the development of the Port is underway by MUDA and around 3,870 acres including Government and Private has been transferred/acquired so far. Balance private land of about 929.8 acres is to be acquired.

Bhavanapadu Port

The port is located in Srikakulam district. There is a defunct fishing harbor, and no commercial activity at this Port. Availability of the Land is 268 Acres. Only single bid has been received from M/s.Adani Ports & SEZ Ltd., for development of Bhavanapadu Port as concessionaire. Letter of Award issued to M/s.Adani Ports & SEZ Ltd., on 27-03-2018 with a Revenue Share starting at 2.3%. Estimated project cost is about Rs. 3,390 Crore in the Phase-I.Cargo traffic in the 1st year after commencement of operations is estimated at about 16 MMT. An extent of about 2,300 acres of land is to be acquired for the Port with rehabilitation & resettlement of about 1,515 households with about 4,578 persons.

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Kakinada SEZ Port

The Government declared the Kakinada SEZ Port in East Godavari District as minor Port to facilitate transportation of refinery products and to handle all special Economic Zone Cargo. Government awarded concession to M/s.KSEZ Limited for development of Port and agreed to the proposal for conversion of the Captive Port to the Commercial Port through Swiss Challenge approach, duly following the procedure laid down in APIDE Act, 2001, draft PPP Rules, 2012 and as per the A.P. Port Policy, 2015.

M/s KSEZ proposed to construct 3 berths one for Coal handling and other two to handle General Cargo. The Total Cost of Project includes Dredging, Breakwater Revetment, construction of Berths, Port Buildings, Road works, Railway line, Port Craft berth, Miscellaneous etc. is Rs.2123.00 crores.

A Special Purpose Vehicle (SPV) GMR Kakinada Gateway Port Limited is formed by the successful Bidder as the Concessionaire for the project and Concession Agreement has been signed on 21-11-2018. Revenue share of 2.7% is to be provided to the Government for the Concession period of 30 years from the Commercial Operations Date, which is extendable by 2 periods of 10 years each.

The Development of the Project is envisaged on a total land area of 1,944 acres out of which 133 acres of sea accreted land owned by Government shall be made available to the Concessionaire on lease.

Ramayapatnam

Ramayapatnam village, proposed site for port development is a coastal village, located at South – East corner of Prakasam District in Ulavapadu Mandal, located 4.5 km East of Thettu on NH-5 and 93 km North of Krishnapatnam Port. It is 12.8 km away from its Mandal main town Ulavapadu and 78.7 km distance from Ongole. The connecting straight road joins NH-5 at Thettu. South Central railway passes adjacent to the NH-5 Nearest Railway stations is 'THETTU' located within 6 km from the sea.

An extent of 3092.43 acres of land identified in Ravuru and Chevuru Village of Gudlur Mandal for establishment of the proposed Port at Ramayapatnam in Prakasam District. Government has accorded in principal permission for taking up the development of the Ramayapatnam Port by

Government including approval to form appropriate SPV/ Entity to take up the Port development.

The Government have accorded approval for establishment of an umbrella organization called "Andhra Pradesh Maritime Infrastructure Development Corporation Limited (APMIDCL)" under companies Act, 2013 for establishment of Ramayapatnam Port and development of other allied Maritime Infrastructure in the State.

M/s RITES has been awarded work for the preparation of Techno-Economic Feasibility Report. Estimated project cost is about Rs. 4,240 Crore Phase 1 and land to an extent of 3,093 acres is needed for the development of the port. Cargo traffic in the 1st year after commencement of operations is estimated at about 20 MMT.

Issue of exclusive limits of Krishnapatnam Port has to be sorted before proceeding further.

Other Ports

Narsapur Port

The Port is located in West Godavari District. There is no commercial activity in the Port. No Port land is available at the Port.

Meghavaram Port (Captive Port)

The State Government declared Meghavaram Port in Srikakulam District as minor Port for imports of Coal, fly ash for the Thermal plants. Government accorded permission to M/s.East Coast Energy Pvt. Ltd., for construction of a dedicated Captive Jetty at Meghavaram for the Thermal Power Project at Kakarapalli and the issue is pending.

Nakkapalli Port (Captive Port)

The State Government declared Nakkapalli as a Minor Port in Visakhapatnam District for Export of Alumina by M/s ANRAK Aluminum Ltd., The proposed Port is 75 Km from South of Visakhapatnam. M/s. Anark Alumina Ltd., has proposed to construct 2 berths to handle alumina & thermal coal etc. The cargo handling capacity of the project is 4 MLT per annum.TheProject is yet to be taken up by the firm.

Nizampatnam and Vodarevu Ports

The State Government have proposed to develop Vodarevu Port in Prakasam District & Nizampatnam Port in Guntur District under Public Private Participation Mode on Build, Own, Operate and Transfer (BOOT) basis. The Port is at present under dispute.

Duggarajapatnam

As per the Andhra Pradesh State Reorganization Act, 2014, “The Government of India shall develop a new major port at Dugarajapatnam in the successor State of Andhra Pradesh to be completed in phased manner”. Proposed port at Duggarajapatnam is located in SPSR Nellore district of Andhra Pradesh. The site is located 23 Kms north of Sriharikota islands (ISRO) in Vakadu mandal of SPSR Nellore district. Important towns like Gudur are at a distance of 40 Km and Vakadu at 10 Km. Government of India through NITI Aayog has cited the unviability of the proposed port and requested for an alternate location for the development of the port.

Communications

There were 10,483 Post offices in the State, of which 59 are Head Post Offices, 5 are Mukhya Dak Ghars, 1,526 are Sub Post Offices and 8893 Branch post offices as on March 2019. Details of district wise post offices data are shown in Annexure 7.7

There were 1735 Telephone exchanges, 5.50 lakh land line, WLL connections, 8837 public telephone connections (Local +STD), 68.80 lakh wireless subscribers (pre & postpaid) up to March 2019 in the state. District wise status of telephone connections are given in Annexure 7. 8.

Banking

There were 7379 scheduled bank offices at the end of March 2019 in the State. The aggregate deposits amounted to Rs.312641.58 Crore and the total bank credit extended was to the order of Rs.397349.59 Crore up to March, 2019. The credit-deposit ratio of the banks in the state is 127.09% as against RBI norm of 60%.

The total priority sector advances to Net Bank Credit (NBC) was Rs.240220.10 crore (72.35%) against RBI norm of 40%. Agricultural advances to Net Bank Credit were Rs.1,49263.62crore (44.96%) against RBI norm of 18%. Non-Farm Sector Advances was Rs. 58024.60 crore which accounted for 17.48% of NBC. Other priority sector advances including export credit are at Rs. 32931.88 crore forming 9.75% of NBC. Profile of banking institutions in A.P as on March 2019 is given in Annexure 7.9.

Tourism

Tourism in India has grown by leaps and bounds over the years, with each region of India contributing something to its splendor and exuberance. The ‘Incredible India’ campaign which showcases the best that India has to offer to tourists, now commands worldwide attention. Andhra Pradesh has the distinction of being a leading tourism destination in India and is presently, the third most visited State in terms of domestic tourism

The AP Tourism Development Corporation is fully owned A. P. Government undertaking created various taken products all over AP and providing services to the tourists visiting. In order to develop the Andhra Pradesh as one of the most preferred tourist destinations of the Country, the Govt. adopted mission based approach and prepared Tourism Policy.

To develop Andhra Pradesh as a major Tourist destination in India the APTDC requires extensive support from the Govt. to expand its activities and also to create innovative tourism products.

AP Tourism Policy

The government is committed to encourage tourism activity in the state, to position Andhra Pradesh as globally recognized tourism destination. With an aim to enable tourism sector to be a significant employment generator and to deliver world class experiences by offering diverse Tourism Infrastructure Projects and Services, all steps will be taken to nurture and sustain the rich culture, heritage and environment of the state.

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Activities

1. Tourism Infrastructure Development
2. Operation of Hotels & Catering Units
3. Operation of Guided & Package Tours
4. Leisure Cruises & Pleasure Boating activities
5. Sound & Light Shows and Rope Way

For sustainable development of organization, adopted the Strategic Measures like Expedient execution of projects, Establishment of new infrastructure and up-gradation of the existing Purchase of New Buses Effective operation of new tours and packages Introduction of Luxury Cruises HR Development and professional services. For the administrative convenience APTDC established the divisional offices at following locations and monitoring the activities. APTDC established Information & Reservation Offices in and outside the State at following locations for the convenience of tourists visiting Andhra Pradesh and to promote AP Tourism activities. Central Reservation Offices are at Visakhapatnam, Vijayawada and Tirupathi.

Operations of APTDC

APTDC operates Hotels/Resorts, Wayside Amenities and Restaurants at various destinations of the State to provide hassle free facilities to the tourists visiting the State. The Corporation is at present running 36 Hotel Units having 930 rooms and 2008 bed Strength along with catering facilities: Haritha Restaurants: Exclusive Catering Units at Borra Caves, Araku Region, Belum Caves, Kurnool District and TADA, Nellore District.

Tourist Transport Fleet and Package Tours.

APTDC has established Transport Units at Visakhapatnam & Tirupathi, introduced Tourist Coaches and operating local and interstate tour packages from both destinations.

Water Fleet:

APTDC established a biggest water fleet and operates river Cruises, speed boats, house boats, ferries etc.

Sound & Light /Laser Shows and Rope way:

Created Sound & Light Show, dynamic lighting system and Ropeways created at Chandragiri, Belum Caves, Ettipotala, Borra Caves etc. and Rope way at Srisailam. An amount of Rs.121.23 Crores revenue received from operations during the year 2018-19.

Development of tourism Infrastructure Projects:

CFA Projects:

APTDC initiated various tourism projects with CFA funds under various schemes announced by Govt. of India. In which, works have been taken up for 7 projects and awaiting sanction for remaining projects. Status of sanctioned projects are as furnished in Table 7. 12

Table 7. 12 Status of CFA projects sanctioned by the Govt. of India

(Rs. in Lakhs)

Sl. No.	Name of the Project	Sanctioned Project Cost	Amount Received from GoI	Value of work done	Remarks
	Swadesh Darshan				
1	Development of Kakinada - Hope Island - Konaseema	6783.53	6444.35	7050.64	Work completed
2	Development of Coastal Tourism Circuit in SPSR Nellore District.	5969.94	4775.96	4680.00	Works completed except the four works taken up by Forest Dept.
3	Development of Mahayana Buddhist Circuit	5233.91	1046.78	802.00	Works are in progress

Sl. No.	Name of the Project	Sanctioned Project Cost	Amount Received from GoI	Value of work done	Remarks
	PRASAD				
4	Development of Amaravathi as Pilgrimage Tourist Destination.	2836.43	2269.14	2368.77	Works completed
5	Development of Srisailam Temple	4744.93	3795.92	3290.00	Works are in brisk progress
	HRIDAY				
6	Development of Heritage Walk at Amaravathi	1233.60	1233.60	1233.60	Work completed
7	Development of Heritage Pond at Amaravathi.	613.90	427.56	182.00	Works are in progress
	SAGARMALA				
8	Construction of Passenger Jetty at Bhavani Island in Krishna District.	1000.00	500.00	520.00	Works are in progress
	Total	28416.24	20493.31	20127.01	

Information Technology and Communications

The Government is committed for making the state as a suitable destination for IT Services, Electronic Manufacturing /Assembling. To achieve this, Government has formed three societies viz., e-Government authority, Electronic & IT agency, and Innovation society. Andhra Pradesh government firmly believes that technology focus will carve a way forward for the newly formed State of Andhra Pradesh.

Promotions

The Government firmly believes that technology sector forms the backbone of the economy, and will continue to provide the thrust required to generate large investments and employment while also ensuring the delivery of citizen centric “good governance”.

The State has set itself a vision to deliver “good governance”, and to ensure more transparent and effective delivery of services to citizens, the ITE&C Dept. created

Mee-Seva – a good governance initiative that facilitates a single portal for the entire range of G2C and G2B services. It is aimed towards improved efficiency, transparency, and accountability for the government.

Govt. of Andhra Pradesh is broadly focused on the following activities:

- Policy development to release best in class policy framework
- Investment promotion to attract USD 2 billion investment and create 1 lakh jobs in IT and USD 5 billion investment and create 2 lakh jobs in Electronics by 2020
- Digital governance to make Andhra Pradesh the first fully digital government
- Infrastructure development, including real estate and soft infrastructure, to create world class infrastructure conducive for establishing industries
- Skill development to increase industry ready talent availability

On the employment generation front, the department has released 9 policies focused on IT & Electronics sector thus far, with the aim of achieving the goals set for the department. The State has been successful in generating realized employment of 30,656 with investment of Rs.1030.00

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crores in the IT sector and an employment of 18,750 with a realized investment of Rs.397.70 crores in the Electronics sector. The State has also built a pipeline of committed employment of over 2.24 lakh and committed investment of over Rs.56511.00 crores in both the IT and Electronics sectors. The State has targeted to tune of Rs.632.45 crores of IT export in the current year 2019-20.

Infrastructure

New APSDC established at Pi Data Centre, Mangalagiri. APTS had published RFPs for implementation of perimeter network infrastructure and O&M at APSDC, Amaravati, in March 2018. The tenders were finalized and the successful bidders had executed the orders successfully. The migration of the applications to APSDC, Amaravati is under progress from APSDC, Hyderabad.

Communications

To increase the reliability, efficiency and high availability on APSWAN, GoAP proposed to upgrade existing APSWAN to AP software defined network (APSDWAN) and to provide network as a Service (NaaS) to all its Departments. Accordingly, APTS had identified the service provider for the NaaS project and is in the process of identifying the Bandwidth service providers.

SAPNET

Achievements during the year 2018-19:

Live transmission started from Vijayawada with point to point encrypted studio, procured with the support of -Andhra Pradesh State Film, TV and Theatre Development Corporation. Transmitted 120 episodes on DSC classes "DSC Bodhana". Transmitted 201 episodes on Groups special. 350 special video films produced on school education, rural development, motivational and career guidance subjects at field level. 10 days live program transmission done on Zero Based Natural Farming. Conducted pilot project on Good Governance, motivational and career orientation program called "Yuva Prasthanam" for younger generations. Corporate video films made on the progress of AP power sector through outsourcing agencies etc.

Targets set for the year 2019-20:

- Educational and awareness creation on Government schemes (**Navaratnalu**). Special stories prepared on Government's initiatives like "YSR Raitu Bharosa, YSR Pensions, YSR Asara, Amma vadi, Pedalandariki Illu, Madya Nishedam, Jalayagnam, Aarogyasri" and some of them have been transmitted through SAPNET channels.
- Creating educational calendar for awareness programme on Government job notifications, exams and academic classes to the students 6th to Degree.
- Creating Live Interactive shows on "Navaratnalu Schemes" to clear the FAQ's of beneficiaries/public.
- Increase viewers in satellite platform and subscribers in digital platform for SAPNET channels.
- Recruitment of District level SAPNET officials for creating of awareness on Government schemes to the general public and capturing success stories of beneficiaries.

Mee-Seva

Mee-Seva is providing faster, easier and transparent access to various G2C & G2B services through more than 10,543 kiosks by utilizing Information & Communication Technologies.

Mee-Seva currently has 460 high impact services and the project has already completed 14.44 crore transactions and most of the government departments are now on board. The target is to ensure that Mee-Seva becomes the entry and exit point for the citizen to approach the government for any service. Besides this, project also delivers more than 20 crore transactions every year for other services like Bill Payments besides a big range of B2C services making it the country's biggest one stop e-governance shop. Mee-Seva centers are now also providing Business. Correspondent Services for various banks and achieving financial inclusion for the citizens. This is significant because of the large scale Aadhaar based DBT roll out in the country. 460 services pertaining to 39 departments are delivering through Meeseva centers.

Aadhar enrolment centres: The Government have initiated for setting up of 904 Permanent Enrolment Centre's (PEC) in Mee Seva centers at each Mandal headquarters across the state. During the year 2019-20 (upto May 2019), 112.23 lakh enrolments done and 101.62 lakh pockets were uploaded.

Pradhan Mantri Gramin Digital Saksharta Abhiyaan (PMGDISHA)

“Digital Literacy is the ability of individuals and communities to understand and use digital technologies for meaningful actions within life situations.”

Digital literacy is a key component of the Government of India’s vision of building an empowered society as envisaged under “Digital India” initiative. Spinoff effects of digital literacy especially in the context of rural India would address a number of socio-economic issues. ‘Digital Literacy’ would bring the benefits of ICT to daily lives of rural population in the major thrust areas of Healthcare, Livelihood generation and Education. Under this scheme 5.40 lakh students were registered and trainings were conducted to 3.70 lakh persons and 2.68 lakh certified candidates.

PMGDISHA in Urban Areas of Andhra Pradesh:

Now the State Designated Agency ESD Meeseva has taken an initiative to extend the Digital Literacy program to Urban Areas for making the Urban Citizens as Digital Literates by converting the Urban Meeseva – CSCs as the PMGDISHA Training Centers. Priority would be given to Non-Smartphone users, college drop-outs, participants of the adult literacy mission, digitally illiterate school students from class 9-12th provided facility of Computer/ICT Training is not available in their schools.

Digital Gram Pratinidhi(DGP):

Digital Gram Pratinidhi, is an advanced and next generation technological solution, where the core services which earns income to government are taken to door steps of service consumers with three-fold method, for download and printing of Certificates, URL and credentials will be provided, Print the certificates from the given URL on security stationery. Stationery will have supplied on payment of actual cost of stationery. Establish the rural connectivity of all G2C, B2C services through the DGP. Provide employment opportunity in the form of Digital Gram Pratinidhi who takes the services to consumers.

Services Offering for utility Services (Electricity, Traffic Challans, other bills,etc), Certificate Services(G2C),

Government Schemes, Health and Agricultural are under Pipeline.

Andhra Pradesh Information Technology Academy(APITA)

Andhra Pradesh Information Technology Academy (APITA) has been established on 01-06-2016. The academic activities of the Society have been planned to run in the name of “Amaravati Knowledge Centers”. Collaborate with Industry, Educational and Research Institutions for the promotion and development of e-governance. To create a set of policies relating to promotion of Electronics and Information Technology.

To design a plan for marketing the “Advantage AP” brand among the players in IT and Electronics manufacturing sector globally and create the roadmap to attract investments into the Electronics sector to the tune of US \$ 5 billion by 2020, and into the IT sector to the tune of US \$ 2 billion by 2020. To create an employment potential of 0.5 million by 2020 in the IT and Electronics sector. industries around FAB facility in Andhra Pradesh. To attract top design companies in IT and ESDM sector to invest in Andhra Pradesh.

APITA has academic collaborations with several Industry and Academic Partners to offer various training programs to the students of Andhra Pradesh.

During the Academic Year 2018-19, 346 Engineering / MCA colleges are registered with APITA. 269 students are trained in Soft skills and 220 are trained in Aptitude and Reasoning. In Technical, 4834 are trained in VMware level 1 course, 231 in cyber security, 428 in National Instruments technologies, 408 in Animation, 486 in Arm Embedded Systems, and 34 in Autocad. As part of the Microsoft – Data Security Council of India’s Cyber Sikshaa Program 43 female students are being trained in Cyber Security for about 3 months. Under ISB Technology Entrepreneurship Program 442 students are being trained out of which 139 students are from the second year course on 2017-19 batch and 303 are from 2019 batch. In Electronics domain 2000 female candidates have been trained for Line Assembly Operator positions in Mobile Manufacturing Companies and another 2000 are being trained.

From January 2019 to March 2019, a total of 461 students have been placed in IT and Mobile companies (including

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Infosys, Capgemini, IBM, FedServe, and Rising Star Mobiles India Pvt Ltd) and 214 internships have been provided in the IT industry. In addition to these 979 candidates have been placed for line assembly operator positions in mobile phones manufacturing industry.

For the year 2019-20 APITA is targeting to train a total of 30000 students for IT and Electronics domains. Up-skilling training programs are being planned for training 5000 candidates in refrigeration and air-conditioning, 10,000 candidates on Mobile handset repair and 10,000 candidates on Telecom Technical Application Developer as part of the Electronics Sector Skills Council of India and Telecom Sector Skill Council of India Programs of Government of India. Furthermore, as per the requirement of the industry customized training programs will also be designed and conducted by APITA. APITA is also discussing with Oracle University to offer certification program in Oracle Technologies at a highly discounted and subsidized price to the students of Andhra Pradesh. Furthermore, VM ware IT Academy has expressed interest to open up academic membership to the colleges under APITA Network. Oracle Academy has also expressed interest to conduct workshops for school teachers towards training their students on Animation and 2D games by using simple JAV based tools and technologies. As part of the Microsoft – Data Security Council of India’s Cyber Sikshaa Program training for two more batches of female students are being planned.

e-Pragati Authority

e-Pragati Authority is responsible for fine tuning existing services by adopting Government Process Re-engineering (GPR) Standards from across the globe, which are proven and established, finally resulting in reduction in operational expenses, ease of business, zero touch points for citizen and instance delivery of services. Under this scheme, more than 12 departments are on-board on this platform with 100+ services, in the first quarter of Year 2019-20, and proposed to release 15 services of line departments by the end of 2019-20. The dept. intent to on board remaining departments in some or other form with minimum hosting of 200+ Digital Services. As of part of this mandate, e-Pragati has undertaken Digital Transformation of Line Departments and in year 2019-20, envisages engagement with 30 Departments for Digital Transformation of

services, on an average 6 services in production stage and at least 2 more services in development stage for each department. Also, e-Pragati Authority intends to prepare a more exhaustive list of Common, Group and Cross-cutting Applications. e-Pragati is also working towards preparing a Roadmap for migrating existing DT Compliant applications of government departments. e-Pragati has adopted a policy for designing an Application prioritization plan for implementation, adopting the 80-20 Rule and the Criticality-Feasibility principle.

As a part of mandate, e-Pragati Authority has been assigned with a responsibility to establish e-Pragati Academy, through this program, e-Pragati Authority intends to conduct Digital Transformation programs for 200 Senior Officers to sensitize them with latest industry trends, practical use cases, standard global practices and various advantages of Digital Transformation to help them envision new policies account DT as core. Once DT compliant systems are designed, for success of these systems, it is very important that at least 5000 Mid and Junior Officers of GoAP are part of Digital Literacy Programs which will ensure in fading the existing gap for digital preparedness for resources. e-Pragati Authority has also designed a large scale Change Management Plan for smooth transition of existing work force into digital workforce.

e-Pragati Authority has designed the Database Schemas for the Core Databases and the Master Datasets which would be standardized and shared with department for uniform data collection to avoid noise and irregularities from the datasets. To ensure the authenticity and accuracy of the data, e-Pragati has established e- Highway Solution which allows hosting and sharing of the interdepartmental data through secured and authorized channel with concerned stakeholders. For interpretation and development of insightful reports from this data, e-Pragati has Data Lytics platform which is used to create dashboards for senior management, specific customizable reports for execution staff and periodic report for citizen to monitor the progress of government work in their respective areas. For Year 2019-20, e-Pragati Authority, has planned an enhanced CM Dashboard with the introduction of deep analytics, machine learning and Artificial Intelligence and more than 45 Dashboards for Line Departments to improve efficiency.

Andhra Pradesh Space Applications Centre (APSAC):

APSAC is an autonomous scientific organization under ITE & C Department registered under AP societies Registration Act, 2001 and is a nodal agency for remote sensing, GIS and GPS applications in Andhra Pradesh.

APSAC implemented certain projects with line departments some of these projects are listed below

Forecasting Agriculture observation (FASAL) output using Space, Agro-Meteorology and Land-based:

The main objective is the pre-harvest forecast of acreage and production of major crops at State/district level in both Kharif and Rabi seasons using optical and microwave data. It helps the State for policy making and advance estimate of various agricultural commodities which significantly contributes to production.

Evaluation of IWMP/PMKSY Batch-2 Watersheds (22no.s)

The main objective of the study is to evaluate the impact of watershed programmes implemented in the watershed based on the Remote Sensing and GIS techniques in given IWMP watersheds of the batch-2 of 2010-11 in Andhra Pradesh. Geospatial technology has been proved as effective tools to monitor, manage the natural resources and assess the impact on watersheds during the pre and post-development.

Development of GIS Based Integrated Natural Resources (INRM) and Rural Infrastructure Maps for 1,521 GPs for Planning of Mission Water Conservation under MGNREGS

The Government of Andhra Pradesh is keen to improve the ground water situation in water stressed areas in order to improve the ground water situation and eventually enhance the agricultural production and productivity dully contributing to environment harmony.

With the above objective, the Govt. has decided to develop RS & GIS based Action Plan for Soil and Water Conservation in 1521 water stressed Gram Panchayats in 88 mandals covered in Anantapuramu, Chittoor, YSR

Kadapa, Prakasam and Krishna Districts of A.P, within the lines of Mission Water Conservation–Natural Resources Management under MGNREGS within overall framework of PMKSY for implementation during the year 2018-19.

APSAC has prepared base maps showing cadastral boundaries of all the revenue village covered under 1,521 Gram Panchayats dully furnishing necessary details, such as, rainfall, water demand / budget status, ground water category, depth of ground water and drinking water situation for each GP. Besides the above information the geo-tagged information on structures executed earlier was also collected from RD department and furnished to enable identification of new structures needed.

Preparation of District -wise Mining Information Reports for Andhra Pradesh

Preparation of district survey report basing on the requirement of Mines & Geology department is taken up. Natural resources which includes mineral wealth, ground water, land use / land cover, drainage network and rainfall will be described along with the information provided by the department on mining licenses, royalty, production of sand, etc.

Urban green cover mapping in 16 ULBs

The green areas help individuals to overcome the physical and mental stress, especially in Urban areas. Despite knowing the benefits of greenness, the lack of quantitative and qualitative information on greenness handicaps the managers and planners. Thus, an attempt has been made to study the urban green cover in the 16 Urban Local Bodies (ULBs) of the State. The objective of the study is to assess the Urban Green Cover in 16 Urban Local Bodies (ULBs) using high resolution satellite data. The digital data of high resolution (10m) Sentinel-2A satellite data of April/May 2017 has been used for this study. Normalized Difference Vegetation Index (NDVI) is a good index of the ability for vegetation to absorb photosynthetically active radiation used for assessment of green cover. Demographic data of towns/urban has been taken from 2011 census. The vegetation extracted in urban areas has been overlaid on high resolution satellite data to assess the errors of commission or omission.

Identification of Potential Sites for Aquaculture Development in Coastal Districts

Aquaculture has been a fast-growing industry because of significant increases in demand for fish and seafood throughout the world. It is growing more rapidly than any other domain of the animal husbandry. The main objective of the project is to identify potential sites for aquaculture development using Remote Sensing and GIS techniques. The study reveals that the existing aquaculture area is 1,63,341 ha and the potential area is 88,539 ha which can be developed sustainably.

Action Plan

A.P. Space Applications Centre (APSAC), as a nodal agency for Geo-spatial activities, worked out the possible inputs from above projects to 'NAVARATHNAALU' the famed government initiative and are presented below to be implemented by line departments for development of a Decision Based WEBGIS

- To identify new borewell locations in potential groundwater prospect zones. Site suitability of free Bore wells by geophysical surveys in ground water prospect zones
- Geo tagging of the existing cold storage and food processing locations and finding the gap areas under YSR Rythu Bharosa
- Geo-tagging of liquor shops, Zonation of Liquor shop near School, Religious structure and Highways. Prioritize the places for stage wise ban of liquor
- Geo tagging all the existing educational institutions (Primary/ Secondary/ Higher/ Technical) and Geo tagged to all the Govt. hostel list of eligible students for fee reimbursement.
- To create a GIS database at a single source for planning and effective implementation of YSR Arogyasri for free of cost for people living below the poverty line.
- To map a list of mothers of school going children of below poverty line to encourage their studies under Amma Vodi
- To map a saving groups & bank account details at village wise for BC, SC, ST women above 45 years. To map a Population of BC, SC, ST Women above 45 years, to map a location of Govt. and Pvt. Banks and to map BC, SC, ST Corporation office locations under YSR Asara
- YSR Housing for Poor: To map existing slums in urban areas, to map wastelands/ vacant lands and identify suitable lands for construction of pucca houses to provide these inputs to Housing department. Proximity and site suitability analysis for homeless poor.



Social Infrastructure

Besides strong economic growth, a society seeking holistic development calls for a substantial progress in social sector parameters like education, healthcare, nutrition, water supply, housing, social security and other basic minimum social services that results in a healthy ambience and happy living.

It has been established that economic growth alone will not lead to well-being and the state needs to focus on improving the living conditions of people. The broad strategy would be to address the needs and priorities of the poor, disadvantaged and vulnerable groups that is aligned with the government's overall development strategy taking into consideration the human development approach and the emerging priorities with respect to sustainable development goals (SDGs).

Andhra Pradesh state despite showing decent economic progress, lags behind its southern counterparts. Reduction of IMR and MMR remain critical. The state with 67% literacy with 60 % female literacy is much below the National average literacy. Efforts are to be taken to compete with advanced states. Quality education is the need of the hour. Issues relating to drinking water and sanitation are to be addressed on priority.

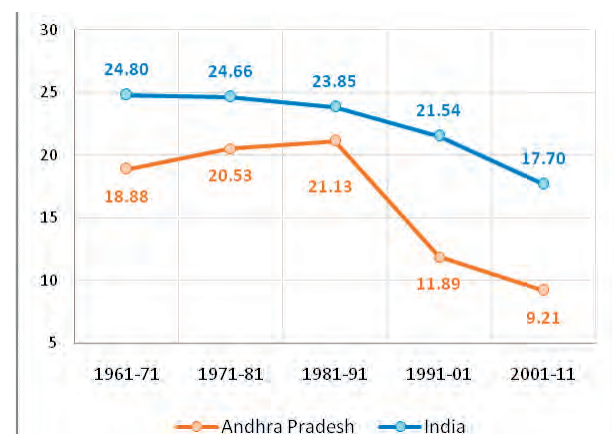
Inclusive growth is to be achieved through implementation of schemes and sub plans. The state of Andhra Pradesh is committed to harness the strength of the Self-Help Groups and to generate employment, create awareness, improve water-use efficiency and inculcate cleanliness among citizens and this stands at the core of the development agenda. The focus areas of the government include providing quality education to children, improving service delivery in public health, ensuring nutrition for all and ensuring safety of women and citizens.

Demographic details - 2011 Population Census:

Andhra Pradesh is the tenth largest state in the Country, in terms of population. As per 2011 Census, the State accounts for 4.10% of the total population of the country. The population of Andhra Pradesh is more than doubled in the last half century from 23.29 million in 1961 to 49.58 million in 2011. Of this, 24.83 million are males and 24.75

million are females. The decadal growth of population rose from 18.88 percent during 1961-71 to 21.13 percent during 1981-91. Subsequently a significant decline was observed in the rate of growth of population and decline is even more prominent at 9.21 percent during 2001-11, lower than the All-India's growth rate of 17.70 percent. Decadal variation of population in AP and India are shown in chart 8.1.

Chart 8.1: Percentage of decadal variation of population in AP and India



Source: Census of India, 2011

Among the districts, East Godavari is the most populous district in the state whereas Vizianagaram accounts for the lowest population. District-wise population from 1961 to 2011 Census is given in Annexure 8.1.

India's Demography at 2040: Some concerns for Andhra Pradesh

- Sharp slowdown in population growth expected in next 2 decades in India.
- Worrisome picture is that the sharp decline in the annual population growth rate, especially in AP, which is in the bottom two next to Tamil Nadu with just 3.4 per cent of projected growth for the period between 2021-2041.
- Population growth will be close to zero in Andhra Pradesh by 2041.
- Most of India to enjoy demographic dividend while some states will transition to ageing societies by 2030s.
- National Total Fertility Rate (TFR) expected to be below replacement rate by 2021.

- The TFR projection for Andhra Pradesh is one of the lowest in the country with just 1.5 per cent for 2021-2041 as against 2.3% in 2001.
- Decline in Total Fertility Rate is attributed to increase in rate of education among women, access to family planning methods
- Proportion of Youth to decline in AP by 10% in the next two decades. Persons above 60 years of age to increase in AP.
- Working age population to grow by roughly 9.7mn per year during 2021-31 and 4.2mn per year during 2031-41.
- Significant decline to be witnessed in elementary school-going children (5-14 age group) over next two decades.
- States need to consolidate/merge schools rather than build new ones.

Source: Economic Survey of India, 2018-19

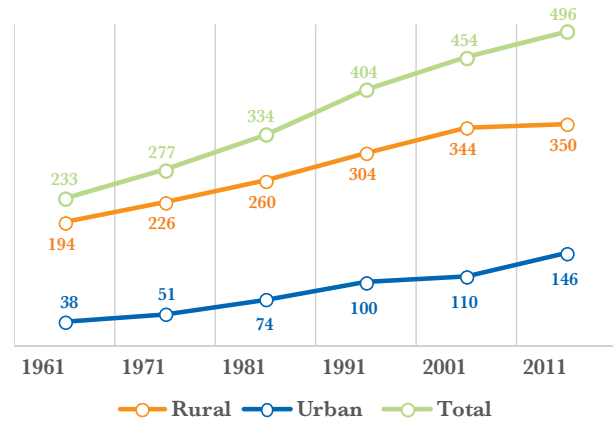
Sex Ratio

Sex ratio, the number of females per 1,000 males, has shown a declining trend in the State till 1991. The sex ratio in the state was up from 983 in 2001 to 997 in 2011 and is higher than all India figures of 943 in 2011. Sex ratio continues to be favourable in Vizianagram and Srikakulam districts. The districts of Visakhapatnam, East Godavari, West Godavari and Guntur have registered a progressive sex ratio moving from less than 1000 category to more than 1000 from 2001 to 2011. District wise population (decadal variation) and sex ratio is given in Annexure 8.2.

Density

Density of population, another important demographic indicator, is defined as the number of persons living per sq. km. The density of population for Andhra Pradesh is 304 persons per square kilometer, as against 382 persons per square kilometer at all India level in 2011. Krishna district has the highest density at 518 while Y.S.R and Prakasam districts have the lowest population density with less than 200. District wise density of population details are given in Annexure 8.3. Details of total population in rural / urban and total are shown in chart 8.2. (rounded to nearest integer).

Chart 8.2: AP Population (Lakhs)



Source: Census of India, 2011

Urbanization

Andhra Pradesh has recognized the importance of urbanisation for growth realization and higher per capita incomes. States with higher per capita incomes in the country have shown positive correlation with higher urbanization rates. The percentage of urban population to the total population in the State is 29.47 percent in 2011 as compared to 24.13 percent in 2001. Among the districts, Visakhapatnam stood first with 47.45 percent of urban population followed by Krishna district with 40.81 percent. Srikakulam with 16.16 percent of urban population followed by Prakasam with 19.56 percent are the least urbanized districts. District wise percentage of urban population to total population is given in Annexure 8.3.

Literacy

A person aged 7 years and above who can both read and write with understanding in any language is considered as literate. The literacy rate of the State is 67.35 percent in 2011 as against 62.07 percent in 2001. The literacy rate of the State is lower than the all India literacy rate at 72.98% percent. A slow growth in literacy rate was identified during the last decade at state and national levels. There has been an improvement in the literacy rate by more than 8 percentage points during 2001-2011 at national level. Literacy in Andhra Pradesh increased over 37 percentage points from 29.94 percent in 1981 to 67.35 percent in 2011.

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In spite of this fast rate of growth in the last three decades, the literacy rate in Andhra Pradesh is still lower than the all India average. While the literacy rate of Andhra Pradesh was about three fourths of the all India level in 1961, the State has made substantial progress, especially in the last four decades. The overall literacy rate has gone up from 62.07 percent in 2001 to 67.35 percent in 2011; the male literacy rate has increased from 71.28 to 74.77 percent. Female literacy rate has gone up from 52.72 percent in 2001 to 59.96 percent in 2011. West Godavari is at the top with 74.32 percent and Vizianagaram is at the lowest with 58.89 percent in 2011 among the districts. District wise details of male, female and total literacy rate from 1961 to 2011 are given in Annexure 8.4.

School Education

The Article 45 of the Constitution of India stipulates that Universalization of Elementary Education is a directive principle of state policy that underlines the need to provide free and compulsory education for all children age group 6 to 14 years. As per Article 21A and 93rd Constitutional Amendment 2009, Education has become a fundamental right. This article spells out the responsibility of the State for providing free and compulsory education to all children in the age group of 6 to 14 years.

The Integrated Scheme on School Education (Samagra Shiksha Abhiyan) envisages the 'school' as a continuum from pre-school, primary, upper primary, secondary to Senior Secondary levels. The vision of the Scheme is to ensure inclusive and equitable quality education from pre-school to senior secondary stage in accordance with the Sustainable Development Goal (SDG) for Education.

The Government is committed to achieve total literacy by 2020 and several schemes have been initiated for bringing out both quantitative and qualitative improvement. The government provides schooling facility to school aged population of 70.41 lakh children (Aadhaar linked enrolment).

Universal Access in School Education

The following norms in establishing schooling facilities have been laid down to achieve universal access in school education as per RTE:

Primary level schools, Elementary level schools, Secondary level schools should be within 1 km, 3 km and a radius of 5 kms walkable distance of all habitations respectively.

On these parameters, Andhra Pradesh has achieved 99% access at elementary level and 91.5% at secondary level. Primary schools and secondary schools have been started in areas, which were not served earlier. Type wise schools and teachers are shown in Table 8.1 and management wise schools and teachers are shown in Table 8.2.

Table 8.1: Type of Schools and Teachers (in No.s)

Sl. No	Category of School	Schools	Teachers
1	Primary	39644	110264
2	Primary with UP (I to VII / VIII Class)	9549	56100
3	Primary with UP, Secondary & Higher Secondary (I-XII Class)	214	3333
4	UP with Secondary, Higher Secondary (VI –XII Class)	204	2713
5	Primary with UP, Secondary (I-X Class)	2205	17715
6	UP with Secondary (VI-X Class)	10247	109251
Total		62063	299376

Source: Commr. of School Education (Provisional data of Child Info 2018-19 & UDISE)

Table 8.2: Management-wise Schools and Teachers 2018-19 (in No.s)

Sl. No	Management	Schools	Teachers
1	Central Govt.	60	940
2	State Govt.	3811	18953
3	MPP/ZPP	38589	157056
4	Municipal	2110	12051
5	Pvt.Aided	2203	9132
6	Pvt.Un-aided	15290	101244
Total		62063	299376

Source: Commissioner of School Education (Provisional Data of Child Info. 2018-19 & UDISE).

Key education parameters

Steps are being taken up to ensure 100% access in Education. Strengthening existing schools, opening new Primary Schools, establishment of alternative schools and other type of educational facilities in smaller and un-served habitations are few of the strategies implemented for Universalization of Elementary Education.

Enrolment in all types of schools in the state during 2018-19 was 70.41 Lakhs out of which 36.08 Lakhs in I-V classes; 20.95 Lakh in VI-VIII classes and 13.38 Lakhs in IX-X classes. In terms of percentage enrolment of children, it was about 51.24% in I-V classes, 29.76 % children in VI-VIII and 19.00% in IX-X. Details of enrolment are given in the Annexure 8.5.

Dropouts

It has been observed that there is a problem with retention at different levels in enrolment of school aged group children into the schools. During 2018-19, Annual Average **Dropout Rates** at I-V classes (Primary Level), I-VIII (Elementary Level) was 0% and 3.94% at IX-X (Secondary Level). Necessary measures have been taken to retain children into schools by organizing **Rajanna Badi Bata etc.** The details of school dropout rates are given in Annexure 8.6.

Teachers and Teacher Pupil Ratio

A teacher is instrumental in developing knowledge, skills, attitudes and values among children at all stages of Education. It is essential to maintain an optimum teacher-pupil ratio to achieve the goal of universal enrolment, retention and improve the education of children. With a view to maintain an optimum **teacher-pupil ratio** to achieve the said goals. Sustained efforts are also being made by the government to recruit teachers in all types of schools to maintain a reasonable Teacher-Pupil Ratio. Rationalized deployment of teachers, creation of new posts and massive recruitment of teachers helped overcome imbalances in demand and supply of teachers. In the year 2018-19, there were 1,10,264 teachers in primary schools, 56,100 in Primary with Upper Primary schools(I-VII/VIII), 3333 in Primary with Upper Primary, Secondary & Higher secondary schools (I-XII) and 2713 in Upper Primary with Secondary & Higher secondary schools (VI-XII) 17,715 in Primary with Upper Primary &

Secondary schools (I-X) and 1,09,251 in Upper Primary with Secondary (VI- X).

The Teacher Pupil Ratio for Primary, Upper primary and High Schools are shown in Table 8.3

Table 8.3: Teacher Pupil Ratio

Year	Primary	Upper Primary	High School
2010-11	28	20	25
2011-12	27	21	25
2012-13	30	23	25
2013-14	26	22	25
2014-15	26	21	26
2015-16	22	19	26
2016-17	22	19	27
2017-18	23	19	28

Source: Commissioner of School Education. (Provisional Data of Child Info. 2018-19 & UDISE)

Examination results

Performance of students at different levels of education has been conventionally considered as an important indicator for assessing efficiency of educational system. The number of students appearing and passing the S.S.C. examination at the end of secondary stage (cycle) is an important indicator. The pass percentage of students in S.S.C examinations during 2018-19 was 94.88. Details of year wise performance in S.S.C Examinations are given in Annexure 8.7.

Mid-day Meal Scheme:

Mid-Day Meal Scheme is implemented in the State for the children of classes I to X and extended to Special Training Centres (NCLP) from 2010. Model Schools are also being covered from the year 2013-14. The Scheme sharing pattern of GoI and GoAP is 60:40 The Scheme extended to Intermediate with 100% State share from 2018-19 onwards. The objective of the scheme is to avoid classroom hunger, to increase school enrolment, school attendance, to reduce gender gap, fostering social equality, to address malnutrition, promoting schools participation, woman empowerment.

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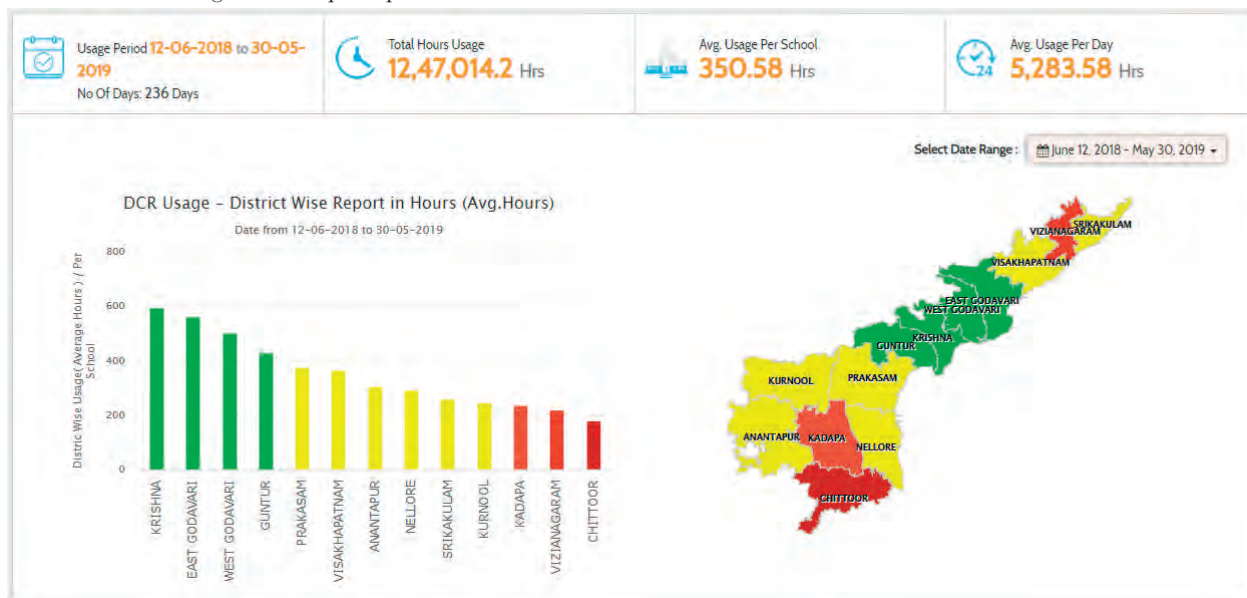
37.22 lakh children were covered under this programme during 2018-19, out of which 17.61 lakh are in Primary including NCLP, 12.42 lakh in Upper Primary and 7.18 lakh children in High schools in the state. A flexible menu, provision of rice, sambar and pulihora and also providing five eggs per week per child under Mid Day Meal from the year 2018-19 are the features of the scheme.

Monitoring MDM daily attendance and meals taken through SMS and Mobile Application and the same is linked to CM Core Dash Board and also to GoI portal ie. Automated Monitoring System (AMS). Nearly, 90% schools attendance information is being captured in AMS. To avoid supply of underweight bags, the foodgrains are supplying through E-PoS system from Fair Price Shop. In the state 44,849 schools are having LPG connections, the remaining 382 schools are using fire wood and solar as fuel. 85143 Cooks are working in 2018-19 an Honorarium of Rs.3,000/- is payable per month per Cook The bills are being paid through centralized payment system.

Dashboard – To monitor and plan

U-SKY Content usage Link: <http://dcrusage.usky.in/Usage/>

Erudex Content usage Link: <http://apdcr.erudex.com>



Innovative Programs and Schemes Digital Class Rooms (DCR)

1. To improve the teaching-learning experience in the classroom and enhance student engagement in the classroom the Digital Class Room (DCR) Project in being implemented in Government managed schools in Andhra Pradesh State. DCR equipment is provided in 5000 schools and 100% target achieved. All the DCRs is loaded with online and offline digital content in all subjects as per the School Education Text Books from Class I to X is being provided, both in Telugu Medium and English Medium from two content providers i.e., from U-SKY and Erudex.

Major components include, Hardware Infrastructure, Digital content both Online and Offline: Fully mapped AP-SCERT curriculum content is deployed across all the DCR's. Capacity Building: Under ToT model ~4500+ teachers got the training on How to handle DCR and On integrating DCR's in Teaching learning process

2. To overcome the dependency on private content providers, government has taken steps in building own content by establishing **E-Content Cell**, by using APeKX-DIKSHA as a platform to host the content.

3. Government with the support of Central Square Foundation and ID insight is conducting process **impact evaluation report** for the existing DCR's to a) Assess the quality of the current implementation and b) Provide recommendations for future use and scale.

Proposed Steps:

Based on ICT guidelines proposed by Govt. of India, SE department is planning to establish Advanced digital classrooms to shift from current teacher centric to student centric model, which includes 1:1 personalised student tablet loaded with Adaptive learning software. Out of the target 5000 classrooms, for 1000 schools labs are being set-up from the available funds under advance DCR project sanctioned by Govt. of India.

As Capacity building of teachers plays a major role in effective usage of Tech Infrastructure, and to provide hands-on training at school point to all the teachers across all the schools established with DCR.

Virtual Class Rooms

Implementation of Virtual Class Rooms is given focus in 4000 High Schools including 500 Municipal Schools. Till date, Virtual Class Room system integration is completed in 3938 Schools and Fiber Net Connectivity is given to only 1849 Schools. As of now, the construction of all District Studios has been completed, Lessons are prepared for delivering the Classes from different district Studio and live classes from the studio started from 2nd July on-wards. Training's are conducted for MANA TV Teachers on utilization of infrastructure supplied to the Schools. Air Conditioners are allocated to all the Virtual Classroom Schools and supplied to 2200 Schools. Trainings were conducted for the Teachers on utilization of infrastructure supplied to the Schools.

e-Hazar -

The e-Hazar Project is being implemented in a phased manner in all Schools, Teacher Training Institutes, School Education administrative offices etc. Nearly 5% schools are located in weak network areas and are facing difficulty to ensure Aadhaar authentication. Biometrics of 9.7 lakhs students are not mapped with Aadhaar. Hence, offline student attendance is being taken up with one time Aadhaar Authentication. Implementing biometric for students across schools.

Badikosta

The objective of the scheme is to increase enrolment, attendance and to improve academic performance of girl

students. To ensure universal access to secondary education by achieving 100% GER and universal retention by 2020. Under this scheme bicycles are distributed to 3.75 lakh Girl students of 8th and 9th classes studying in Government schools in 2018-19.

Physical Literacy

Physical Literacy programme has started in the Primary and High Schools for Long Term Athletic Development (LTAD) in school children. MOU has signed between CSE, Ibrahimpatnam and Gopichand sports, Telangana, Hyderabad. 6361 Schools Covered and 750 master trainers were selected for trainings under this scheme. The physical literacy programmes are successfully conducting in the all Government Schools. For the academic year 2019-20 all 1 to 4 level books, Yoga books etc to be distributed to all the schools.

Triumph PE physical literacy programme was implementing in 200 schools in Andhra Pradesh state where the physical education teacher post was not sanctioned in that schools.

It is planned to conduct a Yoga training programme to masters trainers to cover district level and division level training to all the teachers in the state. Yoga book for all classes have been distributed to all school points during 2019-20.

To develop creativeness among students through art and culture and reduce absenteeism and to increase attendance in schools the Government introduced Dance, Music and Fine Arts (Tansen Institute of Performing Arts TIPA- ARTIZEN Visakaptnam) in 2017-18. Project extended to 2018-19 & 2019-20. Physical Literacy activities increased through this Programme as many number of students participated in online dance learning classes. Programme is under implementation in 650 schools

Samagra Shiksha Abhiyan (Secondary)

Schemes under Samgra Siksha Abhiyan (Secondary): Quality improvement is one of the main thrust areas of RMSA as it is committed to universalize quality education at secondary and higher secondary stages.

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- Recurring & Non Recurring (Civil Works)
- IEDSS
- Vocational Education
- Establishment of Girls Hostels in Educationally Backward Blocks (EBBs)
- ICT

Non Recurring (Civil works): To facilitate quality education, a delightful learning environment is one of the factors. Out of 3205 Schools sanctioned, 2368 Schools are completed (73.88%) and remaining 837 works are at different stages. Out of Rs.1150.94 Crores sanctioned, Rs. 989.52 Crores (85.97%) are spent and remaining Rs. 161.42 Crores are under spill over as on 30.04.2019. Out of 295 works yet to be grounded, 132 works (Sanctioned in 2010-11 and 2011-12) are not started due to escalation of SSR Rates and the same is proposed to surrender and recast with new SSR Rates in the PAB 2019-20, 43 works are not started due to site problems and zero sanctions and remaining 120 works are in tender stage.

Girls Hostels:

There are 346 Educational Backward Blocks. In total, 235 Girls Hostels are sanctioned by GOI for Andhra Pradesh State. Out of which 153 Hostels are completed and remaining 83 Hostels are under construction.

IEDSS

Under **IEDSS**, stipend for girls is provided to 6493 Students and 3548 children have been provided escort allowances through DBT through Postal SB Accounts. To meet the needs of CWSN in secondary education under IEDSS, a professional training programme has been conducted to 3500 Educational Administrators. Spectacles were provided to the identified students in Krishna District.

Vocational Education:

It is implemented in 256 Schools to enhance the employability of classes 9th to 12th (youth) on modular vocational courses and to maintain their competitiveness through provisions of multi-entry - multi-exit learning opportunities. In-service and Induction trainings are conducted to the 452 VTs.

ICT

The state had piloted in 100 schools before scaling up to know the ground level scenario and compatibility.

Model Schools

The Model Schools are established in EBB Mandals in Andhra Pradesh under Andhra Pradesh Secondary Education Society with classes 6th to Intermediate with English Medium. The maximum student strength per school is 560 students @ 80 students per class and 40 in each section. -

Construction of Model Schools and Girls hostels

Out of 163 Model Schools in phase-I, 159 Schools were completed and in remaining 4 Schools construction works are pending due to administrative reasons and classes are running in other buildings. Works in 109 schools in Phase II and 69 in Phase III are not taken up yet. 163 schools in Phase-I and 1 school in Phase-III are functioning with 80115 students. Out of total sanctioned strength of 3260 teachers 2043 are working.

Girls Hostels are sanctioned to 163 Model Schools in the State, from the year 2017-18, with inmate capacity of 100 Girls students each Hostel and at present 145 Hostels are functioning. The Girls Hostels are being maintained by the RMSA.

Vocational Education

Vocational Education is being implemented from the year 2016-17 in 155 Model Schools in the State. Every School has two trades in Vocational Education. 12,400 students in 155 Model Schools are being enrolled for Vocational Education every year. The Vocational Education Scheme is being maintained by the RMSA. Constructions of compound walls in 164 Model Schools under MGNREGS are in progress.

Performance Analysis in SSC examinations

Total 11,574 students have appeared in SSC examinations in 2018-19 and 11,246 students have passed (97.17%). 82 A.P. Model Schools got 100% results. 304 students got 10/10 GPA.

Performance Analysis in Intermediate

Total 10,882 students have appeared for 1st Year Intermediate and Pass percentage is 62.06% and 7,623 students have appeared in 2nd Year Intermediate (Pass percentage is 77.75%). In 2018-19, EAMCET Coaching is provided to 500 students.

District Institute of Education and Training:

13 Teacher Training institutes have been upgraded. The Total intake of Govt DIETS is 1650 Telugu medium 650, English medium 650, Urdu medium 250 and Tamil Medium 50. During 2018-19, 765 Private D.Ed colleges are functioning with total intake of 66100 (50/100 intake) New text books were introduced 2 year D.El.Ed course. The text books were translated in Urdu medium also. From the Academic year 2018-20 English Medium sections also started with an intake of 50 in all DIETs and in Private D.Ed colleges. Under capacity building component conducted orientation to Teacher Educators in both Govt and Private colleges.

SCERT developed Almanac for 2018-20 batch D.El. Ed course. Introduced in-house project work for D.El.Ed students on Professional Development Books. Conducting Teleconferences through MANA TV with D.El.Ed students on Professional Development Books. Conducted National Achievement Survey 2018 for Class X duly involving Secondary Grade Teachers and with support of DIET principals. Orientation programmes are conducted for staff. Virtual Class rooms started in 4 DIETs. Term based Special innovative activities were designed for D.El.Ed students such as TLM melas, Seminars and Cultural Capitations.

In service teacher trainings were conducted based on the components found out from the needs identification survey and were conducted mainly for quality improvement in content, process of teaching learning, re-orientation and strengthening of teacher's professionalism. For improving

Learning Levels among low performing schools and students in partnership with, Rishi valley, Isha Foundation, J-PAL and Pratham, Akshara Foundation is taken up in the schools of identified districts. In collaboration with Krishnamurthy Foundation of Rishi valley, **ALA (Ananda Lahari Abhyasana)** is being implemented in 1570 double teacher primary schools of A.P. for implementing child friendly and technology driven MGML pedagogy.

Teaching at the Right Level programme (TaRL) is being implemented in 7840 lowest performing schools of 151 mandals covering 10.02 lakh children of Anantapur, Kurnool and Vizianagaram districts.

Isha Foundation is implementing Happy classroom, Magic English and remediation programme for improving learning outcomes among slow learners in 3000 schools in Chittoor district which is covering 1.58 lakh children as well 14,240 teachers.

In collaboration with **Akshara Foundation Ganitha Mitra** programme has been implemented in 2000 model primary schools of all 13 districts covering 2,85,511 students for making Mathematics learning a fun.

Summer remediation programme was implemented in the name of Gnana Dhara in residential mode during summer vacation for C and D grades children covering 58000 students. Parallel English Medium sections were started in 7,491 Model primary schools and other primary schools from 2018-19 academic year onwards. 66,627 children were enrolled in those schools in the academic year 2018-19.

State Awards

Every year State Awards are being given by Government of Andhra Pradesh to the Best Teachers on the occasion of Teachers Day and National Foundation for Teachers' welfare, Government Andhra Pradesh, Amaravathi have announced awards to the Meritorious Teachers/Teacher Educators in the State. The State Selection Committee will select Teachers for State & NFTW Best Teacher awards in all categories.

Amma Vodi

The Government flagship programme, 'Amma Vodi', is a scheme intended to extend financial help to the mothers who send their children to school, from this academic year 2019-20. The **'Amma Vodi'** is one of the schemes in 'nava

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ratnas'. The government will pay Rs.15,000 per annum to the mother who send their children to the school. It will be helpful to the family of the poor child. There are about 40 lakh children studying in Govt. Schools from classes I to X. As such the amount estimated towards the scheme is Rs.5898.35 crores. Government has extended the programme to the mothers who are willing to send their children to private schools also.

Samagra Shiksha Abhiyan (Sarva Shiksha Abhiyan)

Sarva Shiksha Abhiyan is an effort for universalization of elementary education by bridging social, regional and gender gaps with the active participation of the community in the management of schools. Government of India has enacted RTE Act 2009 to provide free and compulsory education to all the children in the age group of 6-14 years. Sharing pattern of GOI and GOAP is 60:40. The Integrated Scheme "Samagra Shiksha" envisages providing an equitable and inclusive quality of education.

Objectives:

- Enrolment of all children in the age group of 6-14 years in regular schools
- Provision of quality education and enhancing learning outcomes of students;
- Bridging Social and Gender Gaps in School Education
- Ensuring equity and inclusion at all levels of school Education
- Ensuring minimum standards in schooling provisions; Promoting Vocational Education;
- To provide building and infrastructure facility & other amenities to all the schools of government and Local Body Primary, Upper Primary and High Schools/Senior Secondary meant for imparting Education.
- To provide access to free education to all children up to the age of 14 years as stipulated in RTE act of 2009.

Quality Initiatives

Quality, joyful teaching, local dialects and language skills: With an objective to improve quality of education in schools, several initiatives like Ganitha Mitra programme

for improving maths skill through Maths kit. 2000 schools covered 285511 students (I to V), Ananda Lahari Abhyasana for providing joyful teaching with activity based and using tabs by children have been put in place. Towards developing scientific temper in Maths and Science, Rashtriya Avishkar Abhiyan was introduced in 2866 UP schools. Further to encourage student's home language in their local dialect to improve reading and writing in early stage on pilot basis (Class 1&2) in 'Local Dialects' initiative was introduced in the Mandasa Mandal of Srikakulam, Macherla Mandal of Guntur & Adoni Mandal of Kurnool. Keeping in view of the tribal cultures, geographical and ecological factors of tribal pockets, text books were developed in 6 tribal languages of students (1 to 3 Classes) Languages: Savara, Konda, Kuvi, Adivasi Oriya, Koya, Sugali/ Lambada in 8 districts for improvement of language skills.

Learning Enhancement Programme: Gnana Dhara, Remediation activities, Assessments, Post NAS activities, TLM manual (Classes I to VIII):

Inclusive Education

Mainstreaming of Children with Special Needs (CwSN) into regular schools by conducting corrective surgeries, therapy services under school readiness programme in IERCs.

Progress during 2018-19

- 70864 Children with Special Needs (CwSN) were benefitted in 21 categories in Govt. & Govt Aided Schools
- Divisional Assessment Camps have been conducted for assessing of CwSN in 21 categories of disabilities by medical experts and provided aids and appliances to CwSN.
- Entitlements for CWSN Children under Inclusive Education:
- Transport Allowance (HI, MR & Ortho), Escort Allowance (CP, Loco Motor & M.D), Stipend for Girls (Class VI – VIII) and Home based for Severe CwSN have been provided.

Proposed Activities for the Academic Year 2019-20:

- 1,24,395 CwSN of 6 to 14 years in 21 categories

through “Sahitha” App during 2019-20. The PAB has recommended and sanctioned budget for 77664 CwSN. The State Government to provide financial assistance to the rest of 46731.

- Provide aids and appliances to 5500 CwSN, transport allowance to 12000 CwSN, stipend to 9868 CwSN girls, escort allowance to 8000 CwSN, home based allowance to 6800 CwSN and reader allowance to 1519 visual impairment students.
- To conduct corrective surgeries to 1772 CwSN by medical experts.

Pre – Primary Education

To promote transition of children in Pre-Primary Schools to primary level and to develop oral skills, quality education and to develop infrastructure in Pre-Primary Schools, the MHRD has sanctioned 3000 Pre-Primary schools (Co-located Anganwadi Centers) with an amount of Rs. 2610 Lakhs in the year 2019-20.

Out of School Children

School dropouts and Out of School children continue to be concern in education. 1,14,832 Out of School Children were identified during the year 2018-19. 44384 children are enrolled under direct enrolment, 22190 children into Non-Residential Special Training Centres, 2744 children in Residential Special Training Centres and 16711 children in Madrasas during 2018-19. 1393 specific category of deprived children such as orphans, semi-orphans, CWAP, beggars, street children, rag pickers, children of HIV affected, HIV Infected children of sex workers etc were covered in 2 Urban Residential Schools & 13 Urban Residential Hostels. 19931 Children of migrating parents were covered by opening of 398 Seasonal Hostels. Transport allowance has been provided for 32756 children who are residing at schoolless habitations/sparsely populated areas, hilly areas etc. and the distance more than 1 km for Primary & more than 3 km for Upper primary from their habitations.

Minority Education:

Up gradation of Urdu schools: 220 Urdu Primary schools have been upgraded as Urdu Upper primary schools

by the Government of India with 660 additional class rooms and 660 additional teacher posts. The additional teacher’s recruitment is under process. Out of the total 1607 Urdu minority schools in the state, 1114 are primary, 355 Upper primary and 138 High schools.

Proposal to Establish of Madarsa Education Board:

As per the Govt. of India recommendations, the APSSA has constituted a draft committee under the Chairmanship of Prof. Mohd Akhtar Siddiqui, Former NCTE Chairman & Professor of Education in Jamia Milia University, New Delhi. The Draft prepared by the Committee was submitted for an Act /Ordinance. It is in the process.

Kasturba Gandhi Balika Vidyalaya:

There are 352 KGBVs are running for dropouts, orphans, semi orphans, SC, ST, OBC girl students. 71495 children enrolled in 2018-19. 31 KGBVs upgraded to Intermediate level education in 2018-19. Virtual class rooms are established in 321 KGBVS, e-vidya programme and Adaptive learning programmes are being implemented. Edupaytion, a School Management system app is being implemented in all KGBVs for monitoring. In these schools, the Pass percentage in SSC in 2018-19 was 95.69%, 5th place at State Level and 161 students secured 10 GPA. 140 KGBVs have been proposed up-gradation to Intermediate Education.

Equity:

Establishment of Equity Clubs – ‘Karachlanam’ (Shake Hands) is planned to promote equity and equality, communal harmony, patriotism, national integration, constitutional values and to improve cultural heritage among the school going children. The activities include: Organizing awareness Camps, conduct of essay writing, quiz, drawing, poems, story, competitions, group discussions and extracurricular activities, exposure visits to villages and towns.

Digital classrooms:

In 2018-19, advanced Digital Class rooms(DCRs) were sanctioned for 2000 Model Primary schools with enrolment more than 50 and 1092 Desktops are provided to Bhavitha / Non Bhavitha, URH & URS, Madarasas. 2870 DCRs are proposed for 2019-20 for UP Schools with enrolment more than 50 students and for maintenance of existing 500 DCRs.

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Uniforms:

Three pairs of stitched uniforms (earlier 2 pairs only) are being provided to 30,17,454 children of 1 to 8 classes for the first time in Government, Aided, Model and KGBV management schools within the ceiling limit of Rs.600/- per student. Procurement is made through APCO. It is planned to be extended from 9th class up to Intermediate additionally covering 10,46,116 students with an estimated amount of Rs.62.76 Crore @ Rs.600/- for student. Similarly, a pair of shoe and two pairs socks are provided to children of 1 to 9 classes. It is also proposed to provide Tie and Belt to 30,17,454 students @ Rs.50/- per student with an estimated amount of Rs.15.08 Crore.

Civil works – School infrastructure:

A massive program for construction of 8310 compound walls with an out lay of Rs.796.64 Cr is sanctioned during the year 2018-19 under convergence of MGNREGS and works are in progress.

- 14077 toilets require repairs to bring into usable condition, and 2851 schools need electrification. Drinking Water Facilities is required in 7510 schools.
- Under HAM Project, government sanctioned Rs.4848 Crores for providing basic infrastructure facilities in schools with duration of 2-year construction period and 5 years' maintenance period. HAM is being implemented in NHAI. In this model 40% of the project cost is from State Government and 60% by the Bidder through loan which is re-payable by the Government in Maintenance period of 5 years to the bidder in 10 Installments.
- The targets for 2019-20 include: Construction of 69 Addl. Class Rooms, 1685 Toilets, 929 Major Repairs,

Intermediate Education

The plus two stage (Intermediate) education was introduced in Andhra Pradesh under 10+2+3 pattern from 1969-70. The Directorate of Higher Education has been bifurcated into two Directorates, Directorate of Intermediate Education and Directorate of Collegiate Education from 1-11-1989.

There are 457 Government Junior Colleges and 168 Aided Junior Colleges functioning under the administrative control of the Commissioner of Intermediate Education. Conventional courses in science, arts and commerce are offered at Intermediate in plus 2 Education. 27 Vocational courses are also being offered in the fields of Engineering & Technology, Agriculture, Home Science, Para Medical, Business & Management. Details of district wise and category wise functioning Junior colleges are functioning are given in Annexure 8.8.

Enrolment of Students

Contact/Awareness Programmes are conducted at School level/mandal level for identification of SSC students and dropouts to improve enrolment in Government Junior Colleges for the academic year 2018-19, by preparing pamphlet, highlighting success stories of the students in the Government Junior college concerned. The Government has fixed minimum target of 10% increase in enrolment of students in Government Junior colleges over last year. Enrolment of Students in the year 2018-19 are given in the Table 8.4

Table 8.4 Enrolment of Students in the year 2018-19.

(in No.s)

2018-19	Govt.+ Aided+ Other		Private		Total	
	Colleges	Enrollment	Colleges	Enrollment	Colleges	Enrollment
1 st Year	1093	138632	2203	368675	3296	507307
2 nd Year	1093	132305	2203	378050	3296	510355

Source: Board of Intermediate Education

Results, Trainings and Vocational Courses

4,31,739 candidates appeared for General Courses in 2nd year I.P.E March 2019 of which 3,09,613 students passed whereas under Vocational courses, out of the 26,652 candidates appeared, 18,409 students passed. District wise General and Vocational courses result in March 2019 are given in the Annexure 8.9.

During the academic year 2019-20, about 3802 Junior Lecturers are engaged on contract basis and nearly 804 Junior Lecturers are engaged on Guest Faculty in Government Junior Colleges during the academic year 2019-20.

State Institute of Vocational Education (SIVE)

Short Term Vocational Courses

About 4027 unemployed youth have been admitted / registered for 48 short term vocational courses (STVCC) during 2018-19 in various modules under the notification issued by the State Institute of Vocational Education (SIVE) wing in the Commissionerate of Intermediate Education.

Academic programme and training and placement details:

During the year 2018-19, syllabus of Vocational courses in 1st year and 2nd year and Practical manuals were reviewed and 1st year text books were prepared with new curriculum and 2nd year Vocational text books are being prepared for the Year 2019-20.

The 1,862 students were selected for Apprenticeship Training programme from 5 centres in AP. Skill training programme was provided for 884 Engineering Vocational Students through Skill Development (APSSDC) in AP. 435 vocational students were selected for different Jobs through JOB MELAS conducted by SIVE (State Institute of Vocational Education).

Mid-Day Meal

Government have issued orders to provide Mid-Day Meal to the students studying in all the Government Junior colleges in the state. Government allocated an amount

of Rs.23 crores under SCSP,TSP and General Head of account for implementation of Mid Day Meal Programme in Government Junior Colleges in the state. As such, Mid-Day Meal (Cooked Food) programme is implemented from 01-08-2018 upto last working day of the academic year 2018-19. About 1,50,715 students studying in the 450 Govt Junior Colleges in the state benefitted under the scheme.

Distribution of Text books

Government have allotted an amount of Rs.7.90 Crores for the year 2018-19 for supply of Intermediate text books on free of cost to the Intermediate students studying in the Government and Aided Junior Colleges in the state. 15,02,024 Intermediate text books of various groups were distributed for the year 2018-19 to 1,50,715 students and incurred an expenditure of Rs.10.67 crores. Further 14,76,053 Intermediate text books are printed for the year 2019-20 and are being distributed to all Government/Aided Junior Colleges.

RIDF Works

Govt. has sanctioned 248 works/Projects under RIDF 18,19,20,22 and 23 with an estimated cost of Rs.254.72 Cr under RIDF NABARD Assistance to the Intermediate Education. Out of 248 works /Projects, 190 works were completed with an amount of Rs.158.52 Cr and 58 works are under progress. Government has introduced new scheme Digital Class Rooms in all Govt. Junior Colleges in the State for the benefit of students during 2018-19.

English language Laboratories

Government has introduced new scheme English Language Laboratories in all Govt. Junior Colleges in the State for the benefit of students during the year 2018-19.

Supply of Sanitary Napkins to Intermediate Girl Students

Government has introduced scheme for supply of sanitary napkins to Intermediate Girl Students in all Govt/Aided Junior Colleges in the State during the year 2018-19.

Fees Reimbursement: Government is reimbursing the tuition fee full for students pursuing Post Metric Courses and

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the programme will be strengthened under the Navaratnalu. Maintenance Charges or Mess Charges are sanctioned every month as per the rates prescribed in the Academic year. A total Amount of Rs. 98.87 Cr. have been distributed to 3,09,072 students in 1st year and an amount of Rs. 122.84 Cr. has been distributed to 2,64,377 students in 2nd year SC, ST, BC, EBC, minority etc., categories during the year 2018-19 by the concerned welfare departments.

Collegiate Education

Higher Education Sector focuses on providing quality education and transform the state into a knowledge hub. Access to meaningful learning and particularly to students hailing from marginalized sections of the society is the mission statement.

There are 148 Government degree colleges and 137 Private aided colleges with 1,92,340 students (86,985 GDCs+ 1,05,355 Pvt. Aided Colleges) offering UG & PG courses. Out of these, 42 are autonomous colleges (14 GDCs + 28 aided), 16 oriental colleges (1 GDC + 15 aided) & 2 are social welfare Govt. residential degree colleges offering B. Com (Hons). The department has initiated various programmes for sustaining and promoting quality of education.

Table 8.5 below shows the details about the number of Degree Colleges and their strength. District-wise colleges, strength and category wise enrolments of Government & Private aided Degree colleges during the year 2018 - 19 are given in Annexures 8.10 and 8.11 respectively.

Table 8.5 Degree Colleges and Students, 2018 – 19 (in No.s)

Type	Colleges	Students
Government colleges	148	86,985
Private Aided colleges	137	1,05,355
Total	285	1,92,340

Source: Commissionerate of Collegiate Education

Government degree colleges – results and new courses

Results of Government degree colleges were analyzed to encourage and motivate faculty members and to create healthy competition among colleges. Average pass percentage in 2017-18 was 72.92%. 359 Lecturers secured

100% results in their subjects and 2160 Lecturers secured more than 90% pass percentage. Government introduced market oriented courses through the UGC scheme of restructuring to help students find immediate employment after graduation. 25 market-oriented restructured courses were introduced in 12 Government Autonomous Colleges across the State. All these courses are in English Medium with a sanctioned intake of 30. B.Sc. Course in Aquaculture is introduced in 6 Govt. Colleges and NFDB has agreed to fund the students for 6 months of apprenticeship.

Employability Enhancement: Jawaharlal Knowledge Centres (JKCs)

Jawahar Knowledge Centre (JKC) is one of the Flagship programmes of the Government of Andhra Pradesh under the aegis of Commissionerate of Collegiate Education. Training is the quintessential in unleashing human potential. JKCs extend placement support to final year students and also passed-out students by inviting companies like Infosys, Wipro, Tech Mahindra, Genpact, Hetero drugs, ILM, ICICI, etc., for conducting campus drives at colleges.

Andhra Pradesh State Skill Development Centre (APSSDC) established 50 training centres in Government Degree Colleges and provided Laptops and Tabs as part of Employable Skill Enhancement. Both JKC and APSSDC conduct Mega Job Fairs for the final year students of the Government Degree Colleges. The Department is imparting employable skills through JKCs established in 132 Government Degree Colleges. 13453 students were trained and 7474 students got placements in 2018-19. 10000 students were registered for various training programs in different Skill Sector Councils (SSCs). About 45 Govt Degree Colleges and 22 Aided Colleges have undertaken MoUs with APSSDC for training on skills and employment opportunities.

Rastriya Uchchitar Siksha Abhyan (RUSA)

Rashtriya Uchchatar Shiksha Abhiyan (RUSA) is a Centrally Sponsored Scheme (CSS), providing funding to eligible state higher educational institutions. The funding to states would be made based on critical appraisal of State Higher Education Plans, which would describe each state's strategy to address issues of Equity, Access and Excellence in Higher

Education and the outcome will be visible through increasing GER, Quality Teaching and relevance in research output.

RUSA Phase - I (Period 2012-17)

- Creation of Universities by conversion of colleges in a cluster at Kurnool @ Rs.55 Crores.
- Construction of New Model Degree colleges in six places viz., Kurnool (Atmakur), Prakasham (Yerragondapalem), West Godavari (Kamavarapukota), East Godavari (Jaggampeta), Srikakulam (Pathapatnam) and Vizianagaram (Cheepurupalli) districts are under progress @ Rs.12 Crores each.
- Upgradation of existing Degree Colleges to Model Degree Colleges in two places at Visakhapatnam (GDC, Bheemunipatnam) and Guntur (GDC, Repalle) @ Rs.4 Crores.
- Infrastructure grants to 56 Govt Degree colleges in the state @ Rs.2 Crores.

Action Plan under RUSA Phase - II (Plan period 2018-20) & Beyond

- Construction of New Model Degree colleges in two places viz., Araku(W) Visakhapatnam and Pendlimarri Kadapa are under progress @ Rs.12 Crores each.
- Upgradation of existing Degree Colleges to Model Degree Colleges in three places at Salur Vizianagaram, Paderu Visakhapatnam and Proddutur Kadapa @ Rs.4 Crores. Each.
- Infrastructure grants to 35 (4 GDCs + 31 Aided) Degree colleges in the state @ Rs.2 Crores
- Enhancing quality and excellence in autonomous institutions in two places viz Andhra Loyola College – Vijayawada and St.Theressa College Eluru @ Rs 5 Crores each

Quality enhancement, Capacity Building for Faculty

The Department mandated all colleges under its administrative control to get accredited by the (NAAC). The department extends necessary support to colleges in the process of accreditation such as training for Principals

and IQAC Coordinators of (Internal Quality Assurance Cell) IQAC in preparation of Self Study Report (SSR) for submission to NAAC. 180 Government & Pvt Aided colleges are having valid NAAC grade as on 31.1.2019. The department provides training to Principals, Lecturers and non-teaching staff to enhance the academic, administrative skills of the staff. During 2018-19, 400 faculty were trained on MOOCS at NIT, Warangal and 350 new recruits undergone Induction training at APHRDI.

To improve communication skills 72 English Language Labs (ELL) were established in Government Degree Colleges. ELL software was also provided to 101 Government Degree Colleges to strengthen the skills among the students.

Autonomous Colleges

Autonomous and CPE status

44 Degree colleges (16Govt. and 28 Pvt. Aided) attained Autonomous Status. Autonomous Colleges have flexibility to frame their curriculum & devise methods of evaluation in consultation with affiliating universities. CPE Colleges receive special assistance from UGC to the tune of Rs.3.5 Cr. over a period of 5 years.

NIRF Ranking

During 2018-19, 4 colleges viz., Andhra Loyola College (A), Vijayawada, Silver Jubilee Govt. College (A), Kurnool, Dr.V S Krishna College (A), Visakhapatnam and SRR & CVR Govt. College (A), Vijayawada have obtained ranks below 200 as per the National Institutional Ranking Framework, Ministry of Human Resource Development, Government of India. Govt. Arts College (A), Rajahmundry, St. Teresa's College (A), Eluru, and St. Joseph's College (A), Visakhapatnam were in the top 10 ranks in all over India

Awards - State Teacher, Pratibha and Yuvatarangam awards

51 awards were given to teachers on 5th September 2018 on Teachers day. The Government has instituted Pratibha awards for the students of Higher Education in recognition to their merit. 311 awards were given to the students of Degree colleges on 15th October 2018 on Abdul Kalam's Birth day. Each awardee is given Merit Certificate, Medal, Cash prize of Rs.20,000/- and Electronic Tab.

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Key Performance Indicators (KPIs)

The Degree Colleges are graded based on Key Performance Indicators like NAAC accreditation, Infrastructure facilities, Focus on Research, Faculty Training programmes, Results & Placements and the grades. Apart from this, 25 Key Performance Indicators were designed and colleges were ranked based on 25 KPIs.

Academic Audit

Academic Audit is the process of internal assessment of Institutions and faculty, introduced to promote right learning environment for students. Trained lecturers from different subjects designated as academic advisors conduct academic audit in line with NAAC criteria in the colleges allotted to them. The initiative helps Institutions to perform well in accreditation and to attain better NAAC Grades. Academic Audit of AP is identified as the Best Practice by Govt. of India. Student Satisfaction Survey is included in Academic Audit as suggested by NAAC, Bangalore to assess Teachers and Curriculum.

New Initiatives in Collegiate education

Choice Based Credit System

- Andhra Pradesh is one of the few States in the entire country that implemented Choice Based Credit System (CBCS) for UG Courses in all Universities in the State.

Virtual Classrooms:

- Virtual Classrooms were established in RUSA funded Colleges. District level and state level expertise lessons are telecast daily to improve access to varied teaching experiences
- In Phase-I, 90 virtual classrooms installed in 56 RUSA Colleges, and in Phase-II, 101 virtual classrooms installed in 90 Non-RUSA Colleges.

AP fibre grid connectivity

- 54 Govt. Degree Colleges were provided with AP Fibre Grid connectivity with 10 mbps leased line for Virtual Classrooms and Digital Classrooms using LMS & 100 Mbps broadband to facilitate Wi-Fi enabled campus.

Learning Management System (LMS)

- Learning Management System (LMS) is an important initiative of the department introduced as an Academic Reform under RUSA to showcase varied teaching strategies like video lessons, power point presentations, notes for further reading and self-assessment questions to promote active learning in students leading to effective transfer of knowledge and skills to students in and outside the classroom.
- 370 video lessons were available in LMS portal for the benefit of students and faculty covering 22 subjects by involving 80 subject experts. To make class room teaching interactive and to help students become familiar with basics and obtain a command over the subject there by improving employment opportunities in core subjects.

Establishment of Digital Classrooms

- Establishment of Digital class rooms is in progress in 56 RUSA Colleges
- 10 MBPS dedicated leased line will be exclusively used through Digital class rooms

Andhra Pradesh Student Academic Management System (APSAMS):

- The SAMS application offers online features like e-admission, college management services and student services.
- A common admission process has been devised for all Government and Private Aided Degree Colleges through mapping of courses, Seats, University-wise Fee structure along with Infrastructure Quality Index.
- Once the portal is ready it will be of great use for NAAC accreditation, NIRF rankings and other rankings including other global rankings

Solar power:

Introduced 'Solar Equipment' solution in 49 RUSA colleges, as a part of developing 'Green Campus'. 20kv/10kv/6kv/ solar panels are installed in 46 colleges and Net-metering has been adopted to enable excess power generation and low maintenance.

Extra-Curricular & Extension Activities

Various Extra-Curricular & Extension Activities are being entertained in the degree colleges in the state; These include establishment of Women Empowerment Cell (WEC), Kishori Vikasam campaign to create awareness among the students of upper primary and high school level on prevention of child sexual abuse, trafficking, child marriages, establishment of “Anti-Ragging Committees” in all Government and Private Aided Degree Colleges, Vanam Manam for forestation drive, Open defecation Free by the NSS units and Sanitation as everyone’s business. Five degree colleges in Chittoor, Tenali, Rajamahendravaram, Nellore, Vijayawada received Swachha Bharat Awards for their participation in cleanliness and hygiene in urban and rural areas of the State.

Action Plan to implement Fee Reimbursement under Navarathnalu

During 2018-19, 179561 students were admitted in Govt. & Pvt. Aided Degree Colleges, out of which 125245 are beneficiaries of scholarship scheme. (52696 in Govt. and 72549 in Pvt. Aided)

Additional budget requirement for the scholarship beneficiaries for Food & Accommodation i.e., @ Rs.20000/- per student under the newly assured scheme of Navarathnalu is estimated as Rs.15891.91 Lakhs, in which Rs.6797.96 Lakhs for Govt. and Rs.9093.96 Lakhs for Pvt. Aided Colleges

Admissions in Polytechnics of AP

(in No.s)

Type	Polytechnics	Sanctioned strength	Enrolment	Vacancy	Percentage of enrolment
Government	84	15835	12758	3077	81
Private Aided	2	275	275	0	100
Private	201	57366	29652	27714	52
TOTAL	287	73476	42685	30791	58

Source: Technical Education

Skill Development Activities

41 Skill Development Centres have been established in Polytechnics across the State. Technical courses that supplement regular Diploma Courses are offered. ‘Polyskills’ – a general communication and soft skills training course is offered to students of all branches. 70 Government

Technical Education

The prime objective of the department is to increase and enhance skilled technician manpower through polytechnic education to cater to the needs of the industry and thereby achieve sustainable development goals. The government also lays emphasis on and to improve the ranking at All India level by enhancing the quality of education in our Polytechnics and increase the number of students who join Polytechnic education. There are 84 Government Polytechnics, 2 Aided Polytechnics and 201 Private Polytechnics functioning in the state.

Mission

- Teaching and Learning Suiting Industry needs
- Interaction with Industry for upgrading Courses
- Modernization of Laboratories matching Industry skills-set
- Revision of Curriculum every five years
- Making learning self – targeting for students in need of immediate supervisory technical jobs.
- Accreditation from NBA for Government Polytechnics

Courses offered

- 3 Year Diploma courses are offered in 20 branches of Engineering & Non- Engineering.
- 3 ½ year Sandwich Diploma courses are offered in 5 branches of Engineering.
- 2 Year Diploma course in Pharmacy is offered in 8 GPTs with an intake of 320 and in 11 Private Institutions with an intake of 805.

Polytechnics chosen to have CISCO Academies. Course content of Cisco has been incorporated into the Polytechnic ECE and Computers Diploma courses. Cisco, trained staff of Polytechnics, in two phases to enable them to run the courses effectively. Students to get ‘Certificate from Cisco’ along with Diploma Certificate. 4932 students have registered in 56 Cisco Academies started in Polytechnics during the year 2018-19.

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Pratibha Scholarships

Government sanctions scholarship under Pratibha Scholarship Scheme to promote quality and excellence in education. Under this scheme, meritorious students who excel in public examination/ Entrance Tests. i.e. Eamcet, Ecet, ICET, Polycet; and who belong to Andhra State and joined National Level Institutes will be provided with a certificate medal electronic Tab and Cash Prize of Rs 20,000/-.

Enrollment in PMKVY –TI- 2018-19

Studies say that India will have youth in the age group of 18 – 25 years @ 54 % of the population by 2029. It is against this backdrop that mission mode projects like ‘Pradhan Mantri Kaushal Vikas Yojana’ (PMKVY) etc., are initiated to bridge the gap between Industry needs and output from the Educational Institutions. PMKVY is implemented through AICTE approved Technical Institutes and Polytechnics which are willing to run Skill Development Program using existing infrastructure for running technical skill based courses for the academic year 2018-19 and selected institutions may run certificate courses “NSQP”. 18 Government Polytechnics @ 81 courses with an intake of 1890, 7 Private Polytechnics have applied @ 97 Courses with an intake of 2595 and 55 Engineering Colleges @ 308 Courses with an intake of 7405 have applied for PMKVY.

Institutional and Infrastructure Development

With regard to capital work in government polytechnics, out of 84 Polytechnics, 82 having land and other 2 GPs (GPT, Chodavaram, VSP Dist, and GPT, Aluru, Kurnool – (Private land donation in process)) land is under process. Out of 84 Polytechnics 62 having buildings and remaining 22 are under process. 8 laboratories have been modernized.

Web Based Counselling:

Admissions are made through web based counselling for EAMCET, ECET, POLYCET (CEEP) & I CET as per the ranks secured by the candidates at different helpline centres in Andhra Pradesh. The web counselling facilitates the students to exercise their options from nearest computer/helpline centres or from their residences.

Apprentice Training:

The Department is also providing training for Engineering Graduates and Diploma holders in collaboration with BOAT, MHRD, Government of India. Industrial Training is made mandatory in C-16 Curriculum for all branches in polytechnics. 5 National level institutions viz; IIT Tirupati, IISER Tirupati, IIM Visakhapatnam, NIT Tadepalligudem, IIIT Kurnool have been established in the state.

Construction of Buildings under NABARD:

Construction of buildings for various Government Polytechnics were planned under different RIDF projects. Further, infrastructure development facilities including construction of hostel buildings are being taken up in the government and GMR polytechnics for SCs and STs. Provision of Drinking Water, Toilets and Digital Class Rooms 100% achieved in all Government Polytechnic Colleges.

New Proposals

- To set up 4 Vocational Education & Training Institutions in Government Polytechnics at Anantapur, Tirupati, Guntur and Visakhapatnam.
- The main objective of these institutions is to reduce the mismatch between the demand and supply of skilled man-power, prepare students for identified vocations with an emphasis on development of attitudes, knowledge, and skills for entrepreneurship and self-employment,

Family Welfare

Family Welfare department provides maternal health care, child health care and family welfare services through 7458 Sub-centres, 1148 Primary Health Centres, 198 Community Health Centres, 28 Area Hospitals, 14 District Hospitals, 10 Other Health facilities (3 Mother and Child Health Centres, 4 MPLs, 2 FRUs and 1 ESI) and 12 Teaching hospitals. Apart from these, 59 Urban Family Welfare Centres, 44 Post Partum Units and 243 (e)-UPHCs and 8 UHCs are also providing services in the state.

The estimated Crude Birth rate, Crude Death rate and Infant Mortality Rates for the year, 2017 in the state are

16.2, 7.2 and 32 respectively while it is 20.2, 6.3 and 33 for All India (as per Sample Registration System, bulletin - May, 2019). The Male and Female expected life at birth in the AP including Telangana State is 68.4 and 72.1 respectively as against the All India figures of 68.8 and 71.1 in (2016-20). Maternal Mortality Ratio (MMR) is defined as the proportion of maternal deaths per 1, 00,000 live births reported, which is 74 for Andhra Pradesh as against 130 in All India (2014-16) as per the latest Sample Registration System Sources.

Demographic Goals

The Goals fixed for State under Infant Mortality Rate, Maternal Mortality Ratio, Total Fertility Rate are <20, <70 and 1.8 respectively. Implementation of various planned departmental programmes in a structured process over the years has culminated in achievement of the set demographic goals in the following manner. The status of achievement in demographic goals in AP is shown in Table.8.6.

Table 8.6: Status of Achievement in Demographic Goals – AP

S. No	Name of the Indicator	Goal	Present Status		Source
			AP	India	
1	Maternal Mortality Ratio (MMR)	< 70	74	130	SRS - 2014-16
2	Infant Mortality Rate (IMR)	< 20	32	33	SRS-2017
3	Under 5 Mortality Rate (U5MR)	< 25	37	39	SRS - 2016
4	Total Fertility Rate (TFR)	1.8	1.7	2.3	SRS - 2016
5	Contraceptive Prevalence Rate (CPR)	-	66.7	48.2	DLHS-3
6	Crude Birth Rate (CBR)	-	16.2	20.2	SRS 2017
7	Crude Death Rate (CDR)	-	7.2	6.3	SRS 2017

S. No	Name of the Indicator	Goal	Present Status		Source
			AP	India	
8	Adult Sex Ratio (ASR)	-	996	943	Census 2011
9	Child Sex Ratio (CSR)	-	944	918	Census 2011

Source: Family Welfare

Maternal Health Care Services:

In Andhra Pradesh, Maternal Health Care Services are being provided to the pregnant woman by implementing the following schemes/ interventions:

a. 24-hours Mother & Child Health Centre (MCH):

The concept of 24 hours Mother & Child Health PHCs has been contemplated during the year 1996 to provide round the clock normal delivery services for rural Mothers. 596 MCH centres are functioning in the state to provide round the clock normal delivery services for rural mothers. 44444 deliveries have been conducted by 24x7 MCH PHCs during April 2018 to March, 2019.

b. Comprehensive Emergency Obstetric and Neonatal Care (CEMONC) Services:

To reduce Maternal Mortality Rate & Infant Mortality Rate, 90 CEMONC centers were established by GOI in selected First Referral Units (CHCs/AHs/DHs) in the State

c. Accredited Social Health Activist (ASHA):

ASHA Programme is the key component of Community Process. ASHA will take steps to mobilize Community on Maternal & Child Health activities. ASHA also creates awareness to the community on Nutrition, basic sanitation and Hygienic practices, Healthy living and working condition, information on existing Health Services and need for timely use of Health services. 42353 ASHAs are working in the state, of which 39609 ASHAs are in rural areas and 2744 are in urban areas.

d. Village Health and Nutrition Day (VHND):

To create awareness on various preventive measures to be adopted, the Department of Health, Medical & Family Welfare in convergence with Women and Child Welfare Department is conducting two VHNDs, i.e. one in Anganwadi centres and second on the day of visit of Mobile Medical Unit

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(MMU) to that village. Village Health Nutrition Days (VHND) are regularly conducted by ANMs, AWWs and ASHAs in Anganwadi centers of 17366 Villages. Under this scheme, 5.93 lakh VHNDs were conducted in 2018-19. For the next five years, department has prepared an action plan to conduct 5.78 Lakh VHNDs every year from 2019-20.

e. **Janani Suraksha Yojana (JSY):** Under this scheme, incentives are being paid to the pregnant women at the time of delivery to encourage institutional deliveries at Public Health Institutes. 2.73 Lakh pregnant women were benefitted during 2018-19. The department has planned to cover 2.86 lakh pregnant women during 2019-20.

f. **Janani Sishu Suraksha Karyakram (JSSK):** The Government of India has initiated a policy to guarantee free & cashless deliveries including caesarean operations in all public health institutions under JSSK scheme under NRHM without user charges and out of pocket expenditures. Andhra Pradesh launched the scheme on 22.10.2011. Under this scheme, 1.58 lakh Pregnant Women availed drugs and consumables, 1.53 lakh availed free diet and 1.64 lakh availed free diagnostics. Department is planning to increase the public institutional deliveries @ 5% minimum per year.

g. **Talli Bidda Express under JSSK:** The government has introduced this service in order to encourage deliveries at the government hospitals which are safe and most of them would be normal deliveries. The scheme provides safe and hygienic transportation to post-natal women with children through dedicated vehicles. 2.59 lakh pregnant women availed drop back service after delivery during 2018.

h. **Maternal Death Review (MDR):** The District Level Quality Assurance Committee constituted at District Level reviews the maternal and infant deaths every month and sends a detailed report about the corrective measures taken to minimize the Maternal and Infant Deaths. 461 MDRs reports were received during year 2018-19.

i. **Other Initiatives:**

a. **Reproductive Child Health (RCH):** To track every Mother & Child in receiving the Health Services from time to time, the name based online record is being maintained under Reproductive Child Health (RCH) which is a centralized web based application. All ANMs are provided with Tablet PC's along with

Net Connection and Sim Cards for using these tabs so that ANMs can easily identify the services due to the Pregnant Mothers & Infants. The beneficiaries also are alerted with SMS in receiving Health Services due from time to time. During 2018-19, a total of 5.81 lakh mothers and 4.93 lakh children were registered in the web portal.

b. **ANM Digi is** a complete healthcare record management application which gives real time visibility about the overall health condition of a place, challenges, extent of implementation & execution of health programs and effective monitoring of Improve care quality, patient safety and outcomes of the health services and reduce the Maternal and Child death rate. ANG Digi was rolled out and currently being used in 8 districts (Srikakulam, Vizianagaram, West Godavari, Krishna, Guntur, Prakasam, Nellore and Kurnool).

c. **Mother and Child Health Cards** provided for every registered pregnant woman to have on-hand record of Health Services being provided to pregnant mother and infants. Birth certificates are also included in this card.

Table- 8.7. Progress under Key Performance Indicators under Mother Care Services. (in. No.s)

S. No.	Indicator	2017-18	2018-19
1	ANC Reg.	809667	868449
2	High Risk PW	114376	134885
3	ANC 4 Checkups	72075	757435
4	Govt. Institutional Del.	323921	331544
5	Low Birth Weight (<2.5 Kgs)	40032	35164
6	Breast Feeding within 1Hr	657655	694499
7	Post Natal Checkups	539523	561526

Source: Family Welfare

Child Health Care Services

26 Special New Born Care Units (SNCUs), 21 Mini Special New Born Care Units (Tribal), 18 Nutrition Rehabilitation Centres, 95 Newborn Stabilization Units (NBSUs) and 789 New Born Care Corners (NBCCs) are established in the state to reduce Infant Mortality Rate (IMR) by strengthening

neo-natal care services. Of these, 21 centres are having 20 bedded facilities in district hospitals and teaching hospitals and 5 with 10 bedded facilities in area hospitals/community health centres.

Child Immunization: This is an ongoing programme with time to time reviews, reorientation trainings and introduction of new vaccines.

- A full immunization (children below 1 yr) coverage 100.16% - and complete immunization (Children of 1 to 5 Yrs) 104.86 % was the achieved so far.
- Special efforts to bring in children of vulnerable groups for immunization coverage are in place and ongoing, through meticulous RI plans – Mission Indradhanush and Intensified Mission Indradhanush.

Rota Virus Vaccine: Introduced in to the RI schedule of the state to address the problem of Diarrhoea in children due to virus. Given in 3 doses, scheduled at 6th, 10th & 14th week after birth, the percentage of coverage is 91.94%, 91.9% & 93.8% respectively.

Inactivated Poliomyelitis Vaccine: To continue the Polio Free status, as a part of end game strategy against Polio, the State has switched to bOPV (bi-valent Oral Polio Vaccine) and introduced Inactivated Polio Myelitis Vaccine in to the RI schedule of the state. Given in 2 doses, scheduled at 6th & 14th week after birth and covered 94.03% & 95.22% respectively.

MR Campaign: In order to eliminate Measles & control of Rubella from the Country by 2020, as per the instructions of the Government of India, MR vaccination was given to all the children from 9th month to 15 years in the state in campaign mode and a total of 1.14 Crore children were given MR Vaccination in this campaign. Later, the Measles vaccine was replaced by MR Vaccine in routine Immunization programme.

Palakarimpu Programme: The Palakarimpu Programme was implemented in the State in the month of December 2018 in coordination with staff of Women and Child Welfare Department and MEPMA. The aim of the Programme is to declare that the all children in Andhra Pradesh immunized by end of April 2018. Under this programme teams were formed with Anganwadi workers, ASHAs and MEPMA members. Each team will visit every household with 0-5 years children in the village -at least 10 households per day. These teams

identify the gaps in Child Immunization, MCH services and Seasonal Disease.

Rashtriya Bala Swasthya Karyakram (RBSK)

The RBSK programme is broadly aimed at screening children for 4Ds (Birth Defects, Deficiencies, childhood diseases disability and development delays) and providing treatment with early intervention. To provide the referral treatment to school children, 16 DEIC (District Early Intervention Centres) are also established to provide comprehensive treatment. The children will be screened for health problems under the program vitamin-A supplementation, bi-annual de-worming and referral services to higher medical institutions for better treatment. Achievements of Rashtriya Bal Swasthya Karyakram Programme are shown in Table 8.8

Table 8.8 Achievements of Rashtriya Bal Swasthya Karyakram (RBSK) (in. No.s)

S. No	Intervention	2017-18	2018-19 (up to March)
1	Schools Screening	45094	45673
2	Screening Children	4236844	3964656
3	Children Treated by PHC/UHC MOs team	415743	374134
4	Referral to higher Centres	170302	203476
5	Treated at higher hospitals. A) Aarogyasree B) Non Aarogyasree	20337	16634
6	Eye Screening	978750	1787466
7	Spectacles Distributed	30729	17821
8	Albendazole Tabs	12046312	12117869
9	Iron Folic Acid tabs (Big + Small)	142519172	154347725
10	RBSK Target	6032728	6494524
11	Mobile Health Teams	0	450
12	District Early Intervention Centres	16	16

Source: Family Welfare

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Rashtriya Kishor Swasthya Karyakram (RKSK)

GoI launched the Rashtriya Kishor Swasthya Karyakram (RKSK) to strengthen the adolescent component of the RMNCH+A strategy, which is one of the weakest and a sub-critical programme area. Core programming principles for RKSK are health promotion and a community based approach expanded scope of the programme includes nutrition, sexual & reproductive health, injuries and violence (including gender based violence), Non-Communicable Diseases, mental health and substance misuse.

Various Programs under RKSK:

a. Weekly Iron and Folic Acid Supplementation

(WIFS): Weekly Iron and Folic Acid supplementation programme is being implemented covering adolescent girls and boys enrolled in government/government aided/municipal schools from 6th to 12th classes & adolescent girls who are not in school along with married adolescent girls in both rural and urban areas.

b. Adolescent Friendly Health Clinics (AFHCs):

AFHCs provide clinical, counselling and referral services to adolescents. These service providers will be instrumental in creating an enabling environment at the community level for adolescent health and development activities. 25.17 Lakh adolescents were covered during 2018-19,

Family Welfare Services

The World Population Day is celebrated every year on 11th July. In order to control population explosion by decreasing the Total Fertility Rate, Family planning services are provided by implementing the following schemes and interventions. These are guided by the State's Population Policy -1997 with an objective to improve the quality of services under family welfare programme.

a. Sterilization Methods: Government is providing family planning incentives as compensation towards wage loss an amount of Rs.600/- is paid to Tubectomy acceptors belonging to BPL, SC and ST families and Rs.250/- to other Tubectomy acceptors. Similarly, Rs.1100/- is paid to the Male Sterilization (Vasectomy) acceptors belonging to all categories. During 2018-19 (up to March), 1674 Vasectomies and 199070 Tubectomy operations were performed.

b. Medical Termination of Pregnancy Services -

The objective of the scheme is to provide MTP services at all government hospitals to the eligible couples for termination of unwanted pregnancies. 1834 patients during 2017-18 and 1258 patients in 2018-19 (up to March) were benefited under this scheme.

c. Family Planning Insurance Scheme-

The objective of the FPIS is to Indemnify all the beneficiaries of sterilization, doctors and Health Facilities (Public & accredited private /NGO) conducting sterilization operation in the unlikely event of death / Failure/ Complication following sterilization operation. Under the scheme, Rs.2.00 lakhs is given after death of an acceptor due to sterilization operation within 7 days from the date of discharge from the hospital, Rs.50,000 for such occurrence between 8 to 30 days, Rs.30,000 for sterilization operation failure (payable once) and a maximum of Rs.25,000 as expenses for treatment of medical complication due to sterilization operation (within 60 Days of operation) and indemnity coverage of Rs.2,00,000 to the service providers on legal issues arising out of the surgery. 13 persons were claimed FP Insurance (upto March, 2019).

Urban Slum Health Services: This scheme was started with an objective to provide preventive, promotive and curative services to the people living in slum areas. 243 Urban Primary Health Centres (UPHCs) were established in 54 ULBs under National Urban Health Mission in the Year 2016-17 to address healthcare needs of urban slum population, Each urban health centre covers 15,000 to 20,000 populations in slum area.

Electronic Urban Primary Centres (e-UPHCs):

Government has upgraded the existing 243 Urban Primary Health centres to e-UPHCs with better infrastructure, medical and specialties like Cardiology, Orthopedics, Rheumatology, Endocrinology, Internal Medicine to provide quality medical services to the thickly populated urban dwellers nearer to them.

All the National Programmes are being implemented in e-UPHCs. All the services given to the patients are being captured through online real time software for transparency and efficiency and is reflected on CM CORE Dash Board on real time basis at <http://www.euphc-ap-gov.in>. ASHAs and Anganwadi workers during UHNDs will educate mothers on health and nutritional activities. Based on the Key

Performance Indicators developed for effective monitoring by the PGIMER, Chandigarh who is the Knowledge partner and external auditor, the eUPHCs are inspected by the Knowledge partner and submit performance report to the Government. During 2019-20, Government is planning to cover 7 ULBs.

Preconception and Prenatal Diagnostic Techniques (PC&PNDT) Act:

The PC&PNDT (Prohibition of Sex Selection) Act 1994 and Rules 1996 are implemented in the state to prevent the female feticide and to improve the female sex ratio. So far, 3207 Nursing Homes/Hospitals/Laboratories and Diagnostic Centers were registered in the state under PC&PNDT Act. Multi Member Appropriate Authority and Advisory Committees were constituted at State, District and Sub District Level and regular meetings were being conducted by these committees to review the implementation of PC&PNDT Act in the state.

Special Initiatives:

The State is implementing emergency transportation to aid the patients in case of health urgency, fixed day health services to converge services in each rural habitation for identification, diagnosis, treatment, record keeping and referral of high risk cases and health information help line to provide health advice and health counseling to the public.

- a. **Emergency Health Transportation Schemes:** A total of 433 ambulances with trained technical staff all 24 hours and 365 days through 108 - toll-free telephone number were made operational to cover entire state of Andhra Pradesh. 5.93 Lakh patients were transported during 2018-19 and expected to extend the services to 8.50 Lakh during 2019-20. Pregnant Women from hard to reach areas are transported through Feeder Ambulances up to the point where 108 ambulance services are available.
- b. **Fixed Day Health Services (FDHS):** 277 mobile health vehicles are placed in all districts to provide fixed day service once-a-month at the rural habitations located 3 km beyond a PHC or CHC as per pre-determined calendar.
- c. **Blood Bank and Blood Storage Centers- Blood Transfusion Services (BTS):** Blood donation can save even '3' lives medically, and may save '3 families' socio economically. Blood Donation is also helpful to the donors and reduces the risk of events like stroke, heart

attack (World Health Organization). 598170 units of blood collected during 2018-19.

Details of achievements of Family Welfare Programme are given in Annexure 8.12

New Initiatives

In order to decrease the Out of Pocket Expenditure (OPE) of the public, the government has taken up the following new initiatives.

Free Clinical Laboratory Services: Under this scheme, Government provide free Essential Laboratory investigations to all the patients visiting public Health Facilities. 91.7 Lakh Lab tests were conducted free of cost to the patients during 2018-19.

Sanchar Chikitsa (Mobile Medical Units): An initiative for providing quality Primary care services through Medical Officers at village level by upgrading 104 Fixed Day Health Services from April 2016. Sanchar Chikitsa consists 292 Mobile Medical Units with a team of Medical Officer, Staff Nurse, Pharmacist and Lab Technician in every Mobile Medical Units, 13523 villages with population of 2.37Cr will be covered. Maintaining electronic medical records of every beneficiary on real time basis is strong backbone to this initiative. 50 types of drugs, medicines and lab consumables will be made available in every MMU. This initiative reduces IMR,MMR, diseases burden due to non communicable and out pocket expenditure on account of Health. 12.45 Lakh patients were treated during 2018-19. Targeted to treat 51.84 Lakh patients during 2019-20.

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA): The Government of India has launched PMSMA to provide quality ANC and also detection, referral, treatment & follow up of High Risk pregnancies and women having complications. Under this initiative at least one Antenatal Check up will be provided to the pregnant woman by a Doctor / Gynaecologist during the 2nd & 3rd trimester of pregnancy on the 9th day of every month to ensure that no High Risk pregnancy goes undetected. This is in addition to the three (3) ANC checkups being conducted by ANMs/ Staff Nurses. During 2018-19, Screened 6.67 Lakh pregnant women and identified 1.86 as High Risk.

On 29th June 2018, Andhra Pradesh received PMSMA 'I Pledge for 9' Achievers Award in the category of States with maximum proportion of pregnant women reached under PMSMA.

Baby Kits: The main aim of the Baby Kit to reduce the

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Infant Mortality Rate (IMR) and reduce infection rate in mother and baby. Pregnant women are also motivated for delivery in Government Hospitals only for their safety. The baby kits consists of Baby bed cum carrier with zip, baby wrap, baby protective net, Liquid hand wash and Rexene Kit bag (total 5 items). During the period of 2018-19, a total of 4.48 Lakh baby kits were distributed to the new born babies in Government Institutions. Target to provide 8.64 Lakh kits during 2019-20.

Safe Delivery Calendar – Safe Delivery Calendar should be used as a tool to monitor the progress of all pregnant women during pregnancy, at the time of delivery and during Post Natal care by facilitating appropriate timely intervention. MI Life line, Talli Suraksha App and HM&FW portal are the initiatives and used as data source for monitoring the maternal health. Government is strengthening the services in the facilities provided.

Thalli Bidda Challaga (PMMVY):

It is a maternity benefit program compensating for wage loss to ensure pregnant and lactating mothers get adequate rest before and after delivery of the first living child (for first PRIMI). State has started implementation of the Talli Bidda Challaga(PMMVY) programme from January 2017 onwards. The objective of the schemes is to provide partial compensation for the wage loss in terms of cash incentives to the pregnant women with poor economic status so that the woman can take adequate rest before and after delivery of the first living child (for first PRIMI) and would lead to improved health. The average Maternity benefit provided is Rs 6000/- for rural and Rs 5600/- for urban. 24.49 Lakh beneficiaries were covered during 2018-19.

The Ministry of Women and Child Development, Govt. of India awarded Andhra Pradesh for commendable implementation of Pradhan Mantri Matru Vandana Yojana on Sept 7th, 2018.

Dr.YSR Aarogyasri Health Care Trust

To provide end to end cashless health care services to the BPL families identified by the Government in Empaneled Network Hospitals for 1059 procedures with financial limit of Rs. 5 Lakhs per family per annum. The cashless treatment includes OP registration, free diagnostics, consultation, surgical procedures/ Medical treatment, consumables, post discharge medicines for ten days and follow-up for certain procedures. The main

object and aim of the Trust is to implement, establish, provide, administer, modify and supervise either directly or indirectly “Dr.YSR Aarogyasri” Scheme or any other Scheme(s) under the Trust for the benefit of the beneficiaries.

Health Schemes / Services

The Health schemes implemented in the State are - Dr. YSR Aarogyasri for the Below Poverty Line families, Employees Health Scheme for the employees, Pensioners and their dependents, working Journalists Health Scheme for the accredited journalists identified by I&PR, Amaravathi Residential Health Scheme for the residents identified by CRDA, Aarogya Raksha Scheme, Amrutha Health Scheme for the orphans and destitute identified by the Government, Aayushman Bharath – PMJA. Recently Government has included Obstetric Procedures under Dr YSR Aarogyasri.

The services provided are - 104 SevaKendram – Toll Free (Health Information & Help Line), Scrutinization of Medical Bills of the Government employees/pensioners, Cochlear implantation for the deaf children, Dialysis treatment for the patients with Chronic Kidney Disease:

Health Schemes:

1. Dr. YSR Aarogyasri (BPL Families):

Under Dr. YSR Aarogyasri scheme, the BPL population of the State holding the white ration card / BPL card. (144.07 lakhs of families according to the data of Civil Supplies Dept,) and their dependents existing in the card are eligible for the benefits. As per the scheme guidelines, Government will bear the entire expenditure of treatment. Services are provided through 1,459 Network Hospitals empaneled under the Trust (714 Govt. + 485 Pvt. +260 Dental for EHS/WJHS). To implement the scheme, 1059 procedures are identified of which 143 procedures are reserved only for Govt. network hospitals. Cashless treatment is offered right from registration of the patient to the 10 days post discharge. For 138 identified procedures, Cashless Follow – up – treatment is cashless for a period of one year from the date of discharge are. 2,290 Health Camps have been conducted in tribal areas where 5,43,204 beneficiaries were screened and 3480 patients were referred. The Scheme is reviewed by the Board of Trustees under the Chairmanship of Chief Minister.

22.35 Lakh therapies were preauthorised with a preauthorized amount of Rs.6124.50 crores benefitting 13.97 Lakh patients under this health scheme. District wise details are given in Annexure 8.13

2. Employees Health Scheme:

The Scheme was introduced for the benefit of 16.76 Lakh State Government employees, pensioners and their dependents on a premium contribution of 50:50 between State Government and Employees / Pensioners. Under the scheme, 1885 procedures have been notified with treatment of 25 identified chronic diseases. 170 procedures identified under follow-up treatments. Rs.2.00 lakhs is the limit per episode of illness with no limitation on number of episodes.

Under this scheme, 9.05 Lakh therapies were preauthorised with a preauthorized amount of Rs.992.08 crores benefitting 3.22 Lakh patients during 2018-19

3. Working Journalists Health Scheme:

Working Journalists Health Scheme is being implemented by the Trust since 21st March 2015 on the lines of Employees Health Scheme for accredited journalists identified by I&PR Department which is a nodal agency.

During 2018-19, 9603 Pre authorisations received for an amount of Rs.757 Lakhs and 2995 claims settled with an amount of Rs.270 Lakhs

4. Amaravati Residents Health Scheme:

The residents within the Amaravathi Capital City Area who are residing as on 08.12.2014 are provided free medical facilities subject to certain conditions. Dr. YSR Aarogyasri Health Care Trust is implementing the scheme. The Trust is providing services to the residents of CRDA region covering 37,569 families Budget will be provided by the CRDA.

5. Aarogya Raksha Scheme:

The Govt of Andhra Pradesh with an objective of providing "Universal Health Coverage" initiated a new Health Scheme called "Aarogya Raksha" for Above Poverty Line Families (APL) is being implemented from 07.04.2017.

The Scheme covers any one family as one unit, by paying Rs.1200/- per member per year to avail the benefits of the scheme. 1044 procedures are covered with 138 follow up packages as in Dr YSR Aarogyasri with financial coverage of Rs 2.00 lakhs per year per individual.

67,474 families were enrolled and collected premium of Rs.21.04 crore. Settled 12,224 Claims and paid Rs.25.56 crores. 18,783 Pre-authorisations received with Pre-authorised amount of Rs.40.60 crores.

6. Amrutha Health Scheme for Orphans and destitute

A health scheme to cover the orphans and destitute in old age homes managed / recognized by the State Government on par with the guidelines of existing health scheme Dr. YSR Aarogyasri. The Trust has collected data of **2,812** beneficiaries and implementing the scheme from 04.07.2018 and providing cashless services on the lines of Dr YSR Aarogyasri.

7. Aayushman Bharath – PMJAY:

The Government of India has launched Health Insurance Scheme for all the BPL families identified under SECC 2011 for 1350 procedures with financial coverage of Rs.5 Lakh per family per annum. Dr. YSR Aarogyasri Trust is the nodal agency for implementation of the scheme in the State. The Government of A.P has signed an MoU with Government of India and launched the scheme on 30.12.2018 along with Talli Suraksha.

For providing financial assistance from AB PM-JAY 1.44 Crore families identified under State Scheme, 55.31 Lakh SECC beneficiaries identified under AB PM-JAY, 38.20% of families are eligible. The share of AB PM-JAY is @ 60:40

The Total funds received from AB PM -JAY is Rs.182.84. As per the Social Economic Caste Census 2011(SECC) data, the total number of eligible families in the state of AP is 55,30,825 and the total eligible beneficiaries are 1,70,80,552. As on 10.06.2019, "30,47,399 families and 87,52,180 beneficiaries were validated" and will be completed as early as possible. The total procedures of AB PM-JAY is 1392 and the total NTRVS Procedures matched with AB PM-JAY is 1130.

8. Inclusion of Obstetric procedures

In order to reduce the Maternal Mortality Rate from 65 to 50 per one lakh live births, the Government of AP has included the Obstetric procedures viz., Normal Delivery and Caesarean. The objective of the scheme is to provide cashless Obstetrics services under Dr.YSR Aarogyasri Scheme for BPL beneficiaries on par with CGHS 2014 rates, thereby reducing the burden on Govt. Hospitals.

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Performance of Talli Suraksha

Sl. No	Name of the Procedure	No. of Therapies Raised	No. of Therapies Approved	Therapies Approved Amount (Rs in Lakhs)
1	Caesarean Section	14,431	13,250	1859.38
2	Normal Delivery	10,508	9,494	758.98
Grand Total		24,939	22,744	2618.36

So far, 13250 therapies under Caesarean section with Rs.1859.38 Lakhs and 9494 therapies with Rs.758.98 Lakhs were approved.

Services**104 Seva Kendram - Helpdesk (Helpline)**

The Trust has established a dedicated helpdesk/ helpline "104 Seva Kendram"(Health Information Help Line) which functions round the clock (24x7) 365 days. This Toll-Free Call Centre provides Health Advice (with SMS prescription), Counselling Services, Directory Information, Aarogyasri/EHS/WJHS information, Aarogya Raksha Information through inbound call services. The Trust is monitoring all the schemes by outbound services and taking the feedback from the beneficiaries directly. The average calls per day is 2100. Total calls answered during the period from April,18 to March,19 is 4,05,172.

Scrutinization of Medical Bills of the Government employees/pensioners:

The Chief Executive Officer, Dr. YSR Aarogyasri Health Care Trust scrutinize the Medical Reimbursement bills of the Government Employees & Pensioners for speedy implementation in clearing bills.

Cochlear Implantation programme:

The scheme has been designed as a special package to provide cashless services to the needy hearing impaired deaf and dumb children up to the age of 5 years with package amount of Rs.6.5 lakhs per beneficiary towards Cochlear Implantation Surgery and Audio Verbal Therapy for one year. 474 hearing impaired children were benefited from cochlear implantation programme till date with the TP cost of Rs.24.72 crores.

Dialysis treatment for the patients with Chronic Kidney Disease

The Trust is providing cashless dialysis treatment to the patients suffering from Chronic Kidney Disease in identified network hospitals of both Government and Private with a package amount of Rs. 10,550/- per month for 10 dialyses. There are 16 Govt. and 114 Private Network Hospitals empanelled for treatment of Maintenance of Haemodialysis under all the schemes of Dr YSR Aarogyasri Health Care Trust. Conducted 2.64 Lakh preauthorized therapies with a Preauthorised amount of Rs.309.65 crore benefitting 55,891 patients during 2018-19.

Special Achievements:

Addition of Procedures: 117 new procedures added to the existing 942 procedures under Dr. YSR Aarogyasri scheme to provide more health services to the BPL families. The total procedures under Dr.YSR Aarogyasri are **1059**.

Enhancement of Financial Limit: The Government increased the financial limit from Rs. 2.50 lakhs to Rs.5.00 lakhs per family per annum w.e.f . 01.04.2019.

Addition of BPL beneficiaries: 14.63 lakhs identified BPL beneficiaries are included in the Dr. YSR Aarogyasri Scheme.

Enhancement of Package Prices:

- The Trust has enhanced the package prices for the procedures by 21.11 % over and above the basic package prices in accordance with Consumer Price Index(CPI) under Employees Health Scheme and Working Journalists Health Scheme
- The Government has further increased the package prices under EHS & WJHS by **2.62%** (total enhancement of 23.73% = 21.11 + 2.62) for all procedures except Dental category

Incentive for NABH accredited Network Hospitals: The NWHs with NABH accreditation is eligible for an incentive of 11% on the claim paid amount under EHS and WJHS & also providing 2% incentive for Dr. YSR Aarogyasri

Heart Transplantation surgery under Dr YSR Aarogyasri and EHS: The Trust has framed treatment protocols and package rates for Heart Transplantation surgery as a category under S19 with package rate of Rs.10.50

lakhs + Rs.50,000 as buffer amount with Rs.4.00 lakhs for follow-up treatment. Three beneficiaries have undergone Heart Transplantation under Dr. YSR Aarogyasri in G.G.H. Guntur which is a nodal centre for Heart Transplantation.

Pensions to Dialysis patients treated under Dr. YSR Aarogyasri: The Government have been providing **Rs. 10000/- pension for Dialysis patients** treated in both Government & Private Hospitals under Dr. YSR Aarogyasri through SERP Department.

MoU with CMC, Vellore: A Memorandum of Understanding has been entered into with Christian Medical College, Vellore, Tamilnadu for BMT (Bone Marrow Transplantation) and LT (Live Transplantation) under EHS.

Empanelment of Hospitals: The Trust, after bifurcation, has empanelled more number of hospitals to decentralise the health services from Hyderabad and to extend services / easy accessibility for all the beneficiaries under various schemes of the trust especially in the remote areas of state.

Empanelment of Govt. hospitals increased from 76 to 714 including Area Hospitals, CHCs and PHCs. Total number of private hospitals increased from 170 to 485. Total number of Govt. and Private Hospitals increased from 246 to 1,199 under Dr. YSR Aarogyasri. Total number of network hospitals is 1,459 (including 260 dental hospitals).

Andhra Pradesh Vaidya Vidhana Parishad

Andhra Pradesh Vaidya Vidhana Parishad (APVVP) is an autonomous organization funded by Govt. of Andhra Pradesh, started functioning in 1986 to manage secondary level Hospitals. APVVP also functions with an objective of reduction of Maternal Mortality Rate, reduction of Infant Mortality Rate, improving the quality of Health, services provided by public Health Facilities, reduction of Out of Pocket expenditure to the people on account of Health expenses

At present, there are 242 hospitals with 13130 beds under the control of APVVP in the State. In addition, Government has recently upgraded 62 hospitals with 2260 beds and 2498

HR. The institutional infrastructure under APVVP in the state is shown in Table 8.9.

Table 8.9: Type of Hospitals in the state (No.)

Sl. No	Type of Hospitals	Hospitals	Beds
1	District Hospitals	13	3550
2	Area Hospitals	28	2800
3	Community Health Centers	195	6520
4	Specialty Hospital	1	60
5	MCH	2	100
6	Dispensaries	3	0
Total		242	13130

Source: APVVP

Hospital Activities:

The Community Health Centres (CHC) with 30-50 beds provide maternity, child health services apart from the general health services. The Sub District Hospitals (SDH)/ Area Hospitals (AH), with 100 beds provide services and clinical specialties like Obstetrics & Gynecology, Pediatrics, General Medicine, General Surgery, Anesthesia, Orthopedics, ENT, Ophthalmology, Dermatology and Dental Care. The District Hospitals (DH) with bed strength ranging from 150 to 350 provide services like Obstetrics & Gynecology, Paediatrics, General Surgery, Orthopedics, Anesthesia, Ophthalmology, ENT, Dental, Dermatology, Psychiatry, Radiology and Dental Care.

All these hospitals are provided with professionals depending upon their service levels and bed strength. Drugs are provided to all hospitals by the Central drug stores under APMHIDC as per the requirements and allotments specified by APVVP. These Hospitals along with the Primary Health Centres (PHCs) and Teaching Hospitals (Tertiary Hospitals) act as a platform for implementation of various National health programmes like Malaria, TB, Leprosy, HIVs and Family Welfare programmes.

Performance of Hospitals:

The comparative performance of activities under important indicators is shown in Table 8.10.

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Table: 8.10 Performance of Hospital Activities (No. in Lakh)

Sl. No.	Name of the Development indicator	2015-2016	2016-17	2017-18	2018-19
1	2	3	4	5	6
1	Out Patients	154.26	210.91	227.89	293.03
2	In Patients	13.79	17.86	19.21	18.95
3	Major Surgeries	0.75	0.86	0.92	0.91
4	Deliveries	1.27	1.58	1.69	1.75

Source: APVVP

Human Resources and blood banks

There are 1620 doctors including specialists, 2689 nursing, 1213 paramedical staff and 496 administrative staff working for Health care in APVVP Hospitals. Sanitation and cleaning services are contracted to third party agencies and other non clinical services like security and pest & rodent control services are provided mostly through third party basis. The blood banks are providing blood to the needy patients in the Hospitals and there are 26 blood banks and 93 blood storage centers functioning in APVVP hospitals in the State.

Performance of National Health Mission

Under National Health Mission, 23 Sick Newborn Care Units(SNCU), 9 NRCs, 118 Newborn Stabilization Units(NBSU), 86 Comprehensive Emergency Obstetric and Newborn Care (CEMONC), 26 Tribal Hospitals are functioning in APVVP Hospitals.

Special Care New Born Units:

Government have sanctioned 13 SNCUs to APVVP Hospitals in Andhra Pradesh. These units provide special medical care and treatment to the low birth weight new born babies and premature babies. The Performance of SNCU in APVVP Hospitals are shown in the Table. 8.11

Table 8.11: Special Care New Born Units

Baby Weight in grams	No. of cases under SNCU during 2018-19
>2500gm	36446
<2500gm	5730
1500-2499gm	5093

Baby Weight in grams	No. of cases under SNCU during 2018-19
1000-1499gm	526
Preterm births(Gestation)	
>37 weeks	27737
<37 weeks	4510
No.of new borns required resuscitation at birth	1602

Source: APVVP

New Born Stabilization Units:

The New Born Stabilization Units(NBSU) are used to stabilize the new born babies. At present 118 NBSU are functioning and located in APVVP Hospitals in Andhra Pradesh. During 2018-19, 45530 cases were admitted, 35606 discharged, 5407 referrals and 221 deaths.

Nutritional Rehabilitation Centres

NRCs will provide care to the sick and malnourished children. At present 9 NRCs are functioning in APVVP Hospitals. The performance of NRC in APVVP hospitals. During 2018-19, 1697 SAM cases were admitted, 1537 discharged, 1115 discharged with target weight gain, 53 cases referred, 1439 children followed up.

Vidya Seva

Vaidya Seva scheme is being implemented in all District Hospitals, most of the Area Hospitals and a few CHCs which have empanelled, based on the availability of specialists and equipment. There is a gradual increase in the number of cases treated in the APVVP Hospitals.

Vaidya Pariksha: Under the comprehensive scheme, the following activities have been undertaken till May 2019.

95.08 Lakh patients availed the services. 4.62 crore tests conducted as part of Free Laboratory Services. In regard to Free Tele-radiology services, 15.38 Lakh X- Rays uploaded and 15.17 reported. 1.63 lakh Free CT-Scan Services in PPP mode were reported and 1,63,073 CT Scans were reported under Tele Reporting.

National free dialysis services: Dialysis centers are established in all 13 districts in APVVP hospitals in PPP mode. 6656 patients were given 316883 sessions of dialysis during 2018-19.

Tele-Ophthalmology Services: (Up to May'2019)

This programme aims to provide high quality eye care to affected population. 115 e-Eye centers have been established. This service is delivered in a hub and spoke model and services typically delivered through these centers include checking of Fundus, retinopathy, glaucoma, refraction. Correction glasses/spectacles are then provided free of cost based on the report recommendations. 9,91,025 beneficiary visits, 9,28,616 refraction checks, 2,38,814 Fundus checks have been completed, and 7,15,000 spectacles have been issued.

SADAREM Programme:

The existing system of issuing disability certificates was entirely revamped by Business Process Re-engineering to enable beneficiaries get certificates without any hassles and intermediaries. 55 hospitals have been identified speciality wise as SADAREM centres and about 600 specialist doctors are provided with digital Keys. Certificates are issued on every Friday in 55 centres and considering the demand under locomotor category, assessment for locomotor cases has been taken up in 15 teaching hospitals on every Tuesday in addition to Friday assessment

The program started on 3rd August 2018 and so far, 47,351 beneficiaries have been assessed, out of which 33,277 beneficiaries were issued with certificates and 12,422 beneficiaries are rejected.

Trauma Care Centres

Trauma Care Centre aims to provide immediate emergency Medical Care to accident victims. At present 4 Trauma Care Centers are functioning at DH-Rajahmundry, DH-Eluru,

AH-Tekkali, and AH-Tuni and the process of establishment of two more Trauma care centres: CHC-Naidupeta, Nellore District and CHC-Penukonda, Anantapur District in under process.

Other Programs

APVVP implements other program like; Scientific Sanitation Policy Bio Medical Equipment Maintenance Program, Bio Medical waste Management, Talli Bidda Express, Baby Kits, Trauma Care Centers - 6 (Level II-1, & level III-5), SNCU (44) & NBSU(119), NRC(9) , RFID(11 hospitals), Maha Prastanam (6 hospitals), Linen Services (Sapta Varna-3 hospitals)

Health

National Vector Borne Diseases Control Program (NVBDCP)

NVBDCP deals with Malaria, Japanese Encephalitis, suspected Viral Encephalitis, Dengue, Chikungunya, Filariasis and Kala Azar under an umbrella program. The objectives of this program are prevention of deaths due to vector borne diseases and reduction of morbidity. The strategies adopted are

- Early diagnosis and prompt treatment of all vector borne disease cases by weekly/fortnightly surveillance
- Integrated Vector Control Measures through adoption of insecticidal spray operations, personal prophylactic measures like bed nets usage, biological control measures with Gambusia fish release and source reduction method.
- Capacity building through induction and re-orientation level trainings to in-service staff and other voluntary organizations useful to the program.
- Inter sectoral co-ordination between the medical, health and other departments Health education through Information Education and Communication (IEC) to create awareness among people regarding the diseases its prevention and control.

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Details on Vector borne diseases are shown in Table 8.12

Table 8.12: Vector Borne Diseases

(in No.s)

Sl. No	Disease	2018		2019 (Up to June 16 th)	
		cases	Deaths	cases	Deaths
1	Malaria	6040	0	941	0
2	Dengue	3972	0	385	0
3	AES/Japanese Encephalitis	0	0	2	0
4	Chickungunya	79	0	7	0
5	Filaria	17	0	3	0

Source; Health and Family Welfare

Revised National TB Control Programme

The main goal of the programme is elimination of TB by 2025 and the main objectives of the programme are to achieve 90% notification rate for all types of TB cases, to achieve 90% success rate for all new and 85% for re-treatment cases, to achieve decreased morbidity and mortality of HIV associated TB and to decrease catastrophic cost to the patients.

Action Plan

To implement National Strategic Plan 2017-25

Performance of **RNTCP** details are shown in Table 8.13.

Table 8.13 Performance of RNTCP (as per new indicators)

Years	Population in lakhs	Annual Total TB Case Notification Rate.			Treatment Success rate	
		Public	Private	Total	New Cases	Re-treatment cases
2013	500.8	124	4	128	90	78
2014	504.3	128	14	142	91	79
2015	508.4	122	15	137	92	82
2016	511.5	125	17	142	90	82
2017	514.8	130	31	161	92	84
2018 (Q1)	525.2	122	43	165	92	84
2018 (Q2)	525.2	125	67	192	92	85
2018 (Q3)	525.2	121	46	164	92	85
2018 (Q4)	525.2	132	36	168	92	85
2019 (Q1)	530.27	158	46	204	92	85

Source; Health and Family Welfare

- Strengthened rapid diagnosis and started universal DST by increase molecular diagnostic test (RT-PCR) upto sub district level (CHCs and PHCs).
- Treatment regimen changed to Daily Fixed Dose Combinations according to weight bands to prevent Relapse and increase treatment adherence,
- To diagnose and treat all vulnerable groups, unreached population by implementing active case finding strategy.
- ICT based monitoring of adherence of the treatment by 99 DOTS.
- Implementing Nutritional support to all TB patients, financial incentive of Rs.500/- per month for each notified TB patient for duration for which the patient is on anti-TB treatment

National Programme for Control of Blindness

National Programme for Control of Blindness established in 1976 the main aim is to reduce the prevalence of blindness from 1.4% to 0.3%. The prevalence is 1% as per 2006-07 survey by Govt. of India,

Disease Control:

Free Cataract Surgeries both in Government and NGO sector, refractive errors detection, school eye screening, distribution of free spectacles, eye ball collection through

Eye Banks and Eye Donation Centers and early detection of other eye diseases viz., Glaucoma and Diabetic retinopathy

Objectives:

To provide high quality of eye care to the effected population, expand coverage eye care services to the underserved areas, to reduce the backlog of blindness and to develop institutional capacity for eye care services.

Cataract Operations: 3.28 Lakh cataract operations were conducted during 2018-19 achieving 112% against the target. The details of the Eye Screening and Eye Ball Collection are shown in Table 8.14

Table 8.14: School Children Eye Screening and Eye Ball Collection

(in. No.s)

Activity	2016-17		2017-18		2018-19	
	Annual Target	Achievement	Annual Target	Achievement	Annual Target	Achievement
No. of School Children Eye Screening	874264	715486	874264	955150	874264	3805146
No. of School Children detected with Ref. Errors	87428	40617	87428	69932	87428	32829
Distribution of Free spectacles	70000	11481	70000	38821	70000	44951
Eye Ball Collection	2100	3454	5000	4143	5000	4961

Source; Health and Family Welfare

National Leprosy Eradication Programme (NLEP)

Under National Leprosy Eradication Programme (NLEP) if it is to ensure that all Government Health Institutions are diagnosing leprosy cases, treatment and motivating the patients for complete treatment. PHCs and higher institutions are providing treatment for leprosy reaction cases wherever necessary. For the protection of the in-sensitive sole of the foot, MCR footwear is being provided twice in a year. For the deform foot, hand and disability of eyes, RCS (Re-Constructive Surgeries) are being performed with the support of NGOs and Government Institutions. The Department is also pursuing for the provision of disability

pension, AAY cards and housing facility for the leprosy patients. For early identification of leprosy suspects, ASHAs are imparted with the knowledge of symptoms of leprosy cases and after identification of the cases, ASHAs are being paid incentives for identification and for regular monitoring of completion of treatment.

As per the instructions of Government of India, three pronged approach is being implemented in the State are Leprosy Case Detection Campaign for high endemic districts, Focused Leprosy Campaign for hot spots and Case detection in hard to reach areas. Leprosy Case Detection Campaign (LCDC) a unique initiative of its kind under NLEP will be implemented in selected high endemic districts annually. During 2018-19 campaign was conducted covering 82.27 Lakh households and detected 1457 new cases.

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Integrated Disease Surveillance Project (IDSP)

Integrated Disease Surveillance Project (IDSP) is a decentralized, district-based surveillance programme intended to detect early warning signals of impending outbreaks and help initiate an effective response in a timely manner. Syndromic (Form S), Presumptive (Form P) and Confirmed by Laboratory (Form L) are the different types of surveillance carried out under IDSP. Average Reporting % of S, P, L are given in Annexure 8.14

- Investigated and reported 35 outbreaks (ADD-13, Foodpoison-12, Viral Fever-1, Others-9) during 2017-18 (Jan-Nov) with 3478 cases affected and 7 deaths.
- Reported and monitored the status of all Influenza 'A' H1N1 cases (334 cases, 14 deaths)
- Reported 5143 Sunstroke cases and 26 deaths.

Programmes implementing under Non – Communicable Diseases

National Programme for Prevention and Control of Cancer, Diabetes, CVDS and Stroke Programme (NPCDCS)

Programme is implemented in all 13 districts of the state. District NCD cell and NCD clinics were established in all districts. 195 CHCs have already established NCD clinics. From 2016-17 screening activities are being conducted in all districts to all the people who are 30+ age. 8 Cardiac Care Units were established and functioning in eight districts. Equipment procured and distributed. Establishment of 5 new Cardiac Care Units at Visakhapatnam, Rajamahendravaram, Guntur, Eluru and Hindupur are under process in the remaining 5 districts. All PHCs are transformed Health and Wellness centers under Ayushman Bharath.

Under Chronic Kidney Diseases screening, 6 Mandals were identified with the prevalence of Chronic Kidney Disease in Uddanam area. Mass screening was done to the public age groups of above 30 years in all the Mandals of Uddanam area. 1,01,593 people were screened and. Two Expert teams from MOHM&FW, GoI and Team constituted by Govt. of AP with ICMR have jointly visited Uddanam area to study the various aspects of CKD problem. At present 60 dialysis machines are functioning.

The Government of Andhra Pradesh have also announced pension of Rs. 10000/- per month to all patients of CKD Stage –III, IV & V who are undergoing Dialysis in Government and private hospitals empaneled.

Cardiac Care Units

At present Eight (8) Cardiac Care Units are functioning in the State i.e. Srikakulam, Vizianagaram, Krishna, Prakasam, Nellore, Chittoor, Kadapa, Kurnool. During 2017-18 the GOI have sanctioned 5 new CCUs. Funds were released to APMSIDC for procurement of equipment for establishing the CCUs at 5 districts i.e. Visakhapatnam, East Godavari, West Godavari, Guntur and Ananthapur under NPCDCS. Supply of equipment is under process.

NTCP-National Tobacco Control Programme:

This programme is implemented in 13 districts. At present 10 TCC are working in the state. The TCC consists of one psychologist and one social worker for counseling. The 16 Dental colleges in the state are in the process of starting a TCC (Dental Council of India guidelines). The aim of the programme is to monitor and control usage of tobacco and prevent hazards of tobacco among the community.

National Oral Health Programme:

The aim of the programme is to deliver oral health care up to the level of family and community and to provide infrastructure required at health center for delivering basic oral health care. Health checkup was made mandatory to pregnant mothers in the state. New Operational Guidelines were circulated to train ANM's/ Health workers.

National Programme for Prevention and Control of Fluorosis (NPPCF):

NPPCF is being implemented in Guntur, Prakasam and Nellore districts. 9 districts are implementing the NPPCF programme. RWS report the fluoride levels in ground water in all the districts along with affected mandals, habitations and villages. Recruitment of various positions under NPPCF in the newly sanctioned districts are under process. Details of National Programme for prevention and Control of Fluorosis is given in Annexure 8.15

National Iodine Deficiency Disorders Control Programme (NIDDCP)

All 13 districts are covered under National Iodine Deficiency

Disorders Control Programme (NIDDCP). Global IDD prevention Day is celebrated on 21-10- 2018 every year. As per NFHS 4 – (2015-2016) survey, 91.1% Urban and 77.4% rural households are using iodine salt.

National Programme for Healthcare of Elderly (NPHCE)

All districts of the state have been covered under the programme. Physiotherapy equipment's have been distributed at the selected sub-centres level. Institution based equipment have been installed at the 195 CHCs covered under the programme. Cardiac care equipment has been installed in the CHCs covered in the programme. In each District Hospital, 10 beds identified for Senior Citizens and a separate 'Q' at OP and Pharmacy are being maintained and Physiotherapy equipment also supplied. International Day for Elderly People is celebrated across the world on 1st October and conduct medical camps with the help of the Rehabilitation workers. All the elderly people are treated at Mobile Medical Unit (MMU) vehicles by providing free drugs for chronic diseases and diagnostics at their door step for one month

Achievements

The Government of Andhra Pradesh has implemented the following health initiatives with the prime objective of reducing the out of pocket expenditure for the people of the state who are visiting public health facilities for their health problems. These are provided across the state with close monitoring on quality from the level of territory hospitals to the level of primary health centres including the tribal areas.

Tribal Health:

- All the 153 PHCs in tribal areas were converted in to 24 X 7 centers duly sanctioning additional 604 posts as per norms.
- 4 high end diagnostic tests made available at PHC level
- 122 Number of 108 bike ambulances were introduced and of now 58000 patients availed services
- To reduce the Neonatal Mortality and to provide specialty care, 21 mini SNCUs (Sick new born care units) were established 3845 neonates were treated
- 15 additional mobile medical units were serving Tribals in Sandies.
- 14 lakhs LLINs were distributed to control vector borne diseases.

- 10 bedded dialysis units established in 5 hospitals in tribal area.
- In addition to the existing 5977 ASHAs 2122 CHWs were engaged in Tribal Areas.
- 2 Hospitals were upgraded as dist hospitals and 2 CHCs were upgraded Area Hospitals.
- Additional 560 bedded added to the existing 1220 beds under secondary care.

MMHC 30 + screening for women aged 30+: Women aged above 30 years were screened by 13,000 trained ANMs at 7683 sub centres, screening being regularly done for Oral, Cervical & breast cancers, Diabetes, Hypertension, Hormonal diseases and Eye problems. In all, 19,79,000/- were screened, 55,025 were referred and 1200 were treated.

MHC 30 + screening for Men aged 30+: Screening facility is provided in 1147 PHCs across the state. Till December 2018, 90939 were screened. Screening being regularly done for Oral, Diabetes, Hypertension, Eye problems, Prostate & Lung Cancer.

e-Aushadhi logging: Inventory for all drugs & surgical and their supply chain management through electronic mode and realtime.100% institutions are enabled for this mechanism.

APERX App for monitoring of TB Drug Sales. Multi-drug resistant tuberculosis (MDR TB) is created by inadequate or improper administration of TB drugs. Andhra Pradesh has come out with a solution to control the Microbial Resistance through e-prescription and Dispensation app (APeRX).

APeRxapp for Doctors and Pharmacists is one of the initiative which uses Information Technology (IT) to achieve the goal of Elimination of TB by 2025. APeRxapp is a Google Play store based application for Prescription and Dispensation of AntiTB drugs by doctors and chemists respectively to control mycobacterial resistance which was occurring due to irrational use of Anti TB drugs.

Aids Control Society

Human Immunodeficiency Virus (HIV) is a retrovirus that eventually causes Acquired Immuno Deficiency Syndrome (AIDS), a global public health problem as more than 35 million people are living with HIV/AIDS worldwide. The HIV epidemic has been one of the most challenging modern public health problems for India. Provisional estimates put the number of people living with HIV in India at 25 lakhs and 3 lakhs in Andhra Pradesh.

SOCIAL INFRASTRUCTURE

Prevention Activities:

Basic Services include free HIV/AIDS counselling, testing services and also prevention of mother to child transmission of HIV/AIDS through 1939 Centers (1636 Govt, 197 Pvt, 98 CBS TI NGOs & 8 Mobile). Integrated Counselling and Testing Centres, Prevention of Parent to Child Transmission of HIV/AIDS centres established in all Government Hospitals and Private Hospitals as per the need.

Targeted Interventions (TIs) including Link Workers Scheme are implemented through Non-Government Organisations and Community Based Organisations to provide condom promotion, behavioral change communication and treatment services for sexually transmitted infections to Female Sex Workers (FSW), Men Having Sex with Men (MSM), Transgender, Intravenous Drug Users (IDU), Migrants and Truckers who are highly vulnerable for HIV/AIDS due their life style. At present 90 Targeted Interventions are implemented in the state to cover 8 FSWs, 3 IDUs, 67 Core components, 2 Truckers and 8 Migrants in high focused areas. These interventions are covering 82,468 FSWs, 16,009 MSMs, 2079 TGs, 1,164 IDUs, 1.27 lakh migrants and 29,434 truckers in the state.

Though only 90 NGOs, the key population is adjusted towards the existing TIs and DAPCUs. The coverage PE, HRG and ORW, HRG ratios has been drastically increased.

Blood Transfusion Services (BTS) are provided through establishment and supporting 145 (Government – 39; IRCS – 18; Private/Charity – 88) 95 Blood storage centers where blood is tested for HIV and other infectious diseases and safe blood is ensured to be made available to all the needy population who require blood/blood components. SACS has been providing prevention, treatment, care and support services through the establishments in the state.

AP Blood Cell APP was started for improving the Voluntary Blood Donations.

Prevention of Sexually Transmitted Diseases and Reproductive Tract Infection services are provided through establishment of 55 Designated STI/RTI Clinics (DSRCs) in Government Hospitals providing free STI treatment.

Care, Support and Treatment, including Community Support Services: These services are provided through establishment of 40 Anti-Retroviral Treatment Centers in Government Hospitals providing free ART medicines to all eligible PLHIV in the state. ART services are widely decentralized with establishment of 32 Link ART + centres and 114 Link ART Centres. More than 1,84,336 PLHIV are presently receiving ART medicines free of cost from the ART centres in the state. 28,985 ART patients have received ART Pensions through YSR Pension Kanuka,

Strategic Information Management Unit (SIMU)

It is responsible for Monitoring, Evaluation & Surveillance of HIV/AIDS related activities in the state, which collects data periodically and a separate reporting system is established for HIV/AIDS related facilities from NACO for this purpose.

President's Emergence Plan for AIDS Relief (PEPFAR): PEPFAR, a program supported through CDC with their partners is focusing on the key population of female sex workers (FSW), men who have sex with men (MSM), Transgendered individuals, and people who inject drugs. This programs are being implemented in East Godavari, Krishna and Guntur districts. It also provides technical assistance for service delivery improvement including capacity building quality improvement and system strengthening.

APSAC performance is given in Table - 8.15

Table 8.15- Physical Performance of APSAC [FY 2018-19(Apri-18 to Mar-19)]

Component Name	Indicator	Annual Target (Lakhs)	Achievement (Lakhs)	% achievement
Blood Safety	Total Blood units Collection	5,01,192	5,98,170	119
	Voluntary Blood units Collection	3,88,493	4,85,663	125
Integrated Counselling & Testing Centers	NON Ante Natal Cases Tested	12,33,004	15,45,181	125
	Seropositivity(%)		21,208(1.4%)	
	Ante Natal Cases Tested	9,74,000	9,67,582	99
	Seropositivity(%)		821(0.08%)	

Component Name	Indicator	Annual Target (Lakhs)	Achievement (Lakhs)	% achievement
STI component (DSRC)	STI cases treated	2,77,130	2,43,605	88
Anti Retro Viral Therapy	Pre ART	NA	3,93,220	NA
	Alive on ART	NA	1,84,336	NA
TI-NGO	HRG Coverage	104266	101720	98
	FSW(8)	11185	11782	105
	core composite(66)	91769	88774	97
	IDU(2)	1312	1164	89
	Migrant 8)	120000	127565	106
	Trucker (2)	22000	29434	134
	Condom Distribution annual average	3705654	2875433	78
	Clinic Services annual average	100556	82999	83

Source: Aids Control Society

District wise performance of ICTC programme Non Ante Natal Clients and Ante Natal Clients in 2018-19 is given in Annexure 8.16 and District wise Ante Retroviral therapy programme performance is given in Annexure 8.17.

Women Development and Child Welfare

The Constitution of India, Under Article 15(3), which allows for positive discrimination in favor of women states that 'Nothing in this article shall prevent the State from making any special provision for women and children.' In addition, the directive principles of State Policy 39(a) also emphasizes that the state shall, in particular, direct its policy towards securing that the citizens, men and women equally, have the right to an adequate means of livelihood. The Constitution of India also allows special provisions to be made by the State in favour of women and children for securing just and humane conditions of work that renounce practices derogatory to the dignity of women.

Promoting social and economic empowerment of women through cross-cutting policies and programmes, mainstreaming gender concerns, creating awareness about their rights and facilitating institutional and legislative support for enabling them realize their human rights and

develop to their full potential are some of the key areas that demand attention. Women now participate in all activities such as education, politics, media, art and culture, service sectors, science and technology, etc. All efforts are being made for the development and welfare of children whose overall development is recognized as the ideal way for fostering national human resources.

Andhra Pradesh state, as a state with highest labour force participation rate, is committed to focus on the empowering women and use their capabilities for the state building process in a more effective way ensuring them of proper health, nutrition and hygienic ambience. The state is also committed to improving child health care and nutritional intake for becoming better citizens by promoting social, emotional, cognitive and aesthetic development of the child.

Integrated Child Development Services (ICDS) Scheme:

The Government of India is implementing the Integrated Child Development Services (ICDS) Scheme in Andhra Pradesh since 2nd October, 1975 and universalized it in the year 2006. The Scheme stands one of the world's largest and most unique programmes for early childhood development.

Andhra Pradesh is implementing 257 ICDS Projects (200 Rural, 33 Urban & 24 Tribal) with 48,770 Main AWCs and 6,837 Mini AWCs (total 55607AWC) in 13 Districts.

SOCIAL INFRASTRUCTURE

Objectives of the ICDS Scheme:

- Improve the nutritional and health status of children in the age group of 0-6 years.
- Lay foundations for proper psychological, physical and social development of the child
- Reduce the incidence of mortality, morbidity, malnutrition among children and women and school dropouts among children.
- Achieve effective co-ordination of policy and implementation among various departments to promote child development.
- Enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper health and nutrition education.

Six (6) services, viz., Non formal Pre-School Education, Supplementary Nutrition, Nutrition and Health Education, Immunization, Health Check-ups and Referral Services are being offered by the government to the targeted beneficiaries i.e., 0-6 Years Children, Pregnant and Lactating Mothers, Adolescent Girls to achieve the objectives

Early Childhood Care and Education (ECCE):

Pre-School Education aims at ensuring holistic development of the children in the age group of 3-6 years and to provide learning environment to children which is conducive for promotion of social, emotional, cognitive and aesthetic development of the child.

Encouraging outcomes:

- Urban slum dwellers and working parents are sending their children to AWCs to get quality pre – school education.
- Noticeable increase in the pre-school attendance
- The capacities of AWWs increased due to capacity building efforts

Supply of Preschool Education Kits to AWCs:

The Department has supplied Preschool Education kits to 48770 Main AWCs and 6837 Mini AWCs under Anganwadi Services Scheme under Umbrella ICDS during 2018-19.

Supplementary Nutrition Programme

Supplementary Nutrition Programme is one of the prime services rendered under ICDS and implemented in 257 ICDS Projects covering 55607 Anganwadi centres in Andhra Pradesh under Centrally Sponsored Scheme with a sharing pattern of 50:50. In this scheme Supplementary nutrition is provided as per GOI norms to the Children age group of 7 months to 6 years and Pregnant and Lactating women.

As per Government of India norms, the State Government is implementing uniform food models for entire state. Under this scheme, 23.93 Lakh children including severely malnourished and 6.58 lakh pregnant and lactating mothers are benefitted.

Balamrutham, the weaning food is supplied to children between 7 months to 3 years with 2.5 kg pack per month per child. It is prepared with wheat, chana dhal, milk powder, oil and sugar. It is fortified and thus provides 50% of iron, calcium, vitamins and other RDA that children require per day.

Mid-day Meal: Hot Meal is provided every day and consists of 75gms, Rice, 15g Dal, 5g Oil, and 25g Vegetables commodities and per child 16 Eggs per month (Weekly 4 eggs) are provided at AWC. Cooked whole chana is provided in every day snack.

One Full Meal: Which involves spot feeding of “one full meal” for Pregnant and Lactating Women at the Anganwadi centre to address, Low Birth weight & Anaemia and ensuring administration of Calcium and Iron & Folic Acid (IFA) tablet at AWC.

Bala Sanjeevani (Special Nutrition Programme) is a Special Nutrition Programme for Pregnant, Lactating Women and Children below 6 years to scheduled caste (SC) under SC Sub-plan and Scheduled Tribal (ST) under ST Sub-plan and also other categories under general funds to improve the Nutrition Status.

Scheme for Adolescent Girls (SAG):

SNP under (THR) 3 Kgs Rice, 1Kg RG Dhal, ½ liter P.Oil, 16 eggs is provided to Adolescent Girls of 11-14 years out of school children only.

Nutrition Supplementation to unreached and uncovered areas through extension centers (GiriPoshana, PallePoshana and NagaraPoshana):

The department has adopted a new initiative to provide supplementary nutrition to women and children in unreached areas of hilltop and remote hamlets of tribal areas through extension centers in convergence with Tribal Welfare Department. A total of 2168 extension centres have been functioning in the tribal areas since last 8 months providing nutrition to 23225 beneficiaries

Similar to the lines of tribal areas, 1050 extension centres have been identified to provide supplementary nutrition to 50416 beneficiaries in uncovered areas of rural and 706 extension centres have been identified to provide supplementary nutrition to 52251 beneficiaries both women and children in uncovered areas of urban areas in convergence with MEPMA.

Nutri-Gardens:

- Nutri Garden helps to meet the requirements of seasonal fruits and vegetables for beneficiaries.
- Vegetables grown in Nutri-Gardens are to be used for mid-day meals and spot-feeding at Anganwadicentres.
- The Department in convergence with PR & RD, Agriculture/Horticulture, Tribal Welfare Dept., and NREGA is receiving an encouraging response.
- For ensuring quality hot cooked Mid-DayMeal, 1622 Panchayats started growing Nutri Gardens

During the year 2018-2019, in all, 29.48 lakh pregnant, lactating women, 7 months to 6 years' children were benefitted. 10,000 Out of school Adolescent Girls (11-14 age group) are benefitted.

Proposed action plan -2019-20

- Ensure all eligible beneficiaries i.e Pregnant, lactating women, 7 months to 6 years' children registered for Anganwadi services
- Delivering package of nutrition services under regular SNP as additional nutrition supplementation to all pregnant, lactating women
- Coordination with health, tribal welfare, SHGs in rural and urban context for effective convergence and service delivery.

- Reduce incidence of underweight, wasting and stunting among children <5 years in tribal pockets

To cover all the out of school adolescent girls covered and also ensure that they avail supplementary nutrition and home based counselling on nutrition and health care behaviour.

POSHAN Abhiyaan

POSHAN Abhiyaan, a government of India's nutrition-related scheme aims to improve nutritional status of children 0-6 years, adolescent girls, pregnant women and lactating mothers in a time bound manner by adopting synergized efforts with all line departments in a result-oriented approach. The Union Government is committed to reduce the country's stunting to 25% from 38.4% by 2022.

The implementation strategy would be based on intense monitoring and convergence action plan right upto the grassroots level. The Mission is being guided by the NITI Ayog and is closely monitored by establishing a Technical Unit under NITI Ayog and constituting Hi-Power committees at different levels for optimal oversight. For effective implementation of mission activities, an SPMU (State Project Management Unit) has been set up at state level.

Goal of POSHAN Abhiyaan:

In specific, the POSHAN Abhiyaan will strive to reduce the level of stunting, under-nutrition, anemia and low birth weight babies as shown below:

Sl. No	Indicator	Target
1	Prevent and reduce stunting in children below six years of age	By 6% @ 2% per annum
2	Prevent and reduce under-nutrition (underweight prevalence) in children below six years of age	By 6% @ 2% per annum
3	Reduction of prevalence of anaemia in young children in the age group of 6-59 months	By 9% @ 3% per annum
4	Reduce the prevalence of anaemia among women and adolescent girls of 15-49 years of age	By 9% @ 3% per annum
5	Reduction of low birth weight	By 6% @ 2% per annum

SOCIAL INFRASTRUCTURE

Geographic Coverage:

In the first phase of implementation, the GOI selected 10 districts from Andhra Pradesh and remaining 3 districts i.e., Krishna, Guntur and Nellore in Phase-II which began from 2018-19. The districts have been selected based on the stunting rates under NFHS-4. Now all districts in state are covered under POSHAN Abhiyaan.

Program Strategy and Components:

The implementation strategy would be based on intense monitoring and convergence action plan right up to the grassroots level. The components of POSHAN Abhiyaan are ICT-RTM/ICDS- CAS, Incremental Learning Approach, Community mobilization and behaviour change communication (BCC), Innovation, Incentives, Jan Andolan and Convergence (CAP)

ICT-RTM/CAS is an application developed to improve service delivery and monitoring mechanism. The Common Application Software(CAS), through automation of registers will improve the efficiency of service delivery and strengthens real time monitoring and guidance by supervisors to AWWs to ensure timely delivery of services. Under this, Smart phones with internet connectivity for AWWs have been procured for AWWs.

Procurement of 4 types of weighing machines (Infanto meter, Stadiometer, Adult Weighing scale and Salter weighing scale) has been done and distributed. Partial Help desks have been set up at block and district level of (Visakhapatnam, Vizianagaram, East Godavari, Chittoor, YSR).

Incremental Learning Approach (ILA): Through this approach, frontline workers and district and block level functionary capacities and skills will be incrementally strengthened on 4 thematic areas. The modules under ILA are based on the life cycle approach. The knowledge and skills acquired through monthly training will contribute significantly towards the POSHAN Abhiyaan targets i.e., reducing malnutrition, anemia and low birth weight. DRG (District level Resource Group) and BRGs (Block level Resource Group) were formed across the state.

Community Mobilization and Behaviour Change Communication (BCC): The community based events are

aimed at capitalizing on important activities and disseminate essential message related to care during pregnancy, early registration, MIYCF (Maternal, Infant and Young child feeding practices) and counsel pregnant and lactating women on appropriate nutrition and health behaviours.

Innovation: Considering the high prevalence of malnutrition in tribal populations of Andhra Pradesh and also considering the successful model of “community Nutrition Hub” piloted by PiramalSwasthya in Araku tribal Mandal of Andhra Pradesh, it is planned to establish 10 community nutrition hubs in select mandals of Srikakulam, Vizianagaram, Vishakhapatnam, East Godavari, West Godavari districts of Andhra Pradesh.

Jan Andolan: The mission will focus on converting the agenda of improving nutrition into a people’s mandate through involvement of general population, PRI, SHGs. Strategies for Jan Andolan includes a series of IEC campaigns and mass events at AWCs, schools, colleges and public places.

As Part of Janandolan, the State has initiated a program called “PoshakaharamKosamMemuSaitham “(PMS). Through this initiative, contributions rose in the form of support from community in kind form i.e. Ragi, Jaggary, Groundnut Chikki and distributed among vulnerable beneficiaries i.e. Pregnant women who are suffering with Anemia and children suffering with Mal Nutrition, it is also ensured that the food distributed are utilized by beneficiaries for at least 6 months period ensure to recover from the malnutrition. The state has generated Rs. 3.27 cr worth of Nutritious food material support.

As part of Jana Chaitanyam (Jan Andolan), the State has celebrated September - 2018 as “National Nutrition Month” with the convergence efforts from the line departments in a campaign mode to create awareness about nutrition among the beneficiaries under POSHAN Abhiyaan.

Convergence Nutrition Action Plan: Research shows that the malnutrition can be effectively handled through a coordinated effort between nutrition specific and nutrition sensitive interventions. In this direction, a block, district and state level convergent action plans will be developed to promote coordinated cross-sectoral efforts to address malnutrition. The convergence action plans which are

developed based on the situational analysis will result in substantive, rapid and sustainable reduction in maternal and child malnutrition. To oversee and guide activities, committees are proposed at state, district and block level. The committee will review once in 6 months or based on the need. State, District, and Block level of Convergence action plan committees were constituted.

Institutional support for women and children

Following are the details of Government run institutions for Women and Children to cater to their needs in difficult circumstances.

- 3 Service homes are functioning in the state to provide services for rehabilitation of socially & economically deprived categories of women in the age group of 18-35 years at West Godavari, Nellore and Ananthapuramu districts. At present, there are 86 inmates as against the sanctioned strength of 350.
- 2 State Homes meant for women discharged from correctional Institutions and women who are unable to protect themselves, are functioning in the state at Srikakulam and Rajahmundry with 129 inmates against the sanctioned strength of 200.
- 4 homes for Collegiate Girls are functioning in the State at Vizianagaram, Tanuku, Guntur and Tirupati with 138 inmates against the sanctioned strength of 170.
- 11 Working Women's Hostels for providing security to the middle class working Women who are residing far away to their families are functioning in the State with 1102 inmates against the sanctioned strength of 630. Proposals for 28 New Hostels are being finalized.
- 4 Ujjawala Homes under Ujjawala scheme for the women rescued from trafficking are working in Guntur -1, YSR district -1 and Ananthapuramu-2. 474 beneficiaries covered and also established a Rescue Home for Women rescued from Trafficking in Vijayawada
- 23 SwadharGreh are functioning with an aim to provide primary needs of shelter, food, clothing and care besides emotional support, counselling and other services for rehabilitation of women. 1120 beneficiaries are covered.
- Domestic Violence Cell for women who are facing domestic violence. 3939 cases covered.
- 46 Children homes are functioning in the State with 1886 inmates at present against the sanctioned strength of 3110.

Integrated Child Protection Scheme

Integrated Child Protection Scheme (ICPS) is a centrally sponsored scheme designed with an objective to provide a protective environment for overall development of children. The Scheme has strengthened the prevention of child rights violation, enhanced the infrastructure for protection of services and provided financial support for implementation of the Juvenile Justice (Care and Protection) Act, 2015. Notable activities have been taken up during last five years under this Centrally Sponsored Scheme.

State Level Service Delivery Structures

- State Child Protection Society (SCPS) and State Adoption Resource Agency (SARA) have been functioning at State level as per the pattern prescribed in ICPS.
- State Child Protection Society (SCPS) is set up in every State/UT as the fundamental unit for the implementation of the scheme. The SCPS takes care about the implementation, supervision and monitoring of ICPS and all other child protection schemes/programs and agencies/institutions at State level.
- State Adoption Resource Agency (SARA) is a unit under the SCPS, to support CARA in promoting in-country adoption and regulating inter-country adoption and to coordinate, monitor the work of adoption.
- District Child Protection Unit (DCPU) in each district is a fundamental unit for the implementation of the scheme. The DCPU shall coordinate and implement all child rights and protection activities at district level.
- In 13 Districts, District Child Protection Societies are established under the Chairmanship of District Collector, and District Child Protection Units with 12 officials are functioning under the control of Project Director, DWCD.

SOCIAL INFRASTRUCTURE

Specialized Adoption Agencies (SAAs) / Sishugruhas

ICPS supports State run Specialized Adoption Agency (SAA), where adoptable children of less than five years of age are provided residential care. The Department is promoting adoption through establishment of 14 Specialized Adoption Agencies (Sishugruhas), in 13 districts (2 SAAs in Krishna District). Adoption process is decentralized to the district level. At present 157 children are housed in 14 Sishugruhas. 391 children are placed for in country adoption and 54 children are placed for Inter-Country adoption.

Prohibition of Child Marriage Act, 2006

- 40% of child marriages in the world take place in India only.
- India is in 11th position among 68 nations, where child marriages are reported.
- AP has the highest prevalence among Southern States as per NFHS – IV.
- 1346 child marriages have been stopped.
- Involvement of community, youth and adolescent group for supporting network.

Civil Works:

The PR & RD Department has approved for construction of 4000 AWCs under MGNREGS during 2018-19 in addition to spillover works (2347). Of this, 2052 buildings are completed. 3788 buildings are under progress & 507 are yet to be started as on 01.04.2019.

Infrastructure facilities:

(in No.s)

Anganwadi Centers	55607
Anganwadi centers having toilet, drinking water & electricity facilities	54583
AWCs having Toilet facility	54643
AWCs not having Toilet facility	964
AWCs having Drinking Water facility (connections)	55607
AWCs not having Drinking Water facility	0
AWCs having Electricity facility	55509
AWCs not having Electricity facility	98

Juvenile Welfare, Correctional Services & Welfare of Street Children

The Juvenile Welfare department endeavors to undertake necessary steps for effective implementation of Juvenile Justice (Care and Protection of Children) Act, 2015 and to provide care, protection, treatment, development and rehabilitation of 'Children in need of care & protection' (orphans, victims of exploitations, abuse, run-aways etc.) and 'Children in conflict with law upto the age of 18 years.

A. Statutory Bodies:

Juvenile Justice Boards (JJB): Juvenile Justice Boards are constituted by the Govt. in the State to deal with the cases of Children in conflict with law. During 2018-19, 1430 cases were disposed by the Boards in the State and 1154 cases are pending for disposal before JJBs as on 1st April-2019.

Child Welfare Committees (CWC): Government have constituted Child Welfare Committees in all the 13 districts in the State to deal with the cases of Children in need of care and protection. During the year 2018-19, 12,159 cases were disposed by the Child Welfare Committees and 2335 cases are pending for disposal by the CWCs as on 1st April-2019.

B. Institutional Services

- There are (4) Children Homes, Observation Homes for Boys (8 by Govt and 6 Extension Homes), Special Homes for Boys (2), Spl-cum-Children Home & Observation Home for Girls (2), Place of Safety (3) and Open Shelters (9 by NGOs) are working.

C. Registration of CCIs

- As mandatorily required U/s 41 of the new JJ Act, Dept has initiated the process of registration of all the child care institutions in the State as defined U/s 2(21) of JJ Act 2015.
- As on 1st June-2019, 934 CCIs have got registrations under JJ(CPC) Act in the State. 78 CCIs were rejected for registration as they do not comply minimum required

standards. Children residing in these unregistered CCIs are also shifted to the nearby registered CCIs

D. Inspection of CCIs:

Government has constituted State Level & District Level Inspection Committees. As the incidents of child abuse was reported in three CCIs in the State during the inspections, the Department has taken the following action to prevent such type of incidents –

- All the CCIs in the State have been instructed to install CC Cameras immediately. As on 01.06.19, out of the 934 registered CCIs, in 202 CCIs CC Cameras have been installed.
- Govt. have issued instructions to the Village/ Ward Child Protection Committees to conduct regular friendly-visits to the CCIs.
- Police Dept was requested to issue instructions to the 'She Teams' to make friendly-visits to the CCIs meant for Girls.
- Sensitization-cum-orientation programs are being organized with all the Chief Functionaries of the registered CCIs in the State. So far, CCIs of 7 districts were covered.
- The Chief Functionaries of all CCIs meant for Girls are instructed to employ only female staff in the Homes.

Achievements during 2018-19:

- Nearly 500 Organizations who are running Homes for Children who need Care & Protection without falling under the Govt. surveillance have been registered under JJ Act & brought under regular monitoring system.
- As an innovation, the Dept. has conducted Spl. Drives to identify Children without having both parents in order to bring under adoption system. As on 01.06.19, 440 Children could've been identified and enrolled in CARINGS portal for adoption.
- Dept. has developed and issued Aftercare guidelines for the State to implement Aftercare program for the Children without parents or without any Home before they leave the Child Care Institution.
- During 2018-19, 505 Children are educationally rehabilitated, 157 Children are vocationally rehabilitated and 1936 children have been either rehabilitated or reintegrated or reunited with their families.

Action plan for 2019-20

- To encourage marriages between Orphans and persons having parents, Department has proposed to the Govt. to provide financial incentives along with preferences in Govt. welfare schemes.
- Dept. is planning to develop software, which will be first of its kind in the entire Country, to speed-up the case proceedings before the Child Welfare Committees in a transparent way, with an ultimate aim to speed-up the rehabilitation process of the Children and also to digitize all the records of the Child Welfare Committees in the State.
- Dept. is planning to implement a special program to reduce recidivism among juveniles in the State. A proposal in this regard has also been submitted to the GoI for necessary budget sanction.
- In order to speed up the restoration process of the Missing Children and also to cover all the Child Care Institutions in the State, Dept. is planning to revamp the existing system under ICPS to make use of the Track the missing child portal to identify the missing Children using the Facial Recognition technology with the convergence support of Police Dept.

Welfare of Differently Abled & Senior Citizens

The Persons with Disabilities Act, 2016 deals with both prevention and promotional aspects of rehabilitation of education, employment and vocational training, creation of barrier-free environment, provision of rehabilitation service for persons with disabilities. The department is working towards implementation of persons with Disabilities Act, 2016 and National Trust Act, 1999 that ensures multi sectoral coordination with various government departments for prevention, early identification and detection, education, employment, rehabilitation, mainstreaming, networking and monitoring of Government of India grant-in-aid projects of NGOs.

SOCIAL INFRASTRUCTURE

As per 2011 census, the total number of people with disabilities in the State is 11.04 lakh. Of which visually handicapped people are 2.03 lakh, hearing handicapped people are 2.90 lakh, orthopedically handicapped people are 3.13 lakh, mentally handicapped people are 1.02 lakh and multiple Differently Abled are 1.96 lakh. As per 2011 census, the population of Senior Citizens in the State is 33.75 lakhs out of which 16.08 lakh are male and 17.67 lakh are female. Number of schemes are being implemented for the empowerment and rehabilitation of persons with disabilities.

Pensions

Every month pensions are being sanctioned to 5.61 lakh Differently Abled persons and 20.84 lakh Senior Citizens in the State through Panchayat Raj and Rural Development.

Education

18 pre-matric and 2 post-matric Hostels are working with a sanctioned strength of 1780 boarders. Out of 6 Residential schools 3 for hearing Impaired at Vizianagaram, Bapatla, Ongole and 3 for visually impaired at Vizianagaram, Visakhapatnam, Hindupur with a sanctioned strength of 860. One Residential Junior College for hearing Impaired at Bapatla, Guntur District with a sanctioned strength of 50. Scholarships are sanctioned to the Differently Abled students including Mentally Retarded, covering 7044 beneficiaries for the year 2018-19.

Social Security

During 2018-19, 1786 beneficiaries were has sanctioned a subsidy of Rs.1.00 lakh incurring an expenditure of Rs.1672.09 lakhs, 665 beneficiaries have got marriage incentive awards to Differently Abled and normal persons incurring an expenditure of Rs.627.56 lakhs during 2018-19 and on purchase of petrol/diesel 50% Petrol subsidy sanctioned on actual expenditure (2 HP and below -15 Litres and more than 2 HP-25 Litres) to the Differently Abled persons who are having motorized own vehicle for self-transportation.

Construction

During 2018-19, an amount of Rs.2.00 crores allocated for construction of Hotels, Homes and Residential Schools. Out of 4 Homes 3 are for Blind and one for Aged and Differently Abled with a sanctioned strength of 335 inmates.

Survey, Assessment of Needs and issue of medical certificates and identity cards: -

The department in close collaboration with departments of Rural Development, Medical & Health, NIMH and NGOs has evolved a scientific computer aided disability assessment strategy. This software is called as SADAREM (Software for Assessment of Disabled for Access, Rehabilitation & Empowerment). Government have issued orders that the appointment time for PWDs (persons with Disabilities) shall be given at Mee – Seva counters as per digital roaster.

Aids and Appliances

Camps are conducting for distribution of tricycles, wheel chairs, walking sticks, Braille slates, laptops, tape recorders, CD players and smart canes to needy people.

Senior Citizens

The Government of India has enacted Maintenance and Welfare of Parents and Senior Citizens Act, 2007. Tribunals have been constituted in all the Sub Divisions of Andhra Pradesh. Appellate tribunals were also constituted in all 13 Districts, to ensure that the SCs are able to live with dignity and that their needs for maintenance, welfare, medical care and protection are taken care of.

Achievement during the 2018-19

Enhanced cahrges of Diet, Cosmetic, Stitching, & Hair Cut for the boarders residing in Government Pre-matric Hostels, Residential Schools and other Institutions. Also enhanced Post-metric scholarships to differently abled students on par with SC/ST w.e.f. 1.7.2018. Government sanctioned Home for Orthopedically Handicapped at Guntur and also launched special recruitment drive for filling up of the backlog vacancies reserved for the differently abled. The period recruitment has been extended from time to time.

Action Plan for 2019-20

It is proposed to establish four homes for Destitute aged and Crippled persons at Srikakulam, Euluru, Nellore and Kurnool with an estimated cost of 185.14 lakh per annum @ Rs.46.28 lakh for each home, on PPP mode. The proposal is under consideration of Government.

Andhra Pradesh Differently Abled and Senior Citizens Assistance Corporation (APDASCAC)

The Corporation has taken up the programme for supply of prosthetic aids and mobility aids, supply of educational aids to individuals and institutions, facilities to impart training in various technical and non-technical trades, organizing employment generation production units with assured market for products and creating awareness among parents for early detection and stipulation and treatment of various disabilities.

Government of India sanctioned Braille Press to Guntur District under the scheme of modernization/ capacity augmentation for starting new Braille Press and released Rs.129.77 lakhs to Andhra Pradesh Differently Abled and Senior Citizens Assistance Corporation.

Rehabilitation and Supply of Prosthetic Aids

Under this scheme, the Corporation supplies aids and appliances such as tricycles, wheel chairs, crutches, walking sticks, try pods (Hand sticks), artificial limbs three wheeler motorized vehicle and hearing aids to PwDs. Government issued orders permitting APDASCAC to extend the facility of supply of aids and appliances/assistive devices to Senior Citizens also on par with Differently Abled. 18829 beneficiaries covered for supply of various aids appliances and 747 Retrofitted Petrol Scooters have been distributed during the year 2018-19 to Orthopedically Handicapped Persons.

Government of India Schemes: -

The Government of India, Ministry of Social Justice & Empowerment has been releasing funds under Grant-in-aid to the projects working under Deendayal Disabled

Rehabilitation Scheme (DDRS), Integrated Programme for Older Persons (IPOP) and Prevention of Alcoholism and Substance (Drugs) Abuse Schemes. The Government of India sanctioned Disability Rehabilitation Centres in 7 Districts of East Godavari, Vizianagaram, Kurnool, Prakasam, Nellore, YSR Kadapa and Chittoor districts. The Government of India has sanctioned the Composite Regional Centre for Mentally Handicapped at Nellore.

Backward Classes Welfare

Population belonging to Backward Classes pursuing traditional activities such as cattle and sheep rearing, toddy tapping, earth works, fishing, weaving, goldsmith, blacksmith, brass smith, carpentry, stone carving, laundry, pottery, oil pressing, basketry, hair dressing, tailoring, dyeing fall under 139 communities listed are divided into five Groups viz., Group A, B, C, D and E. Government is implementing various Welfare schemes, educational and Economic development programmes for the welfare of the Backward Classes people.

The new government is committed to incur an expenditure of Rs.75,000 crores for the next 5 years period @ Rs.15,000 crores per year under BC Sub Plan.

Pre- matric hostels:

Hostels provide free boarding and lodging facilities to students belonging to the Backward Classes and enable them to pursue their Pre-Matric studies. At present, there are 773 Govt. B.C. hostels, (594 hostels for boys and 179 hostels for girls). A total strength of 86158 boarders was admitted in these hostels during 2018-19. All these hostels have a combination of 76% of seats for Backward Classes, 10% of seats for Scheduled Castes, 5% of seats for Scheduled Tribes, 3% of seats for Minorities and 6% of seats for other castes for encouraging Social Integration.

Out of the total 773 Hostels, 556 Hostels are located in Government buildings, remaining 217 hostels in private buildings. The diet charges are provided at Rs. 1,000/- per month per boarder those who are studying 3rd & 4th classes and Rs.1250/- per month for 5th to 10th classes. Cosmetic charges are also provided. Note Books, four pairs of dresses

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and bedding material supplied every year to the boarders. 96.66% of 10th class students in BC Hostels were passed against 94.88% of State average passed in March, 2019. 86,158 students were benefitted during 2018-19 with an expenditure of Rs.228.42 crores.

College hostels for boys and girls:

In order to promote the education among BC Boys and Girls at the Post Matric level, Government have issued orders for establishment of College Hostels @ one for each Assembly Constituency for Girls and Boys. During 2018-19, 181 Boys College Hostels and 179 Girls College Hostels are functioning with a total strength of 38791 boarders (19588 Boys and 19203 Girls). The admission into the College Hostels for Boys and Girls is made as per rule of reservation @ 69% to BC, 15% to SC, 6% to ST & 10% to Minorities. The Diet Charges provided by Government is Rs.1400/- per month per boarder from Intermediate to Post Graduation. During 2018-19, an amount of Rs.86.52 crores have been spent benefitting 38,791 students.

Post-matric scholarships:

Government is implementing the Post Matric Scholarships and Reimbursement of Tuition fee scheme to eligible BC students for pursuing higher education. All eligible BC students having family income upto Rs.1.00 Lakh per annum are sanctioned for the Post Matric Scholarships on saturation basis.

During 2018-19, Post Matric Scholarships were sanctioned to 8,16,448 students incurring an expenditure of Rs.333.32 Crores.

Reimbursement of Tuition fee to BC students:

Government is implementing the Post Matric Scholarships and Reimbursement of Tuition fee scheme to eligible BC students to pursue higher education. All eligible BC students having family income up to Rs.1.00 Lakh per annum are sanctioned for the Reimbursement of Tuition fee on saturation basis. During 2018-19, tuition fees of Rs. 1108.92 crore was reimbursed to 8,16,448 students.

Reimbursement of Tuition fee to EBC students:

Government has been implementing the scheme of Reimbursement of tuition fees for Economically Backward Classes (EBCs) on saturation basis on par with BCs from the year 2009-10 onwards. The eligible criteria for EBCs for getting reimbursement of tuition fee are same as those applicable for BCs i.e., having family income up to Rs.1.00 lakh for annum. In 2018-19, an amount of Rs.440.84 Crore was reimbursed to 131906 EBC students under RTF.

MTF & RTF to Kapu Students:

Government have issued orders for sanction of Post Matric Scholarships to Kapu, Telaga, Balija and Ontari Caste students studying Intermediate, P.G. and Professional Courses with effect from the academic year 2017-18 on par with BC Students as per G.O. Ms. No.40 of BCW (C) Dept., dt. 21.12.2017. The income limit of the parents should not exceed Rs.1,00,000/- per annum for both professional and non-professional courses. Reimbursement of Tuition Fee is applicable to the students who are admitted under Convener quota only.

During 2018-19, RTF & MTF was sanctioned to 117753 Kapu students with an expenditure of Rs.289.44 crores

Residential schools:

At present, 69 BC Residential Schools (56 Residential schools, 11 Upgraded to Jr. Colleges and 2 Independent Jr. Colleges) are functioning in the State of Andhra Pradesh, out of which 35 are meant for Boys and 34 for Girls. Also, 13 BC Residential Junior Colleges Six for Boys and Seven for Girls are also functioning in the State. The total sanctioned strength in the BC Residential Schools for the year 2019-20 is 24320 (Boys-14080, Girls-10240) in the BC Residential Schools. Out of 69 schools, 10 Institutions located at Amalapuram (East Godavari), Mopidevi (Krishna), Satyavedu (Chittoor), Golagamudi (SPSR Nellore), Akkupally (Srikakulam), Nellimarla-Boys (Vizianagaram), Annavaram (Visakhapatnam), Vemuladeevi (West Godavari), Nakshthra nagar (Guntur), and Singarayakonda (Prakasam) are meant for the children belonging to Fishermen Community.

The admission pattern in BC Residential Schools is BC-A: 20%, BC-B: 28%, BC-C: 3%, BC-D: 19%, BC-E: 4% SC-15%, ST-6%, EBCs-2% and Orphans-3%. Total – 100%. In Fishermen Schools, Children of Fishermen 46%, BC-A 7%, BC-B 10%, BC-C 1%, BC-D 7%, BC-E 4%, SC-15%, ST-6%, EBC-1% and Orphan-3%. Total – 100%

SSC/Intermediate Results:

During the academic year 2018-19, 1884 students appeared for SSC exams of which, 1850 students passed and the percentage of pass is 98.19%. 21 out of 32 Schools achieved 100% results. 46 students have achieved 10 GPA. In Intermediate, 107 out of 119 appeared passed and the percentage of pass is 89.91%

Videsi Vidhyadharana to BCand EBC students:

Government have issued orders for sanctions of Financial Assistance to “BC” students for pursuing higher studies in abroad under the scheme of Videshi Vidyadarana scheme starting from the academic year 2016-17 and extended to EBC Students from 2018 onwards. The students, whose family income is less than Rs.6.00 lakh per annum from all sources are eligible. The Maximum age under the scheme shall not exceed 35 years as on 1st July of the year of advertisement date. Government sanctions financial assistance to 1750 students (1000 BC and 750 EBC) every year.

Under this schemes, Financial Assistance of Rs.10.00 lakh for each BC & EBC students for pursuing higher studies in Post Graduate courses in foreign universities and also eligible for Travel Grant and Visa Fees.

In 2018-19, Government provided financial assistance of Rs 48.53 crores to 1746 BC students and Rs.27.15 crore to 783 EBC students for pursuing higher studies in foreign universities

AP Study Circles for BCs:

There are 13 BC Study Circles functioning in the State to provide free coaching facilities to eligible BC unemployed graduates and Post graduates, who are appearing for various competitive examinations of State and Central Government

like Civil Services, Group-I, Group-II, JLS, Police Jobs, Defense Jobs, Banking Jobs, Railway Jobs, etc. In total 750 candidates were selected training during the year 2018-19. All these Study Circles have an admission pattern of 66% to Backward Classes, 20% to Scheduled Castes and 14% to Scheduled Tribes for the purpose of Social Integration. 8154 students benefitted during 2018-19.

Unnatha Vidyadarana:

Government have introduced the Unnatha Vidyadarana scheme for imparting of coaching in reputed Pvt. Institutions for providing financial assistance to the candidates through the prescribed process for (UPSC Civil Service Examination Prelims-cum-Mains and interview). Students will be paid stipend Rs. 10,000/- per month for 9 months. One time traveling allowance to be paid to each students – Rs. 2000/-. Institutional fee is paid to the institution Rs. 1,50,000/-. BC Students are sponsored to 19 empanelled institutions. Total amount to be spent on each student – Rs. 2,50,000/- (Including Institutional Fee). During 2018-19, total 4026 students (839 BC and 678 EBC) were benefitted with financial assistance of Rs.4.50 crores

Pelli Kanuka:

Under the scheme, a onetime financial assistance of Rs. 35,000/- (Rupees Thirty-Five thousand only) will be provided to BC brides During the 2018-19 Financial year, 51,422 brides benefitted with an expenditure of Rs.157.14 crores. The new government is committed to provide Rs.50,000 instead of present Rs.35,000 to every BC bride under “YSR Pelli Kanuka Scheme”.

Welfare of Arya Vysyas:

Government of Andhra Pradesh introduced a New Scheme of “Welfare of Vysyas “and established A.P. Arya Vysya Corporation. An amount of Rs.30.00 Cr. was allocated in the 2018-19 Budget.

AP Backward Classes Cooperative Finance Corporation Ltd.,

The A.P. Backward Classes Cooperative Finance Corporation Ltd., was established in 1974. The prime

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object of the corporation is to undertake the tasks of economic upliftment of Backward Classes in the State. The Corporation implementing two Self Employment Schemes (i). Subsidy Scheme in Rural Areas (Margin Money) (ii). Subsidy scheme in Urban Areas (B.C. Abhyudaya Yojana).

Adarana:

The Government of AP has started AADHARANA programme with an aim to minimize the drudgery, to improve the income levels and living standards of the artisans of BC communities by supplying modern tools/gadgets on the selection choice of the beneficiary. Modern tools/gadgets are provided in three slabs with unit cost of Rs.10,000/-, Rs.20,000/- and Rs.30,000/- with 90% of the unit cost as subsidy, remaining 10% Beneficiary contribution. 2,97,207 tools distributed to the artisans.

AP State Economically Backward Classes Welfare and Development Corporation:

Government has provided Rs. 200.00 Cr. for Economic support schemes in the budget of 2018-19 out of which Rs. 70.00 crores for Bank linked subsidy Schemes for Financial Assistance, Rs. 50.00 for Skill Development, Rs. 50.00 Cr for the Scheme of abroad studies for EBC Students and Rs.30.00 Crore.for Coaching programmes for Civils, Groups etc. During 2018-19, financial assistance provided to 1260 beneficiaries under Bank linked Subsidy scheme.

AP Most Backward Classes Welfare and Development Corporation:

Government issued the orders for implementation of Economic Support Schemes to the MBC Communities to certain low hanging economic support schemes to the MBC Stake holders with funding tie-up from National Backward Classes Finance Development Corporation (NBCFDC) and Non-bank linked schemes to lift up the low hanging fruits.

The beneficiary can also option for smaller units at a unit cost of Rs.10,000/- and Rs.20,000/- with 90% subsidy from MBC Corporation and 10% Loan from NBCFDC. So far an amount of Rs.18.15 Cr. was released and 3,603 Beneficiaries benefited.

Co-operative Corporations for Artisan Communities:

11 Cooperative corporations (AP Washermen Cooperative Corporation, AP Nayee Brahmin Cooperative Corporation, AP Vaddera Cooperative Corporation, AP Sagara (Uppara) Cooperative Corporation, AP Krishna Balija, Poosala Cooperative Corporation, AP Valmiki/Boya Cooperative Corporation, AP Bhattraja Cooperative Corporation, AP Kummari Shalivahana Cooperative Corporation, AP State Viswabrahmins Cooperative Corporation, AP Medara Finance Corporation Ltd., and Settibalija /Gowda / Ediga / Goud / Gandla / Srisayana /Kallale / Goundla / Yata Co-operative Finance Corporation) have been established for the welfare of artisan communities. All the cooperative corporations are implementing financial assistance scheme for the members of the primary cooperative societies. 50% of the unit cost is released as Subsidy, and the remaining 50% is provided as Bank loan. The income limit is Rs.81,000/- for rural and Rs.1,03,000/- for urban areas. Maximum unit cost is Rs.2,00,000/- for individual units and Rs.30,00,000/- for group units with maximum 15 members.

The Financial Assistance scheme is implemented through OBMMS. (Common platform for all economic support schemes of all Corporations).

In 2018 – 19 under all the 11 Cooperative Corporations 38,240 benefitted out of 511518 Eligible Beneficiaries registered (registered in PCS) with an expenditure of Rs.223.48 crores

New Corporations:

13 new corporations have been established during 2018-19 covering 728726 BC population. They are Yadava Co-operative Finance Corporation, Thurpu Kapu/Gajula Kapu Co-operative Finance Corporation, Koppula Velama/ Polinati Velama Co-operative Finance Corporation, Kuruba/Kuruma Co-operative Finance Corporation, Vanya Kula Kshatriya (Vannereddi/Vannikapu/ Pallikapu/Pallireddi) Co-operative Finance Corporation, AP Kalinga Co-operative Finance Corporation, Gavara Co-operative Finance Corporation, Weavers, Fishermen, Gandla, Toddy and Neera Tapping, Mudiraj /Mutrasi/ Tenugollu Co-operative Finance Corporation and A.P. Nagaralu/Nagavamsa/Nagavamsam Co-operative Finance Corporation

Scheme for Community Services:

Construction of Dhobi Ghats is being implemented through A.P. Washer men Co-operative Corporation with a 100% subsidy with unit cost of Rs. 5.60 Lakh. Government have allotted Rs.20.00 Crores for construction of 357 Dhobi Ghats during 2018-19.

Action Plan 2019-20

Fee Reimbursement (As part of Navarathnalu)

Reimbursement of tuition fee for BCs, EBCs & Kapus is one of the main scheme under Navarathnalu. Annual allowance of Rs.20,000 would be given to every student. To provide reimbursement of tuition fees, 9,00,000 BCs will be covered with a budget of Rs.1432.75 crores; 1,50,000 EBCs with Rs.500.00 crore budget and 1,40,000 Kapus with Rs. 420.00 crores.

It is also proposed to benefit 25.85 Lakh BCs under various schemes with a budget of Rs.15000 crores

- Oriented schemes covering 14 Lakh Students with budget of Rs.5400 crores.
- To cover 75000 under Pellikanuka with Rs.600 crores.
- Financial Assistance to benefit 5.60 Lakh Dhobi, Barbers, Tailors with Rs.600 Crores
- Economic Assistance through BC Corporation (MSME) to 50,000 with Rs 3400 crores.
- To Provide Economic Assistance to 5 Lakh BCs through other Occupational Corporations with Rs.5000 crores

Social Welfare

The Scheduled Castes Population in the state has increased from 74.28 lakhs in 2001 to 84.69 lakh in 2011, registering a growth of 14.01 percent. As per the 2011 Census, Scheduled Castes population forms 17.08 percent of the total population of Andhra Pradesh and 79.98% of the Scheduled Caste People live in rural areas. Sex Ratio among the Scheduled Castes is 1007, which is higher than the state average of 996. The literacy rate among SCs is 64.47, lower than the State's Literacy rate of 67.41. SC population ranges from 7.68% in Visakhapatnam district to 23.19% in Prakasam district. Literacy rate among SCs ranges from 55.26% in Kurnool district to 71.43% in West Godavari

district. SC enrollment ratio is 82.29% and dropout rate is 39.64% as against the general rate of 33.41%.

Educational Programmes

Hostels

759 Pre-metric hostels are functioning in the state, with an admitted strength of 73,600 in 2018-19. 38 integrated hostel welfare complexes are functioning with an admitted strength of 8149.

The students studying from III to X will be admitted into these hostels in the ratio – SC: 70%, Christian converts from SCs:12%, ST:5%, BC:9% and Others: 4%. Amenities like Diet, cosmetic charges, bed sheets, Carpets, Uniforms, Havai Chappals, Sports materials, School bags and Belts, Towels, Nightwear, Tracksuit and 5 to 25 note books as per class of the student, are provided to the students.

Ananda Nilayams

At present 17, (8 boys and 9 girls) Ananda Nilayams are functioning with a strength of 1367 in the State in 2018-19. 50% of the seats in Ananda Nilayams are filled with orphan students and the remaining 50% with children whose parents are engaged in unclean occupations. The inmates in these Ananda Nilayams are provided all facilities on par with the boarders in Social Welfare hostels.

Bio-Metric attendance and results:

Bio-Matric Attendance is implemented in 759 Pre-Matric and 309 Post - Matric Hostels. Laptops and finger print devices are provided to mark biometric attendance. 648 hostels were merged into Social Welfare residential schools so far. Out of the 12,408 students who appeared for SSC Examinations in March, 2018, 11,318 students passed. The overall pass percentage is 91.22% as against the State average 94.88%. 309 College hostels - 154 for boys and 155 for girls are functioning with an admitted strength of 28,622 students.

Web portal for all the Welfare Departments

From 2017-18 onwards, all Post Matric / Pre Matric Scholarships / BAS / AOVN and etc., are implemented

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through the web portal of “JnanaBhumi” for all the Welfare Departments. In this system student need not to register separately for Scholarships. But, Scholarship will be provided, as per the eligibility of the Student. All the details of the Students will be collected from the Admission Module. Due to the launch of this web portal for Scholarships, Student registration, verification, sanction and release processes have been simplified. Attendance is linked with release of MTF and MTF shall be paid every month subject to 75% of attendance on aggregate attendance of the Student and also MTF is linked with release of RTE.

Post-Matric Scholarships

An amount of Rs.752.62 crores is provided for 3.38 lakhs students in the year 2018-19.

Dr.B.R. Ambedkar Overseas Vidyanidhi

Under this Scheme, financial assistance is provided to the eligible SC students for pursuing higher education abroad. The selected SC students are sanctioned Rs. 15.00 lakhs grant in installments. 93 students have been selected and assisted under this scheme and an amount of Rs.9.33 Crores was incurred during 2018-19.

Skill Upgradation

Govt is implementing the scheme for giving coaching to SC students for eligibility test such as TOEFL/IELTS and GRE/GMAT and other for admission in foreign universities. An amount of Rs. 1.00 Crs is provided for the target of 1500 Students during 2018-19.

Pre-Matric scholarships for Students belonging to SCs Studying Class V to X

The objective of the scheme is to support parents of SC children for education of their wards studying in classes V to X so that the incidence of drop-out, especially in the transition period from the elementary to the secondary stage is minimized. During 2018-19, Rs. 24.65 Crs was incurred benefiting 180758 students.

Best Available Schools Schemes

Under this scheme, preference is given to the children of those belonging to the families of agricultural labourers Jogins, bonded labourers and orphans. During 2018-19, an amount of Rs. 29.80 Crs was incurred benefiting 26603 students.

Backlog Vacancies

Under this 445 SC vacancies and 489 ST vacancies are identified, out of which 267 are filled by SCs and 241 to filled by STs. 178 SC and 248 ST vacancies are yet to be filled.

PCR ACT, 1955 and POA ACT, 1989:

Special Sessions Courts:

Government sanctioned 13 Special sessions courts in all districts of AP. There are 4336 SC/ST cases pending as against 4494 cases registered during 2018-19 upto March, 2019.

Special Mobile Courts:

Government sanctioned 13 Special Mobile Courts in all the districts of A.P. The Special Mobile Courts were constituted for dealing with offences under PCR Act, 1955 in the State from 1978. The Mobile Courts are headed by First Class Judicial Magistrate and assisted by Asst. Public Prosecutor.

Relief and Rehabilitation to the Victims of Atrocities:

Under Rule 14 & 15 of the POA Rules, the scheme of Relief and Rehabilitation to the victims of Atrocities is entrusted to the State Government and enhancing the Relief and Rehabilitation amount fixing the monetary limits.

Rehabilitation of Bonded Labour

Rehabilitation of Bonded Labour is a centrally sponsored scheme with funding pattern of 50:50 between the state fund the centre. The A.P. Scheduled Caste Cooperative Finance Corporation is rehabilitating the identified bonded labourers out of the Corporations funds initially with the help of District SC Co-operative Service Societies.

Rehabilitation of Jogins

Economic Support Schemes with a unit cost of Rs.20,000/- per family has been implemented for rehabilitation of Jogins of which Rs. 10,000/- is subsidy. The District SC Societies are implementing schemes for the benefit of Jogins through Bank Linked Schemes like Milch Cattle, Bullock carts and Kirana shops etc.

Incentive award for inter – Caste married Couples:

Government have been encouraging Inter-Caste marriages for social integration and social reform with an objective of eradication of caste system in the society. The incentive award for inter-case married couples is to Rs. 75,000/-. The incentive award can be sanctioned to the couple where one of the spouses belongs to Scheduled Castes. During 2018-19, Rs. 64.27 Crs was incurred benefiting with 3166 couples.

Vidyonnathi

700 SC candidates were selected through an entrance exam conducted by the JNTU, Ananthapur during the year 2018-19 and they have been allotted to 19 reputed institutions in the Country. During 2018-19, an amount of Rs.16.00 Crs was incurred.

Free Power to SC Households:

On the Occasion of 110th Birth Anniversary Celebrations of Dr.Babu Jagjeevan Ram, Government launched “Jagjeevan Jyothi” scheme extending the benefit of free power upto 100 units in respect of SC Households, consuming power 125 units per month. With this, additionally 4.67 Lakh SC households will be benefited.

During 2018-19, Rs.183.04 Crores is allocated for Jagjeevan Jyothi Scheme (Free Power) for providing 13.77 Lakh SC Households. So far Rs. 108.96 Crs was incurred benefiting with 13.85 Lakh SC Households.

Scheduled Castes Sub Plan

This is designed for development of SC's & ST's at least in proportion to their population with an objective to bridge the gaps in development indicators between the general population and SC's and ST's. During 2018-19, an amount of Rs. 11228.11Crs is allocated and incurred expenditure of Rs. 10448.19 crores.

Ambedkar Smruthi Vanam

Ambedkar Smruthi Vanam Project is designed with the following components, 125 Feet Statue, Memorial Hall, Buddhist Dhyanakendram, Meditation Hall, Library, Open Air Theatre, Park & Convention Hall at CRDA region with an initial estimated cost of Rs.248.65 Crs and 20.00 Acres of land was allocated. Designs and Tenders have been finalized and APIIC is executing the project. This Work is executed by M/S. KPC Projects Ltd., Hyderabad complete by 16-03-2020.

Commitments of the Government under Navaratnalu

Fees Reimbursement

As assured, the Social Welfare Department has already implemented full fee reimbursement to SC Students for all Post-Matric Courses including Engineering, M.B.A, MCA, Pharmacy, Medical etc., on saturation mode.

Every year 3.50 Lakh SC Students are benefitted with an expenditure of around Rs.600 crores.

YSR Cheyutha

Revamping of existing Corporations to introduce transparency & accountability. Providing inadequate support to a very few people after extracting bribes, would be done away with:

Online registration, social audit of grounded units, 3rd party verification and reducing human interface during selection process

BC, SC, ST & Minority women, between 45 to 60 years will be provided Rs. 75,000 in Phases, through respective Corporations:

Assistance will be provided to 413579 SC women between the age group of 45 to 60 years @ Rs 18750 per year in 4 years from next year onwards.

The government is planning to establish 3 corporations for SCs (one for Mala community, one for Madiga community and one for Relli and other communities.

Pelli Kanuka:

Ensuring Socio-Economic Security for the Girl Child, to empower the support the Girl Child and promote

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compulsory Marriage Registration, this scheme is providing for assistance to SC brides at the time of marriage for the better future of SC unmarried girls. During the year 2018-19, Rs.116.55 Crs is allocated to provide Assistance for 25000 Beneficiaries. 24599 SC Brides were given incentive with Rs.101.67 Crs. Now the government is planning to provide Rs.100000 to every SC bride on the occasion of her wedding under "YSR Pelli Kanuka".

Pensions to dappu artists:

To protect and rejuvenate the Traditional Art form of Dappu and to address the income vulnerability of the Traditional Dappu Artists belonging to Scheduled Community, the Scheme is provided for Assistance to Dappu Artists for their Livelihood. During the year 2018-19, Rs.35.10 Crs was allocated. So far, 27599 pensions were sanctioned.

Assistance For Livelihood Enhancement

To secure a dignified life to the poor and vulnerable section of the society for empowering the rural people by creating additional income by improving their productivity and achievement of service quality with modern tool and technologies supporting minimum needs that brings happiness in the lives by providing safety net to the Traditional Cobblers, this Scheme is provided Financial Assistance for Livelihood. Rs.84.00 Crs was allocated and 16948 Pensions were sanctioned. 23928 Modern Tool Kits @ Rs.10,000/- & to Purchase of Raw Material @Rs. 20,000/- one time, to each beneficiary were sanctioned so far.

Andhra Pradesh Scheduled Castes Coop. Finance Corporation Limited

The main objective of AP Schedule Castes Cooperative Finance Corporation limited is to provide financial assistance for creation of income generating assets to the poor belonging to scheduled Castes households for social and economic development.

The Corporation mainly prepare plans, promote and take up economic assistance programme in the fields of Agriculture, Animal Husbandry, Marketing, Procession, Supply and storage of Agriculture products, Small Scale Industry, cottage Industry, Trade. Business or any other activity which enables Scheduled Castes members to earn a better living and improve their standard of living with special emphasis on vulnerable sections like Bonded Labour, Flayers & Tanners,

Jogins. All these schemes are implemented with loan tie-up from the banks towards providing skills for enhancement of opportunities for wage employment and self-employment.

Under SC Action Plan, an amount of Rs 2124.30 Cr. was provided towards financial assistance for the benefit of 107257 SC beneficiaries in 2018-19 with a subsidy of Rs 1162.54 Cr.

Implementation of Schemes under Special Central Assistance (SCA)

Government of India is providing funds under SCA to SCSP to the State Government for taking up schemes for the benefit of Scheduled Castes and the funds are utilized for providing subsidy and for non-recurring items. An amount of Rs 23.13 Cr was released by GOI under SCA to SCSP.

Enhancement of Subsidy

The Government have enhanced the subsidy component for economic support schemes and the subsidy component is 60% or Rs 1.00 lakh (whichever is less) in case of self-employment schemes.

E-payment

The Government have issued orders to all Welfare Departments, Government Corporations and participating banks to implement the bank linked subsidy schemes through e-payment system of direct release of subsidy to beneficiaries' loan account from the head office, avoiding all the intermediary levels.

Implementation of Non-Bank linked Schemes

Vulnerable Groups

Providing Financial Assistance with 100% Grant to vulnerable groups like Leather workers (F&T), Jogins, Bonded Laborers with an outlay of Rs 7.00 Cr. for the benefit of 700 beneficiaries.

Minor Irrigation & Energization

Providing irrigation facilities like bore wells, submergible pump sets to the lands of poor scheduled castes families to eke out their livelihood with a total outlay of Rs 5.19 Cr for the benefit of 1200 beneficiaries with 90% subsidy.

Land Development

Land Development scheme is taken up in assigned lands which are not covered by DWMA with an amount of Rs 1.20 Cr. to cover 1250 acres of land.

Land Purchase Scheme

Social Welfare Empowerment & Tribal Welfare Empowerment has taken a conscious decision to implement the land purchase scheme for Elimination of Rural Poverty with a systemic approach to reduce the incidence of poverty among poor persons in the State. The main objective of this scheme is to empower the poor Agricultural Scheduled Caste Women in the society by providing means of livelihood as well as economic security. An amount of Rs 133.41 crores is provided under SCAP 2018-19 for the beneficiaries of 1271 SC families for purchase of 3179 acres of agriculture land.

National Schedule Caste Finance Development Corporation and National Safai Karamcharis Finance Development Corporation (NSFDC & NSKFDC)

The broad objective is to enable easy access to credit for SC educated un-employed poor youth belonging to SCs at a cheaper rate of interest for self-employment units and to identify entrepreneurial capabilities among them. With a view to encourage SC educated youth, the APSCCFC has revived the self-employment programmes with the loan assistance from NSFDC during the year 2018-19.

An amount of Rs 270.12 Crores allocated for the benefit of 6,194 SC beneficiaries with a subsidy Rs. 102.14 Crores and NSFDC loan of Rs. 153.17 Crores under NSFDC scheme.

An amount of Rs 264.61 allocated to assist 8,439 SC beneficiaries with subsidy of Rs 135.65 Cr and NSKFDC loan of Rs. 141.70 Crores under NSKFDC scheme.

Tribal Welfare

The Tribal Welfare Department is committed for the overall socio-economic development of scheduled tribes in the State through formulation of policies and programs and duly implementing the constitutional safeguards

The Tribal population of Andhra Pradesh according

to 2011 census is 27.39 lakhs constituting 5.53% of the total population of the state. The scheduled areas extend over 14,132.56 sq.kms which is about 8.82% of total area of the state with 5,318 villages spread in Srikakulam, Vizianagaram, Vishakapatnam, East Godavari and West Godavari districts. There are 34 ST communities living in the state. Of the 27.39 lakh tribal population, 10.54 lakh are found in the above 5 districts. The ST literacy rate is 48.83% (Female 39.40, Male 58.37). Government accorded high priority for development of tribals. Major focus is on Education, Health, Skill Development and creation of social infrastructure including road connectivity and supply of drinking water in tribal areas.

Important Goals

Starting and maintaining Ashram Schools, Hostels and Residential Schools for imparting education to ST Children, Extending support in education by sanctioning Scholarships, Sanctioning of Bank Linked Subsidy loans through TRICOR, Implementation of Livelihoods projects in Agriculture, Horticulture, Coffee, Dairy and Fisheries and skill development activities, to build basic infrastructure works like Buildings, Roads, Minor Irrigation structures in the tribal areas, Social Security Assistance, Inter & Intra caste Marriage Incentives and Free power are extended to STs and Implementation of NAVARATNALU on a priority basis.

Residential Education

To ensure quality residential education for STs, Government is committed to provide quality education for all ST students by converting all the (179) Hostels into Residential Schools and Ashram Schools. All the 134 Hostels in Plain districts were converted into (80) Residential Schools and 45 Hostels in Agency districts into (30) Ashram schools.

Quality Initiative under Education

There are 378 Ashram Schools, 23 Hostels, 4 IWCH (including merged Mandals) and 1,12,562 students have been enrolled so far. An amount of Rs. 630.03 Cr is provided in budget for 2018-19 and an amount of Rs.511.73 crores were incurred towards Diet and other maintenance charges. 94.81% of the students passed SSC Exam during 2018-19

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Pre-Matric Scholarships

For sanctioning the pre-matric scholarships to ST students in the reputed Best Available Schools, the entry point classes are 3rd, 5th & 8th. Under this scheme Rs.30,000/- per annum per student is paid. Income limit ceiling is Rs.2.00 lakhs. The eligible candidates can register their details in “Jnana Bhumi web portal” to get sanction under this scheme. Under the scheme, total 11,575 ST students have benefitted and an amount of Rs.32.35 crores were incurred in the year 2018-19.

Pre-Matric Scholarships (New Scheme) for 5th to 8th ST Day Scholars

To improve enrolment rate in upper primary sections, an incentive of Rs.1500/- to every girl day scholar and Rs 1000/- to every boy day scholar per annum is sanctioned for ST students studying 5th to 8th classes in Govt./ Local Bodies/ Govt Aided School. Income limit ceiling is Rs.2.00 lakhs. In the year 2018-19, 11419 ST students have been registered under this scheme and an amount of Rs. 1.13 crores were incurred so far.

Pre-Matric Vidya Jyothi for 9th& 10th classes

The scheme meant for ST Students of IX & X Classes (Hostellers & Day Scholars) studying in Govt. Schools, Schools managed by local bodies such as Zilla Parishad, Municipalities, Schools aided by the Government, Tribal Welfare Ashram Schools, Gurukulam schools, Mini Gurukulams, KGVB schools and Best Available Schools. Income limit ceiling under this scheme is Rs.2.00 lakhs. Rs.4500/- per annum per student (for Hosteller) and Rs.2250/- per annum per student (for Day Scholars). In the year 2018-19, 28,629 ST Students have been registered and an amount of Rs.10.25 crores were incurred.

Post –Matric Scholarships

There are (2) components under this scheme called RTF (Tuition Fee) & MTF (Maintenance Charges). RTF is paid directly to the Colleges (as fixed by the University/Boards). MTF is given directly to the students account on monthly basis.

The entire process of sanction of Post-Matric Scholarships is through online by registering their details in “JnanaBhumiwebportal”. For sanction of Post-Matric Scholarships Aadhar as mandatory. Income ceiling for payment of scholarships under this scheme is Rs.2.00 lakh. To simplify the process as well as for speedy and effective sanctions on behalf of student, principal is authorised to register.

Post-Matric Scholarships of ST students in 8099 colleges and 25 universities were registered for claiming 71107 ST students were registered under JnanaBhumiwebportal under post-matric scholarship scheme, pursuing their education and an amount of Rs. 128.23 Crores incurred during 2018-19.

New Initiatives

Under health, all 158 PHCs in tribal areas are converted as 24x7 PHCs. 604 additional posts sanctioned. All tribal habitations were sanctioned with CHWs by adding 2313 posts to the existing 5977 CHWs (Total 8290 CHWs). 21 mini SNCUs established in addition to the 5 existing. 122 feeder ambulances (108 bike) sanctioned and 40 Mukhyamantri Giri Aarogya Kendramulu started in remote Sub – Centres.

School Health Programme (Adivasi Aarogyam) has been implemented in (969) TW Educational Institutions covering 2.29 lakh students in collaboration with M/s. Thrill Health and Wellness Private Limited, Visakhapatnam and positioned Health Volunteers (ANMs) in all the institutions for providing health services to all the students.

Infrastructure

Creation of infrastructure in tribal and remote areas includes the following:

- Provision of connectivity to unconnected habitations by forming all weather roads to tribal habitations for giving access to services like health, education, daily needs,
- Building infrastructure to educational institutions like hostels, class rooms, water supply and sanitation, staff quarters in hilly, remote and agency areas on par with developed areas,
- Constructing youth training centres for imparting skill development to enable tribal youth to get employment.
- Girijan Bhavans to celebrate community functions and ceremonies for tribal population.

- Construction of various amenities like anganwadi centres, GP buildings, health centres, GiriSeva Kendra for services like banking, issue of certificates in agency and remote tribal areas.
- Development of infrastructure for better marketing facilities like link Roads, modernisation of Shandies, Godowns, DR depots etc

Economic Support Schemes:

It is proposed to cover 16,232 beneficiaries with an amount of Rs. 139.48 crores under economic support schemes. The selected ST beneficiaries /ST groups are provided financial assistance of 60% of the unit cost or Rs.1.00 lakh whichever is less, in which the PVTGs and other vulnerable groups are given 90% subsidy of the unit cost or 1 lakh whichever is less. An amount of Rs. 84.10 crores was released to 10933 beneficiaries during 2018-19.

Other Livelihood Promotion Activities:

The scheme aims to promote farm-based livelihoods and bridge the critical gap of funds in the areas of Agriculture, Horticulture, farm mechanization, Animal husbandry, Poultry and Sericulture. An amount of Rs. 22.70 crores have been sanctioned to cover 38768 beneficiaries under SCA-TSS during 2018-19.

Dairy development project in 8 ITDAs:

With a view to provide supplementary income to the tribal households, a project to develop the dairy sector was launched with technical support from BAIF Institute for sustainable livelihood development (BISLD). Under this project, total of 6000 Women SHG members would be provided 2 cows or buffaloes each over a period of 3 years i.e. a total of 12000 good quality animals would be inducted. For every 20 animals, an animal hostel (Gokulam) would be constructed. Provision has been made for setting up of feedmills, bulk milk chilling units, fodder, milking equipment etc. to serve the gokulams. The total project cost for three years is Rs.242.94 crore. BISLD is the knowledge partner and funds are arranged by TRICOR in convergence with DAH, MGNREGS etc.

Chintapalli Tribal Organic Coffee Project:

In the backdrop of stagnant yields and continued dominance of middleman / traders in marketing of coffee, a pilot project was initiated with financial outlay of Rs.15.51 crores for a period of 3 years in Chintapalli Mandal in convergence with ICSD (Inter Cooperation Social Development India) during 2018-19. In addition to coffee, pepper and other Agri, Horti produce are proposed to be covered. The project is farmer-centric covering 14000 farmers with 25000 acres in 17 panchayats in Chintapalli Mandal. This project envisages collectivization of efforts of all the farmers by forming FPGs and FPO.

Strengthening tribal livelihoods through Desi Backyard Poultry in ITDA Areas:

It is a collaborative programme implemented by Tribal Welfare Department, Department of Animal Husbandry with technical support from WASSAN and other NGOs with a financial outlay of Rs. 3107.60 lakhs for the period of 3 years. This project will cover 13500 Tribal Households in 27 mandals of 6 ITDAs in Andhra Pradesh. The main objectives of the project are to improve the household income of tribals by promoting desi backyard poultry by providing 10 + 10 chicks, a night shelter and adopting best practices. To ensure regular supply of good quality chicks to the households, 540 Tribal entrepreneurs are selected for setting up breeding farms and 270 Tribal youth are trained for providing poultry health care services.

Comprehensive Coffee Project:

In order to promote the coffee and improve the income of Tribal Coffee growers, a comprehensive coffee project is being implemented in Visakhapatnam Tribal area in convergence with TRICOR. Coffee board, MGNREGS with the financial outlay of Rs. 526 Crores for the period of 10 years. The major components of the project are: Expansion of new coffee in 1 lakh acres, Rejuvenation/ Consolidation of existing coffee in 45000 Acres, Quality improvement through promoting wet processing, Organic certification and marketing support for raw coffee. During 2018-19, Government has allocated Rs. 34.46 crores for the project. Completed new coffee plantation in 10,000 Acres, Shade plantation in 15,000 acres and Rejuvenation in

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15000 acres. and 880 baby pulpers are supplied to promote wet processing and necessary process are being made for marketing promotion of raw coffee in this cropping season.

Skill Development:

8181 ST Candidates were trained through APSSDC in 2018-19, with an amount of Rs.15.72 crores and 3306 are placed in various fields. Aspiration training infrastructure was created by consulting 24 youth training centers of excellence. MoU is entered between Tribal Welfare Department (TRICOR) and AP State Skill Development Centers (APSSDC) for providing skill upgradation training for employability of ST youth. Pre-training orientations are being organized to mobilize ST youth. Career guidance and counseling job Meals/direct placement drives are being organized for placement to the skilled youth. Training in 30 trades working with 65 training partners, are being offered to ST youth from the YTCs and Pool Training Centers.

IT Initiatives:

To enhance service delivery system to reach up to the last mile has been taken up through e-Hostel, e-Pass, e-Office etc. Online Monitoring of Post-matric, Pre-Matric Scholarships, Corporate colleges, BAS Scheme, Vidhyannathi, GiriputrikaKalyanapathakam, Student academic & Biomatric attendance Monitoring System have been introduced in Gurukulam.

- Fibernet connectivity to all the Tribal Welfare Educational Institutions, habitations are under progress, Created APK for Collection of Health Sub Center Information and for Strengthening of Marketing in Shandies.
- Implementation of GIS through AP Space Applicable Centre is under process.
- Introduced digital Classes in (80) Residential Schools.
- The Govt. Of India have sanctioned ATAL Tinkering Labs for (25) institutions of which 6 are grounded.
- Introduced “Spell-Bee” in all Gurukulam Schools to improve English Vocabulary and pronunciation among the tribal students.
- Skill Development training program is introduced in (48) institutions in coordination with AP State Skill Development Corporation.

- Vocational courses introduced in (4) identified Gurukulam Institutions from 9th class onwards in coordination with RastriyaMadhyamikaSikshaAbhayan (RMSA).

Tribal Sub Plan:

The budget under STC (earlier TSP) is allocated to 45 line departments and Rs. 3537.94 Crores is incurred by the 45 line departments covering 196 schemes.

Reimbursement of Electricity Charges to ST Household's up to 100 Units:

Under “JAGJEEVAN JYOTHI SCHEME” 3,94,043 ST Households have benefitted with an expenditure of Rs. 48.20 crore in 2018-19. The government is committed to provide reimbursement of electricity charges to ST households upto 200 units (or) Rs.6,000/- per year.

Giriputrika Kalyana Padhakam:

Financial assistance of Rs. 50,000/- is extended to tribal girls at the time of their marriage with a view to alleviate financial difficulties to celebrate marriage in the families of Scheduled Tribals in the state. 3625 beneficiaries were covered under the scheme during the year 2018-19.

Implementation of Recognition of Forest Rights Act, 2006:

Special training programmes were conducted for the field functionaries and the Inter District fields visits to the ST farmers under ROFR, to facilitate them to interact with their counterparts in the other Districts on the issues of methods of cultivation, land development, rising of crops / plantation and related issues.

In addition, the newly established Resource Center in the office of State Project Monitoring Unit-ROFR,, acted as a knowledge hub to the field functionaries of ROFR programme, particularly in the matter of Geo mapping for identification of claimant's lands. In the year 2018-19, (95,649) individual claims were distributed with an extent (AC) 122410. And (1374) community claims were distributed with an extent (AC) 453384.

Girijan Cooperative Corporation (GCC):

GCC has pumped in Rs.34301.31 lakhs into tribal economy through its core activities and fixed an annual target of Rs.53000 lakhs for the current financial year 2019-20. GCC has procured Rs.1592.46 lakhs worth Minor Forest Produce & Agricultural Produce, Coffee worth Rs.681.31 lakhs and Rs.27796.52 lakhs worth Domestic Requirement in the year 2018-19 for domestic requirements through GCC owned DR Depots (Fair Price Shops).

GCC Other Activities:

In the year 2018-19, the Essential Commodities worth Rs.1696.68 lakhs have been distributed to tribal card holders under PDS through the network of 906 D.R. Depots. Besides, other daily requirement such as pulses, soaps, edible oils, cosmetics etc. worth Rs.27796.52 lakhs have also been supplied to the tribal consumers.

Product range is being increased to attract various consumer segments. New Products such as Cashew Nut and Roasted cashew, Multi-Grian biscuits, Pepper, Arrow root powder etc. under the brand name "Girijan" have been introduced in to the consumer market. The response from the consumers is encouraging.

During the year 2018-19, GCC has disbursed Short Term Crop Loans to a tune of Rs. 120 lakhs to tribal farmers for various crops and also coffee, linking recovery with the produce grown.

This Corporation achieved a business turnover Rs. 34301.31 lakhs during the year 2018-19. This year (2019-20), a turnover of Rs. 530.00 lakhs have been targeted through diversification of its activities.

In addition to 16 existing petrol bunks, it is now contemplated to open 25 more new bunks (under the network of IOC) in prime location across the state. Apart from this it is proposed to open nearly 55 GCC outlets.

Minorities Welfare

As a secular country, the Government's endeavour has always been to ensure progress to all population, including the Minorities. Several schemes and policies have been put in place to ensure up-liftment of Minorities under the aegis of the Minorities Finance Corporation. Development of

Minorities requires attention from several angles. The minority population is mostly urban-based. A large segment of the Minority population is below poverty line. The share of Minorities in different economic support schemes has also been very low.

The primary objective of the department is socio economic development and educational advancement of minorities in the State. The department has taken up various schemes for improvement in livelihoods, educational upliftment and imparting training for enhancing employment opportunities for the Minorities.

Scholarships

Government is providing scholarships both MTF and RTF to the Post Matric students covering Intermediate, Graduation, Post-graduation, M.Phil, Ph.D & Diploma Courses like Polytechnic, Nursing etc., Professional courses like MBBS, B.Tech, MBA, MCA etc., on saturation basis.

Post Matric Scholarships: During 2018-19, Rs. 60.00 Crores towards MTF and Rs. 225.00 Crores towards RTF allocated and out of which Rs. 42.93 Crores towards to MTF and Rs. 133.63 Crores towards to RTF is utilised and 1,27,557 students were benefited. For the year 2019-20 an amount of Rs.80.00 Crores was allocated towards MTF and Rs.26.66 Crores released, whereas towards RTF Rs.225.00 Crores was allotted and Rs.74.99 Crores released.

Fee reimbursement: The scheme, which was introduced by late YSR, will be brought back to its former glory. The education of the poorest of the poor will be funded by the government so that the students would be able to pursue their higher education dreams. Annually, Rs 20,000 will be given to students for their basic necessities.

Dulhan Scheme:

This is a scheme for supporting poor Minorities families, in performing the marriage of the girl child by providing a grant of Rs. 50,000/- So for Rs. 67.72 Crores (up to Mar, 2019) incurred covering 13,545 beneficiaries under the scheme.

As part of Navaratnalu, the benefit under DULHAN Scheme would be enhanced from Rs. 50,000/- to Rs.1,00,000/- for the welfare of brides of Minorities-

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Minorities Welfare Hostels

There are 13 Pre -Matric and 10 Post Matric Hostels for Minorities are functioning in the State for educational and social development of the poorest of the poor minority students.

Residential Schools

There are 6 Residential schools in the state which aim for the educational and social development of Minority students with residential amenity.

Pradhan Mantri Jan Vikas Karyakram (PMJVK)

The MSDP is a Centrally Sponsored Scheme restructured as “Pradhan Mantri Jan Vikas Karyakram (PMJVK)” and will be implemented during the remaining period of 14th Finance Commission i.e. up to 2019-20. The PMJVK will continue to support the projects sanctioned under erstwhile MSDP for completion of the sanctioned and ongoing projects. MSDP funds have been released to 4 Districts viz., Ananthapuramu, Guntur, Kurnool and YSR district for implementation of the Scheme. The works are under progress. Under PMJVK, newly added MCB's (7) & MCT's (12) in 6 Districts

Overseas Educational Scholarships Scheme

This Scheme has been introduced for the Minorities for pursuing their higher studies in abroad and an amount of Rs.10 lakhs is being sanctioned for each student and it is enhanced to Rs.15 lakhs from July, 2018. 116 students were benefitted and incurred an amount of Rs.13.66 Crores during the year 2018-19.

Central Government Schemes

Scholarships

Pre Matric Scholarships are sanctioned to the minority students pursuing studies in a Government or private school from Class I to X whose parent / guardian's income from all sources does not exceed Rs.1.00 lakh per annum and students must have secured not less than 50% marks in the previous final examination. During the year 2018-19, Government of India released an amount of Rs.35.53 Crores Pre Matric Scholarships to 1,28,962 students. Post

Matric Scholarships are sanctioned to the minority students pursuing Intermediate, Technical and vocational courses in Industrial Training Institutes in a Government or private colleges. During the year 2018-19, an amount of Rs.11.27 Crores released by Government of India to 13,094 students. Merit-cum-Means Scholarships are sanctioned to the minority students pursuing studies in a Government or private colleges in Professional Courses (B.Tech, M.Tech, B.Pharmacy, M.B.B.S., M.B.A. M.C.A etc). During the year 2018-19, an amount of Rs.5.62 Crores released by GoI to 2,101 students.

Andhra Pradesh State Minorities Finance Corporation (APSMFC)

The APSMFC Limited encourages the socio economic development of weaker sections of Minorities viz., Muslims, Christians, Sikhs, Buddhists, Jains and Parsis, educational development skill upgradation through training, developing confidence among Minorities of being important stakeholders in nation buildings. Assistance is provided through banks for which the corporation provides subsidy component under economic assistance for setting up business, industry, service, agriculture and allied viable activities and grant in aid for welfare schemes.

Proposed Action Plan for 2019-20

Bank Linked Income Generated Schemes

The scheme is being implemented for Minorities to setup viable Self-employment scheme where the maximum unit cost allowed is up to Rs.2,50,000/- in general scheme and Rs.3,00,000/- in Transport Scheme. The corporation provides subsidy components for loans sanctioned by Banks. The Subsidy @ 50% of the total loan subject to maximum of Rs. 1,00,000/- will be provided. Banks share will be 50% of the unit cost.

Taxi Subsidy Scheme

The Minorities are mostly engaged in Automobile field and settle as drivers. There is a need to implement four wheeler scheme for Minorities also. Under this scheme subsidy of Rs. 2.00 lakhs shall be provided to the beneficiary for purchase of Sedan Taxi. The maximum unit cost shall be Rs.10.00 lakhs. The beneficiary contribution shall be 10% of the vehicle cost, balance amount will be provided by bank as loan.

YSR ASARA (SHG Scheme for Minority Women) - Navarathnalu

There is imperative need to form homogeneous group for Self sustenance and Economic Empowerment particularly the women candidates trained under EST& P Programme. It is proposed to implement YSR ASARA (SHG Scheme for Minority Women) with a budget of Rs.26.00 Crores towards subsidy to cover 26,000 beneficiaries (2600 Groups) for the year 2019-20.

Subsidy Scheme:

It is a scheme to assist petty traders, mobile vendors etc., residing in Mandals/Municipalities/ Municipal Corporations. Under this scheme, the maximum unit cost shall be Rs. 50,000/-out of which 90% shall be provided as one-time subsidy to the eligible beneficiary for setting up/ upgrading petty business, and the beneficiary contribution shall be 10% of the scheme.

Training & Employment and placement

To improve the technical skills under various trades and to create self-employment and Employment among the educated unemployed youth in Minority communities, the training is being given in the fields of Electronic, Automobile, IT & ITES, Construction, Hair Therapy, Health & Medical, Retail, Manufacturing, Textile, Hospitality, Electrical, Education, Job Melas.

Empanelment of Training Partners

The placement linked training programme shall be organized with the Training partners empanelled with A.P.S.D.C./NSDC and Government Organizations like APSRTC, CITD, CIPET. During the Training Period Stipend of Rs.500/- per month will be paid to the eligible trainees. The Corporation is planning to conduct high-end training programmes for the benefit of B.Tech, M.Tech and M.C.A. unemployed candidates. During the year 2018-19 12000 women beneficiaries were trained and given sewing machines free of cost and 4207 Minority candidates trained in different courses.

Law Graduates Scheme:

Training & Employment Corporation is implementing Minority Law Graduate Scheme for the benefit of Law

Graduates to undergo Training in Administration of Justice under Public Prosecutor/ Government Pleader for a period of 3 three years.

During the period, every Minority Law Graduate shall be paid a stipend of Rs.1,000/- per month uniformly for all 3 years, an amount of Rs.6,000/- towards purchase of Books and Furniture as one time grant in the 1st year. An amount of Rs.2,000/- per annum will be sanctioned to the candidate under training for Administration of Justice, for attending seminars, workshops, symposiums etc., that enhances advocacy skills of the candidate and enrolment fee of Rs.585/-and wherein the enrolment fee will be reimbursed to them. During the financial year 2018-19, 121 candidates (Fresh + Renewal) with expenditure of Rs. 20.00 Lakhs.

AP State Christian (Minorities) Finance Corporation

Government of Andhra Pradesh has been implementing welfare schemes for the Christian Minorities. Many initiatives such as Christian Bhavan, Pilgrimage to Holy Land of Jerusalem, Financial Assistance to Self-Employment Schemes, Grant in Aid to Churches and Church run Institutions, Scholarships, Trainings for Unemployed Christians, Coaching Programmes for Christians, Training for Christian Minority Law Graduates, Pelli Kanuka were introduced.

Progress of APSCMFC:

Christian Bhavan: Government allotted 2.00 Acres of land for construction of Christian Bhavan with a budget of Rs.16.00 Crores at Guntur (Rural). Construction Work is under progress.

Financial Assistance for Repairs/ Renovation/ Construction of Churches: Financial assistance for construction/ repair/ renovation of Churches to Rs.500000/- (Rupees Five Lakhs Only).

Pilgrimage to Holy Land of Jerusalem: Financial Assistance to Pilgrimage to Holy Land of Jerusalem is Rs.40000/- as subsidy for the pilgrims whose annual income is below Rs.3.00 Lakhs whereas the subsidy shall be Rs.20,000/- for other pilgrims whose annual income is above Rs.3.00 Lakhs. For the year 2019-20, an amount of Rs.10.00 Crores is proposed in the budget for providing the subsidy to 2500 Christian pilgrims.

SOCIAL INFRASTRUCTURE

Christmas Kanuka: Government provided basic commodities to 1,00,000 poor Christian families during the Christmas season as Christmas Kanuka. All Christians having White Ration Card are provided Christmas Kanuka. The cost of all items is Rs.226. Government has spent an amount of Rs.2.26 Crores for distribution of Christmas Kanuka in the year 2018.

Schemes & Activities of the Corporation

Subsidy for Bank Linked Income Generated:

The scheme is for individuals who desire to setup self-employment activities where the maximum unit cost is up to Rs. 2,50,000/-. The Corporation provides a subsidy @ 50% of the total unit subject to a maximum of Rs.1,00,000/-. The action plan was prepared for providing subsidy loans for establishing Micro/Small/Medium industries as well as subsidy loans for purchase of Taxi-Cars and Autos which generate revenue to the beneficiaries. It is proposed to provide loans to Self Help Groups through the Corporation. Exclusive groups shall be formed for Christian Minority Women.

YSR Aasara (Navaratanalu):

Government have decided to issue direct loans to the eligible Christian Minority women through SERP/ MEPMA/ Anyother agency under the Economic Support Scheme of the AP State Christian Minorities Finance Corporation. The interest shall be borne by the Corporation.

Training and Employment:

APSCMFC offers intensive training programme to create gainful employment opportunities for the Unemployed Christian youth. APSCMFC offers industry specific training across sectors including IT and ITES, Hotel Management, Retail, Engineering etc., at exclusive skills centers through multimedia content. The unique skill delivery process begins with the identification of jobs and ends with the placement of trained youth in various sectors.

For the FY 2019-20, it is proposed to provide budget for training 2500 unemployed Christian Minority youth under the scheme of Training, Employment and Placement.

Scheme of the Training for Christian Minority Law Graduates in Administration of Justice:

The scheme is intended to prepare Law Graduates to practice as Advocates, Law Officers, Legal Advisors in High & Lower Courts, Government and Corporate sectors by equipping them with Advocacy & Arbitration Skills, Court presentation and negotiating Skills.

Free Coaching for Competitive Exams:

The Corporation provides financial assistance by way of coaching fees, study material and employment information to eligible candidates. The coaching is provided for APPSC – Group I, II, III Examinations, Banks, Insurance Companies, SSC recruitments

Anglo Indian Day Celebrations:

The Anglo Indian Welfare Association celebrates Anglo India Day celebrations throughout the country every year. Government of Andhra Pradesh is sponsoring the celebrations of the Anglo India Day.

Centre for Educational Development of Minorities (CEDM)

CEDMs are located at Kurnool, Guntur and Visakhapatnam and implementing the following major state government sponsored projects.

- 1."Integrated project on improving classroom performance of minority school children" which provides special free coaching in core subjects of Mathematics, Physical Sciences, Biology, English and Telugu / Social Studies to X class Urdu / Telugu / English medium minority students at 65 centres in 9 districts.
2. A comprehensive project for improving participation and performance of minority candidates in competitive entrance examinations
3. Chamak Scheme for free coaching to minorities for job oriented competitive examinations and for providing free coaching to job-oriented competitive examinations and
4. Vidyonnathi for providing professional guidance for Civil Service Examinations for sponsoring the meritorious students to reputed private institutes to extend the benefit for 300 students yearly.

A.P. State Haj Committee

The Andhra Pradesh State Haj committee is constituted to advise and assist pilgrims during their stay at Embarkation Point in Hyderabad/Bangalore proceeding to Haj Pilgrimage in all matters for the better understanding of Haj Pilgrims about the Haj procedures and rituals at Holy Mecca, A.P. State Haj committee only in India has introduced monthly magazine titled "A.P. Haj Bulletin" six months every year and one special book containing the details of Haj to educate the A.P. Haj Pilgrims before they proceed to Haj. 2323 pilgrims proceeded Haj during the year 2018.

Andhra Pradesh State Waqf Board

This Government assured that the properties belong to Waqf will be resurveyed and it will be fully protected with digitization of records. Further an action plan will be prepared for development of such properties to generate income which will be utilized for community in large.

In 13 Districts of Andhra Pradesh 3502 Notified Waqf Institutions with its attached properties got notified in the Gazettes during the first survey and thereafter prior to bifurcation 10769 Waqf Institutions got identified U/s 4 of Waqf Act-1995 out of which 2711 Masjids and another incomeless 2289 Masjids have covered in the scheme namely Incentive to Imams and Mouzans. The Government is committed to enhance the Honorarium of Imam from Rs.5,000/- to Rs.10,000/- and Honorarium to Mouzan from Rs.3,000/- to Rs.5,000/- (Comprising Rs.15,000/- to each incomeless Masjid from Rs.8,000/-) The Government will also provide houses to Imams and Mouzans.

A.P. State Urdu Academy

A.P State Urdu Academy, Vijayawada has been established as autonomous body, formed by the Government of Andhra Pradesh in 1975 for promotion, protection and development of Urdu language and literature. Urdu Academy implements the following schemes.

1. Preserving/promotion of Urdu Language.
2. Vocational Training in Urdu Computer Education by Urdu Academy.
3. Generating awareness about plan schemes of Minorities Welfare Department and other Institutions among Minorities.
4. Construction of Urdu Ghar-cum-Shadikhanas.

Education facilities being provided to Minorities

One Month Training Program

AP State Urdu Academy started one month Urdu learning writing and reading program at all 13 Districts under the supervision of DIOUS with help of District Minorities Welfare Officers and started 184 Training centers at 13 districts and 12,000 students are being trained.

Vocational training in Urdu Computer Education:

This scheme is intended to improve the socio economic conditions of the minorities, to create livelihood and to generate employment in computer skills. Under this Scheme, the AP State Urdu Academy is running (36) Computer Training Centres & (36) Urdu Libraries are functioning in 13 districts in the State.

Library Centers

The primary purpose of the public library is to provide resources and services in a variety of media to meet the needs of individuals and groups for education, information and personal development including recreation and leisure. They play an important role in the development and maintenance of a democratic society by giving the individual access to a wide and varied range of knowledge, ideas and opinions.

Providing Infrastructural Facilities to Urdu Medium Schools

Most of the Urdu Medium Schools are not upgraded in accordance with the requirement and lack basic amenities such as, drinking water, toilets, black-board, laboratory equipment, library books, etc. With an aim-to improve the infrastructural facilities in these schools, the Academy providing financial assistance of Rs.50,000/- each to Urdu Medium School.

Urdu-Ghar-cum- Shadikhanas:

Under this scheme, Urdu-Ghar-Cum-Shadikhanas are being constructed for the use of Minority communities. During the year 2018-19 an amount of Rs. 50.34 Crores was sanctioned and released to 162 Urdu Ghar-ShadiKhanas.

Youth Services

The Department of Youth Services was established in the year 1972 with a view to channelize the energies of the youth towards constructive activities and to wean away the youth from unsocial activities. Different initiatives for Youth Advancement and Youth Empowerment are being taken up to focus on creating greater community change relies on the development of individual capacity and keeping in view of the changing aspirations and needs of youth.

Youth Empowerment Programmes

Andhra Pradesh Youth Policy 2018:

State Youth Policy was launched on 2nd October, 2018 with an aim to enable, motivate, engage and empower the youth to realize their full potential and be adequately equipped with necessary tools to contribute to the growth and development of the State of Andhra Pradesh.

Youth Festivals:

To encourage youth to participate in cultural programmes and to provide them a platform to exhibit their talents, Divisional Level Youth Festivals in all the Divisions and District Headquarters of the State were conducted. State Level Youth Festival was conducted at Eluru, West Godavari District from 29th – 31st January, 2019.

Youth Parliament (Yuva Sabha):

It was aimed at strengthening leadership qualities among the youth as envisaged in Andhra Pradesh Youth Policy-2018. Youth Parliaments (Yuva Sabha) were conducted in all the Districts.

Disaster Management & First Aid Training Programme:

To make endeavours for creating awareness among the youth about disasters and natural calamities and to prepare them in advance to face such situation and to ensure their participation in the disaster mitigation plans, Disaster Management and First Aid Training Programmes were conducted in coordination with Indian Red Cross Society in all the districts. During the training, subjects like disaster management, first-aid, psycho-social care, public health in emergencies, search and rescue, health hygiene and sanitation, climate change etc., were covered. 6,421 (Student) youth were imparted training.

Inter-District Youth Exchange Programme:

To familiarize youth with the environment, family life, social customs etc., of the people living in different parts of the state, Inter-District Youth Exchange Programmes were taken-up. 2600 youth were sent from one district to another districts of other regions of the state.

Observance of National /International important days:

The Department made arrangements for observing national and international important days every month @ 2 -3 days in all the districts of the state by organizing suitable programmes involving youth members of youth clubs, non- governmental organizations, NCC, NSS, educational institutions etc., The important days include Dr. B.R. Ambedkar Jayanti, World Earth Day, World Red Cross Day, National Technology Day, International Day of Innocent Children Victims of Aggression, World Environment Day, International Day of Yoga, World Population Day, Organ Donation Day, Independence Day, Sadbhavana Diwas, National Sports Day, National Nutrition Week, Teachers Day, International Literacy Day, Gandhi Jayanti, International Day for Nature Disaster Reduction, National Unity Day, National Youth Week Celebrations, Republic Day, Womens' Day Celebrations.

Formation and rejuvenation of youth clubs:

10382 Youth Associations/Youth Clubs were reactivated and 760 youth Associations/Youth Clubs were newly formed Continuous efforts were made to conduct awareness camps every month in every nook and corner of the district to form new youth clubs/associations and rejuvenate old and dormant groups into live.

Medical and Health Check-up Camps:

Medical and Health Check-up camps were conducted, through which 5,668 units of blood were collected and 3,895 pledges were taken for eyes and other organs donation.

Sports Material:

To encourage youth to keep themselves fit and to channelize their energies towards participating in community welfare programmes/social service for the welfare of the society, supplied sports material to all the 175 constituencies @ 20

per constituency in the state and to the identified government residential schools.

Action Plan for 2019-20

- Conducting Youth Festivals at Divisional, District, State Level.
- Organising free coaching Pre-recruitment training programmes for Army & Air Force Rallies
- Disaster Management & First Aid Training Programme Training to enhance capacities of young people to take leadership to help others to live a meaningful life and contribute towards nation.
- Financial assistance to youth to undergo training course in adventure activities
- Inter-district youth exchange programme
- Observing important days of national and international importance every month in all the districts of the state by organising suitable programmes involving youth members
- Formation / rejuvenation of youth clubs/associations
- to impart self-defence training to 12,500 women youth members all over the state during 2019-20 to protect themselves from unsocial elements and provide awareness and advocacy to build confidence and self-sustainability.

Housing

Andhra Pradesh State Housing Corporation (APHCL) has been the pioneer in implementation of Weaker Section Housing Programme along with adequate amenities. APHCL acts as a Techno Financing Agency in shelter delivery in rural and urban areas by encouraging construction of houses through self- help and mutual help basis. It also encourages community participation in the construction of houses.

APSHCL encourages production and usage of cost effective and minimize cost of construction. Nirmithi Kendras / Sub Nirmithi Kendras were established all over the State for spreading awareness about the use of such materials and technologies. Building components have been produced and utilized for the housing program taken up by the corporation so far.

APSHCL is the executing agency for taking up urban houses in all the municipalities under the centrally sponsored PMAY-

HFA (U) –BLC scheme and Rural Housing (G) dovetailing with PMAY (G) besides taking up IHSDP scheme and few BSUP projects along with local bodies under JNNURM.

Government of India is adopting the Socio-Economic Caste Census (SECC) 2011 data for identifying beneficiaries in respect of PMAY, Ayushman Bharath and other Centrally Sponsored Schemes. However, the quality of data of SECC is not of acceptable standards as several inconsistencies were noticed while identifying the eligible beneficiaries in Andhra Pradesh, which is causing immense deprivation to our state. The discrepancy was more evident in respect of Housing beneficiaries in AP state.

The state government has brought to the notice of Government of India and NITI Aayog to consider using Census, 2011 data as the basis for deciding eligibility for all CSS assistance to the state of AP as a special case, keeping in view the disturbed conditions prevailed during the state bifurcation time, in which the SECC data was collected and also the precarious financial position of the newly formed state of Andhra Pradesh.

Departmental Activities

Weaker Section Housing Programme

Government of AP have been assigning top priority for implementation of weaker section housing programmes in the State. A.P State Housing Corporation (APSHCL) has been identified as Nodal agency to implement both Central and State sponsored Housing Schemes in the State. District wise details are given in Annexure 8.18

Rural Housing:

Under this scheme government of AP sanctions houses in rural areas with a unit cost of Rs.1.50 lakh per house with state share of Rs. 95,000/- as subsidy and MGNREGS share of Rs.55,000/-. In addition to the unit cost, government also sanctions an additional amount of Rs 50,000/- to SCs and STs in three categories @ Rs. 1,00,000/- for all PVTGs, Rs. 75,000/- to Yanadis and STs in Scheduled and TSP Mandals and Rs. 50,000/- to STs in Non-Scheduled Mandals.

From the year, 2019-20, the subsidy shares of GoAP and MGNREGS share of unit cost is revised. GoAP provides

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Rs. 1,19,550/- as and MGNREGS share Rs.30,450/-. The unit cost per house is Rs 2,00,000/- for SCs and STs and Rs.1,50,000/- for other categories. Over and above the unit cost, the Nodal Agency for STC has agreed to sanction additional amount to STs @ Rs.50,000/- to PVTGs and Rs.25,000/- to Yanadis and STs in TSP & Scheduled Mandals to STs.

PMAY (Gramin)

The Govt. of AP have sanctioned unit cost of Rs.2.00 lakhs uniformly to all areas in the state duly dovetailing MGNREGS funds and State Govt. funds. The unit cost is shared by GOI and State Govt. in the ratio of 60:40 respectively.

State Government provides additional financial assistance of Rs 50,000/- for SCs in all areas and for STs @ Rs. 1,00,000/- to all PVTGs, Rs. 75,000/- to Yanadis and STs in scheduled & TSP Mandals and Rs.50, 000/- to STs in non-scheduled mandals.

PMAY (Urban) and Urban Housing

Houses with a unit cost of Rs. 3,50,000/- in ULBs and Rs. 2,50,000 in UDAs are sanctioned by Government

Special Housing

- a) **HudHud:** Government have sanctioned 9170 houses with the average unit cost of Rs. 4.00 Lakh per house shared 50% by GoAP and 50% by donor.
- b) **Titli:** Govt. sanctioned 18,152 houses with a unit cost of Rs. 2.50 Lakh per house (GoAP subsidy Rs. 2.50 Lakh) to the eligible affected who lost their houses in Titli Cyclone 2018.
- c) **Houses grounded without sanction:** Government sanctioned 1,25,186 houses with unit cost of Rs. 60,000/- (Rs 45,000/- for house and Rs15,000/- for IHHL) under NTR Special Housing 2018-19 to the households who have constructed Houses without prior sanction from June 2014 onwards.

Houses Prior to 2014-15:

4,38,024 houses pending for completion as on 01.04.2014 under Pre NTR Housing (State schemes). 1,46,517 houses under IAY and IAY-PVTG were allotted for the years 2013-14, 2014-15 & 2015-16. Thus total 5,84,541 houses in Rural and Urban areas have been taken up for completion.

Unit cost (in Rs.):

Area	SCs	STs	Others
Rural	1,00,000	1,05,000	70,000
Urban	1,00,000	1,05,000	80,000

An amount of Rs.25,000/- per each house is being provided over and above the unit cost for completion of houses.

Road map for Navaratnalu flagship programme:

The government is planning to construct 25.00 lakh houses in 5 years as a part of “**Navaratnalu**” @ 5.00 lakh houses each year. Housing is the priority of the government and is committed to provide Pucca houses to all eligible families through “Navaratnalu” Programme.

The Government is aiming to provide house, to all the poor with the following agenda.

- a) To construct houses to all the Houseless poor irrespective of caste, religion etc.
- b) To provide house sites to all the needy and also register the land along with the house on the name of women. (The revenue department & Land acquisition department will take necessary action for acquiring land to all the needy beneficiaries and allot sites by Ugadi so as to take up housing activity)
- c) To facilitate to provide loans @ “Pavala Interest” through the banks and other financial agencies, for the amount required over and above unit cost.

The action plan is proposed for flagship programme Navaratnalu.

Under the scheme “YSR Housing’ the proposed unit cost is furnished in the table 8.16

Table 8.16 Unit cost of Houses under YSR Housing

Sl. No	Source	Dept.	SC/STs (Rs.)	Others (Rs.)
1	GoAP subsidy	Housing	2,16,550	1,66,550
2	Additional amount for IHHL	RD	3,000	3,000
3	MGNREGS funds	RD	30,450	30,450
	Unit cost		2,50,000	2,00,000

Source: AP Housing Department

Year wise requirement of funds under the scheme with unit cost shown in the Table 8.17

Table 8.17 Year wise requirement of funds

Sl. No	Year	No. of Houses proposed	Amount Required (Rs. in Crs)		
			From Housing Dept. Budget	From Rural Dev. Dept. under MGNREGS	Total
1	2019-20	5,00,000	8888.25	1672.50	10560.75
2	2020-21	5,00,000	8888.25	1672.50	10560.75
3	2021-22	5,00,000	8888.25	1672.50	10560.75
4	2022-23	5,00,000	8888.25	1672.50	10560.75
5	2023-24	5,00,000	8888.25	1672.50	10560.75
		25,00,000	44441.25	8362.50	52803.75

Source: AP Housing Department

Public Health & Municipal Engineering

Urban Water Supply and Sanitation

Water Supply Improvement Schemes are being taken up in Urban Local bodies from time to time to improve per capita water supply on par with National Standards. In addition, the technical control over all Engineering Works in 110 Municipalities including 14 Municipal Corporations of the state is exercised by Engineer-in-Chief (PH). The operation and maintenance of Water Supply & Sewerage Schemes is being attended by the respective Municipalities and Municipal Corporations. The Department is dealing with investigation, design, preparation of estimates and plans and execution of water supply and sewerage schemes in all 110 Municipalities including 14 Municipal Corporations.

Water Supply

As per the standards stipulated in Central Public Health Engineering Environmental Organization (CPHEEO) manual, the rate of drinking water supply to be maintained is as follows:

Town with Under- ground drainage - 135 LPCD

Town without Under-ground drainage - 70 LPCD

The State Government is giving top priority to provide protected drinking water to all urban local bodies by strengthening existing infrastructure and service levels. In 2018-19, seven water supply schemes have been completed, improved per capita water supply in 7 ULBs and frequency of supply has been increased in these ULBs. About 180 MLD of water is treated and 2.00 Lakhs Water Supply House service connections are added. Water supply projects under various schemes at a cost of Rs.1107.82 Cr are completed covering 7 ULBs.

HUDCO

Under HUDCO scheme, Water Supply Project at a cost of Rs.585.05 Cr in Nellore is 80% completed and sewerage

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at a cost of Rs.577.76 Crs is 70% completed and will be commissioned by Dec-2019.

One Time Special Financial Assistance

Under One Time Special Financial Assistance, Storm Water drainage scheme in Vijayawada at a cost of Rs.461.04 Crs is 60% completed and Sewerage Scheme in Guntur at a cost of Rs.923.84 Crs is 60% completed and both will be commissioned by the end of 2019.

AMRUT

Under AMRUT-Phase-I, water supply projects costing Rs.787.97 crores were taken up in 25 towns which are in progress with 80% of work completed and will be commissioned by Dec 2019.

Under AMRUT-Phase-II, water supply projects have been taken up in 27 towns at a cost of Rs.2001.93 crores and 60% of work completed and will be commissioned by December, 2019. Sewerage and Septage Projects have been taken up in 25 towns at a cost of Rs.793.73 crores and 60% of the work completed. Storm water drainage projects have been taken up in 7 towns at a cost of Rs.350.75 crores and 40% of the projects are completed

Asian Infrastructure Investment Bank (AIIB)

In Phase-I, the projects were proposed in 21 ULBs with cost of Rs.2250 crores and works are in progress. In Phase-II, projects are proposed in 29 ULBs with cost of Rs.2685.58 crores. The Phase-II is divided into Two Packages. For Package-I tenders are invited and for Package-II works are in progress.

Critical Infrastructure investment plan (CIIP)

Under Critical Infrastructure investment plan (CIIP) providing infrastructural facilities like water supply, Roads, Storm Water drains, sewerage facilities are scheduled to taken up in 110 ULBs at a cost of Rs.6000 crores and works are in progress and will be completed by March-2020.

During the Year 2019-20, the target for construction of

STPs is 274.50 MLD and to cover 19 ULBs under 135 LPCD for supply of Drinking water.

Action Plan for completion of on-going Schemes:

- To complete 8 schemes in 8 ULBs benefitting 18.60 lakh population. (Vizianagaram, Kakinada, Guntur, Markapur, Badvel, Ananthapuramu, Pithapuram & Nellore).
- Completing 2 Schemes in 2 ULBs in Kadapa & Yemmiganuru costing Rs.152.49 Crores under UGD Sector for benefitting 4.84 lakhs population.
- Completion of Storm Water Drainage Sector Scheme taken up in Atmakur (Nellore) costing Rs.39.20 Crores for benefitting 0.33 lakh population.
- Projects taken up under AMRUT Phase-I in Water Supply Sector will be completed.

Action Plan for financial year i.e. 2019-20

- Complete the 2 water supply scheme in 2 ULBs (Ramachandrapuram & Jaggaiahpetta) costing Rs.48.90 Crores for benefitting 1.04 lakh population
- 2 Schemes taken up under UGD Sector in Narsaraopeta & Guntur costing Rs.973.38 Crores to be completed to benefit 8.70 lakhs population.
- To complete Scheme under Storm Water Drainage Sector in Mandapeta costing Rs.23.82 Crores to benefit 0.60 lakh population.
- AMRUT Projects of Phase-II will be completed.
 - a. An amount of Rs. 2250 Crs have been Proposed for providing water supply in 21 Towns under AIIB in Phase-I. Tenders were invited.
 - b. An amount of Rs. 2780.67 Crs have been Proposed for providing water supply in 29 Towns under AIIB in Phase-II.

Rural Water Supply

The Rural Water Supply and Sanitation Department is the nodal agency in the State for providing drinking water and sanitation facilities in rural areas. The drinking water

facilities are being provided by various types of schemes such as bore wells with hand pumps/single phase motors, direct pumping schemes, MPWS Schemes, PWS Schemes and CPWS Schemes.

The government is committed to provide every rural person with adequate safe water for drinking, cooking and other basic needs on sustainable basis and by 2024 every rural person will have access with 70 LPCD within their household premises

Infrastructure created

2,00,565 hand pumps were fitted to bore wells, 12,721 with direct pumping, 35,241 PWS/MPWS Schemes, 574 CPWS Schemes and 107 Water Testing Laboratories existing as on 1.4.2018

Status of habitations:

25,425 (52%) Habitations are fully covered with more than 55 LPCD water supply, 22,866 (47%) habitations are partially covered with 0-55 LPCD supply and 401(1%) Habitations are Quality Affected. Total 48,692 habitations have been covered.

RWS Ongoing Programme 2018-19:

2207 spill over works with a cost of Rs. 935.77 crores covering 3961 habitations. 1236 (Partially covered & Quality Affected) habitations are targeted for coverage during 2018-19. So far 1546 habitations are covered incurring an expenditure of Rs. 285.15 crores under different programmes like NRDWP, NABARD and State Development Scheme.

New Sanctions (2018-19):

2258 works sanctioned to cover 2373 habitations with an estimate cost of Rs. 374.28 crores under all programmes during 2018-19.

The Government has decided to cover all problematic (QA & Stressed) habitations through water purification plants through hub & spoke model. 103 clusters are identified in 17 packages to cover about 7787 (QA & stressed) habitations with an amount of about Rs. 402.40 crores. Out of 17 Packages, tenders finalized for 8 packages and tenders called for the remaining 9 packages

Action Plan

Earlier, most of the PWS schemes are provided with ground water source (bore wells). The ground water level has gone very deep even beyond 1000 Feet in many areas particularly in the drought affected districts of Rayalaseema. Government of India has taken a decision to provide sustainable surface/Sub surface sources only for all drinking water supply schemes to avoid further depletion of ground water.

Base Line:

Currently, 52 % of habitations are covered with 55 LPCD and 47% of habitations are covered with 40 LPCD service level. 1% (401) habitations are quality affected. Out of 90 Lakh rural households, about 25 Lakh households are having house connections.

- The State Government is planning to provide 70 LPCD service level with 100% household connections for all habitations through sustainable surface/ground water sources through Banks Assistance.
- Accordingly, AP Drinking Water Supply Corporation has been formed and Survey and preparation of DPRs are under process.

Government is planning to cover safe drinking water at least 55% habitations with 55 LPCD by 2019, 100% habitations with FC status (with at least 55 LPCD service level) by 2020 and by 2024, to cover 100% household connections.

Municipal Administration

Urban Sanitation – Door to Door Garbage Collection

The main aim of the scheme is to provide garbage free roads, free flow of side drains, controlling insanitary conditions created by stray animals and mosquitoes. There are 110 Urban Local Bodies i.e., 14 Municipal Corporations, 71 Municipalities and 25 Nagara panchayaths in the State. As per 2011 census, urban population of the state is 132.23 lakhs. The total garbage generated in the State is 1,96,614

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MTs of which 1,94,638 MTs waste is lifted per month achieving 98.99%. Out of the total 36,19,838 households, door to door garbage is collected covering 35,36,363 households achieving 97.69%.

Establishment of Waste to Energy Plants Under SWM

The Swachha Andhra Corporation is exclusively established to deal with sanitation and solid waste management matters. To improve the sanitation conditions and to arrest open defecation, the Swachha Andhra Corporation has sanctioned individual house hold toilets on saturation mode in 110 ULBs. All the 110 ULBs in the State have been declared as ODF.

The Swachh Andhra Corporation, setup as State Mission Directorate for Swachh Bharat/Swachh Andhra Programme, under the directions of the MA&UD Department, Government of Andhra Pradesh has initiated action for setting up of Waste to Energy Plants under PPP mode, in aluster Approach. At present concessionaire agreements were entered into with the agencies for establishment of 9 Waste to Energy Plants (9 Clusters with 61 ULB) at 10 different locations i.e. Visakhapatnam, Tadepalligudem, Guntur, Tirupathi, Nellore, Anantapur, Kadapa, Rajamahendravaram and Kurnool in the State for processing the Municipal Solid Waste around 4835 MTs/day of solid waste generated in 61 ULBs per day to generate 56 MW of Power. In addition to this, the Swachh Andhra Corporation has also initiated action for setting up of Municipal Solid Waste Management Projects in rest of the 49 Urban Local Bodies by using different technologies i.e., Waste to Compost/RDF/Bio-methanization/Bio-fuel.

Solid Waste Management

The Government of Andhra Pradesh has issued the Solid Waste Management Policy in terms of Rules of Solid Waste Management Rules, 2016. As per SWM Rules, 2016, the Government detailed guidelines, duly shifting from “Worker Insourcing to Work Outsourcing”, wherein arrangements are made for collection of door to door segregated garbage at household level covering of all individual households, apartments, commercial, institutional and multi-storeyed buildings of the town. The works covered under the scheme are

- Streamlining garbage collection at source level (for both residential and commercial areas separately) collection and transportation of wet and dry waste separately,
- To ensure 100% service coverage, residential houses and shops were bifurcated into separate micro pockets. Each micro pocket consists of 350 to 400 households for ensuring gate-to-gate waste collection service on daily basis.
- Wet waste is being transported in waste compactors and tractors and dry waste is being transported in separate trucks. (140 numbers of 14 M3 compactors and 330 numbers of 6 M3 compactors are distributed across 110 ULBs)
- To make the residential areas totally bin free (in the streets) and achieve 100% collection efficiency from gate points of the residential area waste RFID Tags are fixed at each Gate Points and with RFID Scanners 100% service coverage being ensured.
- For each micro pocket, one push cart with 8 HDPE bins are given for collection of Wet waste and Bags for collection of Dry waste.
- Dry Waste Handling: The ULBs are responsible for setting up Material Recovery Facilities, the maintenance of which is outsourced to the independent service providers or local Kabadiwalas (local dry waste traders).
- The collected dry waste transported to the MRFs and sent for recycling after further category wise segregation.
- Out of 110 ULBs, the G.O.279 is being implemented in 57 ULBs successfully for the last 5 months and in remaining ULBs the finalization of Service Providers under G.O. 279 is at different stages.

Black Spot Monitoring & Management App (BSMM)

Sanitation teams of Public Health workers will daily monitor through photos/videos and tracked live 24x7 at the Command & Communication Centre established in Secretariat. First time in the country Black Spot Monitoring and Management App has been designed and developed to monitor garbage vulnerable points and other sanitation issues in two levels;

Priority Black Spots – Covers main roads and Commercial areas with floating population and Sensitive Zones including Hospitals, Educational Institutions etc.

Normal Black Spots: Low visibility areas and internal roads, open plots in the wards etc.

Conversion of Black Spots into Green Spots: Database of all Black spots in all 110 ULBs is being monitored 24x7 to convert into Green Spots. If a Black Spot being cleared off regularly by sanitation staff and after a period of 7 days, the said Green Spot will be converted as Green Spot. So far, total 14,469 black spots were converted as Green Spots, out of total 18,625 Black Spots.

Creating clean & green ULBs by ensuring constant garbage vulnerable points monitoring and sustained cleanliness in the communities for the benefit of the citizens of the ULBs.

Real Time Monitoring System for monitoring of Sanitation by using ICT & IOT Devices

Technology enabled objective tracking of Gate to Gate solid waste collection across all the cities down to the extent of micro-pocket.

- Developed Real Time Monitoring System (RTMS) for managing Sanitation and Solid Waste Management activities on real time basis. RTMS is designed to meet the unique requirements of SWM activities to capture, in real time attendance of the PH workers, service coverage, punctuality of the transport vehicles, conversion of black spots into green spots, feedback from the public and redressal of their grievances.
- This tool acts as an advisory to the ULB for making payments to the service provider basing on the performance, objectively verified, calculated penalties to levied for default of services, indicator wise.
- **RTMS-I** - An integrated software, does data analytics and generates dashboards, alerts and MIS reports for real time monitoring and course correction. Payments to the service providers is authorised through a performance score card which is generated based on the actual field performance of the service providers. Identified KPIs are the baseline criteria for performance evaluation

- **RTMS-II - IoT** (RFID Tags, RFID Scanners, Electronic Weighing Scale, and GPS vehicle trackers are used for real time monitoring of field services in all the 110 ULBs.).

- o For effective monitoring of RTMS, an Integrated Command and Control Centre is set up in the secretariat with a 16 hour monitored call centre (Two Shifts).
- o 1052 GPS Trackers were fixed for effective monitoring of Vehicle Transportation.
- o So far 21.43 lakhs RFID Tags are fixed to the Houses, 7314 RFID Scanners are given to ULBs, 786 Digital Weighing Scales were given to ULBs

14th Finance Commission Grants

The 14th FC has recommended grants to ULBs in two types i.e., 1) Basic Grant for Rs.2908.64 Crores and 2) Performance Grant for Rs.727.16 Crores (total for Rs.3635.80 Crores) on the ratio of 80:20 basis.

From 2016-17 onwards for the release of performance grant by Government of India, the ULB has to fulfil the certain conditions. They are i) Making available data on local bodies receipt and expenditure through audited accounts, ii) Improvement in own revenues; and iii). Measure and publish Service Level Benchmarks (SLB) for basic services.

As per the guidelines, ULBs have to propose and execute basic services namely, water supply, sanitation including seepage management, sewerage management, solid waste management, storm water drainage, maintenance of community assets i.e. development of parks, protection of open spaces, development of play grounds, maintenance of municipal school buildings, roads, burial and cremation grounds, street lighting & ULB share under AMRUT Scheme.

An amount of Rs.2017.72 crores released by Government of India from 2015-16 including Rs.569.84 crores released during 2018-19. 10,031 works were sanctioned to ULBs for the released amount from 2015-16 to 2018-19, out of which, 5,069 works completed, 1,065 works are under progress and remaining 3,897 works are yet to be grounded.

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Scheduled Castes Component (SCC)

This Scheme intends to fill the infrastructural gaps in Scheduled Castes localities in the Urban Local bodies in the State such as laying of roads, construction of drains, providing drinking water supply pipe lines, construction of community halls, providing street lighting facilities etc. During 2018-19 development works with an amount of Rs.67171.29 lakhs are taken up.

Scheduled Tribes Component (STC)

This Scheme intends to fill the infrastructural gaps in Scheduled Tribes localities in the Urban Local bodies in the State such as laying of roads and construction drains, providing drinking water supply pipe lines, construction of community halls, providing street lighting facilities etc. During 2018-19 development works with an amount of Rs.2940.00 lakhs were in taken up.

State Finance Commission (SFC) Grant

As a part of providing basic infrastructure facilities of the Urban Local Bodies in the State, an amount of Rs.10279.93 lakhs is released by government to 110 ULBs during 2018-19.

Education in Municipal Schools

Government have issued orders for introduction of English Medium in all Municipal Schools except 10th Class in A.P. from the academic year 2016-2017 for supporting urban poor. Later, Government during 2017 have issued orders continuation of Telugu Medium sections in parallel to English Medium sections from 1-10 classes in all the Municipal Schools in AP for the year 2018-19 also.

Foundation Course:

The “Foundation Course” to all the Students of Classes IV to X in all the Municipal High Schools in the State is an innovative approach to uplift the levels of Education in Municipal High Schools and enable the students to acquire New Skills and capacities. It is aimed at creating a right platform for the Students and would give them the right desired direction to prepare for the Competitive Examination at State/ National level. Nearly 80% of the Children enrolled in Municipal Schools hailed from the families of – urban

poor, slum dwellers, down trodden, socially and educational backward. Children in 330 Municipal High Schools in the State are beneficiaries of the program. The Project is being implemented by the Municipal Administration Department with an annual budget of Rs.50 crores. Foundation Course is being taught in 330 high schools, 134 upper primary and 1625 Primary schools in the year 2018-19 and 1,11,688 students were benefited by this foundation course. Advanced Foundation Course is in progress in 16 schools with 2677 students.

S.S.C Pass Percentage 2018-19:

Out of the students appeared for SSC Exam during 2018-19, 90.42 % of boys and 90.39% of girls passed.

Infrastructure during 2018-19:

- Providing OMR Scanners to all the High Schools in the State by spending Rs.30.60 Lakhs during 2017-18 for implementing OMR based Common Practice Test for Classes VI – X.
- Provided Thin Clients (Computer Lab) @ 40 per each of Upper Primary (134) and High Schools (330)
- student benches were provided to all school children (2,85,136 students)
- 200 Virtual, Digital and Interactive class rooms were established in 464 Municipal Upper Primary & High Schools in the State.
- 450 Desktops and 10 KVA UPS Batteries were established in 450 Municipal Upper Primary & High Schools in the State.
- Nearly 4000+ Projectors are distributed to A.P Municipal Primary & UP Schools.
- Created Child-Friendly ambience in all Municipal Schools in the State.
- 1692 Part-time Teachers are engaged during 2018-19 in the Municipal Schools against the shortage of subject teachers and as per RTE Norms.
- 8875 Additional School Toilets are provided to a tune of Rs.593.12 lakhs during 2018-19 through Swachha Andhra Corporation, AP

Primary Achievements:

One State Academic Coordinator for each District is appointed from the Municipal Schools stationed DMA Guntur. One ULB Coordinator for Every 25 schools is appointed from the Municipal Schools stationed at the DMA office one ULB Consultant for primary is taking care of follow up of work book preparation, activities, orientation for teachers from time to time along with SAC and ULB coordinators the current year (2018-19) the follow up activities for Classes I to V in all Municipal Schools.

Pre Schools (Anganwadi):

Early childhood Education (ECE) also called as Nursery Education is a branch of education theory which relates to the teaching of young children (formally and informally) until the age of about six. Pre-School or Pre-K, it is described as an important period in child's development. It refers to the all-round development of a child's personality.

1. Early childhood education is one of the important component of Integrated Child Development Services (ICDS)
2. Sensing the need to upgrade Anganwadi's as good Preschool centers, Department of MAUD & Department of Women Development & Child Welfare joined hands and the collaborative model has following features:
 - a. Merging of 3 and above neighboring Anganwadi Centers to ensure teaching is based on age of the children. Accordingly, up to 3 years:
 - b. During the beginning days one complete week orientation was given to the Anganwadi teachers on English language, Rhymes by consultants positioned by MA & UD department as a refresher training monthly twice is continuing
 - c. Basic Foundation Books to all 1,93,502 students to make the child learning to write.
 - d. Text books including activity books are supplied to 1.49 lakh all 3 and 2 grouped pre schools during 2018-19
 - e. Wherever Government/Municipal buildings available, they were allotted for locating these merged centers. Where Government buildings are not available, private buildings are taken on rent by pooling rental amount.

- f. Extension support in the form of improving the ambience with paintings, providing LED TVs, furniture, uniforms and playing equipment .In place of LED TV's – projectors with interactive learning based flash cards are provided to grouped Pre-schools and as well as single Anganwadi Centres also.
- g. Two pairs uniform was also supplied to the Anganwadi children.
- h. Academic Fair was conducted to show case the child's academic performance.

Mission for Elimination of Poverty in Municipal Areas (MEPMA)

The Government has established a separate organization “**Mission for Elimination of Poverty in Municipal Areas (MEPMA)**” on 01.09.2007 with an objective to promote, strengthen and nurture self-sustainable institutions of the poor. The main objective is to enable the urban poor particularly the poorest of the poor to come out of Poverty and vulnerability in a sustainable manner and improve their quality of life in urban areas through their self-managed and self-reliant institutions.

National Urban Livelihood Mission (NULM):

Government of India has restructured the SJSRY scheme as NULM and is being implemented with effect from 01-04-2014 in 32 eligible towns / cities and now it is extended to all 110 ULBs in the State: The Mission is aimed at reducing poverty and vulnerability of urban poor households by enabling them to access gainful self-employment and skilled wage employment opportunities, resulting in an appreciable improvement in their livelihoods on a sustainable basis, through building strong grassroots level institutions of the poor. The mission aims at providing shelter equipped with essential services to the urban homeless in a phased manner. The main components of the programme are.

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Social Mobilization and Institution Development (SM & ID):

The main objective is to organize poor women into SHGs by covering all families living in slums and enable them to become self-reliant. So far **2,16,810** Self Help Groups have been formed with **22,64,158** members upto 30th March' 2019, with 7577 SLFs and 170 TLFs in 110 ULBs.

A. Employment through Skill Training and Placement (EST & P):

Providing assistance for development / upgrading of the skills of the urban poor so as to enhance their capacity for self-employment and salaried employment. The main objective of the programme is providing an asset to the urban poor in the form of skills for sustainable livelihood. So far 1,55,640 no. of youth has been trained, 1,07,320 has been placed.

B. Self Employment Programme (SEP):

This programme focuses on providing assistance to individual urban poor beneficiaries for setting up gainful self-employment ventures and micro enterprises with an upper limit of Rs 2.00 Lakh cost per unit. Under this interest subvention over and above 7% is allowed and 3% more is allowed for prompt payment. Till Date an amount of Rs.119.86 Cr has been disbursed for the eligible SHGs for the period May 2014- June 2016 and an amount of Rs.264.00 Cr is required to disburse for the period July 2016 – Jan 2019.

C. Shelter for Urban Homeless (SUH):

The main objective of SUH is “Providing 24/7 all whether Shelter to Urban Homeless with all amenities”. So far 110 SUHs have been sanctioned out of which 74 shelters are functional and the rest will be made functional.

Scheme of support to Urban Street Vendors (SUSV):

Strengthening and sustainability of livelihoods of Street Vendors (SVs) has been proposed to be implemented in all ULBs in the State as a part of the National policy on urban street vendors. Identified 72,760 Street vendors, issued ID cards to 66,200 and formed 110 Vending Committees.

SHGs Bank Linkage:

SHG-Bank Linkage is one of the premier players in Micro Financing segment in the State. MEPMA facilitated SHG Bank Linkage worth more than Rs. 17,272.83 crores to 7,08,949 SHGs in repeated doses upto 31st March' 2018.

Vaddi Leni Runalu:

The Scheme is introduced in place of Pavala Vaddi w.e.f. 01.01.2012 to reduce interest burden on the urban poor for the loans taken by the Self Help Groups (SHGs) from the Banks for improving profitability of SHG enterprises and to encourage better payment.

Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY):

Under this programme 48,65,714 members were enrolled by covering SHG Members, Rickshaw Pullers, Domestic Workers, Street Vendors, Self-employed and Differently abled persons.

Livelihoods:

SHG Livelihoods & EDP Trainings:

MEPMA is providing EDP trainings on convergence mode to SHG and SLF women on large scale through identified organizations in self employment activities. So far **5,44,344** SHG members have been given training under this programme through ALEAP, APITCO, KVK, Andhra Bank, Canara Bank, Andhra Mahila Sabha and NGOs etc, in Advanced Tailoring, Food Processing, making of Jute product, Handicrafts, making of Readymade garments, Glass Paintings, Bangle making, Pot painting and Catering etc. 100 SHG tailors were trained in Fashion designing through NIFT up to 31st March 2019. During 2018-19 trained 3,48,657 members

Establishment of Livelihood Units:

So far 15,30,815 members have grounded livelihood units through SHG Bank Linkage, Sthreenidhi, Mudra loans, Kapu Corporation, SC, ST, BC, Minority loans and SHG Corpus.

Swasakthi Canteens:

MEPMA has planned to establish Swasakthi Canteens in all districts and as of now these canteens were established through SHG Women at Collectorates, Hospital Premises, Municipal Offices, Market Yards, MRO offices and other public moving areas. Funds mobilized from Bank linkage, SEP loans and CBOs corpus.

MEPMA Marts:

The marts are designed for the SHG women to start the retailing of apparels sourced by APPC with very competitive price from all brands of India and abroad and other products to be displayed for sales in retail and whole sale manufactured by the groups and artisans such as handicrafts, handlooms, hand printing on textiles, pickles wooden furniture's, coir products jute products and other products available from nature and other products across A.P.

Health & Nutrition:

Mahila Aarogya Samithi (MAS) Formation:

To create health awareness among SHG Members MASs have been formed in coordination with health department. So far 10,900 MASs have been formed up to 31st March' 2019. MEPMA has contemplated to organize different awareness programs on communicable and non-communicable diseases among urban poor. MEPMA collaborated with line departments to reduce MMR, IMR, Malnutrition, and Anemia. MEPMA has formed and strengthened 10,900 Mahila Arogya Samithis.

Rural Development

It is possible to increase productivity of degraded lands with proper planning, scientific approach and efficient management and create huge employment opportunities for the poor. It is firmly believed that development of degraded lands is an important input required for eradication of poverty. Government is implementing various rural development programmes like Watershed Development programme, Self Help Groups and related programmes and Mahatma Gandhi National Rural Employment Guarantee Scheme.

Watershed Development Programmes (DPAP, DDP, IWDP,

IWMP), Comprehensive Land Development Programmes (Indira Prabha & NTR Jala Siri under RIDF XIII, XV & XVII) and Wage Employment Programmes (MGNREGS) are being implemented and monitored through software solution RAGAS (Rashtra Grameena Abhivridhi Samacharam). The entire data is displayed on respective websites, thereby bringing in transparency and accountability in these programmes.

Watershed Development Programmes

Watershed programmes are being implemented in the State for over two decades. Watershed programmes are concentrated only in rain-fed areas which have undulating terrain and are prone for degradation of soil (soil erosion). These areas are generally characterized by very poor groundwater profile. The programme envisages demarking 500-hectare area as a micro watershed. The watershed so delineated is treated for conservation of soil and moisture by following ridge to valley approach.

Watershed Development Programmes are being implemented under centrally sponsored DPAP, DDP and IWDP schemes to comeback recurring drought conditions in the state. Soil and Moisture Conservation, Water Harvesting, Ground Water Recharge, Improvement of vegetation and Bio-mass, Wasteland Development etc., are the main components of Watershed Development Programmes. Watershed Development Projects has brought all schemes under one umbrella and provided for cluster approach wherein, contiguous areas upto 5000 Ha. are to be taken up for treatment. So far 3907 Watersheds with an area of 19.54 lakhs Ha were completed

A series of structures like sunken pits, rock fill dams, percolation tanks, check dams, farm ponds, earthen bunding vegetative barriers, plantations etc., are constructed to reduce the velocity of water and allow percolation. They also control soil erosion and improve vegetative cover on the land so as to augment productivity.

Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Watersheds (erstwhile IWMP)

PMKSY-Watersheds (erstwhile IWMP) scheme is being implemented by the Commissioner, Rural Development

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through State Level Nodal Agency (SLNA) in the state of Andhra Pradesh since 2009. The objective of the programme is to increase the agriculture production & productivity by harnessing, conserving and developing degraded natural resources such as soil, water and vegetative cover and create sustainable livelihoods for asset less rural poor.

GoI have sanctioned 432 watershed projects in Six Batches since 2009-10 in 334 Mandals covering an area of 17.68 lakh hectare with total finance outlay of Rs 2237 Crores. The present funding pattern of the project is 60:40 as Central share & state share.

An amount of Rs.23.36 crores under IWMP projects and Rs.2.52 crores under Convergence with MGNREGS have been spent during 2018-19. Physical achievements of PMKSY are given in Annexure 8.19

Action plan for 2019-20:

Rs.342.25 Crores planned for implementation of soil moisture conservation works, Water Harvesting structures, Afforestation & plantations, productivity enhancement interventions in agriculture and Animal husbandry and for the enhancement of livelihoods of the asset less households.

Impact of PMKSY-Watersheds:

- Due to Water Harvesting and Plantation works, so far an additional ayacut of 2,33,495 Ha. has been brought under irrigation, benefiting 2,93,260 farmers.
- Rs.65.33 crores have been spent for Entry Point activities (EPA), 16,400 community interested activities have been taken up.
- Rs.150.12 Crores has been spent under Production Systems Improvement (PSI) component of Agriculture & Livestock activities, benefiting 1,52,898
- Rs.138.84 Crores has been spent for Livelihood Component, 44,676 beneficiaries (Asset less poor) were benefitted under activities of dairy, small ruminants, agriculture, petty and skilled businesses etc.,
- Rs.18.72 Crores has been spent for Institution & Capacity Building Activities, 19,435 trainings were conducted covering 7.71 lakhs primary & secondary level stakeholders.

Jala Siri II

Jala siri programme essentially focus on utilization of available ground water resources and to promote conjunctive use of surface water and groundwater duly adhering to the norms mentioned under AP Water, Land and Trees Act-2002. The programme is taken up in all districts except Ananthapuramu.

As per the priorities of the Government under NAVA RATNALU, the YSR Raithu Bharosa scheme covers providing free bore wells to farmers.

- Only one source (Bore well/ Filter Point) is permitted up to 2.50 to 5.00 acres area and it shall be contiguous block.
- The drilling depth is limited to 200 feet.
- The minimum bore well yield required is 4500 Liters per hour.
- 5 HP solar pump sets installed to successfully drilled bore wells.
- The cost of 5HP solar pump set is Rs.2.42 lakhs.
- A nominal amount is being collected from each beneficiary for installing solar pump set as shown in Table 8.18

Table 8.18 Beneficiaries contribution and NABARD share (in Rs.)

Sl. No.	Beneficiary contribution	Govt. share/ NABARD	Total
For SC/STs	6000	49000	55000
For others	25000	30000	55000

Source: Rural Development

Achievements during 2018-19

12,304 bore wells were drilled successfully and **9,000** bore wells installed with solar pump sets. 18,000 farmers benefited. 45,000 Acres of land brought into cultivation by incurring an expenditure of Rs.51.26 crores.

Action plan for 2019-20:

- The target set is to drill & install agriculture solar pump sets to 25,000 bore wells with an estimated cost of Rs.162.50 crores funded by State. Govt/NABARD.
- 1.25 lakh acres shall be brought under cultivation. & covering 50,000 beneficiaries.

Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

The Mahatma Gandhi National Rural Employment Guarantee Act (NREGA) notified on September, 2005. The Act provides a legal Guarantee of 100 days of wage employment in a financial year to every rural household whose adult members volunteer to do unskilled manual work. The objective of the Act is providing not less than one hundred days of unskilled manual work as a guaranteed employment in a financial year to every household in rural areas as per demand, resulting in creation of productive assets of prescribed quality and durability. Also to strengthen the livelihood resource base of the poor, proactively ensuring social inclusion and strengthening Panchayat Raj Institutions. MGNREGS is implemented in all 13 districts of the State.

All the works executed are categorised into four, namely A) Public works relating to Natural Resources Management, B) Individual assets for vulnerable sections, C) Common infrastructure for NRLM compliant self-help groups and D) Rural Infrastructure. This Scheme is a centrally sponsored scheme with 90% Central share and 10 % state share. The Central Government releases the amount for 100% of the wage payments, 75% of the material payment and 6% Administrative expenditure. The State Government to release the amount for 25% of the material payments, Unemployment allowance and MGNREGS-AP State Council expenditure.

Performance of MGNREGS

MGNREGS is being implemented in **12,915** Gram Panchayats in 661 mandals of 13 districts. 88.65 lakh job cards were issued covering 92.19 Lakhs wage seekers since inception of the scheme. 5.64 lakh Srama Shakthi Sanghas have been formed with 42.39 lakh households covering 69.22 lakh wage seekers.

Performance during 2018-19 (31st March 2019): Andhra Pradesh occupies 4th place in the Country in generating of person days (24.65 Crs.)

- Total expenditure incurred is Rs. 9216.49 Crs
- 69.22 lakh wage seekers belonging to 42.39 Lakh households were provided wage employment with an average employment of 58.15 days per household.

- Total number of households which completed 100 days is 8,54,112

Andhra Pradesh State occupies prior position in the Country in Generation of person days, 100 days completion and timely payment of wages.

Physical Achievement: Out of the target person days 2470.48 Lakhs, approved by GoI, 2465.14 Lakh Person-days were generated during 2018-19. Out of these 529.26 Lakh person days generated by SCs and 251.11 Lakh Person days were generated by STs. Person days generated by BCs are 1205.00 lakhs. 69.22 lakh wage seekers from 42.39 Lakh Households were provided wage employment. Details are shown in Table 8.19

Table 8.19 Overview of MGNREGS- AP

Particulars	2018-19	Cumulative
Total Job Cards issued		88.65 Lakhs
No. of Works Completed	11,46,687	61,87,017
Total Expenditure	Rs.9216.49 Crs	Rs.45280.49 Crs
No. of Households provided wage employment	42.35 lakhs	60.01 lakhs
No. of Individuals provided wage employment	69.14 lakhs	115.90 Lakhs
Total Person days generated	2465.14 Lakhs	22721.71 Lakhs
Persondays generated for SC	529.26 Lakhs	5260.63 Lakhs
Persondays generated for ST	251.11 Lakhs	2573.63 Lakhs
Persondays generated for BC	1205.00 Lakhs	11036.40 Lakhs
Total No. of households completed 100 days	8,54,112	81.72 Lakhs
Average no. of days employment provided per HH	58.15	-
Average Wage rate per day per person	Rs.199.16/-	Rs. 119.50/-

Source: Rural Development

Flagship programmes

'Panta Sanjeevani' (Construction of farm ponds), Construction of water harvesting structures & plantation of

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trees, CC Roads, Housing to all are the key Projects taken up by Andhra Pradesh Government during this year 2018-19, along with works like Vermi/NADEP compost pits, Anganwadi Centres, Solid Waste Management works and other works permissible under MGNREGS.

Panta Sanjeevani (Farm ponds): The Government of Andhra Pradesh has launched ‘Panta Sanjeevani’ program (Construction of farm ponds) apart from other drought proofing activities under flagship program of ‘Neeru – Chettu’ and ‘Neeru – Pragathi’ to support the small and marginal farmers who are facing difficulties due to erratic, reduced rainfall, prolonged dry spells and continuous drought conditions leading to crop failures.

The Panta Sanjeevani programme, has been taken up to harvest rain water during rainy season and using the same for providing supplementary life saving to standing crop by promoting indigenous rain-water harvesting technologies, besides percolating the runoff water into ground.

A farm pond can percolate water to a tune of 5 times of volume of farm pond. The farm-pond construction will be supported under MGNREGS upto 5 acres.

Progress: Total 1,82,370 Farm ponds are grounded and 1,23,614 are completed with an expenditure of Rs.573.12 Crs during 2018-19.

Solid Waste Management: Solid waste management in rural areas includes collection and segregation of solid waste, provision for conversion of biodegradable solid waste in to vermi compost and land fill arrangements to non-degradable solid waste. Liquid waste management includes construction of pucca drains or underground pipeline and collection of same to a distance point and to take up low cost preliminary treatment for reuse the same for agricultural purpose.

Estimates were generated for 11,452 works worth of 535.85 Crs. Out of these 1825 works are under Progress and 9005 were completed with an expenditure of Rs.335.16 Crs during 2018-19.

Individual household latrines (IHHLs): under MGNREGs 1,27,055 completed with an expenditure of Rs.114.36 Crs and 13,707 IHHLs are under progress.

CC Roads: 8676.97 Kms of CC roads were laid with an expenditure of Rs.2616.45 Crs against the target of 8000 Kms,

NADEP/Vermi Compost pits: 89,697 pits were completed with an expenditure of Rs.65.53 Crs and 18,063 works are under progress.

Housing Program: 90 person days under MGNREGS shall be provided for each new house taken up under Rural housing programme by the Housing department depending on the stages of construction. Estimates were generated for 5,22,160 wage seeker’s houses with an estimated amount of Rs.858.25 Crs and 1,99,405 houses are under progress and 2,22,020 completed.

Plantation Programmes under MGNREGS in 2018-19

The Department is promoting Horticulture, Avenue Plantations & Other Plantation Programmes under MGNREGS, as a means of providing & creating productive assets for the poor wage seekers so that there is a sustainable source of income. The main object of the implementation of the Plantation Programmes under MGNREGS is to improve livelihoods to the SF, MF & SC, ST poor.

Horticulture Plantation

Horticulture fruit crops like Mango, Cashew, Sweet orange, acid lime, Guava, Sapota, Coconut, Pomegranate, Tamaring, Seethaphal, Jamun, Apple ber, & Oil Palm are being distributed through this programme. Cost of Pitting, Planting, Plants, Fertilizer and watering charges are being paid from MGNREGS funds. Maintenance is given for 3 years @ 100 days per year as wage component. During the year 2018-19 horticultural plantation taken up in 88,331 Acres with an expenditure of Rs.213.05 Crs.

Avenue Plantation

The Avenue plantation is taken up with 400 plants per 1 Km both sides of the roads with spacing of 5 Mtrs between the plants. Duration of project is 3 years. Cost of pitting, planting, fertilisers and watering charges are being paid from MGNREGS funds. For maintenance of avenue plantation, beneficiaries are identified from SHGs & Tagged with 200 plants for each SHG. Usufruct rights are being given to the SHGs. In 2018-19, plantation in 4286 KMs completed with an expenditure of Rs.20.92 Crores.

Homestead Plantation: -

5 types of fruit plants per household being distributed one time to enhance the nutritional values of the Rural Poor, free of cost. Cost of Pitting, Plant Material & Transportation are being given from MGNREGS funds. 116316 plants were

planted in 38755 households under this Plantation during 2018-19 with an expenditure of Rs.57.28 Lakhs

Institutional Plantation

The objective of this plantation is to develop tree planting consciousness among children, increase the greenery and to get income to the institutions. It is proposed to take up plantation in available vacant /unutilized lands in schools, colleges and other Govt. institutions. Duration of the project is 5 years. pitting, cost of plant material, transportation, maintenance etc. are provided from MGNREGS funds. Fruit bearing & Shade plants are planted. 47411 Plants were planted in 399 Institutions under Institution Plantation FY-2018-19 with an expenditure of Rs.11.60 Crs.

Block Plantation in Community Lands

Planting of shade, ornamental and fruit plants in vacant village common lands, such as community land, burial grounds and endowment lands under green village concept and to create green cover in vacant land to arrest soil degradation and to protect the environment. Cost of pitting, plant material, fertilizer & watering charges are being given from MGNREGS funds. 163626 plants were planted in 334 Acres community Blocks under Block Plantation for FY 2018-19 with an expenditure of Rs.27.90 Crs

Bund Plantation

To create permanent tree assets on the bunds of land holding of SC/STs and SF/MF category beneficiary farmers without disturbing the regular agricultural crops to provide supplementary income to the farmers. Teak plants and Red sanders are being planted on the field bunds of the farmers. Cost of Pitting, Plant Material are being given from MGNREGS funds. 1,30,889 Plants were planted with 521 farmers in the year 2018-19 with an expenditure of Rs.34.00 Crs

Greening of Barren Hillocks

Under MGNREGS, "Greening of Barren hillocks" by Self Help Groups in Non-Watershed areas was taken up for increasing green cover outside the forest area. With the help of Gram Panchayat, the DWMA has identified nearby barren hillocks for plantation, protection and management.

SHG members, SSS groups prepared a holistic three-year work plan for implementing "Greening of Barren Revenue Hillocks" with minimum area of 20 Acres and maximum of 100 Acres. Hillocks with existing staggered trenches are taken up as priority. Cost of Pitting, Plant Material are being given from MGNREGS funds. Plants were planted in 379.42 Hectares in Non IWMP areas with an expenditure of Rs.126.91 Lakhs.

Village Parks

Village Parks are being established under MGNREGS, @ one in each Mandal preferably at Mandal Head Quarter (Rural Areas only). The objectives of establishment of Village Parks are to have pleasant atmosphere, Play use for Children and to take rest by the desirous people

High Density Block & Linear Plantation for creating Rural Forests

With the objective to increase the green cover and to improve bio-diversity, to control pollution and to reduce CO2 content, it is proposed to raise high density plantation (Multi-tier & High Density) in the premises of Govt. Institutions / CPR lands located in all the Districts, either in Block Plantation or in Linear Plantation to take up along with canals, tank bunds, roads under MGNREGS for creating Rural Forests, by planting with not less than 3000 plants. Planting was done in 51035 Rmts under HD Linear Plantation and in 22.25 Acres under HD Block Plantation in 2018-19.

Special Provisions to Persons with Disabilities

In order to provide employment to the Person with Disabilities under MGNREGS-AP, a special strategy evolved to cover the Disable people households with PwDs as members entitled to wage employment for a period of 150 days per year in MGNREGS. Labour families with PwD in the villages were identified the through campaign mode by involving Civil Society Organizations, VELUGU and NREGS.

Under MGNREGA, 1,65,975 Separate job cards have been issued to PwDs to provide wage employment in all 13 districts. 14,985 Shrama Shakti Groups of workers with disabilities are formed in 661 mandals of 13 districts.

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Special Strategy – ITDAs (Tribal Region)**MGNREGS Strategy in Tribal Areas:**

The Project Officer's, ITDA's were designated as Additional District Programme Coordinators to enable them to oversee the implementation of the scheme in tribal areas. Separate DCCs are established under control of PO - ITDA for implementation of works like check dams, roads, GP buildings & mandal buildings in ITDA areas. Horticulture is given importance and plantations like Coffee, Mango, Rubber and Cashew were predominantly taken up in ITDA areas along with Land development activities. Provision of 150 days employment is being given for RoFR (Forest Right Act) beneficiaries

Special Strategy - Chenchu Primitive Tribal Group

Out of 33 tribal groups, 8 groups are recognized as Particularly Vulnerable Tribal Groups (PVTG). Chenchus are also recognized as one among the 8 PVTGs by Government of India in the year 1975. The MGNREGS Chenchu Special Project has been implemented to address the cases of extreme poverty, hunger & starvation and to arrest distress migration among Chenchu.

Convergence with other Departments

The government has been implementing various

convergence initiatives under MGNREG Scheme with the active participation of about 24 line departments, resulting in creation of durable assets which sustain the livelihood base of the rural poor.

The different modes of convergence made in the State include;

A. **Sharing of Funds:** The project cost is shared between the line department and EGS for the permissible works under MGNREGA.

B. **Utilisation of Technical Expertise of Line Departments:** The services of technical staff of the Line Departments like Agriculture, SERP, Horticulture, Sericulture, fisheries, etc. are being utilised for technical guidance and support in taking up the projects under convergence.

C. **Value Addition:** Departmental funds are tapped for further development of assets created under MGNREGS for promotion of sustainable livelihood for the poor.

The following gives a brief account of the various convergence initiatives taken up so far during the financial year 2018-19.

Panchayat Raj Engineering Department: Rural infrastructure activities are being taken up with MGNREGS in convergence with Panchayat Raj Engineering Department as an implementing agency in the state of Andhra Pradesh

Achievements during FY 2018-19			
Component	Units	Completed	Total Expenditure (Rs. In Crs)
CC roads	Kms	8676.97	2616.45
BT Roads	Kms	54.96	72.50
Gram Panchayat Buildings	Nos	408	53.91
Gravel Link Roads	Kms	161.3	24.17
Mandal buildings	Nos	13	2.89
Village Haats	Nos	26	2.25
WBM Roads	Kms	10.18	57.31

Tribal Welfare Engineering Department: In tribal areas, the rural infrastructure activities are being taken up in convergence with TW Engineering Department as

implementing agency. 1130.33 WBM Roads completed with Rs.139.11 crore during 2018-19

Convergence with IWMP:

The works related to soil moisture conservation and water harvesting structures are being executed in IWMP areas following Ridge to Valley concept in a scientific manner with clear convergence by segregation of works in both the schemes and to avoid duplication. During 2018-19, completed 18949 farm ponds with Rs.75.80 crores, Trenches in 1136. Ha with Rs.151.48 crores and 895 Ha under Greening of Hillocks with Rs.44.88 crores were completed.

Animal Husbandry initiatives: For fodder security and creation of livelihood security at GP level, MGNREGA in convergence with Animal Husbandry Department had taken up the following works.

Achievements during FY 2018-19			
Component	Units	Completed	Total Expenditure (Rs. in Crs)
Construction of Animal Hostel - 20 Animals (Gokulam)	Nos	4	10.41

Achievements during FY 2018-19			
Component	Units	Completed	Total Expenditure (Rs. in Crs)
Construction of Mini Gokulam	Nos	199	104.40
Fodder trough for Cattle/Cattle drinking water trough	Nos	493	1.30
Mega Pashu Grasa Kshetralu	Acres	2855.65	5.76
OPGK-Annuals	Acres	15323.84	14.51
OPGK-Perinnials	Acres	8731.24	23.66

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Sericulture: Mulberry bush plantation and Silk worm rearing sheds are being taken up in convergence with Sericulture Department. 2618 Mulberry Bush Plantation, 520 Silk worm Rearing Sheds were completed with an expenditure of Rs.29.78 crores in 2018-19.

Fisheries Department: Excavation of fish breeding ponds and Fish Drying Yards are being taken up in the Fishermen villages to provide additional income to the fishermen community in convergence with Fisheries department. During 2018-19, Completed 279 Fish Drying Platforms with 7.33 crores and 367 Fish ponds with 43.81 crores.

SERP Department: In convergence with SERP, Horticulture plantation programme is implemented under MGNREGS as a single biggest activity for creating sustainable livelihood base for the Vulnerable, poor, Small & Marginal farmers. During 2018-19, horticulture plantation has been completed in 88331 Acres with an expenditure of Rs.109.64 Crores.

Women Development & Child Welfare Department (ICDS): The construction of AWC is taken up through convergence of MGNREGS with Women Development & Child welfare with an estimated cost of Rs 7.00 Lakhs /each building with 70 :30 (MGNREGS : W&CD) Funds sharing pattern i.e Rs.5.00 Lakhs was from MGNREGS funds and Rs.2.00 Lakhs from W & CD dept funds. Constructed 1416 Anganwadi buildings with an expenditure of Rs.76.98 crores during 2018-19

Forest Department: Andhra Pradesh Government with an aim to improve the forest coverage, a massive plantation programme was taken up through Vanam- Manam program in Institutions by utilisation of MGNREGS funds in convergence with Forest and School Education departments. The required plant material was raised in Nurseries with the support of MGNREGS by the Forest Department.

Achievements during FY 2018-19			
Component	Units	Completed	Total Expenditure (Rs. in Crs)
Check dams/ check walls	Nos	225	4.54
Continuous Trenches	Nos	154358	10.61

Achievements during FY 2018-19			
Component	Units	Completed	Total Expenditure (Rs. in Crs)
Improvements to check dams/ percolation tanks	Nos	569	1.56
Maintenance of Nurseries	No of Plants	707.69	23.62
Mini Percolation tank	Nos	2518	3.65
Nursery	No of Plants	1750.71	49.76
Rock fill dams	Nos	215	0.71
Seed Dibbling	Kgs	541349	15.17

Panchayat Raj Department: In order to promote better sanitation in rural areas, the Panchayat Raj& Rural Development have joined hands to promote Solid Waste Management units in Gram Panchayats & under this project, the solid wealth processing units (Shed) are constructed with MGNREGS funds & the expenditure towards Green Ambassadors is met from Gram Panchayat. During 2018-19, completed 9006 Solid Waste Management units with Rs.334.97 crores, 67743 NADEP works with an expenditure of Rs.62.15 crores.

School Education Department: MGNREGS in convergence with School Education Department has taken up compound walls to the schools. 189849 Rmt of compound wall constructed during 2018-19 with Rs.106.67 crores.

Housing Department: In convergence with the Housing Department, as a part of Rural Housing Scheme, the expenditure incurred by the beneficiary towards unskilled labour charges for 90 mandays & IHHL are met from MGNREGS funds. Under this scheme, 222020 beneficiaries under 90 days housing with Rs.530.15 crores and 77152 beneficiaries for IHHLs with Rs.107.17 crores were covered during 2018-19.

RWS&S Department: It is planned to take up Underground drainage in GPs having more than 5000 population in convergence with RWS&S dept & MGNREGS material funds. 146.99 Kms of underground drainage works completed during 2018-19

NRI Component (Burial Grounds): The development of Burial grounds in villages is taken up under MGNREGS and with the help of NRI Contribution, Value addition is done by creating additional facilities like drinking water, compound wall, etc. 2398 burial grounds were completed with Rs.88.67 crores during 2018-19.

Indian Railways: The works like Desilting of water ways of bridges/RUBs/Pipe culverts/Box culverts, Strengthening/widening of Railways embankment, Trench cutting along Railway boundary, Recharge structures to functioning Bore wells/dried up bore well, Desilting of open wells, Block Plantation, Village parks in Railway Colonies, Linear Plantation and Connecting roads to level crossing up to BT level (90 : 10) in convergence with MGNREGS during FY 2018-19.

Action Plan for 2019-20

The Approved Labour Budget was 20.00 Crore Person Days and the Wage component was 4220.00 crores and the Material component was 2813.33 crores for 2019-20.

Focus Area Works

Construction of 5000 KMs of Internal CC Roads, 1 lakh Farm Ponds under Panta Sanjeevini, 3000 Anganwadi Buildings, 1 lakh IHHLs (Housing Beneficiaries), 1300 Mini Gokulams, 500 Animal Hostels, 2000 Play Fields, 661 Village Parks, 3000 Burial Grounds, laying of 3000 KMs of WBM Roads, 2000 KMs of BT Roads and 1 lakh acres of Horticulture Plantation and 10000 KMs of Avenue Plantation

Best Practices

RAGAS (Rashtriya Grameenabhivruddhi Samacharam):

For ensuring transparency in the execution of MGNREGS in Andhra Pradesh, the use of ICT becomes necessary especially in the registration of wage seekers, estimation of works, disbursement of wages and for effective monitoring. The transaction based software issues job cards, maintains shelf of projects, generates estimates, issues work commencement letters, updates muster rolls and generates pay orders.

MIS (Web) Reports:

The web reports provide detailed information under various sections and subsections covering all aspects of MGNREGS activities. The user can access all the reports in the website www.nrega.ap.gov.in which offers information related to employment generation, physical and financial performance.

Key initiatives

Transparency through ICT initiatives

While launching MGNREGA in the state, AP government had made effective use of IT applications in implementation of the programme has avoided duplication of works, spurious transactions, fudging of muster rolls, parking of funds and ensured proper wage payments, timely fund disbursement, standard procedures, proper record keeping and transparency in the entire system. NREGA has popularized ICT as a tool for empowerment amongst the rural masses - grievances recording and accountability has eliminated the middle-men enabling true G2C interaction.

Transaction based software to provide end-to-end solutions

Andhra Pradesh is the first state to introduce comprehensive IT software that provides end-to-end IT solution with transaction based software in place since inception under MGNREGS. Various modules for execution of NREGS works, administration, accounts, etc., are prepared based on different aspects of the programme implementation.

Every work planned and executed under MGNREGS is done through software by way of generation of the estimates, online sanctions, issue of work commencements orders, e-muster entries, direct payments to beneficiaries through eFMS etc.

Web based monitoring reports are placed in the official website of <http://www.nrega.ap.gov.in/> capturing every work and transactions on real time basis which are kept available for public access.

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Electronic Muster & Measurement System (eMMS)

The objective is to achieve complete transparency in implementation of MGNREGS by obtaining LIVE data from the Worksite to the Website on a daily basis. The mobile technology is customised and deployed for the MGNREGS field functionaries through different mobile applications like e-Muster, e-Measurement, e-muster verification and e-check measurement. eMMS is designed to arrest distortions in the programme like Muster Fudging; Delays in Payments; Binami Wage seekers; Fake Measurements and Work Duplication. eMMS is being implemented in all districts.

Geo-tagging of all works where the public money involved in execution

Under MGNREGA while at planning stage it is made mandatory to get GPS coordinates (Latitudes & Longitudes) to be taken to a particular work for the geand capture images with GPRS tag for every payment also date and time of visit to the work location. All such works are put in public domain for enhanced transparency. For this all field functionaries are provided with android based mobile which supports GPRS and GPS. and Demand capture/ allocation of works/daily attendance to work sites and geo tagging are done through these mobiles and all the functionaries are trained to utilize this technology.

Financial transparency through Electronic Fund Management system (eFMS)

eFMS has been established with the objective of implementing an efficient fund transfer system through online money transfers. All the MCCs and DCCs are networked to the central server and through that to a central fund in which all the MGNREGA funds are lodged. eFMS enables electronic transfer of money to a disbursing account (post office/smart card etc) where there is a requirement and allows optimum utilization of funds. eFMS avoids unnecessary parking of funds at Mandal level. The Mandal level staff is liberated from the maintenance of cheque books and accounts. All payments are made to the individual Bank/Post office accounts directly by the disbursing authority, it has reduced delay in payments.

Payments to wage seekers through Direct Benefit Transfer (DBT) using Biometric Authentication:

DBT Project in NREGS-AP was started as SMART CARD PROJECT in 2007 by Rural Development Department of Government of Andhra Pradesh. It is a pioneering initiative in Financial Inclusion and the only one of its kind and scale in India. It is arguably the most successful bio-metric payment project in India prior to introduction of Aadhaar.

Main objective of the project is to disburse wages earned in NREGS to the wage seekers within the village and within the time limits as envisaged in NREG Act, 2005.

The Government of India has introduced a single point facility for payment of benefits to the beneficiaries for all the Government schemes through Aadhar Authentication. The DBT system will eliminate leakages, delays, duplication and falsification. It will lead to seamless transition. It will introduce a very high degree of efficiency and transparency.

In our state we have successfully migrated to Aadhaar Enabled Payment System from the earlier smart card payment system from Jan 2013, with the kick start meeting held by the Minister for Rural Development, Govt. of India on 15.12.2012.

In this system the MoRD will approve a "Mother Sanction" at periodical intervals basing on the approved labour budget & Utilization certificates submitted and process the wage FTOs through Public Funds Management System (PFMS) and credit the wage amounts directly into the accounts. Wage disbursements are now being made through Aadhaar Payment Bridge (APB) mode for the wage seekers having account with banks and seeded with Aadhaar in the NPCI. For the remaining wage seekers, mostly in the agency area, where connectivity is a problem the wage payments are being made in the Automated Clearing House (ACH) mode by the Department of Posts through their Core Banking accounts.

In our State 90% of the wage payments are being credited within 15 days from the closure of the muster.

The Department has provided the IRIS devices to all the districts for making of wage payments in the case of Biometric authentication failures.

Aadhaar Payment Bridge (APB) mode:

The department has started an initiative to route the wage payments through Aadhaar Payment Bridge (APB) mode in which the wage amount will be credited directly into the individual wage seekers account through National Payment Corporation of India (NPCI).

Society for Elimination of Rural Poverty (SERP)

The women empowerment and poverty eradication programme in Andhra Pradesh intends to ensure that disadvantaged communities shall be empowered to overcome all social, economic, cultural and psychological barriers through self-managed organizations. Implemented through Society for Elimination of Rural Poverty (SERP) in the rural areas, this movement has achieved significant poverty reduction and social capital creation through a holistic approach of facilitating and promoting empowerment, creating opportunities, providing mechanism for social security, and working for equity.

Community Based Organisations (CBOs) have built up enormous financial capital base through savings corpus. Besides this, the human capital aspect of the SHG members has been built over the years and is continuously in the process of being strengthened through various programs and initiatives. 76.98 lakh rural women have been institutionalized into 7.46 lakh SHGs. A total of 27,792 Village Organizations (VOs), 662 Mandal Samakhya (MS), 36 special Samakhya of Chenchu & Yanadi, and 13 Zilla Samakhya have come into existence across Andhra Pradesh. The total savings by the members is Rs. 6471.36 Cr and the Corpus available with SHG Members is close to Rs. 8982.17 Crore.

Out of 72.12 lakh rural SHG members, around 92.3% of the members (66.53 lakh) have their individual members SB accounts in banks. Of these, 45.64 lakh rural SHG member accounts are seeded with National Payments Corporation of India (NPCI). Mobile numbers of 96.5% of rural SHG members is mapped and Aadhaar seeding has been completed for 94.27 percent of SHG members as on March 2018.

YSR Pension Kanuka

The Government of Andhra Pradesh is committed to the Welfare and Development of all segments of the society. Government has announced “Navarathnalu” comprising of various welfare and developmental programmes to achieve this objective. As part of the Navarathnalu, enhancement of pension amount and reduction in the age criteria for old age pension is a major welfare measure to ameliorate the hardships of the poor and vulnerable sections of the society particularly the old and infirm, widows, and persons with disability to secure a dignified life.

In pursuit of this overarching goal, in spite of the challenging financial conditions, orders were issued enhancing the Social Security Pensions amount for Old Age Persons, Widows, Toddy Tappers, Weavers, Single women, Fishermen, ART (PLHIV) Persons, Traditional Cobblers to Rs.2250/- per month, Disabled persons to Rs.3,000/- per month, and also for people affected with Chronic Kidney Disease who are undergoing dialysis in both Government and network hospitals to Rs.10,000/- per month. The enhanced scale of pension came into effect from June, 2019 payable from 1st July, 2019 onwards.

The reduction of the pension eligibility age from 65 years to 60 years is a landmark decision of the Government which will act as a more secure safety net measure. Under this social safety scheme for poor and vulnerable, authenticated Aadhaar linked pensions will be provided to 58 Lakh beneficiaries with a monthly outlay of over Rs. 1374.67 crores and an annual outlay of Rs.16,496.04 Crores. District wise Pensions Distributed during 2018-19 given in Annexure 8.20

Bank linkage: YSR AASARA

For the financial year 2018-19, Rs. 15,574.26 Cr was disbursed to 4,26,111 SHGs. The SHG bank linkage programme will be continued in a much bigger scale henceforth with higher ‘per SHG’ bank loans. Currently, on an average each SHG is being provided a loan of Rs.3 lakhs through bank linkage. The Government proposes to increase the bank linkage activities and enhance the loan disbursements to SHG members upto 10 lakh.

The Government proposes to support the SHG women by reimbursement of loans outstanding in their accounts as on 11.04.2019. The outstanding balances in the SHG women accounts as on 11.04.2019 will be paid to the SHG women by the Government in four instalments. Besides

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the loan outstanding amounts, the interest will also be released through continuation of the VLR scheme. The loan reimbursement and VLR interests are covered in YSR Aasara scheme.

Stree Nidhi

Streenidhi Credit Cooperative Federation Limited, operates in Rural as well as Urban areas with an objective of providing livelihood loans to poor SHG women in transparent and easily accessible manner through SHG federations i.e. VO/SLFs and MS/TLFs. Streenidhi, in addition to the loan services, also provides deposit services for resource mobilization, loan insurance, works as Business Correspondent to all Banks and also as a Channelizing Agency for financing livelihood activities under SC/Tribal Sub Plans, IWMP, NRLM etc., and is emerging as a gate way for transferring funds to the target group under different programmes. During 2019-20, Streenidhi strategy is as follows:

- Target of 25 Livelihood applications per Panchyat
- Preference will be given to OBC community to support their professions
- Extending credit for beneficiary contribution under Jalasiri / Farm Machinery / Small Ruminants like schemes
- Extending loans to Small village entrepreneurs like Kirana, General stores, hotel, cloth shop, medical shop, tailoring etc.

Credit Disbursement

- i. Streenidhi during 2018-19 has provided loans to an extent of Rs.894.59 Crores to 189622 SHG members comprising of 89659 SHGs. Stree Nidhi have achieved 91.28% projected credit disbursals up to 31.3.2019.
- ii. Streenidhi, since inception i.e. from October 2011 has disbursed loans to an extent of Rs.5574 Crores to 22.97 lakhs of SHG members.
- iii. The loan outstanding as on 31.3.2019 is Rs.1114.21Crores.

Insurance for Unorganized sector workers

SERP is implementing the social security insurance coverage scheme, by leveraging the services of ZS insurance

call centres and Bima Mitras for registration of unorganized sector workers with the labour department and assistance for processing and quick settlement of claims.

The programme offers relief to nominees in case of death of the scheme beneficiaries to the extent of Rs.2 Lakhs in case of natural death, Rs. 5 lakhs for accidental deaths or total disability and 2.50 Lakhs for partial disability. Further, two dependent children studying 9th, 10th and Intermediate, ITI courses would be provided scholarship with Rs. 1200 per annum.

Claim amount of Rs. 2381 Crores disbursed to 193819 bereaved families under this scheme. This insurance program is proposed to be continued with better claim benefits to the policy holders.

Pelli Kanuka

A marriage incentive scheme has been launched with effect date from 20.4.2018. AP SERP is the Implementing Agency for rural areas and MEPMA is the Implementing Agency for Urban areas. Payment gate way will be maintained by the APSERP. marriages solemnized between 20.4.2018 - 30.9.2018 are permitted to apply for marriage incentive under this scheme through Velugu Mandal Mahila Samakhayas /MEPMA Offices

During 2018-19, 100% Incentive of Rs.248.02 Cr paid to 58,607, 80% Incentive of Rs.63.74 Cr paid to 18,767 and 20% Incentive of Rs.21.03 Cr paid to 24,902 eligible brides.

Unnathi (PoP) SCC (Earlier SCSP) & STC (Earlier TSP)

The mission of Unnathi is to get rid of poverty and improve the quality of life of every poor family among the rural poor mainly the poorest of the poor by providing different livelihood opportunities with various funds like SC, ST Sub plan funds from State Government and Other funds from GoI funds etc Unnathi targets the ultra-poor in rural societies of Andhra Pradesh and provides support in the form of livelihoods. Provided Livelihood/assets to 2239224 households with Rs.811.84 Cr from 2014-15 to 31st March 2019 by mobilizing funds from various sources SCSP & TSP and other funds.

Loan and Livestock Insurance is provided to the beneficiaries at free of cost by Government. The SC & ST funds are

released to VOs as a Revolving Grant and loan to members to cover more beneficiaries in the VO by way of recycling. Member will repay loan with 0% interest and the recovered loan amount will be rotated to the same member to a max of 3 times, remaining SC/ST members also be provided funds basing on the available funds.

In order to achieve the objective of the said sub-plans, various loans were provided to the SC &ST beneficiaries under SC &ST sub-plan for various purposes during the period from 01.04.2018 to 31.03.2019 as shown in the Table 8.20

Table 8.20 Beneficiaries Covered under SC & ST Sub-Plan

Sl. No	Purpose	SC Sub Plan		ST Sub Plan	
		Beneficiaries (No.s)	Amount (in Rs.)	Beneficiaries (No.s)	Amount (in Rs.)
1	Agriculture	2659	98169100	4477	168395496
2	Big Ruminants	8475	348050900	5993	254612859
3	Small Ruminants	1969	62157175	3519	126727900
4	Pretty Business	6430	252947542	3286	128298361
5	Skill Based	3067	122466783	2552	108544184
		22600	883791500	19827	786578800

Source: SERP

Andhra Pradesh Rural Inclusive Growth Project (APRIGP)

Implemented in the 161 most backward mandals of the state, APRIGP (World bank aided) will enable small and marginal farmers and Poorest of Poor (PoP) households to enhance agricultural incomes and secure increased access to human development services and social entitlements.

The Project Development Objective of the proposed project is 'to enable selected poor households to diversify and enhance sources of income and secure increased access to human development services and social entitlements'. The project is proposed to have five components viz. Value Chain Development through Producer Organizations, Human Development, Social Development, Safety Nets and Entitlements, Mission Support, ICT, TA and Partnerships and Project Implementation Support:

Expected Outcomes of the project:

- Enhancement of income of 2,50,000 targeted poor producers in the selected Mandals
- 2,50,000 targeted poor households adopt appropriate health, nutrition and sanitation behaviours for improved human development.

Currently, 2,82,062 farmers have been mobilized into 25,087 FPGs across 22 value chains. These FPGs federated in to 169 Farmer Producer Organizations (FPOs) at Mandal level. As on date 157 FPOs out of 169 FPOs, have been registered under APMACS Act, 1995. The revolving fund of Rs.22.36 Cr. is released to 22,368 FPGs with each receiving Rs.10,000. For initiating the business activity, Rs.35 Lakh was released to each FPOs as the seed fund. District wise details are given in Annexure 8.21

SERP through Rural Retail Chains component aims at strengthening the livelihoods of rural kirana stores and envisages to increase access to affordable, good quality nutrition and hygiene products to rural consumers by linking both the SHG (home-made) products and Fast-Moving Consumer Goods (FMCG) via the network of branded rural retail chain in 161 backward mandals across 13 districts over the project implementation period. Currently, 71 stores are registered with an aggregation of 4017 members.

Human Development: For improved nutrition behaviours and Hygiene practices among pregnant mothers and mothers of children below 2yrs, focussing on 1. Awareness generation and creation of demand for Nutrition, Water, Sanitation and Hygiene practices (WASH) and simultaneously focussing on availability through different initiatives in WASH and

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Dietary Diversification like 1. Promotion of Nutri gardens, 2. Promotion of Back yard poultry, 3. Promotion of Nutri and Hygiene enterprises, 4. Promotion of Gravity fed water supply systems in tribal areas.

The target is to establish 700 Mana seva locations (One Stop Shops) for providing access to entitlements, citizen services, financial services and grievance redressal mechanism through a single window.

Generic Medical stores:

SERP through Sanjivini Generic Medical Stores aims to provide quality branded generic medicines at affordable prices to all. 296 Generic Medical stores are established across 13 districts of Andhra Pradesh in rural, urban and tribal areas. Registered a cumulative sales turnover of Rs. 71.83 Crores.

Start-up Village Entrepreneurship Program (SVEP)

SVEP is a sub project of NRLM implemented on pilot basis with an objective to promote new enterprises and

also to strengthen the existing enterprises. Project is being implemented with the support of NRO/PIA as OMPLIS, Kurnool and Kudumbashree Kerala. The project is currently implemented in 41 Mandals spread across 8 constituencies, viz., Srikalahasthi & Kuppam of Chittoor District, Cheepurpalli & S.Kota of Vizianagaram District and Rajam & Narsannapeta of Srikakulam Districts. It is also implementing SVEP in two more constituencies viz., Tanuku of West Godavari District and Markapuram of Prakasham District with the support of Kudumbashree, Kerala.

Under SVEP, SHG members are provided with training and financial support for setting up the enterprise. Dedicated community staff provide regular handhold support to the entrepreneurs. So far, 4867 SHG entrepreneurs were trained and provided with financial support of Rs.12.84 Crore. Total target for Kuppam, Srikalahasthi, Cheepurupalli and Srungavarapukota

Total target for Tanuku, Markapuram, Rajam and Narsannapeta for 4 years (FY 2018-19 to 2021-22) is to promote 7548 enterprises in pilot blocks and total cost of project is Rs.21.75 Crore.



Poverty

During the past few decades, several poverty eradication programmes, subsidies to poor people, pension schemes targeting people below poverty line (BPL people) have been implemented to ensure at least minimum income to the poor. But the poor who lack of food, cloth and shelter, continue to exist.

Poverty alleviation continued to be the principal component of the state and central government initiatives. Over the decades, poverty has been interpreted and measured by experts in several methods. However, discussions centering around different dimensions of poverty remained the core welfare agenda in almost all the national and international forums. Several development paradigms, including the more recent Sustainable Development Goals (SDGs), emphasize ending poverty in all its dimensions.

With a population of more than 1.2 billion, India is the world's largest democracy. Over the past decade, the country's integration into the global economy has been accompanied by economic growth. India has now emerged as a global player.-----The World Bank

Concept and measurement of poverty

In a larger context, poverty is a state where a person is unable to maintain a minimum socially accepted level of standard of living. Although there is a diversified opinion on the definition and measurement of poverty, it is regarded as the root cause for low levels of health and educational outcomes, poor access to clean water and sanitation, inadequate physical security, lack of voice, and insufficient capacity and opportunity for mobility. The concept and measurement of poverty have undergone changes over decades. The official estimates of poverty for the period 1973-74 to 2011-12 are placed in Annexure 9.1.

The definition of poverty has undergone change over the decades and continued to evolve in a wider perspective. Several committees and expert groups have studied the poverty measurement methodologies in the past. The recent expert group under the Chairmanship of Prof. Suresh D. Tendulkar recommended using poverty lines which are substantially higher than earlier ones. As per the latest estimates of the Planning Commission released in July 2013 for the year 2011-12, the poverty ratios for rural and urban areas of united Andhra Pradesh were 10.96% and 5.81%

respectively and combined ratio stands at 9.20%. The corresponding figures for All India during the same period were 25.70%, 13.70% for rural and urban areas and the combined was 21.92%. Annexure 9.1 depicts the percentage of people below the poverty line in united Andhra Pradesh and at All India level for different time periods. However, there has been widespread criticism that government grossly underestimated the number of poor in the country through a choice of unrealistic poverty lines.

Andhra Pradesh – hub of innovative poverty alleviation programmes

Andhra Pradesh enjoys the legacy for introducing and implementing innovative poverty alleviation programmes. Apart from general economic policies, targeted poverty alleviation programmes for women's empowerment, providing housing and other infrastructure like pensions, land distribution and health insurance helping the poor in various dimensions. Increasing budgetary allocations, improving delivery systems in poverty alleviation programs and effective monitoring can help reduce poverty.

Categorization of states based on head count ratio

NITI Aayog has categorized the states into five classes based on their relative poverty head count positions in 2011-12 with scales of <10%, 10-20%, 20-30%, 30-40% and >40%.

Relative standing of Andhra Pradesh in poverty

Urban Poverty(<10% range)- Andhra Pradesh, Goa, Sikkim, Himachal Pradesh, J&K, Mizoram, Kerala, Tamil Nadu and Meghalaya.

Rural Poverty(10%-20%) – A.P, Haryana, Meghalaya, Rajasthan, J&K, Nagaland, Tripura, Tamil Nadu, Uttarakhand.

With better and more focused implementation of various livelihood and employment generating schemes in the recent past, poverty in Andhra Pradesh is expected to further decline both in respect of rural and urban areas.

Employment and Unemployment

The surveys of National Sample Survey (NSS) on the employment and unemployment are primary sources of

data for various indicators of labour force. These are used for planning, policy formulation, decision support and as input for further statistical and planning exercises by various government organizations, academicians, researchers and scholars. NSS surveys on employment and un-employment with large sample size of households have been conducted quinquennially since 27th round onwards. Nine such comprehensive surveys were conducted so far by NSSO, the latest being the one conducted during NSS 68th round (July 2011-June 2012).

Considering the importance of availability of labour force data at more frequent intervals, on the recommendations of the National statistical Committee(NSC), the Ministry of Statistics and Programme Implementation constituted a Standing Committee on Labour Force Statistics(SCLFS). The SCLFS recommended Schedule of Enquiry and Sampling Design for the **Periodic Labour Force Survey(PLFS)** to produce annual estimates of employment and unemployment characteristics for both rural and urban areas, along with quarterly estimates for urban areas. On

May,2019, the first Annual Report based on the data collected in PLFS during 2018-19 was released and it presents the estimates pertaining to various aspects of employment and unemployment at National as well as State level.

Labour Force

- Labour force or in other words, the “economically active population”, refers to the population which supplies or seeks to supply labour for production and, therefore includes both employed and unemployed persons.
- The Labour Force Participation Rate (LFPR) is defined as the number of persons in the labour force per 1000 persons.
- $LFPR = (\text{No. of employed persons} + \text{No. of unemployed persons}) / \text{Total population} \times 1000$

The estimates of Labour Force Participation Rate based on current daily status for all age groups are presented in the below Table:-1

Table - 1: The estimates of Labour Force Participation Rate based on current daily status for all age groups

Round (Year)	ANDHRA PRADESH			ALL INDIA		
	Male	Female	Persons	Male	Female	Persons
1	2	3	4	5	6	7
Rural						
55 th (1999-2000)	582	387	484	515	220	370
61 st (2004-05)	586	399	492	531	237	387
66 th (2009-10)	578	376	477	536	197	371
68 th (2011-12)	584	375	477	534	180	361
PLFS(2017-18)	613	360	484	544	161	357
Urban						
55 th (1999-2000)	517	158	341	528	123	335
61 st (2004-05)	567	210	388	561	150	364
66 th (2009-10)	545	170	363	550	129	350
68th (2011-12)	567	166	368	555	136	354
PLFS(2017-18)	566	244	402	567	153	364

Source: NSSO, GoI

WFPR /WPR:

- Persons who were engaged in any economic activity (i.e. employed) constitute the workforce. The WPR is the percentage of persons employed among the persons in the population. The WPR is based on the current daily status.

As per the current daily status, a person is considered working (employed) for the entire day if he/she had worked for 4 hours or more during a day.

$$WPR = (\text{No. of Employed Persons} / \text{Total Population}) \times 100$$

POVERTY, EMPLOYMENT AND UNEMPLOYMENT

Table - 2: Workforce Participation Rates per 1000 Population for all age groups on Current Weekly Status (CWS) in rural and urban areas for Andhra Pradesh and India

Round (Year)	ANDHRA PRADESH			INDIA		
	Male	Female	Persons	Male	Female	Persons
1	2	3	4	5	6	7
Rural						
55 th (1999-2000)	535	355	445	478	204	344
61 st (2004-05)	528	350	439	488	216	355
66 th (2009-10)	536	347	441	501	182	346
68 th (2011-12)	555	354	452	504	169	340
PLFS (2017-18)	562	330	444	496	148	326
Urban						
55 th (1999-2000)	480	144	315	490	111	309
61 st (2004-05)	523	192	358	519	133	334
66 th (2009-10)	522	154	343	522	117	329
68 th (2011-12)	536	150	345	528	125	335
PLFS(2017-18)	525	215	368	517	133	329

Source: NSSO, GoI

Key Findings:

- Labour Force Participation rates for both rural and urban areas in Andhra Pradesh are higher compared with all India levels. This is true both for males and females
- The LFPR for females in rural areas of Andhra Pradesh is more than double that of India. Active participation of women in NREGS programme in the state is one reason for this.
- During the period of 2017-18, the LFPR of all persons in rural & urban areas have shown an improvement in Andhra Pradesh as compared to 68th round of NSS. In case of India, while LFPR for all persons in rural areas has shown a decline, it has shown an improvement in urban areas.
- In Andhra Pradesh, as per the WFPR as per the PLFS for males, females and all persons is higher in rural areas than that for urban areas. However, in case of India, the WFPR for males and all persons in rural areas is lower as compared to urban areas.
- The overall WFPRs in Current Weekly Status (CWS) were about 32.7 % for all India level and 41.8% for Andhra Pradesh: In rural areas, it is 44.4 % for Andhra Pradesh and 32.6 % for India and 36.8% for Andhra Pradesh and 32.9% for India in urban areas.

Unemployment Rate:

Persons are considered unemployed, if he/she was not working, but was available for work for a relatively longer period.

- Unemployment Rate, is defined as the percentage of unemployed persons in the labour force. This gives the unutilised portion of the labour force.
- Unemployment Rate = No. of unemployed persons / (No. of Employed persons + No. of Unemployed persons) x100
- Details about the unemployment rates on usual (Principal and subsidiary) status of various rounds for Andhra Pradesh and All India are presented in the below Table-3.

Table -3: Unemployment rates for all age groups according to usual status (PS+SS)

Round (Year)	Andhra Pradesh		All India	
	Rural	Urban	Rural	Urban
1	2	3	4	5
50 th (1993-1994)	4	30	12	45
55 th (1999-2000)	8	39	15	47
61 st (2004-2005)	7	36	17	45
66 th (2009-2010)	12	31	16	34
68 th (2011-2012)	12	43	17	34

Source: NSSO, GoI

Table-4: Unemployment Rate (per 1000) as per PLFS(2017-18) according to usual status (ps+ss) for all age groups:

Round (Year)	ANDHRA PRADESH			INDIA		
	Male	Female	Persons	Male	Female	Persons
1	2	3	4	5	6	7
Rural	45	23	36	58	38	53
Urban	54	91	66	71	108	78
Rural+ Urban	48	40	45	62	57	61

Source: NSSO, GoI

Key Findings:

- The overall unemployment rate of 4.5% for Andhra Pradesh is lower than that of India (6.1%).
- The Unemployment rate of Andhra Pradesh is lower than that of India for rural and urban areas
- The Unemployment Rates in urban areas are higher than those in rural areas both for Andhra Pradesh and India. The female unemployment is a bigger concern in urban areas as it is almost three times higher than rural areas.
- In rural areas of Andhra Pradesh, the Unemployment rate increased from 1.2% to 3.6% (thrice) between 2011-12 & 2017-18. In urban areas, while the unemployment rate increased from 4.3% to 6.6%.

Employment and Training

The department of Employment and Training trains the unskilled into skilled trainees so as to meet the demand of the Industry. Once the trainees come out from the institute, the employment wing will provide employment assistance and as such both the wings have come under one umbrella.

Craftsmen Training scheme

The craftsmen training scheme was introduced to ensure a steady flow of skilled workers in various vocational trades to meet the manpower requirements in industries to raise quantitatively and qualitatively the industrial production by systematic training of workers and also to reduce unemployment among the educated youth by providing them employable training and to cultivate and nurture a

technical and industrial attitude in the minds of the younger generation.

There are 81 Govt. ITIs are functioning in the state. In all these ITIs the admitted trainees will be imparted technical training in various trades as per the norms and syllabus of Director General of Training, New Delhi. In 2018-19, Government have accorded administrative sanction for the establishment of two new Government ITIs at Jaggampeta, East Godavari and another one at Achanta, West Godavari Employment Registrations are given in Anenxure 9.2

Vocational Training Improvement Project- (VTIP)

This is a Centrally Sponsored Scheme implemented with the assistance of World Bank and introduced in a phased manner. 19 ITIs are covered in the fold of VTIP. Various development activities are taken up. All the 19 ITIs are modernized with Machinery & Equipment as per the latest syllabus and the demand of the Industrial market. The total project outlay is Rs.83.05 crore, of which Rs.77.99 crore was spent. However, the scheme has been closed by 30-09-2018.

Upgradation of existing ITI as Model ITI

The objective is to upgrade one existing ITI from the state as model ITI with total cost of Rs.10 crore in the ratio 70:30 by Central and State respectively. Government ITI Gajuwaka, Visakhapatnam has been selected under this scheme. Out of central share of Rs.700 Lakhs, GoI have released two instalments at the rate of Rs.175 lakhs each. The first instalment of Rs.175 Lakhs along with state share of Rs.75 Lakhs together i.e., Rs.250 Lakhs has been released and expended.

Public Private Partnership (PPP) Scheme

31 ITIs are covered under the scheme from all the districts of the state. Each Institute is funded with Rs.2.50 crore for incurring towards construction of Buildings, procurement of Machinery and Equipment and other infrastructural facilities. An amount of Rs.7750 Lakhs was released and Rs.7514 Lakhs is the expenditure incurred so far.

Skill Development Initiative Scheme under Modular Employable Skills (MES)

Government of India have introduced this scheme to

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provide vocational training to school leavers, existing workers, ITI graduates, etc. to improve their employability by optimally utilizing the infrastructure available in Govt., private institutions and the Industry. Existing skills of the persons can also be tested and certified under this scheme. The scheme is intended to build capacity in the area of development of competency standards, course curricula, learning material and assessment standards in the country. There are 68 sectors and 578 courses designed under MES. No training has been conducted for the Financial Year 2018-19 under SDI scheme.

Scheduled Caste Component

There are two Residential ITIs (RITIs), one at Macherla, Guntur Dist. and another at Kadapa, YSR Dist functioning with hostel facilities both boarding & lodging exclusively for SCs in the state. An amount of Rs. 53.46 Lakhs has been allocated in 2018-19 under the scheme.

Scheduled Tribes Component

There are 5 Residential ITIs at Visakhapatnam, Srikakulam, Vizianagaram and West Godavari Districts exclusively for the ST candidates. An amount of Rs. 30.60 Lakhs has been allocated in 2018-19 under TSP and also proposals were submitted to Government for establishment of two new Govt. Model RITI for STs, one at Achutapuramu, Visakhapatnam District and another one at Rampachodavaram, East Godavari District..

Left Wing Extremism (LWE)

“Skill Development in 47 identified districts affected in LWE”, is a Centrally Sponsored Scheme to create Skill Development Infrastructure in 47 districts closer to the people of LWE affected Districts. Funding pattern of central and state share is 75:25. The objective of the scheme is to establish one ITI in each of 47 districts and to run demand driven vocational training courses to meet the requirement of skilled manpower of various sectors of economy in and around these areas, to provide youth opportunities of decent livelihood. Government has issued orders to establish one new ITI at Visakhapatnam District from A. P. State with an estimated cost of Rs.7.35 crores. Government of India have released an amount of Rs. 412.92 lac as the 1st installment towards Central Share. The Govt. have been addressed for creation of posts. Soon after the creation of posts, the

functioning of the said new Govt. ITI will come into force for functioning.

Multi Sectoral Development Programme (MSDP)

The Multi Sectoral Development Programme (MSDP) was conceived as a special initiative of the follow up action on the Sachar Committee recommendations. It is a Centrally Sponsored Scheme (CSS). The programme aims at improving the socio-economic conditions of minorities and providing basic amenities to them for improving the quality of life of the people and reducing imbalances in the identified minority concentration areas. The projects to be taken up under MSDP would be related to the provision of better infrastructure for education, skill development, health, sanitation, pucca housing, roads, drinking water, besides schemes for creating income generating opportunities. Muslims, Sikhs, Christians, Buddhists and Zoroastrians (Parsis) have been notified as minority communities under Section 2(c) of the National Commission for Minorities Act,1992. Four Govt. ITIs for minorities have been sanctioned under this scheme in the State viz., Narasaraopet, Guntur Dist (funding pattern 100:0), Rayachoti, YSR Dist. (funding pattern 100:0), Adhoni, Kurnool Dist. (funding pattern 100:0) and Chagalamarri, Kurnool Dist. (Funding pattern 60:40). The GoI extends financial support only for construction of ITI along with 100 bedded hostel facilities.

Skill Development Corporation (APSSDC)

The objective of the Skill Development Corporation is Skilling the Youth for Employability. Andhra Pradesh State Skill Development Corporation was set up in October 2014 to impart skills for gainful employment. 8.85 lakh youth are trained and 91,437 got placements during 2018-19.

Certification Courses offered to Students in Degree Colleges are Tally, Zoho, Amazon Web services, NSE Academy, INSTAEMI. Course duration ranges from 80-240 Hrs. Google, Udacity, Amazon, Coursera, Udemy, Adobe, Autodesk. Course duration ranges from 180-240 Hrs for engineering colleges.

SIEMENS Project State of Art training centers with a capacity to impart industry relevant skills to 1 lakh students over 3 years has been launched by setting up 6 Centers of Excellence (CoE) and 34 Technical Skill

Development Institute (TSDI) in 40 identified engineering and polytechnic colleges. 79,164 students trained during 2018-19.

APSSDC in collaboration with French Multinational Dassault Systems has set up a virtual learning 3D-Experience Center on Hub and Spoke model in ANU, JNTU Anantapuramu, AU, SVU and 53 Engineering Colleges to train students in design, manufacturing and analysis in the domains of Aerospace, Automotive and Ship- Building. It is targeted to one lakh students in various courses of Data Sciences in 3 years' time starting from academic year 2018-19.

Unemployed Youth Trainings: To address the need of unemployed youth, placement linked training programs such as skilling for tribal youth (YTC), SCs, Minorities, PMKVY and CRDA are being implemented. Under this 99,591 were trained and 31,817 got placements during 2018-19.

ST-YTC Training Program: APSSDC is offering structured & pragmatic solution through 23 YTCs of TRICOR by Skilling and providing placement assistance to ST youth. In FY 2018-19, 8,181 have been trained and placed 3,306 under these YTCs.

SC Training Programs: Special training programmes have been planned for SC youth of the state which are placement linked with standardized certification process. During 2018-19, 11,110 were trained and 2,919 got placements.

Minority Training Programs: Special training programmes have been planned for Minority youth of the state which are placement linked with standardized certification process. During 2018-19, 3,728 have been trained and 1,088 have been placed.

CSR programs (3000 training capacity) Hindustan Petroleum Corporation Limited (HPCL) at Visakhapatnam and Gas Authority of India Limited (GAIL) at Kakinada are imparting Skill Development courses in Oil and Gas sector as part of their Corporate Social Responsibility (CSR) with a capacity to train 3,000 per annum at an estimated cost of 7 Crores per annum.

Upskilling – Recognition of Prior Learning (RPL)

The objective of the scheme is to provide recognition to the informal learning through work to get equivalent status along with formal levels of education. During 2018-19, 18,134 persons trained through Private Training Partners.

Job facilitations: 438 Job Melas have been conducted in 2018-19 and facilitating jobs for 38,850 unemployed youth.

Industry Connect : APSSDC is working closely with the various industries such as KIA Motors, Ashok Leyland, Asian paints, Jain Irrigation Systems, VEM Technologies; Apollo Tyres etc. to understand their manpower requirements and assist them by providing with the training and recruitment avenues.

Trainings are in collaboration with Industries like Raxa Security in Security Sector, CARE Institute in Health Care Sector, BMR Group in Food processing sector, Indian Telephone Industry in Telecom sector, UN Women in Domestic workers, OMNI Present Robot Tech in Drone Sector and are under process. Training has been commenced in collaboration with Singapore SG Ventures from Singapore in six courses with International standards which provides International Skills Certification from Singapore. In collaboration with International partners from Singapore, Germany, UK, Switzerland, Australia, Dubai etc., trainings are being imparted in various key sectors on par with International Standards.

Infrastructure:

Govt. of AP has collaborated with Centurion Skills University to establish a Skills University at Vizianagaram. The campus development is underway. A State of Art Skill Development Centre is coming up in Tirupati at a cost of Rs.30 crores.

Awards & Key Achievements:

The department has bagged awards for the Best State in Skill Development by ASSOCHAM for the last two consecutive years (2017 & 2018). Out of 15 members 10 are participated at the National level skill competition in 10 skills, 3 candidates have received Gold and Silver Medals. 2 candidates in RAC and Mobile Robotics skills are under training by NSDC to compete for the World Skills Competition in Kaizan, Russia.

Under University Innovation Fellow Programmes offered by Stanford University, 258 students from Andhra Pradesh have been selected out of 679 participants from 30 countries across the world. 30,000 candidates trained in Amazon Web Services which is the highest number across all states in India. 25,000 students have been covered in Entrepreneurship and Venture Development Programs offered by Northeastern University, Boston, USA. 32 ideas were converted into startup companies. 500 students trained in Gaming &

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Animation course offered by Kajaani University Finland and 18 games developed by trainees have been published in Google Play Store. 1,000 faculty were trained under Indo Universal Collaboration for Engineering Education (IUCEE) program with Purdue University, Indiana, USA.

Action Plan:

The department is planning to impart trainings on communication skills, soft skills besides technical skills and other non-technical skills to youth students for getting jobs. Impart trainings to youth farmers, aqua farmers, rural youth under PMKVY. So as to make their self-sustained entrepreneurs or to create ways and means to livelihood suiting to market needs.

Trainings to be conducted to Systematic skills to tribal youth from the remote areas in three phases Communication skills and soft skills, Multi skills for suitable jobs. To encourage unemployed youth to learn requisite/interested skills so as to make good livelihood. In consultation with Social Welfare department skills being imparted during curriculum in competitive exams so as to handhold them in getting government and other jobs. Also imparting trainings in Social Welfare hostels for their overall growth. The department target for the year 2019-20 is 12.25 lakh Job facilitations (Job fairs, Udyogaram etc.).

Society for Employment Generation and Enterprise Development in Andhra Pradesh

Government of Andhra Pradesh has established the Skill Development, Entrepreneurship and Innovation Department (SDE&I Department) to coordinate and synergize skilling efforts of all departments.

SEEDAP works with an objective to provide at least one employment opportunity in the organized sector to every poor rural house hold by conducting employment oriented, market driven skilling programs to rural unemployed youth aged between 18 – 35 years focusing predominantly on school and college dropouts. SEEDAP is implementing various Central and State Government skilling initiatives viz., DDU-GKY, Sagarmala, Project LIFE, SANKALP, Rurban and Andhra Yuva Sakthi.

1. Deen Dayaal Upadhyaya Grameen Kaushalya Yojana (DDUGKY):

The DDUGKY programme is designed in such a manner not only to provide high quality skill training opportunities to the youth from marginalised communities but also to establish large ecosystem that supports trained candidates secure a better future. The design of the DDU-GKY, is aimed at making rural youth a key partner to India's economic growth history. Under this programme 22056 were trained and 22418 persons got placements (placements included spillover from 2017-18)

2. Sagarmala – A joint initiative of Ministry of Rural Development and Ministry of Shipping to promote sustainable development of coastal communities through skill development & livelihood generation activities by conducting skilling programs to unemployed youth in Port & Maritime Sector. Training programmes are under process.

3. Project LIFE - The Livelihoods in Full Employment program is initiated with the financial assistance from Rural Development Department, with an objective to provide employment oriented skill development trainings to family members of MGNREGS job card holders with in the age group of 18 – 35 years so as to provide a sustainable wage employment opportunities in the organized sectors. Under this programme 1001 were trained and 529 got placements.

4. Rurban - The objective of the National Rurban Mission (NRuM) is to stimulate local economic development, enhance basic services, and create well planned Rurban clusters by Bridging the rural-urban divide - viz: economic, technological and those related to facilities and services, stimulating local economic development with emphasis on reduction of poverty and unemployment in rural areas, Spreading development in the region and attracting investment in rural areas. The skilling portion of the Rurban project is implemented by SEEDAP through the SEEDAP's skill eco system, by deploying experienced and qualified training partners to the Rurban clusters with a responsibility to impart skills required by the labour market to the unemployed youth.

5. Andhra Yuva Sakthi (AYS) – Under this initiative SEEDAP organizes skilling programs with a focus to address the needs of Primary Sector to improve economic conditions of the rural families involved.

6. Direct Placements:

Through SEEDAP's unique Direct Placement model, the skilled youth are connected with potential employers by organizing job fairs. The Pre and Post selection orientation plays a vital role to create a win – win situation between employer and the target youth.



Prioritized Perspective on Governance

The State Government formed in June 2019 after securing an unprecedented mandate in the recent general elections, has decided to go all out with NAVARATHNALU, an integrated scheme with nine cross cutting themes covering agriculture, health, education, housing, welfare sectors. The government is committed to uplift the downtrodden and the deprived with corrupt free and inclusive governance while dispensing the welfare measure to the eligible without any prejudices of caste, colour, creed or political affiliation. This will ensure removal of discretion while sanctioning the benefits, which will always give scope for corruption. Having noticed that amidst pockets of affluence, there are segments of population which have been neglected during last decade and more so in the recent past, deserve additional support.

The schemes pertaining to various departments that cater to different themes identified under Navaratnalu are being provided with necessary funds in the current year budget 2019-20. With an aim to saturate the basic needs, the government is keen to ensure that all the commitments outlined in the manifesto, which extend beyond those envisaged under Navaratnalu, are fulfilled in a definite timeframe in letter and spirit.

Currently, the progress under each important scheme implemented in the State is being monitored regularly through a web based platform. The priority of the new government is to effectively implement the related themes outlined in the manifesto in general and NAVARATNALU in particular and undertake robust periodic monitoring of the progress. Therefore, in order to evaluate, assess the progress and to know the impact of each scheme, a systematic monitoring and evaluation system at different levels is found vital.

Keeping in view of the priorities of the new government and for effective monitoring of the schemes and indicators of different departments including the fresh set of indicators that need to be identified, the departments have been requested to take adequate care in ensuring that the set of indicators so finalized are included in the Outcome Budget 2019-20.

In the present chapter, the Navaratnalu and other priorities, which the government wants to fulfil are presented theme-wise.

Farming & Drought Resilience

Making Agriculture Profitable



Navarathnalu

- Implementation of 'YSR Rythu Bharosa' scheme from 15th October 2019. Rs.12500/- per annum will be provided to farmers as input support.
- Government will pay the entire premium amount for their crop insurance and provide Interest Free loans.
- 9 hours free electricity for agriculture during day time and free bore-wells to farmers
- Electricity to Aqua farmers at Rs. 1.50 per unit.
- Price Stabilization Fund with Rs. 3,000 crores to guarantee MSP.
- Natural Calamities Relief Fund with Rs. 4,000 crores.
- Cold Storage/Go-downs/Food Processing Units on need basis in every Assembly Constituency.
- Revival of Cooperatives during first year and from 2nd year bonus of Rs. 4/litre to dairy farmers who supply milk to Cooperatives.
- Rs. 7 lakhs ex-gratia for suicidal/accidental deaths of farmers.
- Scrapping/ abolishing of Road tax & Toll tax for tractors.
- Constitution of AP Rythu Mission.

Other Priorities

Tenant Farmers

- Legal Amendments to ensure safeguard agriculture land owner's rights and crop related rights of tenant farmers conferred for 11 months.
- During these 11 months, all crop related concessions & benefits are provided to such tenant farmers.
- Extending all benefits of agriculture farmers under Navarathnalu i.e crop insurance, interest free loans, 9 hours free power etc to tenant farmers also.
- Investment Allowance of Rs.12,500 every year to SC, ST, BC & Minority tenant farmers.

Irrigation

- Completing Polavaram & Poa Subbiah Veligonda & all Irrigation projects on war footing
- Providing water for irrigation and drinking water purposes for all.
- Revival of all the lakes.

Welfare of The Poor & Under-Privileged

Making Growth More Inclusive

SC,ST & Minorities Welfare:



Navarathnalu

- Supporting all SC, ST & Minority women under YSR Cheyutha.
- Revamp existing Corporations to introduce transparency & accountability and provide support to eligible
- Provide Rs.75,000 to SC, ST & Minority women between 45 to 60 years in phases through respective corporations
- Provide entire outstanding loan directly to DWCRA/SHG groups in (4) installments.
- Zero Interest loans to DWCRA/SHG Groups.

Other Priorities

- Establish (3) Corporations for S.C.s one each for Mala, Madiga, Relli and other communities.
- Implementation of SC & ST Sub-Plan in a transparent manner.
- Drilling of Bores, free of cost to SC & ST community, in addition to land allocation.
- Providing wedding gift of Rs 1 lakh to every SC & ST bride under 'YSR Pelli Kanuka Scheme'.
- Free Power of (200) Units per month / in lieu Rs. 6,000 to every household in SC Colonies & ST Colonies/Tandas
- Forming separate District for ST community and establish a University, Medical & Engineering Colleges in the S.T. District.

- Classify every Tanda/Gudem with minimum (500) population, as a Panchayat.
- Establish Super Specialty Hospital in the jurisdiction of every ITDA.
- Grant of Pattas to S.T.s, carrying out agricultural activities in forest areas, as per Forest Rights Act, 2006.
- Ex-gratia of Rs. 5 Lakhs for accidental death of S.C.s & S.T.s, under 'YSR Bima'.
- Legal Amendment for facilitating 10% higher compensation to S.C.s & S.T.s, whose assigned lands are acquired than the amount paid for regular land
- Implementing Minority Sub Plan in a transparent manner.
- Conduct Resurvey of movable & immovable properties of Wakf Board & Muslim minorities. Safeguard them in a comprehensive and transparent manner. Digitalize immovable properties. Through a plan, ensure that they are used for betterment of people belonging to Muslim minority.
- Provide wedding gift of Rs 1 lakh to every eligible Muslim & Christian Minority bride under 'YSR Pelli Kanuka Scheme'.
- Provide financial assistance to Muslims who embark on Haj Pilgrimage.
- Allot house sites to Imams & pastors and construct houses for them.
- Provide Rs. 15,000 to every Mosque, as monthly honorariums for Imams and Mouzams.
- Ex-gratia of Rs.5 Lakhs for accidental death to persons belonging to Muslim & Christian community under 'YSR Bima'.
- Provide a minimum monthly honorarium of Rs.5,000 to every Pastor.
- Simplify the Marriage Registration Licensing mechanism for Pastors.
- Provide financial assistance to Christians who embark on Holy-land pilgrimage

Backward Classes Welfare



Navarathnalu

- Supporting all BC women under YSR Cheyutha.
- Revamp existing Corporations to introduce transparency & accountability and provide adequate support to eligible
- Provide Rs.75,000 to BC women between 45 to 60 years in phases through respective corporations from 2nd year
- Provide entire outstanding loan as on election date directly to DWCRA/SHG groups in (4) installments.
- Zero Interest loans to DWCRA/SHG Groups.

Other Priorities

- To incur an expenditure of Rs. 75,000 crores, in (5) year period @ Rs. 15,000 crores a year under BC Sub Plan.
- (50)% reservation for BC, SC, ST & Minorities in nominated posts to ensure political elevation of these communities.
- Establish separate Corporations, allocate required funds, under YSR Cheyuta, for all BC sub-communities and provide support for their development.
- Provide Rs. 50,000 to every eligible BC bride as wedding gift under 'YSR Pelli Kanuka Scheme'.
- Make a sincere effort to provide opportunities of being members of State Legislature, to people belonging to communities that are not adequately represented in the legislature.

- Take up Census of Backward Classes in the State, & resolve in State Legislature for providing reservation for B.C.s in the Legislature, and send the resolution to the GOI for their approval & action.
- Establish (a) BC Commission with a permanent mandate & legal sanction, (b) Expand scope of such Commission & ensure it functions transparently without political pressures.(c)Issues outside the scope of State Government & within the purview of the Central Government would be sent to them for resolution e.g. Caste Certificate, BC Group Change, MBC issues, etc.
- Ex-gratia of Rs. 5 Lakhs for accidental death of B.C.s under 'YSR Bima'.
- Allocation of Rs.10,000 crores to the Kapu Corporation @ Rs.2,000 crores per annum and will ensure that such amount is spent
- Increase financial assistance to Fishermen, from Rs.4,000 to Rs.10,000, during the Fishing Holiday period (15th April to 14th June)
- Provide Fresh Clearance for Fishermen Boats.
- Ensure Diesel Subsidy to Fishermen from the dedicated Outlets.
- Ex-gratia of Rs. 10 Lakhs for accidental death of Fishermen, under 'YSR Bima'.
- Financial Assistance of Rs.24,000 per annum to weavers who have own Maggam Handlooms.
- Restore ritual of people belonging to 'Sannidhi Gollalu' community - opening the main door of Lord Venkateshwara Temple, in Tirumala.
- Death Insurance coverage of Rs. 6,000 per sheep for sheep farmers
- Identification Cards to Footpath Hawkers/Small vendors and grant Rs. 10,000 loan at zero percent interest which can be availed at a point of time.
- Provide annual allowance of Rs.10,000 to Nayi Brahmins with shops, Barbers with Saloons, Dhobis with Laundry Shops, and Tailors with Tailor shops

Education

Inspiring The Next Generation Future Ready



Navarathnalu

- Rs.15,000/- per year will be given to every mother who sends her children to school under 'Amma Vodi' from January 26th 2020.
- Full Fee Reimbursement (RTF) to all poor SC,ST, BC, Differently Abled and Minority students
- Maintenance Fee of Rs.20,000/annum to all poor SC,ST, BC, Differently Abled and Minority students along with RTF

Other Priorities

- Substantially improve/transform the state of Schools in (2) years.
- Safeguarding importance of Telugu language by making Telugu as a compulsory subject.
- Improve the quality of Mid-day meals.
- Fill all vacant teacher posts to the extent of necessity.
- Improve the Quality of the education in Government institutions
- Introduce English Medium in all Schools.
- Align the courses in Engineering & Degree Colleges, with skill set required to secure jobs.
- Provide complete support to Technical Colleges, upgrade courses and improve the quality of such courses
- Improve the present educational system significantly, constitute a Regulatory Commission to control & regulate reduction of fees, improve the quality of education & the well-being of teachers in Private Schools & Colleges. The Commission will report directly to the Hon'ble CM.

Youth, Skill & Job Creation

Expanding The Opportunities



Navarathnalu

- Fight for Special Category Status till achieved to improve employment
- Provide jobs to (10) local youth through Village/Ward Secretariat by October 2nd 2019.
- Appoint Volunteers in every Village/Ward on an honorarium of Rs.5,000 per month @ one per 50 houses to provide services to them.
- Village/Ward Secretariat to resolve issues on Govt schemes within 72 hours.
- Filling up of around 2,30,000 vacant Government jobs. Release Recruitment notification calendar on January 1, every year
- Bill for (75) % reservation to local youth in industries in A.P.
- Holding Stakeholder consultations with district as a unit, to discuss skill set required for the relevant industry in the district.
- Establishing Skill Development Center in every district for providing free training to locals.
- Bill to ensure Government contracts given to unemployed youth with (50) % reservation to BC/ SC/ST/Minority youth.
- Provide subsidy to unemployed youth to contact relevant equipment.

Other Priorities

- In addition to the subsidies being given for the establishment of Industries, APIDC will be revived and through that will ensure that subsidies are provided to the un employed for their business ideas and needs.

Social Safety Nets

Assuring Livelihood & Sustenance



Navarathnalu

- Reducing the eligibility age for Old Age Pensions to 60 years from current 65 years.
- Increasing Old Age Pensions amount to Rs.3,000/month in a phased manner.
- Increase of Specially Abled Persons pension @ Rs.3,000/month.
- Pension of Rs.10,000 per month for serious chronic ailments, including Thalassemia & Kidney disease patients.
- Pucca houses to all poor, irrespective of Caste/Religion/Party.
- 25 lakh houses will be constructed in 5 years
- Housing Plots will be given to poor households; the houses will be constructed & registered in their name.
- Houses will be registered in name of female family member on day of handover.
- In case of necessity, Families can avail loans @ (4)% p.a. interest by mortgaging the house, using the house as collateral.
- Rs. 7 lakhs ex-gratia for suicidal/accidental deaths of farmers
- Ex-gratia of Rs. 5 Lakhs for accidental death of SC.s STs and BCs under 'YSR Bima'

Other Priorities

- Establish Corporations for all forward communities such as Kshatriya, Brahmin, Reddy, Kamma, etc.
- Allocate sufficient funds for these Corporations & be supportive of poor people belonging to those communities
- Establish a separate Corporation for Arya Vyshya Community.
- Confer right to manage the Arya Vyshya Dormitory, to people belonging to the Arya Vyshya Community.
- Removing existing Retirement Policy for priests.
- Provide (25) % higher pay than specified in March 2019 G.O., for priests working in 6 C temples.
- Provide Grant of Rs. 10,000 to Rs. 35,000 per month, based on size of Panchayat, for priest pay scale & other miscellaneous expenditure.
- Allocate House Sites to Priests & construct houses for them
- Waive and bear the entire debt burden of Rs 3 Lakhs of Urban Housing beneficiaries.
- Grant of Rs. 10,000 per annum for Owner-Driver Autorickshaws & Taxis towards cost of insurance/fitness/repairs etc.
- Insurance Coverage of Rs 1 lakh for death due to natural causes, between ages 18 and 60, under 'YSR Bima'
- Allocating Rs.1,150 crores immediate relief to over (13) lakh Agri-gold victims. Taking necessary steps to ensure to identify quick meaningful solution.

Health & Wellbeing

The 108 Beep Sound Is Back For The Needy



Navarathnalu

- All persons with annual income below Rs.5 Lakhs covered by providing Universal Health Cards.
- All cases with medical expenses exceeding Rs.1,000 are covered under YSR Aarogyasri .
- Complete cost of treatment covered.
- Coverage applicable for all hospitals, irrespective of location (Hyderabad, Bengaluru, Chennai etc.).
- All types of ailments & surgeries covered.
- Providing financial assistance for post-surgery/ ailment recovery period.
- Monthly Pension of Rs.10,000 for patients suffering with serious chronic ailments, including Thalassemia & Kidney disease
- Revamping Government Hospitals to upgrade on par with Corporate hospitals in 2 years.
- Increase the strength of doctors in Government Hospitals as per need/ requirement.

Other Priorities

- Prohibition of Liquor will be implemented in (3) phases & availability of liquor confined to 5-star hotels

Women

The Architects Of Happy Families



Navarathnalu

- Supporting all BC, SC, ST & Minority women under YSR Cheyutha
- Provide Rs.75,000 to BC, SC, ST & Minority women between 45 to 60 years in phases through respective corporations
- Providing total outstanding loan directly to DWCRA/SHG groups in (4) installments.
- Zero Interest loans to DWCRA/SHG Groups

Other Priorities

- Providing wedding gift of Rs 1 lakh to every eligible SC & ST, Muslim & Christian Minority brides and Rs. 50,000 to every eligible BC bride under 'YSR Pelli Kanuka Scheme'.
- Every poor mother to get Rs.15,000/- per year by sending her children to school
- Registration of Government sanctioned pucca houses to poor in name of female family member on day of benevolent handover

Governance

Reforms With Human Face



Other Priorities

- Ensure Good Governance that does not discriminate on basis of Caste, Creed, Religion, etc.
- Conduct Comprehensive Resurvey of all land holdings in the State & confer Permanent titles on the land owners.
- Classify every Parliament Constituency as a District.
- Classify Capital City as Free Zone & ensure employment opportunities therein are available for everyone.
- Sincerely work towards decentralization & ensure equal development in the (3) regions of the State
- Establish Village/Ward Secretariats, work towards development of villages and wards & ensure delivery of Government schemes at the door step of every household by volunteers of Village/Ward Secretariat in a corruption free manner
- Remove CPS system & revive the Old Pension System.
- Sanction (27) % IR to the Government Employees & implement the PRC recommendations, without delay.
- Merge APSRTC in the Government of Andhra Pradesh.
- Regularize as many such employees as possible, duly considering eligibility & experience of contract employees in various Departments.
- Provide justice to contract employees, based on principle of 'Equal pay for Equal work'.
- Establish Pensioners' cell in every district to resolve pensioners' problems.
- Provide a weekly off to Police personnel.
- Establish separate Cell in each Collectorate to redress grievances of Military personnel & ex-Military personnel to ensure they are able to avail the benefits provided to them.
- Create a friendly environment for Government employees to discharge their duties effectively without any fear, harassment & stress.
- Provide Anganwadi workers, Asha workers and Home Guards additional monthly pay of Rs. 1,000 over & above their counterpart in Telangana State
- Provide Rs. 10,000 per month to VOAs, Sangamitras & Animators
- Address concerns relating to pay and other aspects of VRO and VRA.
- Allot house sites to those Government Employees who don't own house sites in the area of their work.

ANNEXURES - MACRO ECONOMIC AGGREGATES

A.2.1: AP GVA/GSDP Estimates at Current Prices from 2011-12 to 2018-19(AE) in New Base 2011-12

(Rs.in crores)

Sl No.	INDUSTRY	GVA/GSDP at Current prices							
		2011-12	2012-13	2013-14	2014-15	2015-16 TRE.	2016-17 SRE	2017-18 FRE	2018-19 AE
1	2	3	4	5	6	7	8	9	10
1	Agriculture, Live Stock, Forestry & Fishing								
1.1	Agriculture	52041	61230	71147	78898	84070	96486	112849	116228
	a)Agriculture	29782	36743	39269	40540	39380	38072	41413	38264
	b)Horticulture	22259	24488	31878	38358	44690	58415	71436	77963
1.2	Live stock	27588	33584	36430	43127	53474	66440	79116	92768
1.3	Forestry & Logging	2503	2530	2805	3464	3538	4754	5244	5702
1.4	Fishing & Aquaculture	11877	14519	18573	22707	32085	42190	58721	72962
	AGRICULTURE SECTOR	94008	111864	128956	148196	173167	209870	255931	287659
2	Mining & Quarrying	14162	14590	14192	12914	17023	19356	24501	30648
3	Manufacturing	50706	42377	42423	54532	58840	65544	72305	83217
4	Electricity, Gas, Water Supply	10765	7130	10141	11513	12835	16310	19863	23447
5	Construction	37026	37590	40651	45324	45603	47657	52584	62575
	INDUSTRY SECTOR	112659	101687	107408	124282	134301	148868	169253	199887
6	Trade, Hotel & Restaurants	26736	31792	37849	42018	47468	52061	58832	69138
7	Transport, Storage & Communications								
7.1	Railways	2643	3037	3345	4331	4387	5126	5557	6299
7.2	Transport by Other means & Storage	24470	28536	32353	35050	41431	44828	50247	57987
7.3	Communications	5402	6214	7960	8991	10725	11375	11952	14064
8	Financing, Insurance, Real estate & Professional Services								
8.1	Banking & Ins.	14256	15843	17105	19047	20599	21476	24292	28679
8.2	Real est., Ownership of Dwellings	28338	34341	38973	44652	49612	56234	64742	74631
9	Community, Social & Personal Services								
9.1	Public Admn.	13938	15524	17390	19439	23505	28368	32008	36757
9.2	Other Services	27304	30639	35383	41703	51225	59389	68774	79942
	SERVICES SECTOR	143086	165925	190359	215230	248953	278857	316404	367498
	GVA	349753	379477	426722	487709	556421	637595	741588	855045
	PRODUCT TAXES	42439	46565	52635	54183	62167	75744	85319	98372
	PRODUCT SUBSIDIES	12790	14638	15085	16916	14359	15831	17359	20015
	GSDP	379402	411404	464272	524976	604229	697508	809548	933402
	NSDP	340000	370196	413164	470934	544827	631249	734659	847056
	POPULATION('000)	49275	49566	49857	50151	50446	50743	51041	51642
	PER CAPITA IN Rs.	69000	74688	82870	93903	108002	124401	143935	164025

Source: Directorate of Economics and Statistics

ANNEXURES - MACRO ECONOMIC AGGREGATES

A.2.2: AP Sector-wise Contribution of GVA at Current Prices from 2011-12 to 2018-19(AE) in New Base 2011-12

Sl No.	INDUSTRY	% Contribution							
		2011-12	2012-13	2013-14	2014-15	2015-16 SRE.	2016-17 FRE	2017-18 AE	2018-19 AE
1	2	3	4	5	6	7	8	9	10
1	Agriculture, Live Stock, Forestry & Fishing								
1.1	Agriculture	14.88	16.14	16.67	16.18	15.11	15.13	15.22	13.59
	a)Agriculture	8.52	9.68	9.20	8.31	7.08	5.97	5.58	4.48
	b)Horticulture	6.36	6.45	7.47	7.87	8.03	9.16	9.63	9.12
1.2	Live stock	7.89	8.85	8.54	8.84	9.61	10.42	10.67	10.85
1.3	Forestry & Logging	0.72	0.67	0.66	0.71	0.64	0.75	0.71	0.67
1.4	Fishing & Aquaculture	3.40	3.83	4.35	4.66	5.77	6.62	7.92	8.53
	AGRICULTURE SECTOR	26.88	29.48	30.22	30.39	31.12	32.92	34.51	33.64
2	Mining & Quarrying	4.05	3.84	3.33	2.65	3.06	3.04	3.30	3.58
3	Manufacturing	14.50	11.17	9.94	11.18	10.57	10.28	9.75	9.73
4	Electricity, Gas, Water Supply	3.08	1.88	2.38	2.36	2.31	2.56	2.68	2.74
5	Construction	10.59	9.91	9.53	9.29	8.20	7.47	7.09	7.32
	INDUSTRY SECTOR	32.21	26.80	25.17	25.48	24.14	23.35	22.82	23.38
6	Trade, Hotel & Restaurants	7.64	8.38	8.87	8.62	8.53	8.17	7.93	8.09
7	Transport, Storage & Communications								
7.1	Railways	0.76	0.80	0.78	0.89	0.79	0.80	0.75	0.74
7.2	Transport by Other means & Storage	7.00	7.52	7.58	7.19	7.45	7.03	6.78	6.78
7.3	Communications	1.54	1.64	1.87	1.84	1.93	1.78	1.61	1.64
8	Financing, Insurance, Real estate & Professional Services								
8.1	Banking & Ins.	4.08	4.17	4.01	3.91	3.70	3.37	3.28	3.35
8.2	Real est., Ownership of Dwellings	8.10	9.05	9.13	9.16	8.92	8.82	8.73	8.73
9	Community, Social & Personal Services								
9.1	Public Admn.	3.98	4.09	4.08	3.99	4.22	4.45	4.32	4.30
9.2	Other Services	7.81	8.07	8.29	8.55	9.21	9.31	9.27	9.35
	SERVICES SECTOR	40.91	43.72	44.61	44.13	44.74	43.74	42.67	42.98
	GVA	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Directorate of Economics and Statistics

ANNEXURES - MACRO ECONOMIC AGGREGATES

A.2.3: AP Sector-wise Growth Rates of GVA at Current Prices from 2012-13 to 2018-19(AE) in New Base 2011-12

Sl No.	INDUSTRY	% Change over previous year						
		2012-13	2013-14	2014-15	2015-16 TRE.	2016-17 SRE	2017-18 FRE	2018-19 AE
1	2	3	4	5	6	7	8	9
1	Agriculture, Live Stock, Forestry & Fishing							
1.1	Agriculture	17.66	16.20	10.89	6.55	14.77	16.96	2.99
	a)Agriculture	23.37	6.88	3.24	-2.86	-3.32	8.78	-7.60
	b)Horticulture	10.01	30.18	20.33	16.51	30.71	22.29	9.14
1.2	Live stock	21.74	8.47	18.38	23.99	24.25	19.08	17.26
1.3	Forestry & Logging	1.08	10.85	23.51	2.13	34.36	10.31	8.73
1.4	Fishing & Aquaculture	22.25	27.92	22.25	41.30	31.49	39.18	24.25
	AGRICULTURE SECTOR	18.99	15.28	14.92	16.85	21.20	21.95	12.40
2	Mining & Quarrying	3.02	-2.73	-9.01	31.82	13.70	26.58	25.09
3	Manufacturing	-16.43	0.11	28.54	7.90	11.39	10.31	15.09
4	Electricity, Gas, Water Supply	-33.77	42.23	13.52	11.49	27.08	21.78	18.05
5	Construction	1.52	8.14	11.49	0.61	4.51	10.34	19.00
	INDUSTRY SECTOR	-9.74	5.63	15.71	8.06	10.85	13.69	18.10
6	Trade, Hotel & Restaurants	18.91	19.05	11.01	12.97	9.68	13.01	17.52
7	Transport, Storage & Communications							
7.1	Railways	14.92	10.13	29.49	1.30	16.85	8.40	13.35
7.2	Transport by Other means & Storage	16.61	13.38	8.33	18.21	8.20	12.09	15.40
7.3	Communications	15.04	28.10	12.94	19.29	6.06	5.07	17.67
8	Financing, Insurance, Real estate & Professional Services							
8.1	Banking & Ins.	11.13	7.96	11.35	8.15	4.26	13.11	18.06
8.2	Real est., Ownership of Dwellings	21.18	13.49	14.57	11.11	13.35	15.13	15.27
9	Community, Social & Personal Services							
9.1	Public Admn.	11.38	12.02	11.78	20.92	20.69	12.83	14.84
9.2	Other Services	12.22	15.48	17.86	22.83	15.94	15.80	16.24
	SERVICES SECTOR	15.96	14.73	13.07	15.67	12.01	13.46	16.15
	GVA	8.50	12.45	14.29	14.09	14.59	16.31	15.30
	PRODUCT TAXES	9.72	13.04	2.94	14.74	21.84	12.64	15.30
	PRODUCT SUBSIDIES	14.45	3.05	12.14	-15.12	10.25	9.65	15.30
	GSDP	8.43	12.85	13.07	15.10	15.44	16.06	15.30
	NSDP	8.88	11.61	13.98	15.69	15.86	16.38	15.30
	PER CAPITA IN Rs.	8.24	10.96	13.31	15.01	15.18	15.70	13.96

Source: Directorate of Economics and Statistics

ANNEXURES - MACRO ECONOMIC AGGREGATES

A.2.4: AP GVA/GSDP Estimates at Constant(2011-12) Prices from 2011-12 to 2018-19(AE) in New Base 2011-12

(Rs. in crores)

Sl No.	INDUSTRY	GVA/GSDP at Constant prices							
		2011-12	2012-13	2013-14	2014-15	2015-16 TRE	2016-17 SRE	2017-18 FRE	2018-19 AE
1	2	3	4	5	6	7	8	9	10
1	Agriculture, Live Stock, Forestry & Fishing								
1.1	Agriculture Proper	52041	52569	60624	60983	58460	64146	72520	75903
	a) Agriculture	29782	30479	34194	34075	29892	27691	31930	28792
	b) Horticulture	22259	22090	26429	26908	28568	36455	40590	47111
	Live stock	27588	29247	29721	31185	36219	41916	46916	53156
1.2	Forestry & Logging	2503	2469	2491	2412	2361	2335	2559	2649
1.3	Fishing & Aquaculture	11877	13546	15516	17620	24479	30999	41452	49366
	Agrl. Sector	94008	97831	108353	112200	121518	139395	163447	181074
2	Mining & Quarrying	14162	14283	13880	12798	17393	20636	22478	24802
3	Manufacturing	50706	40188	38575	48828	54969	60668	65597	72523
4	Electy., Gas, Water Supply	10765	7345	9815	10251	11546	14771	17108	18942
5	Construction	37026	35571	37076	39963	39947	41453	44866	49149
	Industries Sector	112659	97387	99345	111842	123855	137528	150049	165416
6	Trade, Hotel & Restaurants	26736	29554	33149	36789	43218	46575	51171	57507
7	Transport, Storage & Communications								
7.1	Railways	2643	2897	3105	3781	3732	4361	4727	5124
7.2	Transport by Other means & Storage	24470	26720	28378	29968	34410	35707	38392	42369
7.3	Communications	5402	5845	6988	7692	8949	10224	11474	12911
8	Financing, Insurance, Real estate & Professional Services								
8.1	Banking & Ins.	14256	15635	16515	18063	19081	19956	21139	23866
8.2	Real est., Ownership of Dwellings	28338	32426	34130	37025	38969	41899	46340	51083
9	Community, Social & Personal Services								
9.1	Public Admn.	13938	14468	15318	16371	19004	21925	23811	26149
9.2	Other Services	27304	28252	30303	33281	37716	40413	44346	49166
	Services Sector	143086	155796	167887	182970	205080	221059	241399	268176
	GVA	349753	351014	375585	407011	450453	497982	554896	614665
	PRODUCT TAXES	42439	43155	44807	51629	59778	64850	70886	79485
	PRODUCT SUBSIDIES	12790	13540	13277	14076	11624	12365	12989	13818
	GSDP	379402	380629	407114	444564	498607	550467	612793	680332
	NSDP	339996	341335	360239	397064	446997	492644	545445	605561
	POPULATION('000)	49275	49566	49857	50151	50446	50743	51041	51642
	PER CAPITA IN Rs.	69000	68865	72254	79174	88609	97086	106864	117261

Source: Directorate of Economics and Statistics

ANNEXURES - MACRO ECONOMIC AGGREGATES

A.2.5: AP Sector-wise Growth Rates of GVA Estimates at Constant(2011-12) Prices from 2012-13 to 2018-19(AE) in New Base 2011-12

Sl No.	INDUSTRY	% Change over previous year						
		2012-13	2013-14	2014-15	2015-16 TRE	2016-17 SRE	2017-18 FRE	2018-19 AE
1	2	3	4	5	6	7	8	9
1	Agriculture, Live Stock, Forestry & Fishing							
1.1	Agriculture Proper	1.02	15.32	0.59	-4.14	9.73	13.06	4.66
	a) Agriculture	2.34	12.19	-0.35	-12.28	-7.36	15.31	-9.83
	b) Horticulture	-0.76	19.64	1.81	6.17	27.61	11.34	16.07
	Live stock	6.01	1.62	4.92	16.14	15.73	11.93	13.30
1.2	Forestry & Logging	-1.36	0.90	-3.19	-2.12	-1.09	9.60	3.52
1.3	Fishing & Aquaculture	14.06	14.55	13.56	38.93	26.63	33.72	19.09
	Agri. Sector	4.07	10.75	3.55	8.31	14.71	17.25	10.78
2	Mining & Quarrying	0.85	-2.82	-7.79	35.90	18.65	8.93	10.34
3	Manufacturing	-20.74	-4.02	26.58	12.58	10.37	8.12	10.56
4	Electy., Gas, Water Supply	-31.77	33.62	4.45	12.63	27.93	15.83	10.72
5	Construction	-3.93	4.23	7.79	-0.04	3.77	8.23	9.55
	Industries Sector	-13.56	2.01	12.58	10.74	11.04	9.10	10.24
6	Trade, Hotel & Restaurants	10.54	12.17	10.98	17.48	7.77	9.87	12.38
7	Transport, Storage & Communications							
7.1	Railways	9.62	7.19	21.77	-1.30	16.85	8.40	8.40
7.2	Transport by Other means & Storage	9.19	6.21	5.60	14.82	3.77	7.52	10.36
7.3	Communications	8.19	19.57	10.08	16.33	14.25	12.22	12.53
8	Financing, Insurance, Real estate & Professional Services							
8.1	Banking & Ins.	9.67	5.63	9.37	5.64	4.58	5.93	12.90
8.2	Real est., Ownership of Dwellings	14.43	5.25	8.48	5.25	7.52	10.60	10.24
9	Community, Social & Personal Services							
9.1	Public Admn.	3.81	5.88	6.87	16.08	15.37	8.60	9.82
9.2	Other Services	3.47	7.26	9.83	13.33	7.15	9.73	10.87
	Services Sector	8.88	7.76	8.98	12.08	7.79	9.20	11.09
	GVA	0.36	7.00	8.37	10.67	10.55	11.43	10.77
	PRODUCT TAXES	1.69	3.83	15.23	15.78	8.48	9.31	12.13
	PRODUCT SUBSIDIES	5.86	-1.94	6.02	-17.42	6.37	5.05	6.38
	GSDP	0.32	6.96	9.20	12.16	10.40	11.32	11.02
	NSDP	0.39	5.54	10.22	12.58	10.21	10.72	11.02
	PER CAPITA IN Rs.	-0.20	4.92	9.58	11.92	9.57	10.07	9.73

Source: Directorate of Economics and Statistics

ANNEXURES - MACRO ECONOMIC AGGREGATES

A.2.6: All India GVA/GDP Estimates at Current Prices from 2011-12 to 2018-19(AE) in New Base 2011-12

(Rs. in Crore)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16 (TRE)	2016-17 (SRE)	2017-18 (FRE)	2018-19 (AE)
1. Agriculture,forestry & fishing								
1.1 Crops	982151	1088814	1248776	1292874	1327992	1476268	1546808	1532423
1.2 Livestock	327334	368823	422733	510411	582410	672829	758417	837983
1.3 forestry & logging	124436	137558	156674	173760	184411	192840	189348	186205
1.4 fishing and aquaculture	68027	79911	98190	116567	132720	154421	175573	199382
Agriculture Sector	1501948	1675106	1926373	2093612	2227533	2496358	2670146	2755992
2. Mining & quarrying	261035	285842	295794	308476	294011	321872	351058	418517
3. Manufacturing	1409986	1572837	1713452	1878369	2146189	2335068	2542089	2856313
4. Electricity, gas, water supply & other utility services	186668	215350	260155	282258	334965	353468	423089	488633
5. Construction	777335	849365	921470	979086	991084	1082466	1213628	1382558
Industry Sector	2635024	2923394	3190871	3448189	3766249	4092874	4529864	5146020
6. Trade, repair, hotels and restaurants	883582	1054533	1184560	1320833	1433969	1608916	1833720	2076945
6.1 Trade & repair services	793681	954683	1078421	1206474	1307323	1468581	1679832	1905052
6.2 hotels & restaurants	89901	99850	106140	114359	126646	140335	153888	171893
7. Transport, storage, communication & services related to broadcasting	529534	609453	689906	786763	860544	929352	989543	1078479
7.1 Railways	61150	72296	78724	92459	100451	106835	116024	126930
7.2 Road transport	262442	300652	338306	370364	399902	434494	473611	514768
7.3 Water transport	6910	7190	6476	7590	7298	9202	8906	9590
7.4 Air transport	4393	8128	6853	11820	20344	22229	23048	27015
7.5 Services incidental to transport	63602	72054	75719	91681	88246	102489	117416	127807
7.6 Storage	5108	6165	6026	6407	7021	7377	8377	9624
7.7 Communication & services related to broadcasting	125930	142969	177804	206442	237282	246726	242161	262745
8. Financial services	480226	536819	599341	661411	726286	750224	841977	944921
9. Real estate, ownership of dwelling & professional services	1050651	1239813	1470167	1701935	1899852	2161677	2410813	2721808
10. Public administration & defence	491155	546231	601912	676818	731578	826962	955205	1073650
11. Other services	534827	617343	700023	814718	928489	1069555	1251446	1443339
Services Sector	3969975	4604192	5245909	5962478	6580718	7346686	8282704	9339142
GVA at basic prices	8106947	9202692	10363153	11504279	12574500	13935918	15482714	17241155
GROSS DOMESTIC PRODUCT	8736330	9944013	11233522	12467959	13771876	15362387	17095004	19053968
POPULATION(In million)	1220	1235	1251	1267	1283	1299	1316	1332
PER CAPITA NNI (Rupees)	63462	70983	79118	86647	94797	104659	114958	126699

Source: Directorate of Economics and Statistics

ANNEXURES - MACRO ECONOMIC AGGREGATES

A.2.7: All India Sector-wise Contribution of GVA at Current Prices from 2011-12 to 2018-19(AE) in New Base 2011-12

(% of contribution)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16 (TRE)	2016-17 (SRE)	2017-18 (FRE)	2018-19 (AE)
1. Agriculture, forestry & fishing								
1.1 Crops	12.1	13.4	15.4	15.9	16.4	18.2	19.1	18.9
1.2 Livestock	4.0	4.0	4.1	4.4	4.6	4.8	4.9	4.9
1.3 forestry & logging	1.5	1.5	1.5	1.5	1.5	1.4	1.2	1.1
1.4 fishing and aquaculture	0.8	0.9	0.9	1.0	1.1	1.1	1.1	1.2
Agriculture Sector	18.5	18.2	18.6	18.2	17.7	17.9	17.2	16.0
2. Mining & quarrying	3.2	3.1	2.9	2.7	2.3	2.3	2.3	2.4
3. Manufacturing	17.4	17.1	16.5	16.3	17.1	16.8	16.4	16.6
4. Electricity, gas, water supply & other utility services	2.3	2.3	2.5	2.5	2.7	2.5	2.7	2.8
5. Construction	9.6	9.2	8.9	8.5	7.9	7.8	7.8	8.0
Industry Sector	32.5	31.8	30.8	30.0	30.0	29.4	29.3	29.8
6. Trade, repair, hotels and restaurants	10.9	11.5	11.4	11.5	11.4	11.5	11.8	12.0
6.1 Trade & repair services	9.8	10.4	10.4	10.5	10.4	10.5	10.8	11.0
6.2 Hotels & Restaurants	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0
7. Transport, storage, communication & services related to broadcasting	6.5	6.6	6.7	6.8	6.8	6.7	6.4	6.3
7.1 Railways	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.7
7.2 Road transport	3.2	3.3	3.3	3.2	3.2	3.1	3.1	3.0
7.3 Water transport	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
7.4 Air transport	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2
7.5 Services incidental to transport	0.8	0.8	0.7	0.8	0.7	0.7	0.8	0.7
7.6 Storage	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
7.7 Communication & services related to broadcasting	1.6	1.6	1.7	1.8	1.9	1.8	1.6	1.5
8. Financial services	5.9	5.8	5.8	5.7	5.8	5.4	5.4	5.5
9. Real estate, ownership of dwelling & professional services	13.0	13.5	14.2	14.8	15.1	15.5	15.6	15.8
10. Public administration & defence	6.1	5.9	5.8	5.9	5.8	5.9	6.2	6.2
11. Other services	6.6	6.7	6.8	7.1	7.4	7.7	8.1	8.4
Services Sector	49.0	50.0	50.6	51.8	52.3	52.7	53.5	54.2
GVA at basic prices	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Directorate of Economics and Statistics

ANNEXURES - MACRO ECONOMIC AGGREGATES

A.2.8: All India Sector-wise Growth Rates of GVA at Current Prices from 2012-13 to 2018-19(AE) in New Base 2011-12

(Percentage)

Industry	2012-13	2013-14	2014-15	2015-16 (TRE)	2016-17 (SRE)	2017-18 (FRE)	2018-19 (AE)
1. Agriculture, forestry & fishing							
1.1 Crops	10.9	14.7	3.5	2.7	11.2	4.8	-0.9
1.2 Livestock	12.7	14.6	20.7	14.1	15.5	12.7	10.5
1.3 forestry & logging	10.5	13.9	10.9	6.1	4.6	-1.8	-1.7
1.4 fishing and aquaculture	17.5	22.9	18.7	13.9	16.4	13.7	13.6
Agriculture Sector	11.5	15.0	8.7	6.4	12.1	7.0	3.2
2. Mining & quarrying	9.5	3.5	4.3	-4.7	9.5	9.1	19.2
3. Manufacturing	11.5	8.9	9.6	14.3	8.8	8.9	12.4
4. Electricity, gas, water supply & other utility services	15.4	20.8	8.5	18.7	5.5	19.7	15.5
5. Construction	9.3	8.5	6.3	1.2	9.2	12.1	13.9
Industry Sector	10.9	9.1	8.1	9.2	8.7	10.7	13.6
6. Trade, repair, hotels and restaurants	19.3	12.3	11.5	8.6	12.2	14.0	13.3
6.1 Trade & repair services	20.3	13.0	11.9	8.4	12.3	14.4	13.4
6.2 hotels & restaurants	11.1	6.3	7.7	10.7	10.8	9.7	11.7
7. Transport, storage, communication & services related to broadcasting	15.1	13.2	14.0	9.4	8.0	6.5	9.0
7.1 Railways	18.2	8.9	17.4	8.6	6.4	8.6	9.4
7.2 Road transport	14.6	12.5	9.5	8.0	8.7	9.0	8.7
7.3 Water transport	4.1	-9.9	17.2	-3.8	26.1	-3.2	7.7
7.4 Air transport	85.0	-15.7	72.5	72.1	9.3	3.7	17.2
7.5 Services incidental to transport	13.3	5.1	21.1	-3.7	16.1	14.6	8.9
7.6 Storage	20.7	-2.3	6.3	9.6	5.1	13.6	14.9
7.7 Communication & services related to broadcasting	13.5	24.4	16.1	14.9	4.0	-1.9	8.5
8. Financial services	11.8	11.6	10.4	9.8	3.3	12.2	12.2
9. Real estate, ownership of dwelling & professional services	18.0	18.6	15.8	11.6	13.8	11.5	12.9
10. Public administration & defence	11.2	10.2	12.4	8.1	13.0	15.5	12.4
11. Other services	15.4	13.4	16.4	14.0	15.2	17.0	15.3
Services Sector	16.0	13.9	13.7	10.4	11.6	12.7	12.8
GVA at basic prices	13.5	12.6	11.0	9.3	10.8	11.1	11.4
GROSS DOMESTIC PRODUCT	13.8	13.0	11.0	10.5	11.5	11.3	11.5

Source: Directorate of Economics and Statistics

ANNEXURES - MACRO ECONOMIC AGGREGATES

A.2.9: All India GVA/GDP Estimates at Constant(2011-12) Prices from 2011-12 to 2018-19(AE) in New Base 2011-12

(Rs. in Crore)

Industry	2011-12	2012-13	2013-14	2014-15	2015-16 (TRE)	2016-17 (SRE)	2017-18 (FRE)	2018-19 (AE)
1. Agriculture, forestry & fishing								
1.1 Crops	982151	983809	1037060	998425	969344	1018168	1056560	1050643
1.2 Livestock	327334	344375	363558	390449	419637	461171	493676	537356
1.3 forestry & logging	124436	124743	132093	134609	136960	138905	141785	144195
1.4 fishing and aquaculture	68027	71362	76487	82232	90205	99224	111018	120385
Agriculture Sector	1501948	1524289	1609198	1605715	1616146	1717468	1803039	1852580
2. Mining & quarrying	261035	262609	263107	288685	317974	348089	365677	370237
3. Manufacturing	1409986	1486873	1560709	1683938	1903850	2055043	2176923	2353618
4. Electricity, gas, water supply & other utility services	186668	191635	199601	214047	224158	246491	267720	289194
5. Construction	777335	780050	800771	835229	865335	917754	969194	1055917
Industry Sector	2635024	2721167	2824188	3021899	3311317	3567377	3779514	4068966
6. Trade, repair, hotels and restaurants	883582	981620	1034506	1135841	1261426	1389176	1528421	1656488
6.1 Trade & repair services	793681	888665	941941	1037640	1150121	1268165	1400265	1519521
6.2 hotels & restaurants	89901	92955	92565	98201	111305	121011	128156	136967
7. Transport, storage, communication & services related to broadcasting	529535	569523	617556	671847	731399	756239	783794	813083
7.1 Railways	61150	69162	73685	80720	85452	82161	88533	92623
7.2 Road transport	262442	282425	300563	320813	343155	362252	384266	399433
7.3 Water transport	6910	7052	7345	7954	8095	8567	9131	9403
7.4 Air transport	4393	4183	4550	5188	6053	7171	8431	9450
7.5 Services incidental to transport	63602	66480	70172	75596	81156	86817	93354	97182
7.6 Storage	5108	5716	5210	5529	6245	6062	6661	7319
7.7 Communication & services related to broadcasting	125930	134505	156031	176047	201243	203209	193418	197673
8. Financial services	480226	529792	577914	627255	672788	697103	726709	779991
9. Real estate, ownership of dwelling & professional services	1050651	1150239	1289493	1446460	1621999	1797341	1922437	2061814
10. Public administration & defence	491155	501383	510046	543853	565106	613896	683628	741466
11. Other services	534827	568262	600748	659262	711691	780373	876624	951400
Services Sector	3969976	4300819	4630263	5084518	5564409	6034128	6521613	7004242
GVA at basic prices	8106948	8546275	9063649	9712132	10491872	11318973	12104166	12925788
GROSS DOMESTIC PRODUCT	8736330	9213017	9801370	10527673	11369495	12298329	13179858	14100119
POPULATION(In million)	1220	1235	1251	1267	1283	1299	1316	1332
PER CAPITA NNI (Rupees)	63462	65538	68572	72805	77659	82931	87623	92718

Source: Directorate of Economics and Statistics

ANNEXURES - MACRO ECONOMIC AGGREGATES

A.2.10: All India Sector-wise Growth Rates of GVA Estimates at Constant(2011-12) Prices from 2012-13 to 2018-19(AE) in New Base 2011-12

Industry	(Percentage)						
	2012-13	2013-14	2014-15	2015-16 (TRE)	2016-17 (SRE)	2017-18 (FRE)	2018-19 (AE)
1. Agriculture,forestry & fishing							
1.1 Crops	0.2	5.4	-3.7	-2.9	5.0	3.8	-0.6
1.2 Livestock	5.2	5.6	7.4	7.5	9.9	7.0	8.8
1.3 forestry & logging	0.2	5.9	1.9	1.7	1.4	2.1	1.7
1.4 fishing and aquaculture	4.9	7.2	7.5	9.7	10.0	11.9	8.4
Agriculture Sector	1.5	5.6	-0.2	0.6	6.3	5.0	2.7
2. Mining & quarrying	0.6	0.2	9.7	10.1	9.5	5.1	1.2
3. Manufacturing	5.5	5.0	7.9	13.1	7.9	5.9	8.1
4. Electricity, gas, water supply & other utility services	2.7	4.2	7.2	4.7	10.0	8.6	8.0
5. Construction	0.3	2.7	4.3	3.6	6.1	5.6	8.9
Industry Sector	3.3	3.8	7.0	9.6	7.7	5.9	7.7
6. Trade, repair, hotels and restaurants	11.1	5.4	9.8	11.1	10.1	10.0	8.4
6.1 Trade & repair services	12.0	6.0	10.2	10.8	10.3	10.4	8.5
6.2 hotels & restaurants	3.4	-0.4	6.1	13.3	8.7	5.9	6.9
7. Transport, storage, communication & services related to broadcasting	7.6	8.4	8.8	8.9	3.4	3.6	3.7
7.1 Railways	13.1	6.5	9.5	5.9	-3.9	7.8	4.6
7.2 Road transport	7.6	6.4	6.7	7.0	5.6	6.1	3.9
7.3 Water transport	2.1	4.2	8.3	1.8	5.8	6.6	3.0
7.4 Air transport	-4.8	8.8	14.0	16.7	18.5	17.6	12.1
7.5 Services incidental to transport	4.5	5.6	7.7	7.4	7.0	7.5	4.1
7.6 Storage	11.9	-8.9	6.1	12.9	-2.9	9.9	9.9
7.7 Communication & services related to broadcasting	6.8	16.0	12.8	14.3	1.0	-4.8	2.2
8. Financial services	10.3	9.1	8.5	7.3	3.6	4.2	7.3
9. Real estate, ownership of dwelling & professional services	9.5	12.1	12.2	12.1	10.8	7.0	7.3
10. Public administration & defence	2.1	1.7	6.6	3.9	8.6	11.4	8.5
11. Other services	6.3	5.7	9.7	8.0	9.7	12.3	8.5
Services Sector	8.3	7.7	9.8	9.4	8.4	8.1	7.4
GVA at basic prices	5.4	6.1	7.2	8.0	7.9	6.9	6.8
GROSS DOMESTIC PRODUCT	5.5	6.4	7.4	8.0	8.2	7.2	7.0

Source: Directorate of Economics and Statistics

ANNEXURES - PUBLIC FINANCE

A - 3.1: State's Own Tax Revenue

(Rs. Crores)

Sl. No.	Tax/Revenue	2016-17	2017-18	2018-19 RE
1.	Sales Tax	32484	25335	21915
2.	State Goods and Services Tax (SGST)		10820	20611
3.	State Excise	4645	5460	6220
4.	Taxes on Motor Vehicles	2467	3039	3359
5.	Stamps and Registration	3476	4271	5428
6.	Land Revenue	167	107	57
7.	Professional Tax	254	245	312
8.	Electricity Duty	333	16	11
9.	NALA	192	132	159
10.	Other Taxes and Duties	163	387	53
	Total	44181	49813	58125

Source: Finance Department

A - 3.2: State's Own Non-Tax Revenue

(Rs. Crores)

Sl. No.	Tax/Revenue	2016-17 Actuals	2017-18 Actuals	2018-19 RE
1.	Mines and Minerals	1628	2156	2211
2.	Forests	234	342	426
3.	Interest Receipts	113	96	50
4.	Education	577	104	31
5.	Medical and Health	83	172	222
6.	Others	2558	944	1451
	Total	5193	3814	4391

Source: Finance Department

A - 3.3: Resource Flows from the Centre to the State

(Rs. Crores)

Sl. No.	Item	2016-17 Actuals	2017-18 Actuals	2018-19 RE
I.	Finance Commission	33595	34764	38243
a)	Tax share (Devolution)	26264	28675	32711
b)	Grants	7331	6089	5532
II.	Other Grants-in-aid from GOI incl. CASP etc. (other than FC grants and EAP Grants)	16003	16660	13909
III.	Externally Aided Projects	838	958	1966
a)	Grant	12	12	16
b)	Loan	826	946	1950
IV.	Small Savings (Net)	-1132	-1132	-1154
	Total	49304	51250	52963

Source: Finance Department

A 3.4: Composition of Total Expenditure

(Rs. Crores)

Sl. No.	Item	2016-17	2017-18	2018-19 RE
1	Revenue Expenditure	116178	121214	126410
2	Capital Outlay	15181	13491	20444
3	Loans & Advances	564	2781	1843
	Total Expenditure*	131923	137486	148697

Source: Finance Department

* Total Expenditure excludes public debt repayments

Annexure 3.5: Composition of Total Debt

(Rs. Crores)

Sl. No.	Item	2016-17	2017-18	2018-19 RE
1.	Central Loans	9025	8977	9805
2.	Market loans	112630	131553	155376
3.	Small Saving Loans	14792	13659	12446
4.	Provident Fund	13568	13509	14725
5.	Others	44848	56008	66576
	Total*	194862	223706	258928
	Debt outstanding as percent of GSDP	27.87	27.83	28.18

Source: Finance Department

*The outstanding debt includes un-apportioned amount of Rs.23,483.20 crores in 2016-17 and Rs.17,031 in 2017-18 and 2018-19 RE.

Annexure 3.6: Deficits and Interest Payments

(Rs. Crores)

SN	Item	2016-17	2017-18	2018-19 RE
1	Interest Payments	11697	13847	14303
2	Revenue deficit	17194	16152	11726
3	Fiscal Deficit	30909	32373	33736

Source: Finance Department

ANNEXURES - PRICES, WAGES AND PUBLIC DISTRIBUTION

A 4.1: Average daily retail prices of essential commodities

(in Rupees)

Year	Rice (II sort)	Red gram Dal (II sort)	G.Nut Oil	Tamarind (without seed)	Dry Red Chillies (Gr.II)	Onions (Gr-II)
1	2	3	4	5	6	7
2004-05	10.22	27.18	53.79	40.69	30.66	5.52
2005-06	10.75	26.36	51.28	30.10	27.91	7.26
2006-07	11.28	28.00	57.77	40.88	54.46	6.91
2007-08	11.77	34.35	69.60	28.62	47.53	9.66
2008-09	14.68	40.43	69.59	34.99	55.98	10.21
2009-10	17.23	63.42	66.63	35.26	60.51	12.93
2010-11	17.73	58.47	80.13	54.43	62.74	16.66
2011-12	18.34	55.30	92.89	76.09	92.59	10.79
2012-13	21.55	59.21	115.52	57.24	63.90	13.14
2013-14	24.78	63.22	102.69	64.34	77.01	22.87
2014-15	25.84	70.31	92.73	72.36	83.80	19.36
2015-16	26.50	118.86	104.85	79.08	115.01	25.28
2016-17	27.96	109.85	117.45	88.87	131.35	12.58
2017-18	29.06	66.30	110.27	119.24	80.78	23.67
2018-19	29.78	64.28	106.87	133.82	105.84	14.84

Source: Directorate of Economics and Statistics

A 4.2 : Consumer price index numbers for rural, urban and combined

(Base: 2012=100)

Month	Andhra Pradesh			All India		
	Rural	Urban	Combined	Rural	Urban	Combined
1	2	3	4	5	6	7
Apr'18	142.4	135.3	139.8	139.1	134.8	137.1
May'18	143.9	136.3	141.1	139.8	135.4	137.8
June'18	144.1	136.6	141.3	140.5	136.2	138.5
July'18	145.4	138.1	142.7	141.8	137.5	139.8
Aug'18	145.5	138.8	143.0	142.5	138.0	140.4
Sept'18	142.1	138.9	140.9	142.1	138.1	140.2
Oct'18	138.5	139.4	138.8	142.2	138.9	140.7
Nov'18	139.6	140.0	139.7	142.4	139.0	140.8
Dec'18	139.8	139.4	139.7	141.9	138.0	140.1
Jan'19	139.9	139.4	139.7	141.0	138.0	139.6
Feb'19	140.4	139.9	140.2	141.0	138.6	139.9
Mar'19	140.3	140.3	140.3	141.2	139.5	140.4
Average	141.8	138.5	140.6	141.3	137.7	139.6

Source: Central Statistics Office, Government of India, New Delhi. & Directorate of Economics and Statistics, AP

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A.4.3: Ration shops, Ration Cards and Deepam Connections up to March, 2019

Sl. No.	District	Ration Shops	Ration Cards (in No.s)			Distribution of Rice in MTs	LPG connections under Deepam Scheme (in No.s)
			White	Annapurna	AAY cards		
1	2	3	4	5	6	7	8
1	Srikakulam	2005	782577	962	49884	143603	355163
2	Vizianagaram	1345	665829	854	85231	132572	262236
3	Visakapatnam	1629	1167120	911	75154	209045	408414
4	East Godavari	2271	1568471	1330	83546	274444	710041
5	West Godavari	2051	1180123	1028	69968	203072	513559
6	Krishna	2415	1228844	473	64477	208906	476287
7	Guntur	2686	1414220	1080	74421	227593	439014
8	Prakasam	2534	941285	725	47267	154522	365056
9	S.P.S. Nellore	1826	844669	731	58815	139266	365810
10	Y.S.R	1608	737480	715	56649	133139	317034
11	Kurnool	2240	1125038	984	56919	204641	364462
12	Anantapuramu	2976	1111041	826	104649	221808	551828
13	Chittoor	2926	1041372	930	86723	207001	584056
Total		28510	13768069	11549	913703	2459615	5672960

Source: Civil Supplies Department

A 5.1 : Land Utilisation Particulars

(Area in Lakh Hectares)

Year	Forest	Barren & Uncultivable Land	Land put to Non Agricultural Uses	Permanent pastures and other Grazing Lands	Misc. Tree crops and Groves not included in Net Area Sown	Culturable Waste	Other Fallow Lands	Current Fallow	Net Area Sown	Geographical Area
1	2	3	4	5	6	7	8	9	10	11
2008-09	34.67	14.30	18.33	2.59	1.83	4.78	7.00	9.44	67.26	160.20
2009-10	34.67	14.25	18.47	2.58	1.80	4.76	8.19	14.23	61.25	160.20
2010-11	34.87	14.09	19.00	2.52	1.76	4.59	7.10	8.31	67.96	160.20
2011-12	34.87	14.07	19.21	2.50	1.75	4.49	7.32	10.37	65.62	160.20
2012-13	34.84	13.43	19.87	2.12	1.65	4.14	8.19	11.34	64.62	160.20
2013-14	34.93	13.41	19.82	2.12	1.60	3.92	7.92	10.87	65.61	160.20
2014-15	36.63	13.51	20.02	2.14	1.60	3.92	8.58	14.01	62.35	162.76
2015-16	36.88	13.47	20.32	2.12	1.57	4.11	8.32	14.10	62.08	162.97
2016-17	36.88	13.46	20.48	2.11	1.57	4.14	8.60	14.96	60.77	162.97
2017-18	36.88	13.45	20.55	2.09	1.55	4.14	9.40	14.43	60.48	162.97
2018-19*	36.88	13.45	20.58	2.09	1.55	4.11	9.37	14.51	60.43	162.97

Source: Directorate of Economics and Statistics

Note: * As per Provisional data 2018-19

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A 5.2 : Land Utilisation Particulars 2018-19*

(Area in Lakh Hectares)

DISTRICT	Forest	Barren & Uncultivable Land	Land put to Non Agricultural Uses	Permanent pastures and other Grazing Lands	Misc. Tree crops and Groves not included in Net Area Sown	Culturable Waste	Other Fallow Lands	Current Fallow	Net Area Sown	Geographical Area
1	2	3	4	5	6	7	8	9	10	11
Srikakulam	0.69	0.48	1.03	0.01	0.07	0.01	0.15	0.32	3.08	5.84
Vizianagaram	1.19	0.73	0.82	0.05	0.11	0.04	0.31	0.58	2.71	6.54
Visakhapatnam	4.41	1.30	1.11	0.03	0.32	0.10	0.40	0.82	2.67	11.16
East Godavari	4.66	0.83	1.59	0.22	0.05	0.16	0.50	0.57	4.22	12.81
West Godavari	1.33	0.40	1.32	0.12	0.07	0.16	0.27	0.21	4.62	8.51
Krishna	0.76	0.37	1.55	0.11	0.09	0.21	0.40	0.27	4.96	8.73
Guntur	1.62	0.32	1.80	0.14	0.24	0.25	0.38	0.53	6.12	11.39
Prakasam	4.59	1.53	1.84	0.55	0.04	0.58	1.61	1.33	5.55	17.62
SPS Nellore	2.72	0.82	3.14	0.34	0.07	0.81	1.27	1.14	2.76	13.08
YSR	5.01	2.22	1.82	0.09	0.07	0.45	1.05	1.62	3.04	15.36
Kurnool	3.41	1.27	1.44	0.03	0.02	0.45	0.76	1.79	8.49	17.65
Ananthapuramu	1.97	1.65	1.51	0.06	0.09	0.43	1.04	3.56	8.82	19.13
Chittoor	4.52	1.53	1.61	0.34	0.31	0.46	1.23	1.77	3.39	15.15
Andhra Pradesh	36.88	13.45	20.58	2.09	1.55	4.11	9.37	14.51	60.43	162.97
% of Total Geographical Area	22.63	8.25	12.63	1.28	0.95	2.52	5.75	8.91	37.08	100.00

Source: Directorate of Economics and Statistics

Note: * As per Provisional data 2018-19

A. 5.3: Category wise Soil types in the state

SlNo.	Soil Category	Area ('000 Ha)	Percentage
1	Gravelly clayey moderately deep Red soils	305	1.87
2	Gravelly clayey moderately deep desert soils	891	5.47
3	Gravelly clayey moderately deep grass land soils	166	1.02
4	Gravelly clayey shallow dark brown soils	872	5.35
5	Gravelly loam to gravelly clayey shallow dark brown soils	44	0.27
6	Gravelly loamy dark brown moderately deep soils	479	2.94
7	Gravelly loamy moderately deep grass land soils	420	2.58
8	Moderately deep black clayey soils	225	1.38
9	Moderately deep calcareous moist clayey soils	237	1.45
10	Moderately deep calcareous black soils	1559	9.57

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SlNo.	Soil Category	Area ('000 Ha)	Percentage
11	Clayey moderately deep wet soils	22	0.13
12	Clayey to gravelly clayey moderately deep dark brown soils	3040	18.65
13	Dark grayish brown moderately deep moist stratified soils	31	0.19
14	Dark grayish brown moderately deep stratified loamy soils	42	0.26
15	Loamy to clayey skeletal deep Reddish brown soils	3328	20.42
16	Loamy to gravelly clay deep dark reddish brown soils	1219	7.48
17	Shallow gravelly Red soils	1696	10.41
18	Shallow loamy to gravelly clay Red soils	112	0.69
19	Deep black clayey soils	1250	7.67
20	Fine loamy gravelly clayey shallow Reddish brown soils	214	1.31
21	Light gray deep sandy soils	114	0.70
22	Very dark brown moderately deep wetsilty soils	31	0.19
Total		16297	100.00

Source: AP Space Application Centre

A 5.4 : Distribution of Land Holdings by size classes, 2010-11 and 2015-16

(Holdings in lakh Nos and Area in Lakh Hectares)

Size Class	Number of Holdings		Percentage to Total		Area Operated (Ha)		Percentage to Total		Average Size (Ha)	
	2010-11	2015-16	2010-11	2015-16	2010-11	2015-16	2010-11	2015-16	2010-11	2015-16
1	2	3	4	5	6	7	8	9	10	11
Marginal	49.84	59.04	65.40	69.26	21.60	23.37	26.68	29.20	0.43	0.40
Small	15.91	16.46	20.88	19.31	22.51	23.34	27.80	29.16	1.41	1.42
Semi-Medium	7.96	7.70	10.44	9.03	21.00	20.19	25.94	25.24	2.64	2.62
Medium	2.30	1.89	3.02	2.22	12.82	10.38	15.83	12.97	5.56	5.49
Large	0.20	0.15	0.26	0.18	3.04	2.76	3.75	3.45	15.28	18.71
Total	76.21	85.24	100.00	100.00	80.97	80.04	100.00	100.00	1.06	0.94

Source: Directorate of Economics and Statistics

A 5.5: Distribution of Land Holdings by size classes, 2015-16

(Holdings in lakh Nos and Area in Lakh Hectares)

Sl. No.	District	Marginal		Small		Semi-Medium		Medium		Large		All Groups		Average size of Holdings (Ha.)
		No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Srikakulam	5.67	1.67	0.62	0.85	0.17	0.46	0.04	0.20	0.00	0.14	6.50	3.32	0.51
2	Vizianagaram	4.05	1.29	0.60	0.83	0.24	0.63	0.08	0.42	0.01	0.16	4.97	3.34	0.67
3	Visakhapatnam	4.39	1.47	0.67	0.94	0.30	0.81	0.10	0.56	0.01	0.17	5.47	3.95	0.72

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Sl. No.	District	Marginal		Small		Semi-Medium		Medium		Large		All Groups		Average size of Holdings (Ha.)
		No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4	East Godavari	6.49	2.19	0.86	1.18	0.31	0.83	0.08	0.44	0.01	0.15	7.74	4.79	0.62
5	West Godavari	4.74	1.77	0.87	1.22	0.38	1.01	0.10	0.56	0.01	0.15	6.11	4.71	0.77
6	Krishna	4.74	1.86	1.00	1.39	0.42	1.14	0.11	0.58	0.01	0.09	6.27	5.06	0.81
7	Guntur	6.38	2.66	1.39	1.96	0.52	1.38	0.11	0.57	0.00	0.11	8.41	6.68	0.79
8	Prakasam	4.32	2.00	1.78	2.54	0.87	2.29	0.24	1.32	0.02	0.22	7.22	8.36	1.16
9	SPSR Nellore	3.91	1.49	1.03	1.45	0.44	1.15	0.14	0.80	0.02	0.29	5.53	5.17	0.94
10	Chittoor	5.03	2.07	1.50	2.11	0.49	1.28	0.09	0.52	0.01	0.12	7.13	6.10	0.86
11	YSR	2.81	1.34	1.34	1.93	0.63	1.63	0.11	0.57	0.01	0.17	4.89	5.64	1.15
12	Anantapuramu	2.87	1.61	2.67	3.92	1.78	4.52	0.35	1.90	0.03	0.58	7.70	12.52	1.63
13	Kurnool	3.66	1.93	2.13	3.03	1.14	3.07	0.35	1.96	0.02	0.40	7.31	10.39	1.42
Andhra Pradesh		59.04	23.36	16.46	23.34	7.70	20.20	1.89	10.38	0.15	2.76	85.24	80.04	0.94

N.B: Total may not tally due to rounding off.

Source: Directorate of Economics and Statistics

A.5.6 Season Wise Rainfall

(Rainfall in mm)

	South West Monsoon (June to Sep)		North East Monsoon (Oct to Dec)		Winter Period (Jan to Feb)		Hot Weather Period (Mar to May)		Total (June to May)	
Normal	556.0		296.0		15.7		98.3		966.0	
Year	Actual	% of Deviation to normal	Actual	% of Deviation to normal	Actual	% of Deviation to normal	Actual	% of Deviation to normal	Actual	% of Deviation to normal
2008-09	567.5	2.1	241.6	-18.4	0.2	-98.7	61.3	-37.6	870.6	-9.9
2009-10	427.7	-23.1	228.5	-22.8	12.3	-21.7	148.4	51.0	816.9	-15.4
2010-11	755.6	35.9	456.1	54.1	15.8	0.6	90.7	-7.7	1318.2	36.5
2011-12	498.7	-10.3	174.3	-41.1	24.7	57.3	65.4	-33.5	763.1	-21.0
2012-13	586.0	5.4	356.8	20.5	33.4	112.7	60.7	-38.3	1036.9	7.3
2013-14	518.9	-6.7	359.0	21.3	1.2	-92.4	88.2	-10.3	967.3	0.1
2014-15	355.7	-36.0	170.0	-42.6	2.5	-84.1	77.9	-20.8	606.1	-37.3
2015-16	523.0	-5.9	287.2	-3.0	4.3	-72.6	98.0	-0.3	912.5	-5.5
2016-17	533.8	-4.0	85.3	-71.2	1.6	-89.8	56.5	-42.5	677.2	-29.9
2017-18	567.1	2.0	177.5	-40.0	1.4	-91.1	80.9	-17.7	826.9	-14.4
2018-19	456.6	-17.9	124.1	-58.1	10.2	-35.0	44.1	-55.1	635.0	-34.3

Source: Directorate of Economics and Statistics

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A 5.7 : District wise Rainfall during South-West Monsoon and North-East Monsoon

(in mm.)

Sl. No.	District	South-West Monsoon			North-East Monsoon		
		(June to September 2018)			(October to December 2018)		
		Normal	Actual	% Deviation	Normal	Actual	% Deviation
1	2	3	4	5	6	7	8
1	Srikakulam	706	767	9	276	233	-16
2	Vizianagaram	693	628	-9	246	138	-44
3	Visakapatnam	713	681	-4	297	141	-52
4	East Godavari	768	801	4	306	132	-57
5	West Godavari	792	891	12	239	113	-53
6	Krishna	685	643	-6	249	129	-48
7	Guntur	526	397	-25	229	86	-62
8	Prakasam	388	223	-43	394	103	-74
9	SPS Nellore	331	174	-48	661	283	-57
	Coastal Andhra	622	578	-7	322	151	-53
10	YSR	394	202	-49	251	65	-74
11	Kurnool	455	264	-42	150	37	-75
12	Anantapuramu	338	213	-37	155	50	-68
13	Chittoor	439	285	-35	395	168	-58
	Rayalaseema	407	241	-41	238	80	-66
	Andhra Pradesh	556	457	-18	296	124	-58

Source: Directorate of Economics and Statistics

Annexure A 5.8 : Area and Production of Foodgrains in Andhra Pradesh

Year	Area (in Lakh Hects.)	Production (in Lakh Tonnes)
2008-09	42.70	166.16
2009-10	39.93	141.94
2010-11	45.56	149.96
2011-12	41.80	147.73
2012-13	41.54	139.27
2013-14	42.81	156.94
2014-15	39.63	160.02
2015-16	41.36	143.78
2016-17	39.70	149.16
2017-18	42.06	167.22
2018-19*	40.26	151.12

Source : Directorate of Economics and Statistics

Note: * As per 4th Advance Estimates 2018-19 (provisional)

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Annexure A 5.9 : Season-wise Area under Selected Crops in Andhra Pradesh

Sl. No.	Crop	Season	(Thousand Hectares)							
			2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19*
1	2	3	6	7	8	9	10	11	12	13
1	Paddy	Kharif	1710	1530	1706	1635	1399	1520	1477	1565
		Rabi	636	679	877	759	762	585	741	644
		Total	2346	2209	2583	2394	2161	2105	2218	2209
2	Jowar	Kharif	28	28	33	37	44	14	30	15
		Rabi	120	136	85	104	130	83	110	141
		Total	148	164	118	141	174	97	140	156
3	Bajra	Kharif	29	54	47	25	33	39	43	21
		Rabi	3	3	2	3	4	3	5	1
		Total	32	57	49	28	37	42	48	22
4	Maize	Kharif	82	91	110	100	75	85	107	105
		Rabi	190	218	242	203	158	165	229	162
		Total	272	309	352	303	233	250	336	267
5	Ragi	Kharif	35	34	37	29	27	27	27	26
		Rabi	5	5	5	5	4	5	8	8
		Total	40	39	42	34	31	32	35	34
6	Other Millets including Wheat	Kharif	27	36	26	18	47	24	18	10
		Rabi	2	2	2	2	4	7	3	2
		Total	29	38	28	20	51	31	21	12
7	Pulses	Kharif	230	246	230	198	361	444	363	360
		Rabi	1082	1092	878	844	1088	969	1045	966
		Total	1312	1338	1108	1042	1449	1413	1408	1326
8	Total Food Grains	Kharif	2141	2018	2190	2041	1986	2153	2065	2102
		Rabi	2039	2136	2091	1922	2150	1817	2141	1924
		Total	4180	4154	4281	3963	4136	3970	4206	4026
9	Groundnut	Kharif	1033	1042	1086	804	682	933	648	698
		Rabi	103	115	90	70	93	80	87	61
		Total	1136	1157	1176	874	775	1013	735	759
10	Castor	Kharif	151	105	48	46	49	32	31	35
11	Sesamum	Kharif	27	21	28	21	28	34	14	17
		Rabi	26	23	33	64	25	30	26	31
		Total	53	44	61	85	53	64	40	48
12	Total Oil Seeds	Kharif	1275	1236	1238	944	850	1096	786	848
		Rabi	271	253	199	188	147	134	129	115
		Total	1546	1489	1437	1132	997	1230	915	963

Source: Directorate of Economics and Statistics

Note: *2018-19 As per 4th Advance Estimates provisional

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Annexure A 5.10 : Season-wise Production of Selected Crops in Andhra Pradesh

(Thousand Tonnes)

Sl. No.	Crop	Season	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19*
1	2	3	4	5	6	7	8	9	10	11
1	Paddy	Kharif	7803	6067	6535	7646	6159	7850	7412	7870
		Rabi	3813	4227	5455	5037	5074	4153	5279	4500
		Total	11616	10294	11990	12683	11233	12003	12691	12370
2	Jowar	Kharif	61	73	57	55	49	20	30	2
		Rabi	291	339	209	290	308	178	303	352
		Total	352	412	266	345	357	198	333	354
3	Bajra	Kharif	45	95	78	32	59	68	83	21
		Rabi	7	4	4	7	6	4	10	1
		Total	52	99	82	39	65	72	93	22
4	Maize	Kharif	283	364	408	329	276	355	502	434
		Rabi	1480	1547	1805	1609	1135	1298	1824	1131
		Total	1763	1911	2213	1938	1411	1653	2326	1565
5	Ragi	Kharif	29	36	36	27	25	26	30	31
		Rabi	9	6	7	7	9	9	14	12
		Total	38	42	43	34	34	35	44	43
6	Other Millets incl. Wheat	Kharif	16	33	20	12	44	17	15	4
		Rabi	3	3	1	2	5	7	1	2
		Total	19	36	21	14	49	24	16	6
7	Pulses	Kharif	80	123	131	115	200	199	177	82
		Rabi	853	1010	948	834	1029	732	1042	670
		Total	933	1133	1079	949	1229	931	1219	752
	Total Food Grains	Kharif	8317	6791	7265	8216	6812	8535	8249	8444
		Rabi	6456	7136	8429	7786	7566	6381	8473	6668
		Total	14773	13927	15694	16002	14378	14916	16722	15112
8	Ground nut	Kharif	355	540	681	330	598	391	837	343
		Rabi	228	240	200	163	203	212	211	134
		Total	583	780	881	493	801	603	1048	477
9	Castor	Kharif	13	47	26	27	28	16	20	15
10	Sesamum	Kharif	6	5	13	6	5	8	3	5
		Rabi	7	8	8	22	9	9	8	10
		Total	13	13	21	28	14	17	11	15
11	Total Oil Seeds	Kharif	1393	1668	1971	1677	1946	2251	2644	2332
		Rabi	350	320	271	226	234	240	233	161
		Total	1743	1988	2242	1903	2180	2491	2877	2493

Source: Directorate of Economics and Statistics

Note: *2018-19 As per 4th Advance Estimates provisional

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Annexure A 5.11 : Season-wise Productivity of Selected Crops in Andhra Pradesh

(Kgs./Hectare)

Sl. No.	Crop	Season	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19*
1	2	3	4	5	6	7	8	9	10	11
1	Paddy	Kharif	4562	3965	3832	4677	4402	5166	5019	5029
		Rabi	5995	6225	6214	6636	6660	7095	7122	6987
		Total	4951	4660	4641	5298	5198	5702	5722	5600
2	Jowar	Kharif	2151	2652	1747	1487	1110	1436	1018	130
		Rabi	2430	2481	2438	2770	2369	2139	2750	2493
		Total	2376	2509	2247	2435	2049	2036	2382	2269
3	Bajra	Kharif	1573	1751	1654	1289	1767	1744	1912	1014
		Rabi	2051	1504	1853	1924	1793	1394	2054	1014
		Total	1620	1740	1663	1366	1769	1718	1927	1014
4	Maize	Kharif	3467	4006	3711	3292	3682	4149	4678	4130
		Rabi	7759	7086	7454	7910	7204	7878	7956	6983
		Total	6473	6182	6286	6390	6068	6604	6911	5861
5	Ragi	Kharif	825	1044	983	952	955	953	1131	1209
		Rabi	1767	1451	1555	1500	1876	1724	1775	1525
		Total	944	1091	1045	1029	1090	1077	1277	1265
6	Ground nut	Kharif	344	518	627	410	876	419	1291	492
		Rabi	2219	2082	2218	2325	2190	2664	2435	2199
		Total	513	674	749	564	1033	595	1426	628
7	Castor	Kharif	83	454	522	578	564	471	651	419
8	Sesamum	Kharif	226	232	449	272	183	228	220	270
		Rabi	279	337	261	347	364	290	302	312
		Total	252	287	347	328	268	257	274	312

Source: Directorate of Economics and Statistics

Note: *2018-19 As per 4th Advance Estimates provisional

A 5.12 : Source -wise Gross Area Irrigated

(Area in lakh hectares)

Sl.No	Year	Canals	Tanks	Wells	Others	Total
1	2	3	4	5	6	7
1	2010-11	19.99	4.50	15.61	1.43	41.53
2	2011-12	17.84	3.94	15.99	1.44	39.21
3	2012-13	15.63	3.79	16.34	1.35	37.11
4	2013-14	19.56	3.77	16.23	1.40	40.96
5	2014-15	18.82	3.27	15.32	1.45	38.86
6	2015-16	13.93	3.86	16.43	1.25	35.47
7	2016-17	16.01	2.51	16.16	1.14	35.82
8	2017-18	16.21	3.15	16.71	1.23	37.30
9	2018-19*	16.53	2.50	16.02	1.40	36.45

Source: Directorate of Economics and Statistics

Note: As per Provisional data 2018-19*

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A 5.13: Source-wise Net Area Irrigated

(Area in lakh hectares)

Sl. No.	Year	Canals	Tanks	Wells	Others	Total
1	2	3	4	5	6	7
1	2010-11	14.31	4.12	10.66	1.21	30.30
2	2011-12	14.92	3.67	11.22	1.24	31.05
3	2012-13	11.75	3.46	11.58	1.22	28.01
4	2013-14	14.30	3.39	11.21	1.24	30.14
5	2014-15	14.29	2.93	10.80	1.25	29.27
6	2015-16	10.81	3.63	11.93	1.06	27.43
7	2016-17	12.25	2.36	11.62	0.96	27.19
8	2017-18	11.87	2.96	11.74	1.06	27.63
9	2018-19*	13.03	2.32	11.55	1.16	28.06

Source: Directorate of Economics and Statistics

Note: As per Provisional data 2018-19*

5.13 A: District - wise and Source - wise Net Area Irrigated 2018-19*

(Area in lakh hectares)

Sl. No.	District	Canals	Tanks	Wells	Others	Total
1	Srikakulam	1.19	0.54	0.08	0.09	1.90
2	Vizianagaram	0.46	0.68	0.37	0.03	1.54
3	Visakhapatnam	0.44	0.21	0.25	0.24	1.14
4	East Godavari	1.70	0.17	0.69	0.22	2.78
5	West Godavari	1.53	0.13	1.84	0.09	3.59
6	Krishna	1.92	0.25	0.76	0.09	3.02
7	Guntur	3.09	0.04	0.87	0.14	4.14
8	Prakasam	0.58	N	0.89	0.03	1.50
9	SPS Nellore	0.85	0.12	0.87	0.03	1.87
10	YSR	0.17	0.01	1.25	0.01	1.44
11	Kurnool	0.95	0.08	1.00	0.19	2.22
12	Ananthapuramu	0.14	0.02	1.26	0.00	1.42
13	Chittoor	0.01	0.07	1.42	0.00	1.50
Andhra Pradesh		13.03	2.32	11.55	1.16	28.06

Source: Directorate of Economics and Statistics

N: Negligible

As per Provisional data 2018-19*

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A.5.14 : Disbursement of Agriculture Credit as on 31.03.2019 as per SLBC

Rs. in Crores

Sl. No.	Name of the District	Short Term Crop Production Loans		Agricultural term loans Including Infrastructure and Ancillary Activities		Total		% Ach
		Target	Achievement	Target	Achievement	Target	Achievement	
1	Srikakulam	2382.15	2742.28	870.46	1159.37	3252.61	3901.65	120
2	Vizianagaram	2114.49	1987.11	690.79	791.15	2805.28	2778.26	99
3	Visakhapatnam	2645.87	2954.15	1514.30	1580.03	4160.17	4534.18	109
4	East Godavari	6606.24	7676.43	4057.83	4501.53	10664.07	12177.96	114
5	West Godavari	8286.20	7778.84	2863.91	3320.40	11150.11	11099.24	100
6	Krishna	7864.49	6446.34	3864.09	3131.29	11728.58	9577.63	82
7	Guntur	10113.56	10079.74	2431.98	3527.78	12545.54	13607.52	108
8	Prakasam	6752.74	7079.03	2285.95	2230.95	9038.69	9309.98	103
9	SPS Nellore	4648.79	4261.22	1907.39	1782.94	6556.18	6044.16	92
10	Y S R	4679.26	4394.39	1439.42	1492.77	6118.68	5887.16	96
11	Kurnool	5495.09	5491.79	1299.16	1620.84	6794.25	7112.63	105
12	Ananthapuramu	6887.64	8268.45	1381.91	1899.37	8269.55	10167.82	123
13	Chittoor	6523.48	7560.80	1956.81	2801.31	8480.29	10362.11	122
Total		75000.00	76720.57	26564.00	29839.73	101564.00	106560.30	104.92

e: Finance (Institutional Finance) Department

A.5.15 : Loan and Other Eligibility Cards issued and credit extended to licensed cultivators during 2018-19

Rs.in Crores

Sl.No	District	Loan Eligibility Cards (LEC)			Certificate of cultivation (COC)		
		LECs Issued	No.of LECs Issued Loan	Credit extended	COCs Issued	No.of COCs issued Loan	Credit extended
1	Srikakulam	11697	1761	2.82	33259	1305	2.09
2	Vizianagaram	10476	6625	35.28	49952	2235	21.04
3	Visakhapatnam	4953	2542	8.78	25877	19621	46.25
4	East Godavari	119985	106411	397.15	100086	89418	272.93
5	West Godavari	237921	86241	718.33	8834	8916	55.48
6	Krishna	40839	40249	241.27	78852	58219	364.28
7	Guntur	38548	1814	9.93	65045	11355	59.58
8	Prakasam	3993	2229	27.12	55838	2238	29.85
9	SPS Nellore	16982	14671	79.62	73173	51544	297.96
13	YSR	4007	970	8.81	15055	182	1.31
10	Kurnool	18770	1438	3.61	55863	1700	16.54
12	Anantapuramu	4881	1182	6.60	95	0	0.00
11	Chittoor	962	920	5.90	19706	14685	69.80
Total		514014	267053	1545.22	581635	261418	1237.11

Source: Agriculture Department

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

5.16 Crop Insurance Claim details of Andhra Pradesh

S. No	Year	Season	Scheme	Farmers covered (No. in lakhs)	Area covered in Ha	Sum Insured (Rs. in Lakhs)	Full Premium (Rs. in Lakhs)	Claim (Rs. in Lakhs)	No. of farmers benefited (in lakhs)		
1	2013-14	Kharif	MNAIS	4.75	4.79	215442.74	24227.38	32877	2.60		
			WBCIS	7.13	12.39	331499.94	33141.95	25103	5.06		
			NAIS	3.95	3.90	137090.00	4112.31	5748	0.70		
			Total	15.83	21.08	684032.68	61481.64	63728	8.36		
		Rabi	NAIS	0.91	1.15	41684.47	815.09	280	0.10		
			MNAIS	0.13	0.16	7912.55	402.29	280	0.02		
			WBCIS	0.07	0.09	4646.89	535.67	445	0.05		
		Total	1.11	1.40	54243.91	1753.05	1005	0.17			
		Year Total	16.94	22.48	738276.59	63234.69	64734	8.53			
		2	2014-15	Kharif	MNAIS	1.68	1.86	78680.70	9338.18	1127	0.16
WBCIS	0.93				1.68	45459.14	4543.59	4514	0.78		
Total	2.61				3.54	124139.84	13881.77	5641	0.94		
Rabi	MNAIS			0.99	1.13	59744.00	2479.98	1376	0.07		
	NAIS			0.92	1.68	31669.00	699.79	1944	0.13		
	WBCIS			0.03	0.04	3117.00	358.95	178	0.03		
Total	1.94			2.85	94530.00	3538.72	3498	0.23			
Year Total	4.55			6.39	218669.84	17420.49	9139	1.17			
3	2015-16			Kharif	MNAIS	3.56	3.32	156277.00	20430.00	6195	0.51
					NAIS	4.33	4.25	202829.65	8659.91	8438	0.63
		WBCIS	7.27		12.27	324958.45	32470.16	13857	2.71		
		Total	15.16		19.84	684065.10	61560.07	28489	3.85		
		Rabi	NAIS	2.17	3.60	127890.36	2605.37	3675	0.33		
			WBCIS	0.29	0.45	16061.62	1850.99	1809	0.17		
			Total	2.46	4.05	143951.98	4456.36	5483	0.50		
		Year Total	17.62	23.89	828017.08	66016.43	33973	4.35			
		4	2016-17	Kharif	PMFBY	8.72	6.71	500336.00	42762.00	8843	61.00
					RWBCIS	7.59	11.86	305450.00	26251.00	56338	7.52
TOTAL	16.31				18.57	805786.00	69013.00	65181	68.52		
Rabi	PMFBY			1.51	1.96	106284.00	14966.00	25027	75.00		
	RWBCIS			0.08	0.08	7530.00	1295.00	660	0.01		
	TOTAL			1.59	2.04	113814.00	16261.00	25687	75.01		
Year Total	17.90			20.61	919600.00	85274.00	90868	143.53			
5	2017-18			Kharif	PMFBY	8.32	6.55	474845.00	43501.00	21843	1.50
					RWBCIS	7.78	12.23	502645.00	73921.00	29790	5.50
					TOTAL	16.1	18.78	977490	117422	51633	7.00
		Rabi	PMFBY	5.25	5.60	277057.00	25476.00	11629	0.56		
			RWBCIS	0.10	0.10	7942.00	1606.00	546	0.04		
			TOTAL	5.35	5.7	284999	27082	12175	0.60		
		Year Total	21.45	24.48	1262489.00	144504.00	63808	7.60			
		6	2018-19	Kharif	PMFBY	9.06	6.89	534674	43477	Claims calculations are under process	
					RWBCIS	7.5	11.56	564968	69423		
					TOTAL	16.56	18.45	1099642	112900		
Rabi	PMFBY			7.63	6.91	332320	35397				
	RWBCIS			0.14	0.14	10722	1504				
	TOTAL			7.77	7.05	343042.00	36901.00				
Total	24.33	25.50	1442684.00	149801.00							

Source: Agriculture Department

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A 5.17 : Consumption of fertilizers

(Lakh MTs.)

Product	2017-18		2018-19	
	Allotment	Consumption	Allotment	Consumption
Urea	15.50	14.07	17.50	14.18
DAP	3.75	3.26	4.00	3.14
MOP	2.41	2.84	3.00	2.41
Complex	11.50	9.91	13.00	11.38
SSP	2.10	1.88	2.20	1.63
Others	0.70	0.95	0.90	0.08
Total	35.96	32.91	40.60	32.82

Source: Agriculture Department

A 5.18 : Consumption of fertilizers in terms of Nutrients

(Lakh MTs.)

S. No	Year	N	P	K	Total
1	2010-11	10.82	6.28	3.06	20.16
2	2011-12	11.11	6.18	2.15	19.44
3	2012-13	9.93	4.40	1.71	16.04
4	2013-14	11.35	4.61	1.84	17.80
5	2014-15	10.76	4.44	2.19	17.39
6	2015-16	10.23	4.90	1.85	16.98
7	2016-17	9.82	4.80	2.24	16.86
8	2017-18	9.20	4.23	2.21	15.64
9	2018-19	9.30	4.29	2.00	15.59

Source: Agriculture Department

A.5.19 District wise Eligible farmers under debt redemption scheme

S. No	District Name	1 st Installment (2014-15 & 2015-16)		2 nd Installment (2016-17)		Horticulture (2016-17)		3 rd Installment (2017-18)		4 th Installment (2018-19)	
		No of loan Accounts	Amount (Rs.cr.)	No of loan Accounts	Amount with 10% interest (Rs.cr.)	No of loan Accounts	Amount (Rs.cr.)	No of loan accounts	Amount with 10% interest (Rs.cr.)	No of loan accounts	Amount with 10% interest (Rs.cr.) (as on 10 th April 2019)
1	Srikakulam	296510	410.86	147754	109.33	7921	15.38	142765	115.74	13830	19.47
2	Vizianagaram	215719	316.97	93161	66.37	4450	9.35	98153	70.14	15012	21.78
3	Visakhapatnam	216712	325.03	100337	82.88	10582	14.19	101281	83.90	12872	15.96
4	East Godavari	461701	626.08	232862	181.37	32467	41.38	223077	183.11	22673	24.63

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

S. No	District Name	1 st Installment (2014-15 & 2015-16)		2 nd Installment (2016-17)		Horticulture (2016-17)		3 rd Installment (2017-18)		4 th Installment (2018-19)	
		No of loan Accounts	Amount (Rs.cr.)	No of loan Accounts	Amount with 10% interest (Rs.cr.)	No of loan Accounts	Amount (Rs.cr.)	No of loan accounts	Amount with 10% interest (Rs.cr.)	No of loan accounts	Amount with 10% interest (Rs.cr.) (as on 10 th April 2019)
5	West Godavari	493121	640.22	311773	275.47	14731	24.88	290151	284.20	31601	41.28
6	Krishna	444985	580.44	301479	247.76	9032	16.73	279149	261.79	30629	38.99
7	Guntur	667243	931.18	485877	521.64	20464	24.97	464036	549.77	33025	42.64
8	Prakasam	459385	602.55	338970	370.47	2812	7.36	335240	394.19	23370	24.45
9	SPS Nellore	282472	398.02	182062	163.07	18139	38.23	166247	164.84	16624	23.88
11	YSR	352060	465.14	253580	219.85	40632	74.64	249973	231.44	30716	40.45
13	Kurnool	430830	687.81	268079	270.36	2387	5.45	258769	285.53	12429	16.33
12	Anantapuramu	806722	1063.47	552245	451.16	7550	17.93	545490	481.94	36220	45.41
10	Chittoor	370682	516.92	271374	242.00	58728	110.12	242558	250.89	15654	21.15
Total		5498142	7564.69	3539553	3201.74	229895	400.59	3396889	3357.49	294655	376.42

Source: Agriculture Department

A 5.20 Component wise physical Target and achievements under ATMA

(in No.s)

S. No.	Components	2017-18		2018-19	
		Target	Achievement	Target	Achievement
1	State level activities (Trgs. to Extn. functionaries)	22	6	20	5
2	District level activities				
a)	Trainings to Farmers	2298	2502	2645	3504
b)	Demos	8580	3760	8785	8647
c)	Exposure visits	382	207	412	385
d)	Capacity building of FIGs	1050	75	1000	319
e)	Farmer Awards	0	0	170	1249
f)	Kisan Melas	27	39	52	222
g)	Farmer Scientist Interaction	27	22	26	52
h)	Field Days	357	235	340	335
i)	Farm schools	170	113	170	145
j)	Other activities	67	40	56	288
Total		12980	6999	13676	15151

Source: Agriculture Department

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A-5.21 Area & Production Particulars of Horticulture Crops 2018-19 (2nd Advance Estimates)

S. No	Crops	2017-18		2018-19(As per 2 nd Advance Estimates)	
		Area in Ha.	Production in MTs	Area in Ha.	Production in MTs
I	<u>Fruits</u>				
1	Aonl/Amla	800	10764	800	11068
2	Banana	99372	5961326	115311	5956794
3	Ber	1503	32963	1624	33066
	<u>Citrus</u>				
1	Limes/Lemons	34883	562011	36420	558128
2	Sweet Orange (Mosambi)	82887	2003112	84511	1989288
3	Custard Apple	1678	16670	1783	19839
4	Grape	796	15920	805	16044
5	Guava	9528	229777	11665	332118
6	Jackfruit	1197	41408	1197	41895
7	Mango	363002	4573825	382132	4875013
8	Papaya	19216	1829363	20121	1911495
9	Pineapple	4519	71327	4581	73296
10	Pomegranate	9466	139019	10116	151740
11	Sapota	10086	131464	10186	132569
12	Muskmelon	9897	314385	10897	348704
13	Watermelon	11016	360081	12025	396825
14	Other fruits	2819	253710	3328	299520
	Total Fruits	662665	16547125	707502	17147402
II	<u>Vegetables</u>				
1	Beans	19621	264884	20230	273105
2	Bitter guard	4859	90439	4895	90439
3	Bottle guard	2378	50935	2378	50935
4	Brinjal	19620	510120	18160	472160
5	Cabbage	2735	58588	2756	59623
6	Capsicum	173	6051	173	6051
7	Carrot	1361	28580	1361	28580
8	Cauliflower	3131	53196	4242	72072
9	Cucumber	4315	99157	5253	120714
10	Chilies green	23106	519885	17721	459977
11	Garlic	10	800	10	800
12	Elephant foot yam	4265	252430	4579	259761
13	Bhendi (Okra)	13668	205911	14772	222614
14	Onion	42001	915734	45335	953842
15	Parwal/Pointed gourd	1135	38803	1135	38803
16	Peas	11	77	11	144

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

S. No	Crops	2017-18		2018-19(As per 2 nd Advance Estimates)	
		Area in Ha.	Production in MTs	Area in Ha.	Production in MTs
17	Potato	3934	68294	3934	68294
18	Radish	878	18015	878	18741
19	Pumpkin	404	8579	404	8579
20	Sweet Potato	2225	33375	1123	16845
21	Tapioca (Cassava)	15792	208454	18993	303888
22	Tomato	74920	4135584	62084	5587560
23	Other Vegetables	38280	1093527	29632	805913
	Total Vegetables	278822	8661418	260059	9919439
III	Aromatics				
1	Plam Rosa	25	3	165	3
2	Lemon Grass	32	22	122	22
3	Coleus	14	4	14	4
4	Ashwagandha	1212	606	1212	606
5	Other Medicinal Plant	5374	9302	5379	9302
	Total Medicinal & Aromatic Plants	6657	9937	6892	9937
IV	Plantation Crops				
1	Arecanut	1916	3312	2000	3312
2	Cashew nut	114439	89339	116801	89339
3	Cocoa	26216	18351	27043	18095
4	Coconut (No. of lakh Nuts)	99508	13977	109529	14997
5	Oil Palm	162692	1427880	164627	3127913
6	Coffee	63210	27000	63215	27000
	Total Plantations	467981	1565882	483215	3265659
V	Spices				
1	Ajwan	3309	31524	6510	31624
2	Betelvine	2824	60941	2875	68048
3	Black pepper	18650	11377	18050	10733
4	Chillies (Dried)	143630	962321	194656	1362592
5	Coriander	10215	16344	13243	26262
6	Ginger	1897	29616	1964	37112
7	Tamarind	6576	70815	6219	62480
8	Turmeric	28921	347052	30130	361560
9	Other Spices	7144	54293	3256	26048
	Total Spices	223166	1584283	276903	1986459
VI	Flowers Category				
1	Chrysanthemum	6059	260892	5213	237837
2	Jasmine	6996	41976	6996	41976
3	Marigold	9548	103092	8810	101879

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

S. No	Crops	2017-18		2018-19(As per 2 nd Advance Estimates)	
		Area in Ha.	Production in MTs	Area in Ha.	Production in MTs
4	Rose (Lakh Nos)	533	2490	533	2490
5	Tube Rose	1758	12430	1769	20226
6	Crossandra	2917	10827	3016	14081
7	Others	924	16517	494	12329
	Total Flowers	28735	445734	26831	428328
Grand Total		1668026	28814379	1761402	32757225

Source: Horticulture Department

A. 5.22 District wise productivity of Growth Engine Crops

(Kg/Hectares)

District	Productivity of crops								
	Mango	Banana	Papaya	Sweet Orange	Coconut (No. of nuts per Ha.)	Oil Plam	Cashew	Dry chillies	Tomato
Srikakulam	-	-	-	-	11870	-	1	-	-
Vizianagaram	12	35	-	-	10500	-	0.8	-	-
Visakhapatnam	-	-	-	-	17876	-	0.6	-	-
East Godavari	-	40	100	-	14599	19	1.5	-	-
West Godavari	-	45	100	-	13195	11.9	1.0	-	-
Krishna	9.7	-	-	-	-	-	-	5	-
Guntur	-	-	-	-	-	-	-	5.47	-
Prakasam	9.6	-	-	14	-	-	-	3	-
SPS Nellore	-	-	-	-	-	-	-	3	-
YSR	9	65	-	20	-	-	-	5	42
Kurnool	15	50	-	-	-	-	-	7.5	50
Anantapuramu	9.5	67	92	18	-	-	-	3	45
Chittoor	9.8	-	130	-	-	-	-	-	45
Productivity	12	53	100	20	0.138	19	1	5	44

Source: Horticulture Department

A 5.23 : Livestock population as per 2012 census

(in No.s)

Sl. No.	District	Cattle	Buffaloes	Sheep	Goat	Pig	Poultry
1	2	3	4	5	6	7	8
1	Srikakulam	790026	126328	575046	212300	4725	2726062
2	Vizianagaram	385119	133056	423123	173751	10151	3537927
3	Visakhapatanm	504947	306265	252610	324024	7938	5714589
4	East Godavari	375247	642208	246722	292201	32153	13987741
5	West Godavari	215112	622578	443717	204016	10184	17407080

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Sl. No.	District	Cattle	Buffaloes	Sheep	Goat	Pig	Poultry
1	2	3	4	5	6	7	8
6	Krishna	79420	696118	508061	151118	10187	11752181
7	Guntur	110071	1007942	621122	213249	9222	6975964
8	Prakasam	74845	970366	1406578	406239	10076	1237873
9	SPS Nellore	115968	624664	1051938	351426	5364	1491193
10	Y.S.R	139141	412812	1504671	506173	17787	1201514
11	Kurnool	408623	84368	1250077	428721	8285	12600955
12	Ananthapuramu	617270	371127	3879840	785210	21777	1589288
13	Chittoor	926865	466933	1403224	457896	9309	1562509
Total		4742654	6464765	13566729	4506324	157158	81784876

Source: Animal Husbandry Department

A 5.24 : Production estimates@ of Milk, Eggs and Meat

Sl. No.	Year	Milk ('000 M.Ts.)	Meat ('000 M.Ts.)	Eggs (Lakh Nos.)
1	2	3	4	5
1	2009-10	7237.82	349.43	113932
2	2010-11	7734.39	383.65	116383
3	2011-12	8402.04	440.06	122440
4	2012-13	8810.00	477.65	128740
5	2013-14	9082.73	488.75	127269
6	2014-15	9656.02	527.66	130958
7	2015-16	10816.95	566.13	141743
8	2016-17	12177.94	632.51	158275
9	2017-18	13725.16	708.12	177776
10	2018-19	15044.36	802.93	203690

Source: Animal Husbandry Department

@ Estimates based on sample surveys; Eggs includes both commercial and desi and Meat includes chicken meat

A 5.25 : Production estimates@ of Milk, Meat and Eggs during 2018-19

Sl. No.	District	Milk ('000 M.Ts.)	Meat ('000 M.Ts.)	Eggs (Lakh Nos.)
1	2	3	4	5
1	Srikakulam	753.82	25.02	2101.81
2	Vizianagaram	792.82	36.45	5264.08
3	Visakhapatnam	882.87	53.55	14346.42
4	East Godavari	1358.41	62.76	61039.20
5	West Godavari	1523.05	52.42	40507.96
6	Krishna	1839.41	98.23	33792.18
7	Guntur	1543.91	68.76	18942.74

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

Sl. No.	District	Milk ('000 M.Ts.)	Meat ('000 M.Ts.)	Eggs (Lakh Nos.)
1	2	3	4	5
8	Prakasam	1233.07	89.95	2988.71
9	SPS Nellore	896.35	34.23	2913.70
10	Y.S.R	601.23	37.41	2017.97
11	Kurnool	1277.17	95.54	1957.67
12	Ananthapuramu	912.23	61.10	2926.94
13	Chittoor	1430.06	87.51	14890.62
	Total	15044.36	802.93	203690.00

Source: Animal husbandry Department

A 5.26: District wise Animal Husbandry institutions in the year 2018-19

(Units in No.s)

Sl No	DISTRICT	Veterinary Polyclinic	Super Specialty Veterinary Hospital	Veterinary Hospital	Veterinary Dispensaries	Rural Live Stock Units	Total	Gopalamitras
1	2	3	4	5	6	7	8	9
1	Srikakulam	1	0	19	98	80	198	171
2	Vizianagaram	1	0	16	82	56	155	164
3	Visakhapatnam	0	0	20	106	40	166	192
4	East Godavari	1	0	31	155	58	247	278
5	West Godavari	1	0	23	105	78	207	202
6	Krishna	1	1	26	126	168	322	192
7	Guntur	1	0	27	142	114	284	231
8	Prakasam	1	0	26	127	79	232	200
9	SPS Nellore	1	0	23	116	80	218	141
10	YSR	1	1	24	112	109	246	99
11	Kurnool	1	0	29	140	175	345	214
12	Ananthapuramu	1	0	27	121	37	187	371
13	Chittoor	1	0	32	146	145	324	420
	Total	12	2	323	1576	1219	3131	2875

Source: Animal husbandry Department

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A 5.27 : Fish and Prawn production

(in MTs)

Sl. No.	District	2017-18				2018-19			
		Marine fish & shrimp	Inland fish& fresh water prawn	Brackish water shrimp	Total production	Marine fish& Shrimp	Inland fish& Fresh Water Prawn	Brackish Water Shrimp	Total production
1	2	3	4	5	6	7	8	9	10
1	Srikakulam	60673	34278	3348	98299	47146	70834	9639	127619
2	Vizianagaram	20750	20857	1805	43412	14640	35840	358	50838
3	Visakhapatnam	127935	23142	4818	155895	132807	50334	6577	189718
4	East Godavari	126880	114367	60146	301393	117494	208577	72165	398236
5	West Godavari	14744	100495	32053	1051754	1167	1126182	24852	1152201
6	Krishna	55939	914427	140269	1110635	50476	950522	229618	1230616
7	Guntur	53316	46705	49664	149685	27398	2666	89839	195485
8	Prakasam	39560	37116	42288	118964	66133	32524	39817	138474
9	SPS Nellore	105153	182456	82084	369693	114837	241403	86118	442358
10	YSR	0	4466	0	4466	0	5336	0	5336
11	Kurnool	0	30482	0	30482	0	47975	0	47975
12	Ananthapuramu	0	8194	0	8194	0	9147	0	9147
13	Chittoor	0	6686	0	6686	0	4355	0	4355
Total		604950	2428133	416475	3449558	600417	2862958	528983	3992358

Source: Commissioner of Fisheries

A 5.28. District Wise Forest Area

(in Sq.Km)

S. No	District	Very Dense Forest	Modarate Dense Forest	Open Forest	Scrub Forest	Total
1	2	3	4	5	6	7
1	Srikakulam	0	118	662	525	1305
2	Vizianagaram	0	209	653	781	1643
3	Visakhapatnam	25	2063	1604	1368	5060
4	East Godavari	1108	2566	1052	403	5129
5	West Godavari	377	556	425	1	1359
6	Krishna	38	131	314	20	503
7	Guntur	1	291	586	453	1331
8	Prakasam	254	1818	1219	1213	4504
9	SPS Nellore	27	628	676	704	2035
10	YSR	40	2715	1629	1023	5407
11	Kurnool	87	1510	577	681	2855
12	Ananthapuramu	0	213	774	1111	2098
13	Chittoor	0	1233	1968	1277	4478
Total		1957	14051	12139	9560	37707

Source: Forest Department

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A 5.29: Revenue achieved from forest produce

(Rs. in Lakh)

Sl No.	Description	2014-15	2015-16	2016-17	2017-18	2018-19
1.	Timber	247.528	438.204	371.154	386.270	140.530
2.	Bamboo	1274.539	1418.839	696.216	1564.110	1528.690
3.	Firewood & Charcoal	27.398	4.218	1.296	31.000	8.520
4.	Other Forest Produce	28.768	11.153	0.450	6.080	0.890
5.	Beedi Leaves	5.156	13.930	19.290	90.130	19.770
6.	Teak Plants	1208.053	1440.420	805.218	871.110	825.110
7.	Cashew Plants	32.717	39.000	1.770	61.620	83.090
8.	Other Plantations	265.457	204.292	21.744	65.310	3.290
9.	Red Sanders	0.000	0.000	0.000	0.000	0.000
10.	Thinnings	49.370	1.560	17.560	82.750	0.120
Departmental extractions		3138.986	3571.615	1934.698	3158.380	2610.000

Source: Forest Department

5. 30 : Protected areas of the forest department in the State

Sl. No	Protected Area	District	Sanctuary Area in Sq.Kms.
1	Coringa WLS	East Godavari	235.70
2	Kolleru WLS	West Godavari & Krishna	308.55
3	Krishna WLS	Krishna	194.81
4	Rajiv Gandhi WLS (Tiger Reserve)	Kurnool, Prakasam & Guntur	2131.31
5	Rollapadu WLS	Kurnool	6.14
6	GundlaBrahmeswara WLS (Extended Core)	Kurnool & Prakasam	1194.00
7	Sri Lankamalleswara WLS	YSR & SPS Nellore	464.42
8	Nelapattu WLS	SPS Nellore	4.58
9	Pulicat WLS	SPS Nellore	600.00
10	Koundinya WLS	Chittoor	357.60
11	Sri Venkateshwara WLS & Sri Venkateshwara NP (Part of S.V.WLS)	Chittoor	525.97
12	Kambalakonda WLS	Visakhapatnam	70.70
13	Sri PenusilaNarasimha WLS	SPSR Nellore & YSR	1030.90
14	Rajiv Gandhi NP	YSR	2.30
15	Papikonda NP	East Godavari & West Godavari	1012.90
Total			8139.89

Source: Forest Department

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A.5.31 :Progress on compensatory afforestation under forest (conservation) Act 1980

Sl. No.	Item	2015-16	2016-17	2017-18	2018-19
1	Area Diverted in Ha	26317.056	26757.419	26948.57	26924.34
2	C.A. Stipulation in Ha				
	In Forest Land in Ha	4187.86	4003.624	262.76	5518.40
	In Non Forest Land in Ha	28812.185	23457.206	29222.69	29537.95
	Total	33000.045	27460.83	33485.45	35056.35
3	Addl C.A. Penal C.A. & Safety Zone in Ha	2336.379	2253.708	2596.39	2721.57
4	Financial amount required to be deposited by user agency (Rs in La.)	45950.158	49368.339	49154.95	51366.17
5	Fund made available by user agency (Rs in Lakhs.)	46448.993	49517.499	49315.09	51302.00
6	Implementation of stipulation Area afforested in Ha				
	On Forest Land in Ha	5844.925	5793.116	6447.51	7465.09
	On Non Forest land in Ha	24364.413	19264.984	25882.17	27245.76
	Total	30209.338	25058.10	32299.68	34710.85
7	Amount spent (Rs in Lakhs)	18226.583	19049.645	20025.95	21414.50
8	Balance area to be afforested in Ha				
	On Forest Land in Ha	725.600	659.659	438.23	777.98
	On Non Forest land in Ha	4484.482	4089.782	3363.71	2315.42
	Total	5210.082	4749.441	3801.97	3093.41

Source: Forest Department

A 5.32 District wise Achievements Made Under Sericulture Sector in 2018-19

Sl.No	District	Employment Generation (Nos)	Mulberry (Cumulative area in Acres)	Cocoon Production (CB & BVH) (in MTs.)	Raw Silk Production (CB & BVH) (in MTs.)	Sericulture Farmers (Number)
1	2	3	4	5	6	7
1	Srikakulam	2160	720	149	21	482
2	Vizianagaram	2541	851	145	21	430
3	Visakhapatnam	2515	849	115	16	83
4	East Godavari	7284	2433	1210	174	744
5	West Godavari	6471	2214	812	112	508
6	Krishna	3642	1214	496	69	442
7	Guntur	3906	1312	503	69	440
8	Prakasam	10410	3488	2215	301	1158
9	SPS Nellore	2700	949	361	50	505
10	YSR	7467	2546	1286	175	1418
11	Kurnool	10920	3642	1389	195	1440
12	Ananthapuramu	132288	42880	23915	3268	42592
13	Chittoor	128837	41692	21996	3006	27155
Total		321141	104790	54592	7477	77397

Source: Sericulture Department

ANNEXURES - AGRICULTURE AND ALLIED ACTIVITIES

A.5.33 :District wise collection of Market fee

(Rs. in lakhs)

Sl.No	District	2014-15	2015-16	2016-17	2017-18	2018-19
1	2	3	4	5	6	7
1	Srikakulam	1826.83	2197.86	2132.90	1906.70	1026.02
2	Vizianagaram	1153.11	954.61	1438.41	1788.20	1344.86
3	Visakhapatnam	1138.95	962.04	1182.43	1392.62	1563.60
4	East Godavari	5215.85	6790.82	5806.54	7140.56	7521.49
5	West Godavari	5847.46	7096.20	7740.44	7998.27	7210.38
6	Krishna	4866.05	5021.90	5315.80	5186.87	5358.18
7	Guntur	10756.09	11216.85	11285.45	10488.00	11899.00
8	Prakasam	2740.16	2092.11	2116.72	1876.99	1971.23
9	SPS Nellore	1639.17	1925.96	2402.55	2321.68	2414.77
10	YSR	1341.37	1259.32	1406.24	1344.65	1458.49
11	Kurnool	4393.18	4187.82	3515.37	3719.36	3819.31
12	Ananthapuramu	1194.36	1417.13	1021.22	1330.40	1435.15
13	Chittoor	1641.31	1883.01	2320.15	2309.72	2216.92
Total		43753.89	47005.63	47684.22	48804.02	49239.40

Source: Commissioner, Agricultural Marketing

A.5.34 : District wise Godowns in Agriculture Market Committees

Sl.No	Name of the District	Existing Godowns		Godowns under utilisation	
		Godowns (No.s)	Capacity (MTs)	Godowns (No.s)	Utilization (MTs)
1	Srikakulam	58	50300	50	44600
2	Vizianagaram	48	32480	38	25100
3	Visakhapatnam	19	11322	18	10722
4	East Godavari	53	50855	45	39530
5	West Godavari	106	94310	78	57530
6	Krishna	173	172110	153	157060
7	Guntur	174	151070	158	140690
8	Prakasam	78	83135	55	59710
9	SPS Nellore	63	67530	48	58600
10	YSR	48	36000	37	29140
11	Kurnool	75	75140	62	65640
12	Anantapuramu	72	50770	54	37230
13	Chittoor	47	37050	39	33850
Andhra Pradesh		1014	912072	835	759402

Source: Commissioner, Agricultural Marketing

A 6.1 : Large & Mega Industrial Projects gone in to production

District	Up to March, 2018			During 2018-19			Total		
	Units (No.)	Investment (Rs. Crore)	Employment (No.)	Units (Nos.)	Investment (Rs. Crore)	Employment (Nos.)	Units (Nos.)	Investment (Rs. Crore)	Employment (Nos.)
1	2	3	4	5	6	7	8	9	10
Srikakulam	5	835.00	2345	0	0.00	0	5	835.00	2345
Vizianagaram	8	407.07	2695	1	25.00	120	9	432.07	2815
Visakhapatnam	30	4090.07	18875	10	10604.10	2842	40	14694.17	21717
East Godavari	12	5323.84	7854	1	20.96	295	13	5344.8	8149
West Godavari	13	847.71	2270	1	130.00	300	14	977.71	2570
Krishna	22	2150.11	6915	2	580.00	950	24	2730.11	7865
Guntur	9	848.41	2630	1	7.91	25	10	856.32	2655
Prakasam	13	665.50	2252	1	35.0	300	14	700.50	2552
SPS Nellore	24	20607.56	6747	8	977.70	1772	32	21585.26	8519
YSR	11	1768.60	983	4	3000.00	62	15	4768.60	1045
Kurnool	6	417.62	743	4	116.58	140	10	534.20	883
Ananthapuramu	11	1098.57	11913	2	56.04	1206	13	1154.61	13119
Chittoor	29	6537.68	13450	9	1371.79	6118	38	7909.47	19568
Andhra Pradesh	193	45597.74	79672	44	16925.08	14130	237	62522.82	93802

Source: Industries Department

A 6.2 : Micro Small and Medium Enterprises established

District	Upto 2017-18			2018-19			Total		
	Units (No.)	Investment (Rs. Crore)	Employment (No.)	Units (Nos.)	Investment (Rs. Crore)	Employment (Nos.)	Units (No.)	Investment (Rs. Crore)	Employment (Nos.)
1	2	3	4	5	6	7	8	9	10
Srikakulam	1376	584.13	17639	376	222.56	4,292	1752	806.69	21,931
Vizianagaram	2597	576.51	18406	389	132.49	3,880	2986	709.00	22,286
Visakhapatnam	2335	1518.45	38329	590	266.29	6,538	2925	1784.74	44,867
East Godavari	2239	1091.54	26130	455	118.26	4,079	2694	1209.80	30,209
West Godavari	1611	1120.33	17046	437	218.30	4,847	2048	1338.63	21,893
Krishna	2451	1246.61	29350	931	307.10	8,061	3382	1553.71	37,411
Guntur	4105	1531.69	36989	1805	622.91	13,476	5910	2154.60	50,465
Prakasam	2198	1267.05	26007	727	294.88	5,404	2925	1561.93	31,411
SPS Nellore	1138	827.72	16428	730	304.79	4,749	1868	1132.51	21,177
YSR	874	350.90	8422	555	133.89	3,783	1429	484.79	12,205
Kurnool	3619	962.40	31100	888	186.04	5,728	4507	1148.44	36,828
Ananthapuramu	1269	567.57	17111	831	280.33	5,258	2100	847.90	22,369
Chittoor	2076	1118.37	28742	1354	355.73	23,145	3430	1474.10	51,887
Andhra Pradesh	27888	12763.27	311699	10068	3443.57	93,240	37956	16206.84	404,939

Source: Industries Department.

ANNEXURES - INDUSTRIES

A 6.3 : Progress on Prime Minister's Employment Generation Programme

S. No.	Name of the District	2016-17&2017-18			2018-19		
		Projects sanctioned by bank	Projects grounded	MM Disbursed(in Lakhs)	Projects sanctioned by bank	Projects grounded	MM distributed (Rs.in lakhs)
1	Srikakulam	101	51	184.91	64	71	371.2
2	Vizianagaram	90	37	128.87	70	64	322.85
3	Visakhapatnam	48	19	85.08	42	39	194.92
4	East Godavari	175	84	210.22	322	179	814.43
5	West Godavari	118	41	78.63	74	88	295.95
6	Krishna	117	40	187.82	90	87	334.53
7	Guntur	78	28	118.75	147	109	423.67
8	Prakasam	100	24	52.49	98	74	209.43
9	SPS Nellore	111	36	71.32	52	65	176.42
10	YSR	82	53	99.61	43	37	101.41
11	Kurnool	66	11	16.11	68	61	186.52
12	Ananthapuramu	106	52	104.78	211	113	249.49
13	Chittoor	99	38	144.10	143	102	406.23
Total		1291	514	1482.69	1424	1089	4087.05

Source: Industries Department.

A. 6.4 Status of operational Special Economic Zones in Andhra Pradesh

Sl No.	District	No. of SEZs	Employment generated Nos	Total production including Mfg. deemed exports & DTA sales. (Rs. in Cr)	Investment made including FDI (By Developer & units) (Rs. in Cr)	Exports made (including deemed Exports) (Rs. in Cr)	Imports including Capital goods & Raw material (Rs. in Cr)
1	Srikakulam	1	2237	646.52	1549.80	516.68	138.46
2	Vizianagaram	-	-	-	-	-	-
3	Visakhapatnam including VSEZ, GoI, SEZ	7	42767	11875.48	12620.31	7274.40	9037.80
4	East Godavari	3	1990	2225.40	1735.53	2196.89	1983.36
5	West Godavari	-	-	-	-	-	-
6	Krishna	1	649	15.45	87.38	15.50	0.33
7	Guntur	-	-	-	-	-	-
8	Prakasam	1	1644	587.51	418.95	532.46	140.83
9	SPS Nellore	5	14656	1155.11	2177.91	964.46	792.63
10	YSR	-	-	-	-	-	-
11	Kurnool	-	-	-	-	-	-
12	Ananthapuramu	-	-	-	-	-	-
13	Chittoor	1	13348	27608.08	1926.07	660.10	317.03
Total		19	77291	44113.55	20516.04	12160.44	12410.44

Source: VSEZ, Govt. of India.

A 6.5 Index of Industrial Production (Base Year = 2011-12)

Sl. No.	Industry Code	Industry Group	Weight	2017-18	2018-19	% of Growth over 2017-18
1	2	3	4	5	6	7
1	10	Manufacture of food products	89.557	158.78	169.13	6.52
2	11	Manufacture of beverages	11.8145	124.45	112.87	-9.30
3	12	Manufacture of tobacco products	29.0383	49.16	42.03	-14.50
4	13	Manufacture of textiles	31.3337	180.62	176.09	-2.51
5	14	Manufacture of wearing apparel	3.0619	430.15	490.40	14.01
6	15	Manufacture of leather and related products	1.2921	227.72	199.51	-12.39
7	16	Manufacture of wood and products of wood and cork, except furniture	1.1194	43.26	51.96	20.11
8	17	Manufacture of paper and paper products	8.7035	112.87	99.42	-11.92
9	18	Printing and reproduction of recorded media	0.3151	100.43	90.65	-9.74
10	19	Manufacture of coke and refined petroleum products	14.7842	111.03	114.68	3.29
11	20	Manufacture of chemicals and chemical products	60.7103	173.28	167.61	-3.27
12	21	Manufacture of pharmaceuticals, medicinal chemical and botanical products	54.4542	167.25	173.20	3.56
13	22	Manufacture of rubber and plastics products	4.9756	119.23	118.55	-0.57
14	23	Manufacture of other non-metallic mineral products	109.69	94.78	114.65	20.96
15	24	Manufacture of basic metals	155.365	118.12	127.14	7.64
16	25	Manufacture of fabricated metal products, except machinery and equipment	4.4147	144.19	171.88	19.20
17	26	Manufacture of computer, electronic and optical products	0.8445	517.88	1841.80	255.64
18	27	Manufacture of electrical equipment	29.1001	50.88	53.81	5.76
19	28	Manufacture of machinery and equipment n.e.c.	5.7153	127.91	231.70	81.14
20	29	Manufacture of motor vehicles, trailers and semi-trailers	2.5466	145.87	113.95	-21.88
21	30	Manufacture of other transport equipment	4.4438	52.04	21.13	-59.40
22	31	Manufacture of furniture	0.2575	196.26	182.17	-7.18
23	32	Other manufacturing	5.4626	37.63	44.15	17.33
	I	Mining and Quarrying	194.33	96.03	99.71	3.83
	II	Manufacturing	629.00	127.52	136.77	7.25
	III	Electricity	176.67	150.56	160.61	6.68
		General Index	1000	125.46	133.78	6.63

Source: Directorate of Economics & Statistics

ANNEXURES - INDUSTRIES

A.6.6 : Annual Survey of Industries

Sl. No	Item	Unit	2011-12	2012-13	2013-14	2014-15	2015-16	CSO DATA	
								2015-16	2016-17
1	Factories	No.	11195	12549	12658	12940	11786	12864	13084
			(8.08)	(12.09)	(0.87)	(2.23)	(-8.92)	(-0.32)	(1.71)
2	Fixed Capital	Rs. Crores	185818.93	135942.23	144996.95	150435.37	168968.43	168204.78	186320.79
			(78.34)	(-26.84)	(6.66)	(3.75)	(12.32)	(13.46)	(10.77)
3	Working Capital	Rs. Crores	16077.87	16383.94	28782.04	8910.88	16708.42	16667.25	-1984.23
			(268.35)	(1.90)	(75.67)	(-69.04)	(87.51)	(193.37)	(-88.10)
4	Outstanding Loans	Rs. Crores	33970.17	52312.89	62184.02	53162.58	54481.48	55462.67	50319.72
			(-0.46)	(53.99)	(18.87)	(-14.51)	(2.48)	(5.13)	(-9.27)
5	All Workers	No.	369554	405564	414747	433116	421850	417989	456946
			(-24.33)	(9.74)	(2.26)	(4.42)	(-2.60)	(-1.44)	(9.32)
6	All Employees	No.	455007	500799	515736	530063	519530	520056	564017
			(-25.39)	(10.06)	(2.98)	(2.78)	(-1.99)	(-1.58)	(8.45)
7	Wages to Workers	Rs. Crores	3744.71	4442.75	5949.61	6169.58	6392.47	6358.66	7304.72
			(14.02)	(18.64)	(33.92)	(3.70)	(3.61)	(7.46)	(14.88)
8	Total Emoluments	Rs. Crores	6695.52	7629.16	9617.09	11570.25	11163.71	11153.59	12533.34
			(28.69)	(13.94)	(26.06)	(20.31)	(-3.51)	(8.38)	(12.37)
9	Fuel etc. consumed	Rs. Crores	8828.53	12806.87	13351.36	13997.67	13316.87	13129.24	14577.03
			(24.36)	(45.06)	(4.25)	(4.84)	(-4.86)	(-13.42)	(11.03)
10	Material consumed	Rs. Crores	132228.67	141083.94	178715.15	161526.12	145941.59	138066.81	174285.95
			(28.82)	(6.70)	(26.67)	(-9.62)	(-9.65)	(-15.57)	(26.23)
11	Total Input	Rs. Crores	167855.77	183526.99	231604.66	215286.31	203028.63	194970.41	230427.88
			(32.62)	(9.33)	(26.20)	(-7.05)	(-5.69)	(-10.11)	(18.19)
12	Products & By Products	Rs. Crores	184554.29	185564.97	221440.21	218353.04	200281.99	196502.05	232642.76
			(21.65)	(0.54)	(19.33)	(1.39)	(-8.28)	(-10.51)	(18.39)
13	Total Output.	Rs. Crores	206118.86	215029.62	258539.18	251261.05	242692.46	233776.45	265834.34
			(24.86)	(4.32)	(20.23)	(-2.82)	(-3.41)	(-7.20)	(13.71)
14	Depreciation	Rs. Crores	6677.51	7893.05	8193.69	7035.24	7594.36	7607.26	9296.24
			(5.02)	(18.20)	(3.81)	(-14.14)	(7.95)	(9.62)	(22.20)
15	Net Value Added	Rs. Crores	31585.58	23609.58	18740.83	28939.51	32069.47	31198.78	26110.22
			(-1.79)	(-25.25)	(-20.62)	(54.42)	(10.82)	(11.10)	(-16.31)
16	Gross Value Added	Rs. Crores	38263.09	31502.63	26934.52	35974.74	39663.83	38806.04	35406.46
			(-0.66)	(-17.67)	(-14.50)	(33.56)	(10.25)	(10.81)	(-8.76)

Source: Directorate of Economics & Statistics

* Figures in Brackets indicate % of increase/ decrease over the previous year * The above data from 2011-12 to 2015-16 is Pooled Data of Central & State sample survey of ASI results & for 2016-17 CSO data only * Growth rate of 2016-17 is arrived by considering CSO data of 2015-16.

A 6.7: Mineral Revenue

(Rs. Lakh)

Sl. No	District	2014-15	2015-16	2016-17	2017-18	2018-19
1	2	3	4	5	6	7
1	Srikakulam	4359	5738	8994	10126	11136
2	Vizianagaram	2164	2344	2989	3602	4421
3	Visakhapatnam	4109	5226	7302	8487	9982
4	East Godavari	4538	5136	6417	56796	60673
5	West Godavari	1797	2515	3610	4009	7535
6	Krishna	7414	8585	12389	35105	18060
7	Guntur	7032	11264	14370	13943	16932
8	Prakasam	13359	17615	23154	23501	26767
9	SPS Nellore	2967	3817	7549	7569	7594
10	YSR	10841	18501	20312	14647	14315
11	Kurnool	13881	14148	9287	17105	30001
12	Ananthapuramu	4688	5999	18422	8975	13117
13	Chittoor	6292	7665	10209	10882	25815
	Sub Total	83441	108553	145004	214748	246348
	Oil and Gas	11870	29544	25066		
	Cess on others	1301	1507	0		
	Grand Total	96611	139605	170070	214748	246348

Source: Directorate of Mines and Geology

Note: 2016-17 to 2018-19 Crude & Natural figures are included in Rajahmundry & Cess on others included are all offices

A 6.8 : Production of Crude Oil, Natural Gas and Limestone

Sl. No.	Year	Crude Oil (Tonnes)	Growth Rate (%)	Natural Gas (mcm)	Growth Rate (%)	Limestone (000 Tonnes)	Growth Rate (%)
1	2	3	4	5	6	7	8
1	2011-12	303584	--	1353	--	65036	--
2	2012-13	295329	-2.72	1228	-9.24	61367	-5.64
3	2013-14	274030	-7.21	1143	-6.92	61471	0.17
4	2014-15	256662	-6.33*	514	55.03*	31925	48.06**
5	2015-16	294792	15	555	8	30965	-3**
6	2016-17	261605	-11	853	54	34917	13
7	2017-18	321000	23	959	12	38787	11
8	2018-19	286900	-11	1077	12	48540	25

Source: Directorate of Mines and Geology, Hyderabad.

(*) Due to Nagaram blow out, ONGC has closed 40 oil/gas wells. Hence the production decreased.

(**) Due to lack of market, the Cement Industries are running with 50% working capacity. Hence, Limestone production decreased.

ANNEXURES - ECONOMIC INFRASTRUCTURE

A.7.1 Irrigation Potential Created (upto March, 2019)

S. No.	Name of the District	(lakh Acres)				
		Major Irrigation	Medium Irrigation	Minor Irrigation	APSIDC	Total
1	Srikakulam	3.93	0.30	2.75	0.37	7.36
2	Vizianagaram	0.66	0.96	2.21	0.09	3.92
3	Visakhapatnam	0.35	0.39	2.31	0.06	3.11
4	East Godavari	7.36	0.96	1.30	0.36	9.98
5	West Godavari	7.58	0.50	1.13	0.57	9.78
6	Krishna	10.26	0.16	1.04	1.22	12.68
7	Guntur	11.87	0	0.32	2.45	14.64
8	Prakasam	5.85	0.48	1.40	1.55	9.28
9	SPS Nellore	5.95	0.20	2.83	0.16	9.14
10	YSR	3.81	0.60	1.08	0.26	5.74
11	Kurnool	6.58	0.37	0.80	1.14	8.89
12	Ananthapuramu	1.44	0.41	1.42	0.09	3.36
13	Chittoor	0.23	0.22	3.00	0.02	3.47
	Anicuts & Open head channels in Minor Irrigation	0	0	4.02	0	4.02
Total		65.87	5.55	25.60	8.34	105.36

Source: Irrigation Department

A 7.2 : Minor Irrigation Census

Sl. No	Name of Source	1 st Census (1986-87)	2 nd Census (1993-94)	3 rd census (2000-01)	4 th census (2006-07)	5 th census 2013- 14	% variation of 2 nd over 1 st census	% variation of 3 rd over 2 nd census	% variation of 4 th over 3 rd census	% variation of 5 th over 4 th census
1	2	3	4	5	6	7	8	9	10	11
1	Dug wells	385569	454602	449946	376617	212030	17.90	-1.02	-16.30	-43.70
2	Shallow Tube Wells	98664	172983	232741	321203	185255	75.33	34.55	38.01	-42.32
3	Medium Tube Wells					212950				
4	Deep Tube Wells	12666	29987	83013	218801	377950	136.75	176.83	163.57	72.74
Total Ground Water Schemes		496899	657572	765700	916621	988185	32.34	16.44	19.71	7.81
5	Surface Flow Irrigation Schemes	46020	45297	44292	45204	51368	-1.57	-2.22	2.06	13.64
6	Surface Lift Irrigation Schemes	6362	7168	8994	10671	14803	12.67	25.47	18.65	38.72
Total Surface Irrigation Schemes		52382	52465	53286	55875	66171	0.16	1.56	4.86	18.43
Total Minor Irrigation Schemes		549281	710037	818986	972496	1054356	29.27	15.34	18.74	8.42

Source: Directorate of Economics and Statistics

ANNEXURES - ECONOMIC INFRASTRUCTURE

A.7.3 Ground water Level Ranges in percentage

(Percentage)

SI No	District	Depth to Water Level Ranges					
		During May-2018 (%)			During May-2019 (%)		
		0 – 3m	3 – 8m	>8m	0 – 3m	3 – 8m	>8m
1	2	3	4	5	6	7	8
1	Srikakulam	13.2	57.9	28.9	21.1	52.6	26.3
2	Vijayanagaram	11.1	55.6	33.3	4.4	51.1	44.4
3	Visakhapatnam	11.3	38.0	50.7	5.6	30.6	63.9
4	East Godavari	21.3	39.4	39.4	19.6	35.9	44.6
5	West Godavari	5.6	22.5	71.8	4.2	28.2	67.6
6	Krishna	13.0	28.7	58.3	12.0	33.3	54.6
7	Guntur	17.6	49.6	32.8	13.6	42.4	44.1
8	Prakasam	3.3	16.7	80.0	2.2	15.4	82.4
9	SPS Nellore	11.8	35.5	52.7	7.5	29.0	63.4
10	YSR	2.8	30.2	67.0	0.0	12.3	87.7
11	Kurnool	16.6	44.1	39.3	4.9	43.8	51.4
12	Anantapuramu	3.4	14.3	82.3	1.4	8.2	90.4
13	Chittoor	3.4	23.7	72.9	0.9	9.6	89.5
Total		10	33	57	7	28	66

Source: Ground water Department

A.7.4: Salient Features of A.P.Transco / A.P.Genco / Discoms

Sl. No.	Parameter	Unit	As on 31.03.2018 (Provl)	Added 2018-19	As on 31.03.2019 (Provl)
1	Installed Capacity (As per Share)				
	a) A.P.GENCO				
1	Thermal	MW	3410.00		3410.00
2	Hydel	MW	1797.60		1797.60
3	Solar	MW	5.43	400.00	405.43
4	GGPP	MW	0.00	216.82	216.82
	AP Power Development Corp. Ltd	MW	1600.00		1600.00
	TOTAL A.P. GENCO	MW	6813.03	616.82	7429.84
	b) Joint Sector				
1	Gas (A.P.G.P.C.L) 58.8x58.32 %	MW	34.29		34.29
	c) Private Sector				
1	IPPs	MW	2105.25	-216.82	1888.43
2	Small Hydro	MW	104.44		104.44
3	Wind	MW	4019.09	83.30	4178.59
4	Bagasse , Bio-mass Co-Generation projects & Bio mass	MW	439.34		440.65
5	Mini power Plants	MW	17.20		17.20

ANNEXURES - ECONOMIC INFRASTRUCTURE

Sl. No.	Parameter	Unit	As on 31.03.2018 (Provl)	Added 2018-19	As on 31.03.2019 (Provl)
	6 Others Iso.Gas Wells+Waste Heat+Municipal waste)	MW	40.16		40.16
	7.Solar	MW	2141.95	481.36	2623.31
	Total Private Sector	MW	8867.43	347.84	9292.78
d) Share from Central Sector					
1	N.T.P.C Ramagundam -(1-6)	3x200+ 3x500	434.74	-20.51	414.23
2	N.T.P.C Ramagundam -7	1x500	108.07	-4.95	103.12
3	N.T.P.C.Talcher Stage II (Units 3,4,5&6)	4 x 500	232.80	-7.20	225.60
4	Simhadri TPS (NTPC) -Stg 1	2 x 500	461.10	0.00	461.10
5	Simhadri TPS (NTPC) -Stg 2	2 x 500	266.90	-7.70	259.20
6	Neyveli (Tamilnadu)stage-I	630	47.60	0.04	47.64
7	Neyveli (Tamilnadu)stage-II	840	86.87	-0.07	86.80
8	Vallur Stage 1 ,2 & 3	3x500	87.93	0.00	87.93
9	Tuticorin , Tamilnadu Unit 1	1x500	123.15	0.07	123.22
10	M.A.PP (Tamilnadu)	440	18.42	-0.02	18.40
11	Kaiga Nuclear power plant I & II	2 x 220	56.21	0.04	56.25
12	Kaiga Nuclear power plant III & IV	2 x 220	59.92	0.03	59.95
13	Kudankulam Unit1	1x1000	0.00	0.00	0.00
14	NTPC (Kudgi)	1x800	271.84	112.88	384.72
15	Westren region bundled power		75.00	0.00	75.00
	Total Central Sector		2330.55	72.61	2403.16
	Total (A.P.GENCO + Private + Central)	MW	18045.30	1037.27	19160.07
2	Energy Generated (cumulative)		2017-18. (Provl)	2018-19	As on 31.03.2019 (Provl)
	1 Thermal	MU	20560.88		22360.83
	2 Hydel	MU	2680.26		2680.45
	Total	MU	23241.14		25041.28
3	Energy purchased and imported (Including Other's energy handled)	MU	35551.51		38102.28
4	Grid Consumption (2+3)	MU	58792.65		63143.56
5	Maximum demand during the year (At Generation Terminal) MW	MW	8983 (16/03/2018)		9453 (14/10/2018)
6	Max. grid consumption during the year MU	MU	184.98 (24/03/2018)		197.70 (30/03/2019)
7	Per capita consumption	Kwh	1085 (2016-17)		1147 (2017-18)

ANNEXURES - ECONOMIC INFRASTRUCTURE

Sl. No.	Parameter	Unit	As on 31.03.2018 (Provl)	Added 2018-19	As on 31.03.2019 (Provl)
	Transmission Lines		As on 31.03.2018 (Provl)	Added 2018-19	As on 31.03.2019 (Provl)
8	a) 400 kV	Ckm	4561.83	747.70	5309.53
	b) 220 kV	Ckm	11032.84	399.17	11432.01
	c) 132 kV	Ckm	10720.23	517.46	11237.69
	DISCOM's Lines				
	d) 33 kV	km	25827.26	434.50	26261.76
	e) 11 kV	km	226012.73	9617.25	235629.98
	f) LT	km	327044.16	16632.80	343676.96
	Total		605199.05	28348.88	633547.93
9	APTRANSCO's Sub - stations				
	a) 400 kV	Nos.	11	4	15
	b) 220 kV*	Nos.	87	6	93
	c) 132 kV	Nos.	206	6	212
	DISCOM's Sub - stations				
	d) 33 kV	Nos.	2898	51	2949
	Total		3206	67	3269
10	Distribution Transformers (including RESCO)Up to March-19	Nos.	834877	78281	913158
11	Electrification of Towns, Villages, Hamlets, etc., (as per 2011 Census)				
	a) Towns	Nos.	195		195
	b) Villages	Nos.	16158		16158
	c) Hamlets 24001	Nos.	23475		23475
	d) Tribal Hamlets\ Habitations 6079	Nos.	5812		5812
	e) Dalitwadas 37402	Nos.	36312		36312
	f) Weaker Section Colonies 22378	Nos.	21725		21725
12	Consumers Served				
	a) Domestic	Nos.	14338841	460358	14799199
	b) Non-Domestic	Nos.	1349834	115902	1465736
	c) Industrial	Nos.	155521	8288	163809
	d) Cottage Industries	Nos.	17812	1087	18899
	e)Agricultural Services (including RESCOs)	Nos.	1720670	86430	1807100
	f) Public Lighting / Local Bodies	Nos.	104490	3405	107895
	g) General Purpose	Nos.	120989	9008	129997
	h) Temporary	Nos.	2929	169	3098
	L.T.Total	Nos.	17811086	684647	18495733
	H.T.Total	Nos.	9630	883	10513
	Grand Total	Nos.	17820716	685530	18506246

* Reconciled

Source: Energy Department

ANNEXURES - ECONOMIC INFRASTRUCTURE

A.7.5 Registered Motar Vehicles

(in No.s)

Categories	Class Of Vehicles	As on 31-03-2015	As on 31-03-2016	As on 31-03-2017	As on 31-03-2018	As on 31-03-2019
Stage Carriages	APSRTC / Hire with APSRTC	12262	13133	14910	17264	18263
	Private	779	779	1013	975	976
Goods Carriage	Articulated	6461	6710	7756	9162	9956
	Heavy, Medium & Light	253977	272852	298544	339965	374426
	3 Wheel Goods Vehicles	52640	59703	68446	79857	90024
	Tractors & Trailers	186330	203285	227099	271232	307365
Cabs	Maxi cabs	20087	20790	22430	24193	25489
	Other than Maxi Cabs	53237	56797	59992	65939	69742
Auto Rickshaw	Auto Rickshaw	397126	444132	490242	534713	567990
Passenger Vehicles	Contract Carriages	3022	3222	3667	4574	5514
	Private Service vehicles	1735	1785	1979	2229	2258
	Education Institute Buses	20471	21910	23633	26747	27387
*Transport Others	Ambulances	2573	2983	3653	4391	4559
	Others	3286	3461	3825	4165	4370
Total Transport Vehicles		1013986	1111542	1227189	1385406	1508319
2 Wheelers	Motor Cycles	6147523	6826237	7671213	8378772	9326888
4 Wheelers	Jeep	10378	10400	10429	10518	10522
	Motor Cars	475929	530227	589559	681517	759966
Tractors & Trailers	Tractors	126862	138238	154217	177150	209399
	Trailer for Agriculture purpose	93155	100805	110693	124388	134429
**Non-Transport Others	Road Rollers	1128	1154	1182	1270	1405
	Rig Mounted	770	811	864	925	954
	Construction Equipment	9668	11785	13105	17141	19904
	Fire Tenders	259	273	324	338	370
	Others	2604	3233	6037	18590	20528
Total Non-Transport Vehicles		6868276	7623163	8557623	9410609	10484365
Grand Total of Transport & Non-Transport		7882262	8734705	9784812	10796015	11992684
* Transport Others :Cash vans, Mail Carrier, Power Tiller, Campervans for hire, etc.,						
**Non-Transport Others : Cranes, Fork Lift, Generator Mounted, Self propped Harvester etc.,						

Source: Transport Department

ANNEXURES - ECONOMIC INFRASTRUCTURE

A. 7.5A District wise Revenue

(Rs. in Crores)

Sl. No.	Name of the District	2015-16	2016-17	2017-18	2018-19	2019-20 (upto May 2019)
1	Srikakulam	74.06	86.74	114.15	117.01	20.30
2	Vizianagaram	57.81	68.19	91.42	90.44	16.72
3	Visakhapatnam	262.41	303.45	363.52	390.56	70.62
4	East Godavari	203.73	238.41	294.40	305.38	53.59
5	West Godavari	155.05	193.00	239.45	241.82	43.64
6	Krishna	310.19	350.45	420.17	445.56	83.88
7	Guntur	210.83	242.16	311.15	340.48	59.42
8	Prakasam	110.08	131.36	152.33	175.98	31.14
9	SPS Nellore	140.38	168.28	197.47	215.85	37.37
10	YSR	88.37	111.90	148.15	161.67	28.39
11	Kurnool	133.87	156.34	194.70	195.55	32.77
12	Ananthapuramu	117.90	146.83	187.13	205.36	33.75
13	Chittoor	168.17	206.71	261.56	267.26	49.34
14	HOD (STA)	95.58	59.39	69.07	72.05	14.25
Total		2128.43	2463.21	3044.67	3224.97	575.18

Source: Transport Department

A 7.6 : APSRTC Performance

Sl. No.	Item	Unit	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19
1	2	3	4	5	6	7	8	9	10
1	Buses on Road (Held as on last day)	No.	12281	12235	12229	12256	11833	11763	12027
2	Avg. Buses operated	No.	12229	10147	12023	12039	11785	11684	11959
3	Scheduled Buses (As on last day)	No.	11513	11337	11193	11283	10983	10851	10993
4	Kms. Operated	Kms.	172.38	138.10	164.48	162.38	165.85	156.34	157.63
5	Seat / Kms.	No.	8341	6665	7860	7775	7914	7461	7522
6	Passenger / Kms.	No.	5294	4231	5480	5156	5307	5444	5848
7	Passengers Carried	Crs.	216	182	232	230	240	242	285
8	Occupation Ratio	%	69	67	70	69	68	73	78.00
9	Accidents	No.	1532	1080	1320	1217	1206	1220	1163
10	Accident Rate (Per lakh kms.)	No.	0.09	0.08	0.08	0.08	0.08	0.08	0.08
11	HSD oil Km.Pl	Kms.	5.22	5.21	5.23	5.19	5.20	5.23	5.2
12	LUB oil Km Pl	Kms.	5351	5407	5183	5390	5513	7028	8284
13	Employees	No.s	64127	63141	61806	59372	56592	54349	53263
14	Staff per Bus	No.	5.76	5.62	5.54	5.41	5.44	5.23	4.93

Source: Andhra Pradesh State Road Transport Corporation.

ANNEXURES - ECONOMIC INFRASTRUCTURE

A 7.7 : Post Offices in the State as on March, 2019

(in No.s)

Sl. No.	District	Head Post Offices	Mukhya Dak Ghars	Sub Post Offices	Branch Post Offices	Total
1	2	3	4	5	6	7
1	Srikakulam	3	0	71	502	576
2	Vizianagaram	3	0	66	581	650
3	Visakhapatnam	4	1	108	670	783
4	East Godavari	6	2	154	753	915
5	West Godavari	7	0	144	623	774
6	Krishna	6	0	157	653	816
7	Guntur	6	0	156	691	853
8	Prakasam	5	0	123	783	911
9	SPS Nellore	3	0	99	676	778
10	YSR	4	0	102	720	826
11	Kurnool	3	1	107	653	764
12	Ananthapuramu	4	0	119	820	943
13	Chittoor	5	1	120	768	894
Total		59	5	1526	8893	10483

Source: Chief Postmaster General

A 7.8: Status of Telephone Connections upto March, 2019

(in No.s)

S. No	Circle Name	Telephone connections LL&WLL			Telephone Exchanges			Mobile connections (Pre & Post paid) in lakhs	Public Telephones
		Urban	Rural	Total	Urban	Rural	Total		
1	2	3	4	5	6	4	7	8	9
1	Srikakulam	9685	4995	14680	14	72	86	3.37	272
2	Vizianagaram	12582	3119	15701	16	63	79	3.49	176
3	Vishakhapatnam	68792	5443	74235	47	62	109	8.95	869
4	East Godavari	42090	27908	69998	26	131	157	8.76	1030
5	West Godavari	18907	45467	64374	18	151	169	5.60	1735
6	Krishna	53181	33050	86231	24	154	178	6.95	1757
7	Guntur	55239	10080	65319	28	151	179	7.02	490
8	Prakasam	12413	8267	20680	14	125	139	2.77	319
9	SPS Nellore	24034	6174	30208	23	117	140	4.92	426
10	YSR	10694	4260	14954	13	68	81	2.96	461
11	Kurnool	19538	8679	28217	21	139	160	4.10	485
12	Ananthpur	22992	5069	28061	20	104	124	4.82	287
13	Chittor	28192	8725	36917	27	107	134	5.09	530
Total		378339	171236	549575	291	1444	1735	68.80	8837

Source: Telecom BSNL

ANNEXURES - SOCIAL INFRASTRUCTURE

A 7.9 : District wise No of Bank branches, Deposits, Advances as on 31-03-2019

Sl No	District.	No. of Branches	Deposits (Rs.Crore)	Advances (Rs.Crore)	Credit-Deposit Ratio
1	2	3	4	5	6
1	Srikakulam	323	9277.50	9878.73	106.48
2	Vizianagaram	284	7098.39	8350.71	117.64
3	Visakhapatnam	768	44717.07	58636.62	131.13
4	East Godavari	818	33729.39	41658.52	123.51
5	West Godavari	627	21394.17	32289.87	150.93
6	Krishna	858	50119.42	74231.12	148.11
7	Guntur	840	31656.03	44234.14	139.73
8	Prakasam	478	13407.26	22681.56	169.17
9	SPS Nellore	426	15021.00	20840.00	138.74
10	YSR	380	16858.06	18248.78	108.25
11	Kurnool	476	15719.00	20666.23	131.47
12	Ananthapuramu	477	17013.09	20098.63	118.14
13	Chittoor	624	36631.20	25534.67	69.71
Total		7379	312641.58	397349.59	127.09

Source: Finance (Institutional Finance) Department

A 8.1 : Population

(in No.s)

Sl. No.	District	1961	1971	1981	1991	2001*	2011*
1	2	3	4	5	6	7	8
1	Srikakulam	1555369	1769968	1959352	2321126	2537593	2703114
2	Vizianagaram	1411055	1589558	1804196	2110943	2249254	2344474
3	Visakhapatnam	1665213	2035831	2576474	3285092	3832336	4290589
4	East Godavari	2608375	3087262	3701040	4541222	5021502	5285824
5	West Godavari	1978257	2374306	2873958	3517568	3857768	3995742
6	Krishna	2076956	2493574	3048463	3698833	4187841	4517398
7	Guntur	2327246	2844488	3434724	4106999	4465144	4887813
8	Prakasam	1671726	1919995	2329571	2759166	3059423	3397448
9	SPS Nellore	1408891	1627740	2014879	2392260	2668564	2963557
10	Y.S.R	1342015	1577267	1933304	2270720	2601797	2882469
11	Kurnool	1570955	1982090	2407299	2973024	3529494	4053463
12	Ananthapuramu	1767464	2115321	2548012	3180863	3640478	4081148
13	Chittoor	1905344	2267413	2737316	3261118	3745875	4174064
Andhra Pradesh		23288866	27684813	33368588	40418934	45397069	49577103
India		439234771	548159652	683329097	846421039	1028610328	1210854977

Source: Census of India, Government of India *Data merged from Khammam villages

ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.2 : Percentage Decadal Variation of Population and Sex Ratio

Sl. No.	District	Percent Decadal Variation					Sex Ratio (No. of Females per 1000 Males)					
		1961-71	1971-81	1981-91	1991-01	2001-11*	1961	1971	1981	1991	2001*	2011*
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Srikakulam	13.80	10.70	18.46	9.33	6.52	1,047	1,033	1,023	1,012	1,014	1,015
2	Vizianagaram	12.65	13.50	17.00	6.55	4.23	1,017	1,009	1,006	1,000	1,009	1,019
3	Visakhapatnam	22.26	26.56	27.50	16.66	11.96	1,000	992	981	975	985	1,006
4	East Godavari	18.36	19.88	22.70	7.93	5.26	999	996	993	998	993	1,007
5	West Godavari	20.02	21.04	22.39	8.13	3.58	992	994	991	994	991	1,004
6	Krishna	20.06	22.25	21.33	13.22	7.87	962	964	971	969	978	992
7	Guntur	22.23	20.75	19.57	8.72	9.47	976	974	973	970	984	1,003
8	Prakasam	14.85	21.33	18.44	10.88	11.05	991	987	978	970	971	981
9	SPS Nellore	15.53	23.78	18.73	11.55	11.05	989	986	978	980	984	985
10	Y.S.R	17.52	22.59	17.47	14.78	10.79	957	958	959	955	974	985
11	Kurnool	26.17	21.45	23.50	18.72	14.85	977	969	962	953	965	988
12	Ananthapuramu	19.68	20.44	24.81	14.34	12.10	946	947	946	946	958	977
13	Chittoor	19.00	20.72	19.14	14.86	11.43	957	960	966	966	982	997
Andhra Pradesh		18.88	20.53	21.13	11.89	9.21	984	981	978	976	983	997
India		24.80	24.66	23.85	21.54	17.70	941	930	934	927	933	943

Source: Census of India, Government of India

*Data merged from Khammam villages

A 8.3 : Percentage of Urban Population to Total Population and Density of Population

Sl. No.	District	Percent of Urban Population to Total Population					Density of Population (Persons per Sq. Km.)					
		1971	1981	1991	2001*	2011*	1961	1971	1981	1991	2001*	2011*
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Srikakulam	10.65	10.89	12.50	10.98	16.16	266	303	336	398	435	463
2	Vizianagaram	-	15.94	17.22	18.33	20.94	216	243	276	323	344	359
3	Visakhapatnam	22.30	31.28	39.83	39.95	47.45	149	182	231	294	343	384
4	East Godavari	19.23	22.21	23.80	22.94	24.85	241	286	342	420	392	413
5	West Godavari	17.71	20.77	20.71	19.46	20.24	256	307	371	454	453	470
6	Krishna	27.25	32.54	35.82	32.08	40.81	238	286	349	424	480	518
7	Guntur	24.98	27.53	28.89	28.80	33.81	204	250	302	361	392	429
8	Prakasam	11.07	14.99	16.45	15.28	19.56	95	109	132	157	174	193
9	SPS Nellore	15.77	20.76	23.79	22.45	28.94	108	123	154	183	204	227
10	Y.S.R	14.18	19.37	24.03	22.59	33.97	87	103	126	148	169	188
11	Kurnool	20.30	24.49	25.84	23.16	28.35	89	112	136	168	200	230
12	Ananthapuramu	17.77	20.84	23.50	25.26	28.07	92	111	133	166	190	213
13	Chittoor	13.45	16.88	19.80	21.65	29.50	126	151	181	215	247	275
Andhra Pradesh		18.35	22.14	24.77	24.13	29.47	145	173	208	252	279	304
India		17.98	19.51	22.87	25.49	31.14	144	177	216	273	325	382

Source: Census of India, Government of India

*Data merged from Khammam villages

ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.4 : Literacy Rates (Percentage of Literates to Population ages 7 years and above)

Sl. No.	District	1991			2001*			2011*		
		Males	Fe-males	Total	Males	Fe-males	Total	Males	Fe-males	Total
1	2	3	4	5	6	7	8	9	10	11
1	Srikakulam	49.14	23.52	36.22	67.19	43.68	55.31	71.61	52.08	61.74
2	Vizianagaram	45.92	22.47	34.19	62.37	39.91	51.07	68.15	49.87	58.89
3	Visakhapatnam	56.13	34.60	45.51	69.68	50.12	59.96	74.56	59.34	66.91
4	East Godavari	55.32	42.26	48.79	69.54	60.30	64.93	74.10	66.95	70.50
5	West Godavari	59.75	46.98	53.38	77.68	68.55	73.13	77.65	71.01	74.32
6	Krishna	60.55	45.54	53.16	74.39	63.19	68.85	78.30	69.18	73.74
7	Guntur	56.54	35.85	46.35	71.24	53.74	62.54	74.79	60.09	67.40
8	Prakasam	53.14	27.06	40.30	69.35	45.08	57.38	72.92	53.11	63.08
9	SPS Nellore	58.40	36.99	47.76	73.67	56.38	65.08	75.74	61.99	68.90
10	Y.S.R	63.14	32.35	48.12	75.83	49.54	62.83	77.78	56.77	67.30
11	Kurnool	53.24	26.04	39.97	65.96	40.03	53.22	70.10	49.78	59.97
12	Ananthapuramu	55.92	27.61	42.18	68.38	43.34	56.13	73.02	53.97	63.57
13	Chittoor	62.61	36.44	49.75	77.62	55.78	66.77	79.83	63.28	71.53
Andhra Pradesh		56.53	34.92	45.86	71.28	52.72	62.07	74.77	59.96	67.35
India		64.10	39.30	52.20	75.26	53.67	64.84	80.90	64.60	72.98

Source: Census of India, Government of India

*Data with merged villages from Khammam District

A 8.5 : Enrolment of Children in Schools

(in No.s)

Sl. No.	Year	Pre Primary	I-V Classes	VI-VIII Classes	IX-X Classes	XI-XII Classes	Total
1	2	3	4	5	6	7	8
1	2004-05	36199	2039848	665865	709635	1242	3452789
2	2005-06	154391	3955616	1387230	1598020	3443	7098700
3	2006-07	285781	3920406	1387937	1639163	3569	7236856
4	2007-08	267712	3814748	1376052	1670370	2785	7131667
5	2008-09	281988	3775763	1341770	1708002	6139	7113662
6	2009-10	162415	3808746	1323400	1728719	9765	7033045
7	2010-11	158537	3827465	1355780	1709061	11487	7062330
8	2011-12	23416	786908	279710	332618	7245	1429897
9	2012-13	168192	3810085	1417557	1783305	18771	7197910
10	2013-14	163138	3851333	2097833	1195459	29504	7337267
11	2014-15	87309	3747680	2098400	1263420	35962	7232771
12	2015-16	NA	3548246	2072730	1281701	NA	6902677
13	2016-17	NA	3475771	2084949	1286577	NA	6847297
14	2017-18	NA	3565725	2100691	1309110	NA	6975526
15	2018-19	NA	3608016	2095063	1338075	NA	7041154

Source: Directorate of School Education (Provisional Data of UDISE 2018-19 for the year 2018-19)

ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.6 : School Dropout Rates

Year	Class I – V			Class I – VIII			Class I – X		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8	9	10
2004-05	21.84	22.79	22.31	45.91	50.39	48.12	61.91	67.35	64.55
2005-06	17.09	17.59	17.36	42.45	46.20	44.31	60.85	66.18	63.48
2006-07	19.05	19.15	19.11	37.22	40.54	38.87	60.78	65.18	62.96
2007-08	11.85	11.64	11.75	29.66	32.85	31.25	59.21	62.72	60.95
2008-09	8.10	7.26	7.69	29.24	30.43	29.83	54.97	57.75	56.35
2009-10	9.27	8.58	8.93	20.69	21.38	21.03	49.31	51.08	50.18
2010-11	10.56	9.33	9.95	15.35	15.99	15.66	42.95	45.44	44.19
2011-12	7.51	7.40	7.45	14.94	14.96	14.95	41.23	42.75	41.98
2012-13	5.83	6.34	6.08	20.33	20.42	20.38	32.84	34.00	33.41
2013-14	3.16	3.25	3.20	19.37	18.95	19.16	26.20	27.48	26.83
2014-15	4.88	4.30	4.60	14.91	16.59	15.74	24.54	25.93	25.23
2015-16	8.57	8.97	8.76	18.42	10.96	14.75	23.12	24.64	23.87
2016-17	2.18	2.13	2.15	1.47	1.65	1.55	0.78	1.84	1.29
2017-18	0.00	0.00	0.00	0.26	0.80	0.52	3.80	3.23	3.52
2018-19	0.00	0.00	0.00	0.00	0.00	0.00	4.42	3.46	3.94

Source: Directorate of School Education (Selected Educational Statistics AP (Provisional Data of UDISE 2018-19))

Note: Annual Average Dropout Rate has been taken in place of Dropout Rate from the year 2016-17 and they are calculated for all stages

A 8.7 : Performance in SSC Examinations

Year	Number Appeared			Number Passed			Pass Percentage		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1	2	3	4	5	6	7	8	9	10
2005-06	236549	193610	430159	166777	137064	303841	70.50	70.79	70.63
2006-07	261978	231124	493102	188119	165477	353596	71.81	71.60	71.71
2007-08	265305	237482	502787	203398	181870	385268	76.67	76.58	76.63
2008-09	273666	249858	523524	214909	196248	411157	78.53	78.54	78.54
2009-10	279757	260708	540463	227018	211017	438030	81.15	80.94	81.05
2010-11	278864	263042	541906	232721	218535	451256	83.45	83.08	83.27
2011-12	282479	266004	548483	248083	235776	483859	87.82	88.64	88.22
2012-13	287170	267540	554710	258624	242509	501133	90.06	90.64	90.34
2013-14	290016	272297	562313	263423	249167	512590	90.08	91.50	91.20
2014-15	310958	295617	606575	283433	271103	554536	91.15	91.71	91.42
2015-16	316965	300065	617030	298884	284382	583266	94.30	94.77	94.53
2016-17	314471	295031	609502	288909	271344	560253	91.87	91.97	91.92
2017-18	310054	294473	604527	292736	278439	571175	94.41	94.56	94.48
2018-19	317434	302060	619494	300548	287217	587765	94.68	95.09	94.88

Source: Directorate of School Education (Selected Educational Statistics AP (Provisional Data from SSC Board))

ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.8: Category- wise and District-wise Junior Colleges in the State 2018-19

(in No.s)

District	Govt	Aided	Un- Aided	Ap Resi	Apsw	Co-Op	Aptw	Comp.P	Voc	Cent-G	Incent	Model	B.C.Resi	K.G.Bv	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Srikakulam	44	0	99	0	12	2	4	0	5	0	2	14	0	2	184
Vizainagaram	22	2	90	1	10	0	6	3	19	0	0	16	1	3	173
Visakhapatnam	36	8	190	0	12	2	10	3	30	2	1	5	2	6	307
East Godavari	43	18	213	2	17	3	6	0	45	0	2	2	0	1	352
West Godavari	33	13	139	0	9	6	3	1	35	0	1	0	0	1	241
Krishna	26	25	207	1	14	5	1	4	16	2	6	2	1	1	311
Guntur	23	32	197	2	10	3	0	8	16	1	4	14	1	2	313
Prakasam	32	12	112	0	14	3	2	3	11	0	1	11	0	2	203
SPS Nellore	27	9	136	1	12	2	2	4	4	0	4	10	2	2	215
Y.S.R	27	26	102	0	17	1	0	0	8	0	3	10	1	2	197
Kurnool	42	11	135	2	14	2	3	2	14	1	9	36	2	2	275
Ananthapuramu	42	5	121	1	13	1	2	1	5	2	5	25	4	5	232
Chittoor	60	7	165	2	12	0	2	1	16	1	5	20	0	2	293
Total	457	168	1906	12	166	30	41	30	224	9	43	165	14	31	3296

Source: Intermediate Education

A 8.9 : District-wise General and vocational courses results in Junior Colleges IPE'2018

(in No.s)

Sl. No.	District	General			Vocational		
		Appeared	Pass	%	Appeared	Pass	%
1	Srikakulam	25630	15930	62	1502	1008	67
2	Vizianagaram	20838	13799	66	1854	1465	79
3	Vishakhapatnam	45233	32886	73	3300	2311	70
4	East Godavari	41508	27772	67	4369	2492	57
5	West Godavari	29925	22164	74	3322	2070	62
6	Krishna	56894	46075	81	1528	1079	71
7	Guntur	44501	32833	74	1104	746	68
8	Prakasam	23481	15883	68	894	578	65
9	SPS Nellore	26143	19440	74	1083	882	81
10	YSR	18853	11525	61	1127	855	76
11	Kurnool	31113	22263	72	2013	1463	73
12	Anantapuramu	27330	18609	68	2130	1678	79
13	Chittoor	40290	30434	76	2426	1782	73
Andhra Pradesh		431739	309613	72	26652	18409	69

Source: Board of Intermediate Education

ANNEXURES - SOCIAL INFRASTRUCTURE

A.8.10 : Category Wise Enrolment of Students in Govt Degree Colleges 2018 - 19

(in No.s)

SL. No	District	Govt. Degree Colleges	Men	Women	Total	SC	ST	BC	OC
1	2	3	4	5	6	7	8	9	10
1	Srikakulam	12	3225	3349	6574	1102	857	4365	250
2	Vizianagaram	5	757	737	1494	129	384	906	75
3	Visakhapatnam	12	4156	4521	8677	991	3350	3571	765
4	East-Godavari	17	6038	5828	11866	3008	998	5323	2537
5	West-Godavari	15	2735	2171	4906	1859	339	1878	830
6	Krishna	9	3148	1957	5105	1933	295	2145	732
7	Guntur	6	853	2491	3344	1177	251	1166	750
8	Prakasam	8	701	1082	1783	896	94	539	254
9	SPS Nellore	9	1434	1660	3094	1471	177	1099	347
10	YSR	12	3425	2785	6210	1867	204	2459	1680
11	Kurnool	14	5002	3794	8796	3168	400	4419	809
12	Anantapuramu	13	10042	6282	16324	4381	1092	8634	2217
13	Chittoor	16	5027	3785	8812	3504	529	3926	853
	Andhra Pradesh	148	46543	40442	86985	25486	8970	40430	12099

Source: Commissioner, Collegiate Education

A.8.11: Category Wise Enrolment of Students in Private Aided Degree Colleges 2018 - 19

(in No.s)

SL. No	District	Pvt. Aided Colleges	Men	Women	Total	SC	ST	BC	OC
1	2	3	4	5	6	7	8	9	10
1	Srikakulam	1	164	107	271	22	89	151	9
2	Vizianagaram	5	5175	3750	8925	1046	597	6706	576
3	Visakhapatnam	8	2634	3992	6626	866	364	3844	1552
4	East-Godavari	10	6311	4003	10314	2451	299	4768	2796
5	West-Godavari	16	7547	8488	16035	3492	239	8218	4086
6	Krishna	22	9864	12352	22216	4682	557	9909	7068
7	Guntur	33	9386	4725	14111	4107	640	5158	4206
8	Prakasam	10	1760	347	2107	626	96	930	455
9	SPS Nellore	9	1812	1728	3540	1614	193	1273	460
10	YSR	9	3702	2975	6677	1421	135	2882	2239
11	Kurnool	9	6218	3191	9409	2243	193	5257	1716
12	Anantapuramu	4	2460	1959	4419	629	157	2504	1129
13	Chittoor	1	420	285	705	178	58	303	166
	Andhra Pradesh	137	57453	47902	105355	23377	3617	51903	26458

Source: Commissioner, Collegiate Education

ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.12 : Family Welfare Program

(Nos. in Lakh)

Item	2014-15	2015-16	2016-17	2017-18	2018-19
1	2	3	4	5	6
IUD	1.91	1.72	1.60	1.45	1.49
Oral Pill Users	1.40	1.50	1.74	1.72	1.88
Contraceptive Condoms Users	2.13	2.36	2.78	2.75	3.00
Vasectomies	0.03	0.18	0.21	0.13	0.01
Tubectomies	2.89	2.49	2.32	2.13	1.99
Total Sterilization	2.92	2.51	2.34	2.14	2.00
Medical Termination of Pregnancy	0.02	0.02	0.03	0.02	0.02
Deliveries conducted by 24 hours PHC	0.54	0.45	0.41	0.37	0.41
Beneficiaries under Janani Suraksha Yojana	2.62	2.64	2.96	2.72	2.72
TT (Pregnant Women)	8.69	8.19	8.20	8.12	8.21
DPT	8.13	4.61	8.10	7.78	8.54
Polio	8.11	7.91	7.69	5.17	7.41
BCG	7.98	7.69	4.40	7.63	7.55
Measles	7.98	8.06	7.93	8.52	8.36
Full Immunisation	7.96	8.06	7.92	8.52	8.36
Hepatitis -B	8.10	3.81	5.73	6.49	6.92
Vitamin - A	8.52	7.99	8.09	5.86	6.46
Pentavalent		4.22	7.65	7.93	8.29
Emergency cases transported	5.99	5.73	5.52	5.42	4.78

Source: Commissioner Family Welfare

A 8.13 : Health Camps Conducted under Dr. YSR Aarogyasri Scheme during the 2018-19

(in No.s)

SI. No	District	Cards Covered (Lakhs)	Camps Conducted	Patients Screened	Patients Referred	Out-Patient	In-Patient	Therapies Preadthed
1	2	3	4	5	6	7	8	9
1	Srikakulam	8.27	57	9983	1	883	575	540
2	Vizianagaram	7.07	60	13204	42	734	484	465
3	Vishakhapatnam	12.15	58	11538	56	798	555	519
4	East Godavari	16.27	48	14570	84	1329	824	775
5	West Godavari	12.19	60	10299	41	1490	808	752
6	Krishna	12.59	-	-	-	1269	635	624
7	Guntur	14.48	16	6548	298	2272	720	693
8	Prakasam	9.57	73	13647	48	3062	792	752
9	SPS Nellore	8.85	41	16681	19	1364	707	679
10	YSR	7.75	36	8086	10	1926	873	816
11	Kurnool	11.80	24	2444	1	907	630	593
12	Anantapuramu	12.04	-	-	-	1028	711	651
13	Chittoor	11.05	45	12428	176	1822	837	777
Andhra Pradesh		144.07	518	119428	776	18884	9151	8636

Source: Dr. YSR Aarogyasri Health Care Trust

ANNEXURES - SOCIAL INFRASTRUCTURE

8.14 Details of average reporting % of Syndromic (S) Presumptive (P) Laboratory Confirmed (L)

IDSP SPL Performance 2018 (Jan - Dec)										
Sl. No	District	Syndromic (S) Form			Presumptive (P) Form			Laboratory Confirmed (L) Form		
		Reporting Units	Avg	%	Reporting Units	Avg	%	Reporting Units	Avg	%
1	Srikakulam	481	377	78	93	68	73	80	59	74
2	Vizianagaram	435	378	87	101	90	89	76	68	90
3	Visakhapatnam	583	536	92	120	113	94	120	111	93
4	East Godavari	840	835	99	157	157	100	126	126	100
5	West Godavari	638	635	100	109	104	96	109	104	96
6	Krishna	584	572	98	104	98	94	104	97	93
7	Guntur	677	670	99	137	129	94	120	112	94
8	Prakasam	544	510	94	108	108	100	108	108	100
9	SPS Nellore	477	465	98	107	102	96	80	76	95
10	YSR	475	474	100	91	91	100	82	82	100
11	Kurnool	542	542	100	127	124	98	110	107	97
12	Anantapuramu	586	582	99	107	103	97	107	103	96
13	Chittoor	644	644	100	121	118	97	117	114	97
Total		7506	7220	96	1482	1405	95	1339	1268	95

Source: Director of Public Health and Family Welfare

A 8.15 Details of National Programme for Prevention and Control of Fluorosis (NPPCF)

(in No.s)

Surveys (After Installation of Fluoride Ion Meter i.e. from July-2014 onwards)	May-19	Cumulative Data (Since initiation of Programme)
3.1 Villages surveyed	19	1501
3.2 School survey		
Schools covered	6	1946
Children surveyed	201	69452
Children with suspected Dental Fluorosis	40	10019
Urinary tests carried out in school children with suspected Dental Fluorosis	40	6882
Children with confirmed Dental Fluorosis	0	5157
Percentage children with confirmed Dental Fluorosis.	0	7.42%
3.3 Community Survey		
Households surveyed	441	39073
Persons examined	1427	156631
Suspected cases of Dental Fluorosis	72	23838
Urinary tests of suspected Dental Fluorosis carried out	61	3433
Confirmed cases of Dental Fluorosis	0	2435
Percentage of confirmed Dental Fluorosis	0	1.55%

ANNEXURES - SOCIAL INFRASTRUCTURE

Surveys (After Installation of Fluoride Ion Meter i.e. from July-2014 onwards)	May-19	Cumulative Data (Since initiation of Programme)
Suspected cases of Skeletal Fluorosis (with or without Dental Fluorosis)	39	333
Urinary tests of suspected Skeletal Fluorosis carried out	7	51
Confirmed cases of Skeletal Fluorosis	0	39
Percentage of Skeletal Fluorosis.	0	0.02
4. Water Analysis		
Samples tested	25	4011
Samples found above 1ppm	11	1523
5. Urinary Analysis		
Total samples analyzed	108	10238
No. above prescribed limit	5	7585
Percentage samples above limit.	0	74.09

Source: Director of Public Health and Family Welfare

A.8.16 : ICTC Program performance of Non Ante Natal Clients & Ante Natal Clients in 2018-19

(in No.s)

S. No	District	Non Ante Natal Clients(Non-ANC)					Ante Natal Clients (ANC)				
		Target	Tested	% of Achievement	NON-ANC Positives	NON-ANC % of Positivity	Target	Tested	% of Achievement	ANC Positives	ANC % of Positivity
1	Srikakulam	65195	77563	119	654	0.8	51500	62760	122	19	0.03
2	Vizianagaram	54434	81507	150	648	0.8	43000	55030	128	29	0.05
3	Visakhapatnam	104312	128423	123	1691	1.3	82400	76418	93	90	0.12
4	East Godavari	116085	125117	108	2914	2.3	91700	90709	99	90	0.10
5	West Godavari	92285	110693	120	2138	1.9	72900	82342	113	62	0.08
6	Krishna	105451	169076	160	2522	1.5	83300	78817	95	92	0.12
7	Guntur	124693	162815	131	2719	1.7	98500	73136	74	83	0.11
8	Prakasam	90513	112223	124	1845	1.6	71500	61036	85	62	0.10
9	SPS Nellore	67727	91540	135	1115	1.2	53500	59895	112	59	0.10
10	YSR	79120	118191	149	819	0.7	62500	58748	94	42	0.07
11	Kurnool	113806	104515	92	1226	1.2	89900	97282	108	56	0.06
12	Anantapuramu	113426	137167	121	1223	0.9	89600	91719	102	65	0.07
13	Chittoor	105957	126351	119	1694	1.3	83700	79690	95	72	0.09
Total		1233004	1545181	125	21208	1.4	974000	967582	99	821	0.08

Source: Aids Control Society

ANNEXURES - SOCIAL INFRASTRUCTURE

A.8.17: Ante Retroviral Therapy Program performance

S. No	District Name	Cumulative number of PLHIV registered in HIV Care at ART	Cumulative number of PLHIV "Alive and on ART"
1	Srikakulam	14632	7039
2	Vizianagaram	12759	6596
3	Visakhapatnam	33336	15843
4	East Godavari	62544	27737
5	West Godavari	40570	19284
6	Krishna	44937	19973
7	Guntur	51892	23613
8	Prakasam	33194	14446
9	SPS Nellore	19029	8781
10	YSR	16098	7659
11	Kurnool	19847	9957
12	Anantapuramu	22996	13052
13	Chittoor	21386	10356
Total		393220	184336

Source: Aids control Society

A 8.18 Houses completed under weaker section Housing Programme

(in No.s)

Sl. No.	District	2017-18			2018-19		
		Rural	Urban	Total	Rural	Urban	Total
1	Srikakulam	17539	1314	18853	16559	3618	20177
2	Vizianagaram	14626	3413	18039	15451	928	16379
3	Visakhapatnam	21862	8757	30619	16514	7676	24190
4	East Godavari	39489	814	40303	33568	5882	39450
5	West Godavari	27246	928	28174	26768	3400	30168
6	Krishna	20558	651	21209	20805	3813	24618
7	Guntur	23677	2382	26059	22852	5497	28349
8	Prakasam	18274	625	18899	18665	2339	21004
9	SPS Nellore	18897	1384	20281	14422	3806	18228
10	YSR	13714	1463	15177	14869	4343	19212
11	Kurnool	22648	393	23041	22748	7841	30589
12	Anantapuramu	19542	2719	22261	24586	8893	33479
13	Chittoor	18691	1558	20249	20503	5323	25826
Total		276763	26401	303164	268310	63359	331669

Source: Housing Corporation

ANNEXURES - SOCIAL INFRASTRUCTURE

8.19 Component wise Physical Achievements under PMKSY(IWMP)-WDC

(in No.s)

SI.	Name of the component & Work	2009-10 to 2017-18	During the 2018-19	Since Inception
Natural Resource Management (NRM)				
1	Check Dams / Check Walls	8,035	4,641	12,676
2	Farm Ponds / Dugout Ponds (Including EGS)	94,441	38,245	1,32,686
3	Improvements to CDs / PTs	5,826	1,596	7,422
4	Percolation Tanks / Mini Percolation Tanks	4,135	3,009	7,144
5	Staggered Trenches / Continuous Contour Trenches	3,201	1,454	4,655
6	Gully Control Works	19,355	3,155	22,510
7	Cattle drinking water troughs	1,826	368	2,194
8	Threshing floors	858	528	1,386
9	Others (Surface Storage Pond, Recharge of dried up open wells, Compost pit Generation etc.,)	5,022	3,223	8,245
Production System Improvements (PSI)				
1	Oil Engines	34,080	909	34,989
2	Sprayers	1,630	5,002	6,632
3	Tarpaulins	23,526	11,477	35,003
4	Water carrying pipes	8,036	4,305	12,341
5	Custom Hiring Centers	78	0	78
6	Implement Service Stations	913	2	915
7	Individual High cost machinery (Tillers, Seed drills, MB plough)	2,642	995	3,637
8	Others (Breeding Rams, Animal Health Camps, Feed supply, Bio-gas plant)	32,864	3,783	36,647
Entry Point Activities (EPA)				
1	RO Plants	257	15	272
2	Solar street lights	3,553	43	3,596
3	Animal Health/ Sheep Health/ Fertility Camps	2,249	0	2,249
4	Trevices	528	0	528
5	Extension of pipe line for drinking water	641	17	658
6	Tent house	445	6	451
7	School related like furniture, Shed, Building repair, Lab etc.,	618	38	656
8	Others(Single Works, Cattle/Goat / Sheep Trough etc.,)	4,919	12	4,931
Livelihoods(LH)				
1	Dairy activities	17,276	-	17,276
2	Small ruminants	12,092	-	12,092
3	Petty businesses	6,909	-	6,909
4	Skilled businesses	4,319	-	4,319
5	Agriculture activities	2,591	-	2,591

Source: Rural Development

ANNEXURES - SOCIAL INFRASTRUCTURE

A 8.20 District and category wise pensions for the month of March, 2019 payable in April, 2019 (in No.s)

S No.	District	O.A.P	Weavers	Disabled (>=80)	Disabled (<80)	Widow	Toddy Tappers	Others	Total
		1	2	3	4	5	6	7	8
1	Srikakulam	160308	5466	9002	25829	123505	1235	27306	352651
2	Vizianagaram	132884	3422	15643	25720	113783	1998	16637	310087
3	Visakhapatnam	183644	3566	14379	31784	168086	2261	20778	424498
4	East Godavari	243440	11094	26618	40907	226267	5894	36760	590980
5	West Godavari	203642	4516	28490	26696	148070	4816	28923	445153
6	Krishna	161959	5942	25473	31905	180981	5003	28536	439799
7	Guntur	216017	8865	22668	27153	185869	2081	34900	497553
8	Prakasam	177934	8886	15707	23799	132936	381	27015	386658
9	SPS Nellore	132725	5878	10300	25073	124312	2120	17542	317950
10	YSR	137125	12582	12506	24789	106653	277	11049	304981
11	Kurnool	161842	4598	23522	24080	163463	343	14418	392266
12	Ananthapuramu	221736	23269	19740	48730	157751	515	26145	497886
13	Chittoor	210218	8644	19853	34120	170950	672	23328	467785
Total		2343474	106728	243901	390585	2002626	27596	313337	5428247

Source: SERP

A. 8.21 Details of Farmer Producer Organizations and Groups as on 31.03.2019 (in No.s)

Sl. No.	District	RIGP mandals	Total Producer Organizations	FPO's registered	Total Producer Groups	Total Members
1	Srikakulam	11	11	10	1738	19064
2	Vizianagaram	12	13	13	2301	25979
3	Visakhapatnam	14	16	16	2038	24536
4	East Godavari	14	15	15	1872	21961
5	West Godavari	10	10	8	1301	13708
6	Krishna	8	7	7	1142	12289
7	Guntur	11	11	11	1693	21101
8	Prakasam	15	17	17	2750	31502
9	SPS Nellore	11	11	11	1568	17099
10	YSR	10	11	11	1489	16309
11	Kurnool	17	17	10	2754	28681
12	Anantapuramu	12	15	15	2457	27053
13	Chittoor	16	15	13	1984	22780
Total		161	169	157	25,087	2,82,062

Source: Rural Development

ANNEXURES - POVERTY EMPLOYMENT AND UNEMPLOYMENT

A 9.1 : Poverty in Andhra Pradesh** and All India

Year	Andhra Pradesh			All India		
	Rural	Urban	Combined	Rural	Urban	Combined
1	2	3	4	5	6	7
Percentage of People below Poverty Line						
1973-74#	48.41	50.61	48.86	56.44	49.01	54.88
1977-78#	38.11	42.55	39.31	53.07	45.24	51.32
1983#	26.53	36.30	28.91	45.65	40.79	44.48
1987-88#	20.92	40.11	25.86	39.09	38.20	38.86
1993-94#	15.92	38.33	22.19	37.27	32.36	35.97
2004-05#	11.20	28.00	15.80	23.30	25.70	27.50
1993-94*	48.10	35.20	44.60	50.10	31.80	45.30
2004-05*	32.30	23.40	29.90	41.80	25.70	37.20
2009-10*	22.80	17.70	21.10	33.80	20.90	29.80
2011-12*	10.96	5.81	9.20	25.70	13.70	21.92
Number of People below Poverty Line						
(Lakh)						
1973-74#	178.21	47.48	225.69	2612.90	600.46	3213.36
1977-78#	149.13	48.41	197.54	2642.47	646.48	3288.95
1983#	114.34	50.24	164.58	2519.57	709.40	3228.97
1987-88#	96.38	64.05	160.43	2318.80	751.69	3070.49
1993-94#	79.49	74.47	153.97	2440.31	763.37	3203.68
2004-05*	187.07	51.33	238.80	3266.63	807.59	4076.10
2009-10*	127.90	48.70	176.60	2782.10	764.70	3546.80
2011-12*	61.80	16.98	78.78	2166.58	531.25	2697.83

Source: Planning Commission, Government of India.

Note: * As per Tendulkar Committee report #As per Lakadawala Methodology Report

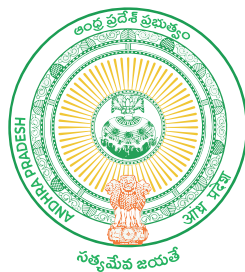
**For united Andhra Pradesh

A 9.2 : Employment Registrations and Live Register during 2018-19

Sl. No.	Employment Exchanges	Live registrations (in No.s)
1	2	3
1	Srikakulam	61144
2	Vizianagaram	62654
3	Visakhapatnam	158209
4	East Godavari	76852
5	West Godavari	82177
6	Krishna	65661
7	Guntur	53493

Sl. No.	Employment Exchanges	Live registrations (in No.s)
1	2	3
8	Prakasam	51896
9	SPS Nellore	50042
10	YSR	59509
11	Kurnool	88801
12	Anantapuramu	37799
13	Chittoor	102189
Total		950426

Source: Employment and Training Department



PLANNING DEPARTMENT
GOVERNMENT OF ANDHRA PRADESH