

# SUSTAINABLE DEVELOPMENT GOALS

## Andhra Pradesh







Government of Andhra Pradesh  
Planning Department



**The Sustainable Development Goals  
Annual Status Report  
2020**





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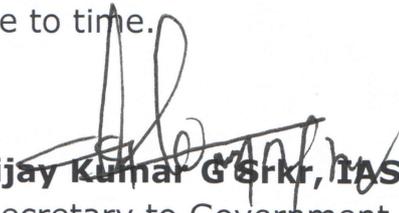
## FOREWORD

India as a member country of the United Nations and signatory to the UN Sustainable Development Summit in September 2015, has also adopted the Sustainable Development Goal 2030 (SDG 2030) as the guiding framework for its National Development Agenda till 2030. The 17 SDGs set in the 2030 Agenda comprise a wide range of targets related to social, economic and environmental issues to be reached by all countries before the end of 2030. Andhra Pradesh, along with other states of the country has adopted the Global Sustainable Development Goals 2030 and targets to direct and drive the social and economic development policies and programmes towards achieving the goals.

Based on the National Indicator Framework (NIF) communicated by NITI Aayog, the Planning Department in consultation with all the departments concerned has prepared State Indicator Framework (SIF) consisting of 395 monitorable indicators duly aligning SDG targets with important schemes\programmes of the State Government including Navaratnalu. Taking the initiative to sub-state level, the state has initiated preparation of the District Indicator Framework (DIF) and soon the districts will also start working on SDGs. Further localization of SDGs to Panchayat and Urban Local Bodies is also on the anvil.

The State government, committed to welfare the poor, under-privileged and marginalized sections, continues to strive hard to deliver results to improve the lives of people of Andhra Pradesh. Keeping in view of the changed priorities of the State, the government through this endeavor, has embarked on reformulating the SDG Vision and bringing out the Annual Report for the year 2019-20 highlighting the achievements, strategies and the challenges of the state under the SDG framework. The latest survey results of NFHS-5 have also been factored into the report.

We are also keen to restructure the SDG Dashboard and facilitate monitoring of the progress on a regular basis, with the cooperation of line departments. I extend my sincere appreciation to the NITI Aayog, New Delhi and MoSPI, GoI for their guidance from time to time.

  
**Vijay Kumar G Srkr, IAS**  
Secretary to Government



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# Sustainable Development Goals (SDGs) - Andhra Pradesh

## Background:

With a view to address the major issues of poverty, hunger, health risks, gender inequalities, illiteracy and the vertiginous degradation of ecosystems and biodiversity worldwide from a global partnership perspective for sustainable development, the United Nations (UN) established an independent commission at the beginning of 1980s.

In September 2000, most world leaders adopted the United Nations Millennium Declaration including 8 Millennium Development Goals (MDGs) to face major issues by 2015 under a global partnership commitment. The UN Millennium Campaign mainly focused on reducing poverty, enhancing education, promoting women empowerment, improving maternal health and ensuring environment sustainability.

On 25 September 2015, the 2030 Agenda for Sustainable Development was adopted at the United Nations Sustainable Development Summit considering a new set of 17 Sustainable Development Goals (SDGs) to be achieved by the year 2030. The 17 SDGs set in the 2030 Agenda comprise a wide range of targets related to

social, economic and environmental issues to be reached by all countries before the end of 2030. 169 targets and 394 indicators were contemplated to monitor progress towards the achievement of the 17 goals.

## SDGs at Global Level:

At the global level, the 17 Sustainable Development Goals (SDGs) and 169 targets of the new agenda have been proposed to be monitored and reviewed using a set of global indicators. The global indicator framework for Sustainable Development Goals was developed by the Inter-Agency and Expert Group on SDG Indicators. The annual meetings of the High-level Political Forum on sustainable development plays a central role in reviewing progress towards the SDGs at the global level. Since the coming into force of the Global Goals in 2016, countries have taken a host of proactive measures to achieve the targets on time. Some of these are:

- I. Extreme poverty and under-5 mortality have reduced
- II. A large number of countries have ratified the Paris Agreement on climate change

III. Developed policies to address rapid urbanization & support sustainable consumption & production.

### **SDGs – India’s Action:**

India as a member country of the United Nations and signatory to the UN Sustainable Development Summit in September 2015, has also adopted the Sustainable Development Goal 2030 (SDG 2030) as the guiding framework for its National Development Agenda till 2030. The UN Summit Agenda document titled “Transforming Our World: the 2030 Agenda for Sustainable Development” enunciated that the SDGs will be more ambitious than the Millennium Development Goals, covering a broad range of interconnected issues, from economic growth to social issues to global public goods.

### **National Indicator Framework (NIF) to Monitor SDGs:**

At the national level, one of the first initiatives undertaken was to map the schemes, policies, and programmes of the Central Government with corresponding SDG targets. This exercise assigned the responsibility of each target to a central ministry, thereby ensuring clarity on ownership, especially in the matters of data and indicators. To monitor the progress of

SDGs into on-going national policies, programmes, and strategic action plans to address the developmental challenges, the Ministry of Statistics and Programme Implementation prepared National Indicator Framework through a participatory process.

### **Key Features / Characteristics of National Indicator Framework:**

- The National Indicator Framework consists of 306 statistical indicators. This is the largest monitoring framework in the country and will be dependent on a statistical system for flow of information.
- The framework consists of nationally defined indicators responding to national priorities.
- Statistical indicators of NIF is the backbone of monitoring of SDGs at the national and state level to achieve the targets under different SDGs.
- The indicators directly respond to the goals and targets of SDGs.
- Data sources , periodicity and computation of indicator also included

- Scope of improving the Framework by adding/deleting indicators with improvement in Statistical System.
- High Level Steering Committee (HLSC) periodically reviews and strive for refinement of National Indicator Framework for monitoring SDGs.

At the national level, NITI Aayog is designated as the government institution responsible for overall coordination and monitoring of the SDGs in the country. NITI Aayog works closely with the Ministry of Statistics and Programme Implementation, accountable for the development of the baseline data on the National Indicator Framework. As an institution, NITI Aayog overseeing implementation of SDGs in the country through aligned programmes/ schemes in collaboration with States/UTs and other institutions and international organizations.

### **SDGs - Andhra Pradesh:**

Andhra Pradesh, along with other nations and states of the World, decided to adopt the Global Sustainable Development Goals 2030 (SDG 2030) and targets to direct and drive the social and economic development policies and programmes. The Government is keen to ensure that the implementation

of SDGs in the state is judiciously prioritized and adopted in accordance with local challenges, capacities and resources available.

### **Road map to achieving Sustainable Development Goals in AP:**

The government has initiated a comprehensive programme of action for sustainable and inclusive growth and development through an integrated strategy encompassing growth, development, equity, welfare, and good governance. The State Government with a definite vision to achieve the set goals, has introduced flagship programmes under 'Navaratnalu' as a social development measure with cross cutting nine themes covering agriculture, health, education, housing, welfare and other sectors.

The state government has placed special focus on improving the human development indicators on a saturation mode. All the themes of Navaratnalu are aligned with the SDGs and the GoI schemes have also been aligned to the different themes of Navaratnalu making the programme to be in sync with the national priorities. Adequate budget allocation has been made through appropriate schemes in the financial year 2020-21. The budgetary support will continue in coming years also.

## **State Indicator Framework (SIF):**

NITI Aayog has communicated the revised draft of National Indicator Framework (NIF) with a request to share the State Indicator Framework (SIF) for Andhra Pradesh after approval by a committee to be constituted for the purpose. Due to Covid19 pandemic, the committee has not yet been constituted in the state.

The Planning Department has prepared SIF on SDGs in consultation with all the departments concerned with necessary data for the data points indicated. The SDG targets have been aligned with important schemes\programmes of the State Govt., including Navaratnalu and departments.

## **District Indicator Framework (DIF):**

The preparation of District Indicator Framework (DIF) is under process in the state.

## **Action Plan for districts:**

As part of localization of SDGs, the districts have a larger role to play. The District Collector with the assistance of the Chief Planning office shall hold a workshop with all the district officers in the district so as to extend awareness on the urgency and importance of achieving SDGs.

Educationalists, academia, people's representatives, NGOs and other informed people who have development background in the district may be invited to the workshop and made partners of the development endeavor. The results are to be monitored periodically under the District Indicator Framework (DIF) for taking corrective measures ensuring timely accomplishment of targets. After strengthening the district level SDG set up, focus also needs to be taken to the sub-district level – to Panchayats and ULBs.

The Planning department and the CPOs office shall respectively be the nodal departments at State and at district levels.

## **Annual Report 2019-20:**

The Planning Department is bringing out the State Annual Status Report 2019-20 on implementation of SDGs

## **SDG India Index:**

To drive the spirit of completion among sub-national governments, NITI Aayog conceptualized a composite SDG India Index as an advocacy and bench marking tool.

The latest and second SDG India Index report have been published in 2019. The comparative performance of 5 states and India is depicted below:

Sustainable Development Goal	India	AP	AP Rank	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
SDG 1. No Poverty	50	69	3	Tamil Nadu (72)	Tripura (70)	<b>Andhra Pradesh (69)</b>	Meghalaya (68)	Manipur (69)
SDG 2. Zero Hunger	35	35	19	Goa (76)	Mizoram (75)	Kerala (74)	Nagaland (70)	Puducherry (71)
SDG 3. Good Health and Well-Being	61	76	2	Kerala (82)	<b>AP(76)</b> Maharashtra(76) Tamil Nadu (76)	Karnataka (72)	Punjab (71)	West Bengal (70)
SDG 4. Quality Education	58	52	18	Himachal Pradesh (81)	Kerala(74)	Goa (71)	Tamil Nadu (70) Manipur(70)	Haryana (68)
SDG 5. Gender Equality	42	37	17	HP(52)	Kerala (51)	Sikkim (49)	Goa(46) Punjab(46)	Madhya Pradesh(45)
SDG 6. Clean Water And Sanitation	88	96	1	<b>Andhra Pradesh (96)</b>	Uttar Pradesh (94)	Maharashtra (93)	MP(92) Gujarat(92) Chhattisgarh (92)	Uttarakhand(90) Tamil Nadu (90)
SDG 7. Affordable and Clean Energy	70	86	6	Sikkim (97)	Goa(95)	Telangana(93)	Tamil Nadu (90)	Punjab (89)
SDG 8. Decent Work and Economic Growth	64	78	2	Telangana (82)	<b>AP (78)</b> Karnataka(78)	Himachal Pradesh (76)	Gujarat (75)	Tamil Nadu (74)
SDG 9. Industry, Innovation and Infrastructure	65	66	9	Kerala (88) Gujarat (88)	Haryana (73)	Odisha (72)	Jharkhand (70) Himachal Pradesh(70)	Punjab (69)
SDG 10. Reduced Inequalities	64	68	12	Telangana (94)	Manipur (81)	Himachal Pradesh (78)	Meghalaya (76)	Kerala (75)
SDG 11. Sustainable Cities & Communities	53	36	22	Goa (79) HP(79)	Gujarat (77)	Sikkim (74)	Telangana (62)	Rajasthan (61) Punjab(61)
SDG 12. Responsible Consumption & Production	55	57	16	Nagaland (100)	Tripura (92)	Manipur (85)	Karnataka (72)	Maharashtra (71)
SDG 13. Climate Action	60	70	2	Karnataka (71)	<b>Andhra Pradesh (70)</b>	Odisha (69)	Telangana (66)	Gujarat (63)
SDG 14. Life Below Water		61	2	Karnataka (65)	<b>Andhra Pradesh(61)</b>	Odisha (57)	Tamil Nadu (50)	Goa (47)
SDG 15: Life on Land	66	86	19	Sikkim (100) Manipur (100)	Odisha(99) Meghalaya(99) Jharkhand(99) Goa(99)	Kerala (98)	Chhattisgarh (97)	Uttarakhand (95)
SDG 16: Peace, Justice & Strong Institutions	72	86	1	<b>AP(86)</b> Gujarat (86)	Uttarakhand (85)	Nagaland (84) HP(84)	Punjab (83)	Goa (79)
Composite SDG	60	67	3	<b>Kerala (70)</b>	<b>Himachal Pradesh (69)</b>	<b>AP(67)</b> Tamil Nadu(67) Telangana(67)	<b>Karnataka (66)</b>	<b>Sikkim (65)</b>

- ✓ The Index 2019 using 100 indicators, covers 54 targets across 16 goals, barring Goal 17, primarily focuses on partnerships (where National Indicators are not available).
- ✓ The SDG India Index 2019 is more robust than the first edition of India SDG Index-2018.

States with a score of **100** were termed **Achievers**, those with **65-99** were **Front Runners**; **50-64** were **Performers** and states with score between **0 and 49** were termed **Aspirants**. No state in the country has attained the status of Achiever.

### **Key findings of the report - Performance of AP in SDGs:**

APs performance has been above the India level in respect of the overall score and also in respect of all goals, except the SDGs of 2(equal to India score), 4, 5, and 11

Andhra Pradesh has emerged as one of the top three performing States in the country in achieving the Sustainable Development Goals (SDG) for 2019. Tamil Nadu and Telangana stood third in the SDG index along with Andhra Pradesh, while Kerala and Himachal Pradesh retained their top spots. **Andhra Pradesh State improved its performance in the overall rankings from 4<sup>th</sup> rank in 2018 to 3<sup>rd</sup> rank in 2019.** India's

composite score on a global scale has also improved from 64 in 2018 to 67 in 2019.

### **Best performing areas of Andhra Pradesh:**

- ✓ Apart from improving its composite score from 64 in 2018 to 67 in 2019, the State also stood as a **top performer** in 'peace justice and strong institutions' (**Goal 16**) 'clean water and sanitation' (**Goal 6**). The improvement in the last one year in clean water and sanitation is significant
- ✓ In Goal 16 (peace, justice and strong institutions), AP bagged **first place** with 86 points, with Gujarat coming second with the same score.
- ✓ The State stood **second** in pursuance of **Goal 3** (good health and well-being) with 76 points. Kerala stood top with 82 points. In 2018, AP had secured just 68 points and stood at sixth place.
- ✓ The State retained its **second place** in performance pertaining to **Goal 8** (decent work and economic growth) with a score of 78.
- ✓ AP also bagged **second place** in the performance pertaining to **Goal 13** (climate action) with a score of 70

with Karnataka bagging top spot with 71 points.

- ✓ The State stood **second** in the pursuance of **Goal 14** (life below water - marine ecosystems) among the nine coastal States of the country. It has secured 61, while the top spot went to Karnataka with 65 points.
- ✓ The State secured **third place** with 69 points in the pursuance of **Goal 1** (no poverty). Tamil Nadu and Tripura bagged the first two places with 72 and 70 points respectively. In the last one year, there has been a marked improvement in providing jobs under MGNREGS in the State.

- ✓ The State secured **sixth place in Goal 7**(affordable and clean energy) with 86 points and ninth place in **Goal 9** (industry, innovation and infrastructure) with 66 points. Compared to 31 points and 20th place in 2018, it can be seen as a huge improvement.

- ✓ The report highlighted that the **highest reduction** in the use of **nitrogen fertilizers** was in Andhra Pradesh (10.92 kg/ha).

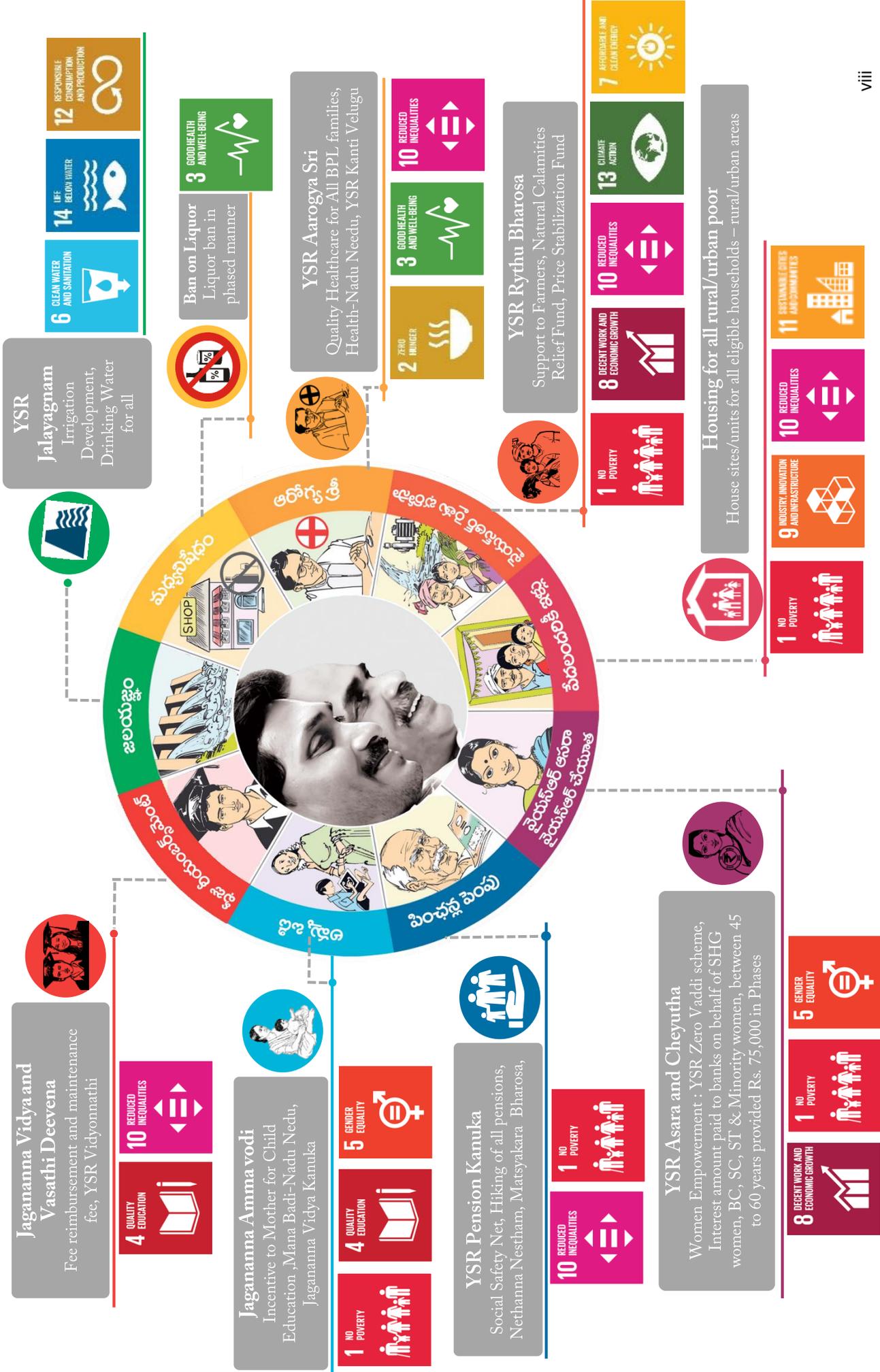
### **Areas where APs performance requires improvement:**

The report indicated some of the areas where the AP state needs improvement. These include: the goals relating to zero hunger, quality education, gender inequality and urban slums.

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# ALIGNMENT OF SDGs WITH NAVARATNALU

## Framework for Comprehensive Social Development





1

# No Poverty

End poverty in all its forms everywhere



# 1 NO POVERTY



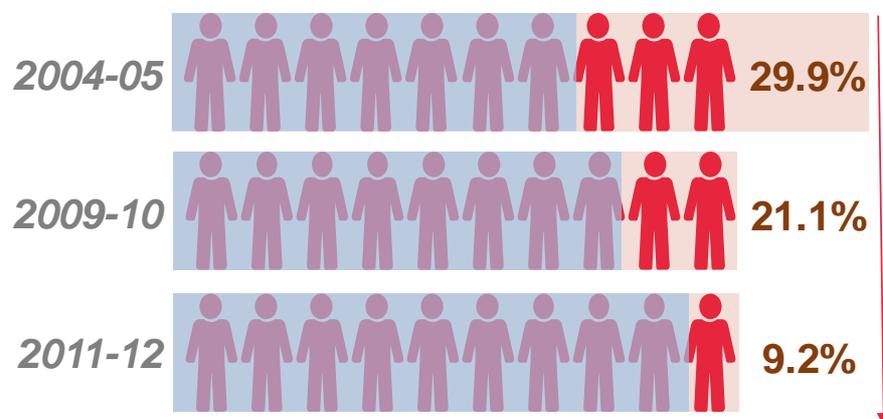
## Poverty eradication – a key component of State welfare agenda

Over the decades, several poverty eradication programmes, subsidies to poor people, pension schemes targeting people below poverty line (BPL people) have been implemented in the State to ensure at least minimum income to the poor. Poverty alleviation continued to be the principal component of the state and central government initiatives.

## Poverty - current standings

As per the official estimates of the Planning Commission 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 the Head Count Ratio for the 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%. This lower Head Count Ratio(HCR) of the State is not only lower than All India's HCR, but is the lowest among major states with population more than 4 crore.

### Overall Poverty – Head Count Ratio – Andhra Pradesh



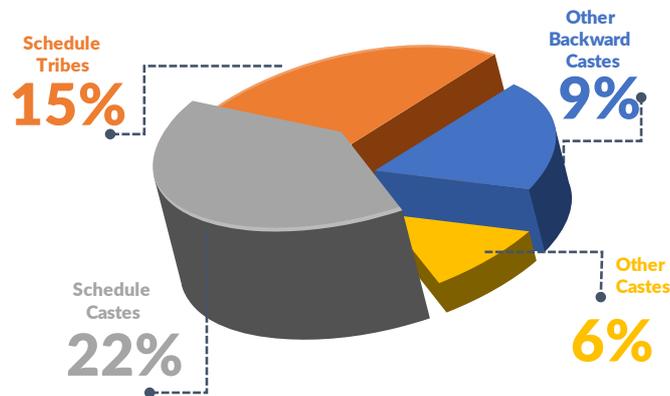
### Rural Poverty



### Urban Poverty



### Social Category-wise Poverty situation 2011-12 in AP State



It is observed that poverty is predominant among underprivileged classes i.e, SCs(22%), STs(15%) and other backward castes(9%) and is relatively less prevalent among forward castes.

The multi-dimensional approach i.e, to end poverty in all its forms (income and deprivations) everywhere (rural and urban) and among all groups through effective and sustainable state interventions by 2030 is the core theme of SDG-1.

#### Important schemes:

##### ✓ YSR Pension Kanuka – making lives dignified

- About 62 lakh pensions being distributed to the old-aged, widows, persons with disabilities, Weavers, Art pensions etc. In addition, Pension of Rs. 10,000 per month is being given for patients with serious chronic ailments, including Thalassemia & Kidney disease. All eligible persons will be covered on

saturation basis. YSR Pension Kanuka new application service has been introduced in GSWS portal for more access to public.

✓ **YSR asara – Loans to SHGs at Zero interest**

- Zero Interest loans are made available to DWCRA/SHG Groups. (Interest amount will be paid to banks on behalf of SHG rural women).Rs. 941.46 crores were credited into respective loan accounts of 6,27,347 SHGs.
- Zero Interest loans will be made available to DWCUA/SHG Groups. (Interest amount will be paid to banks on behalf of SHG urban women)
- YSR Zero Vaddi are applicable for all outstanding bank loans for the financial year 2019-20 in urban SHGs. Under this scheme an amount of Rs. 1185.98 crores were credited into respective loan accounts of 14,53,437 beneficiaries

✓ **YSR Cheyutha – financial assistance to BC, SC & ST women**

- Under the Scheme, BC, SC, ST & Minority women, between 45 to 60 years will be provided Rs. 75,000 in Phases, through respective Corporations.

✓ **YSR Housing Scheme - Pacca houses to all poor**

- To provide 30 lakh house sites for all the eligible houseless poor in the State irrespective of caste, religion etc. and thereafter to construct Houses and registered in their name.
- to construct 30 lakh houses for all the eligible houseless poor in the State irrespective of caste, religion etc. To construct 15.00 lakh houses in the 1st phase and the balance 15.00 lakh houses in next (3) years.

✓ **YSR Nethanna Nestham – Financial assistance to weavers**

- Rs.194.45 crores was distributed to 81024 weavers as financial Assistance.

✓ **YSR Matsyakara Bharosa - Relief to Marine Fishermen during Ban period**

- The Scheme was launched on 21.11.2019 and Rs. 109.231 crores were distributed to 1,09,231 Fishermen as Financial assistance during 2020-21

✓ **YSR Vahana Mitra – Insurance and Maintenance for Auto's and Taxi Drivers)**

- An amount of Rs. 236.33 crores is distributed to 2,36,334 beneficiaries @ Rs.10,000 as Financial Assistance during 2019-20

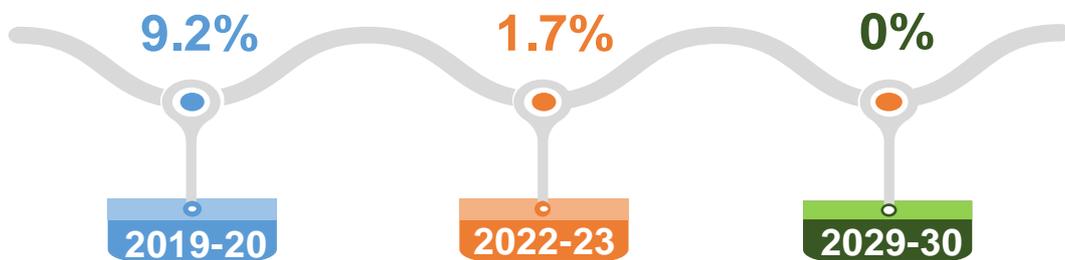
✓ **Jagananna thodu - financial support to petty traders**

- ✓ **MGNREGA and PDS** – ensuring 100 days of employment to all eligible and timely provision of essential commodities through PDS

### **AP's Vision on Poverty reduction:**

#### ***Progressive eradication of poverty in the State – Moving towards zero poverty***

Andhra Pradesh has made decent and sustainable progress in reducing poverty over the decades. The upward progress has been more pre-dominant from the estimates of 2004-05 to 2011-12. The government in the state of Andhra Pradesh has put in place noteworthy schemes, especially through cash transfers that directly benefit the poor. Andhra Pradesh is targeting zero poverty by the terminal year 2029-30\*.



\* However, these estimates of poverty made for the AP state during the year 2018 are likely to miss since the country and hence the states are at risk of losing the hard-won gains against poverty, as per the World Bank's observation on the likely impact of Covid-19 pandemic. In fact the International Labour Organisation has predicted a rather gloomy outlook and estimated that nearly 40 crore workers in India's informal workforce are at risk of falling deeper into poverty.

#### ***Findings of SDG India Index - 2019***

**Health insurance coverage:** 28.7 per cent of households have at least one member covered under a health insurance or health care scheme. The national target is to cover all households in India by 2030. No State or UT has achieved this target, yet. **Andhra Pradesh** at 74.6 per cent has the highest coverage in the country.

### ***Areas of Intervention:***

Acknowledging the multi-dimensionality of poverty and the significance of long term investment in human development to reduce poverty, the state is committed to utilize every opportunity cutting across the sectors to identify and reach out to those who are poor and deprived, with interventions that have protective and transformative potential. Education being the most powerful tool for upward mobility with multiplier effect in addressing poverty related deprivations, the state government is keen to promote literacy vigorously in the education sector through encouraging students and their parents.

As part of the state government's commitment to end poverty, responsive policies will be adopted. Educational outcomes of children among the socially and economically marginalized sections are being prioritized through increased investment in human resource in the schemes newly put in place.

Health emergencies drain the income and asset base of the poor. Improved provisioning of quality healthcare services are therefore being ensured through appropriate interventions. These health related schemes, along with other enabling factors such as nutritional and food security and water and sanitation are expected to usher in a new era that lifts almost every family out of poverty.

### ***Key strategies***

The key strategies to achieve this goal include investments in human capacities, quality basic services, optimizing employment potential of sectors, augmenting access to resources and provision of social security to reduce economic shocks and other vulnerabilities.

The essential focus of this government is to ensure:

- livelihoods and provide income opportunities to all vulnerable people living in poverty in all its dimensions
- enhanced and adequate coverage of social protection to vulnerable sections of the population including hitherto unidentified vulnerabilities.
- expand self-employment opportunities for people, particularly for women and youth, through skill training and entrepreneurship to address poverty and vulnerability.

- optimize the employment potential by supporting agriculture and agro-based industries with input investments under the broad welfare umbrella initiative of NAVARATNALU and to support non-farm, manufacturing and service sectors.
- addressing non-income dimensions of poverty such as housing, access to quality health services and education, drinking water, sanitation, food and electricity.
- protection to households from vulnerabilities, economic shocks and disasters.

### ***Schemes targeting poor sections of Andhra Pradesh:***

A number of socio economic schemes addressing the various dimensions of poverty are being implemented. With such schemes in place, the state aims at eradicating poverty well before 2029-30. Other than addressing the various dimensions of poverty, the state has also implemented schemes targeting gender and marginalized societies. To eradicate poverty in the state, a large number of self-help groups consisting of over 85 lakh members have been formed in the state. Similarly schemes such as livelihood improvement in agriculture, provision of credit to MSMEs, provision of primary education and health care facilities are being implemented in the state.

### **Key outcomes**

<b>Indicator</b>	<b>Value (2019-20)</b>
Poverty ratio of Andhra Pradesh as per National Poverty Line 2011-12 ( in Percentage)	9.20
No. of Universal Health Cards distributed to persons with annual income below Rs. 5 lakh under YSR Arogyasri ( in Crore number)	1.32
No. of Mothers (Pregnant & Lactating) benefitted under Integrated Child Development Schemes -ICDS( in lakh number)	6.23
No. of Children benefitted under Integrated Child Development Schemes -ICDS(in lakh number)	22.62
Proportion of registered population receiving 100 mandays under MGNREGA	3.24

## Key Vision Outcome Indicators

Indicator	Value (2019-20)	SDG- Vision Targets		
		2022-23	2024-25	2029-30
Women of age >45 benefited under YSR Cheyutha (Rural+Urban) - (in lakh number)	N.A	29.91	34.40	39.56
Beneficiaries (widows + old age + disabled) covered under YSR Pension Kanuka (in lakhs)	55.24	58.00	60.90	65.77
Total BPL population who are widows + old age + disabled of the state (in lakh number)	55.24	58.00	60.90	65.77
Pensions - YSR Pension kanuka (All) - Amount Distributed (Rs. Crore)	14873	15617	16398	17709
Pensions - YSR Pension kanuka - Widow (SSP) (in lakh number)	21.50	22.58	23.70	25.60
Pensions - YSR Pension kanuka - Disabled Persons (SSP) (in lakh number)	6.40	6.72	7.06	7.62
Pensions - YSR Pension kanuka - Old Age (SSP) (in lakh number)	27.24	28.60	30.03	32.43
Pensions - YSR Pension kanuka (All, including other pensions) (in lakh number)	62.0	65.04	68.29	73.75
Persons benefited with Rs.10,000 per month for serious chronic ailments, including Thalassemia & Kidney disease patients (no.)	14370	15089	15843	17110
Households provided with Houses sites(lakh)-Urban	Scheme being rolled out			
Households provided with Houses Units (lakh)-Urban	0.056	2.620	0.474	
Households provided with Houses sites (lakh)-Rural	Scheme being rolled out			
% of households living in katcha houses –urban	27.23	27.00		
Proportion of rural population having safe and adequate (55 LPCD) drinking water within their premises (%)	46	80	100	100





2

## **Zero Hunger**

Achieve food security and improved nutrition and promote sustainable agriculture



## 2 ZERO HUNGER

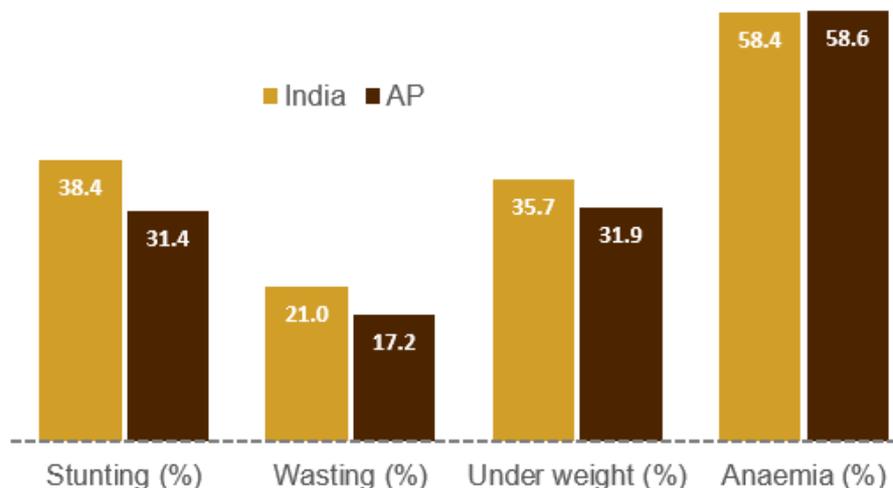


### **End hunger – Achieving food security and improved nutrition**

Ending hunger through ensuring food security and bringing improvements in nutrition levels through effective public distributions systems and sustainable agriculture practices remains the core agenda for this welfare oriented government. Prevalence of malnutrition among children, inadequate nutrition of pregnant and lactating mothers and stunting and wasting among children continue to draw attention of the governments both at State and Central levels.

### **Nutrition related outcomes in Andhra Pradesh - Current Scenario**

As per the NFHS 2015-16 data on the nutrition outcomes, the performance of Andhra Pradesh state on most of the parameters appears better when compared to the Nation's performance. 31.4% (as against 38.4% for India) of children under 5 years of age in AP state are presently stunted (height for age), 31.9% (as against 35.7% for India) are underweight (weight for age) and 17.2% (as against 21% for India) are wasted (weight for height). However, as regards prevalence of Anemia, AP state with 58.6% prevalence is a tad behind India at 58.4%.



**Table- 2.1: A comparative statement showing prevalence of Stunting, Wasting and Underweight among children under 5 years of age: (CNHS-2019)**

Indicator	Male	Female	Urban	Rural	Total
<b>Andhra Pradesh</b>					
stunted (height-forage) (%)	34.3	28.3	26.8	32.6	31.5
severely stunted height-for-age) (%)	15.4	13.3	10.9	15.3	14.4
wasted (weight-for height) (%)	18.9	15.2	16.8	17.2	17.1
severely wasted weight-for-height) (%)	5.5	6.2	7.0	5.6	5.9
underweight (weight for- age) (%)	33.7	33.2	28.4	34.7	33.5
severely underweight weight-for-age) (%)	11.5	8.0	8.3	10.2	9.8
<b>India</b>					
stunted (height-forage) (%)	35.4	34.0	27.3	37.0	34.7
severely stunted height-for-age) (%)	13.4	12.9	9.7	14.2	13.2
wasted (weight-for height) (%)	18.3	16.3	16.3	17.6	17.3
severely wasted weight-for-height) (%)	5.1	4.8	4.7	5.0	4.9
underweight (weight for- age) (%)	32.5	34.4	25.8	35.7	33.4
severely underweight weight-for-age) (%)	10.2	10.0	7.6	10.9	10.1

Source: Comprehensive National Nutrition Survey(CNNS), 2019

**Table- 2.2 : Nutrition related outcomes in Andhra Pradesh - (NFHS-5: 2019-20)**

Item	Andhra Pradesh
Stunting	31.2
Wasting	16.1
Under-weight	29.6
Children age 6-59 months who are anaemic	63.2
All women age 15-49 years who are anaemic	58.8

From the above table 2.2, it is clear that the latest NFHS-5(2019-20) data revealed an improvement in almost all nutrition related parameters.

**Table-2.3: Prevalence of anemia among children (%)**

Children's age-group	Prevalence of anaemia (%)					
	Boys	Girls	Persons	Boys	Girls	Persons
	Andhra Pradesh			India		
Children aged1-4 Years	38.3	41.5	39.7	40.6	40.5	40.6
Children aged5-9 Years	19.4	18.9	19.2	22.2	24.7	23.5
Adolescents aged10-19 Years	11.7	33.3	21.3	17.5	39.5	28.4

Source: Comprehensive National Nutrition Survey (CNNS), 2019

**Table- 2.4: Equity in prevalence of anemia in Women, Men and children (%)**

Type	Rural	Urban	SC	ST	Total
Children	60.8	52.4	60.2	74.2	58.6
Women	61.1	57.2	59.3	71.8	60.0
Men	30.8	19.2	23.3	51.5	26.9

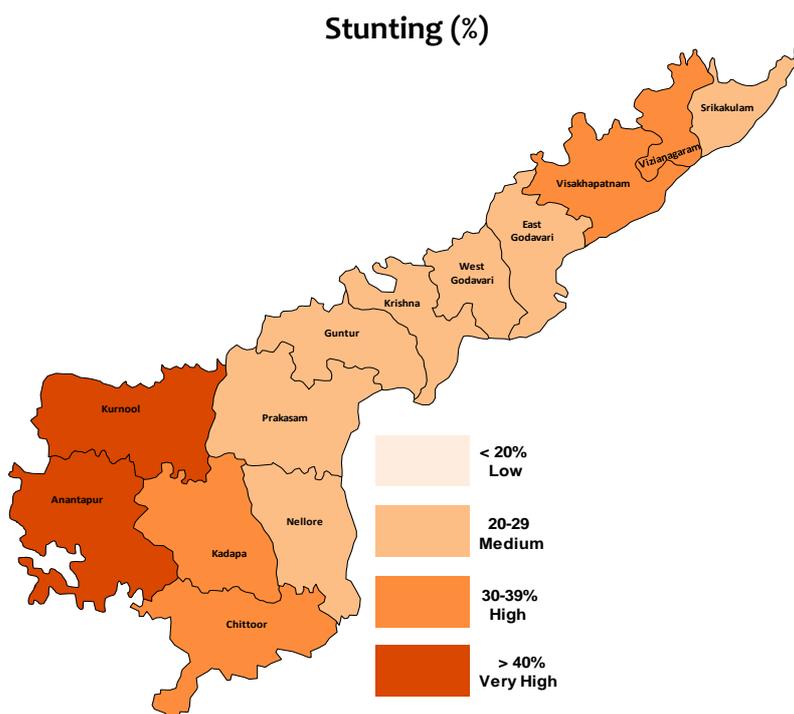
Source: –NFHS-4, 2015-16

It is evident from the table 2.3 that anemia is higher in the children in the age-group 1-4 years and this hovers around 40% both in case of AP state and India as well. As regards Anemia among children in the adolescent age-group, the situation is more serious in girls and this is the even more alarming in case of India.

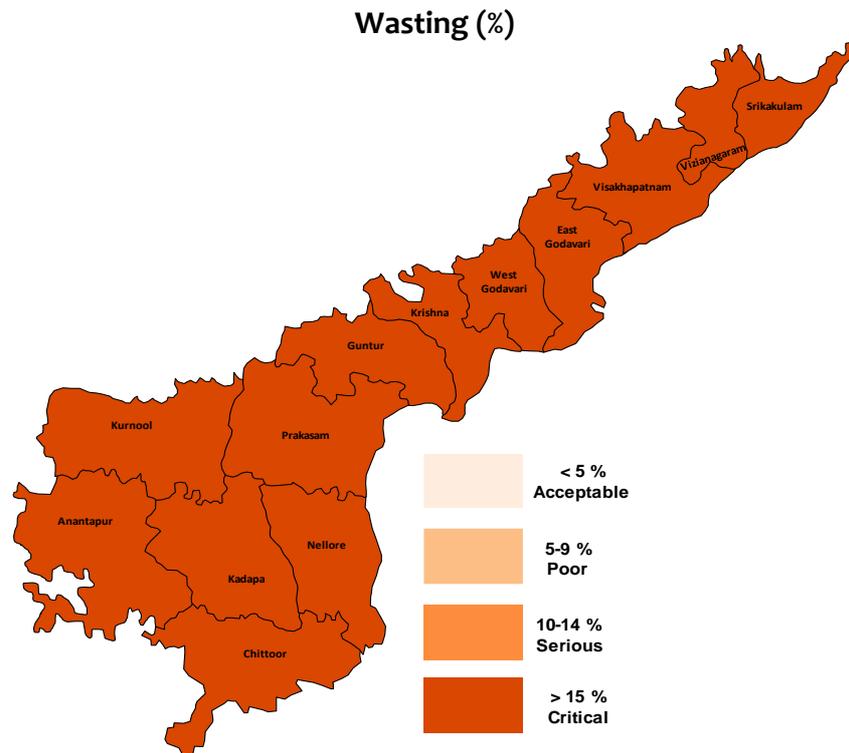
Table-2.4 reveals that anemia is more prevalent in rural areas than urban areas. Overall, women are more anemic than men and children. However, children in tribal areas deserve more attention as about 75% of them are anemic.

**Current standing in Andhra Pradesh:**

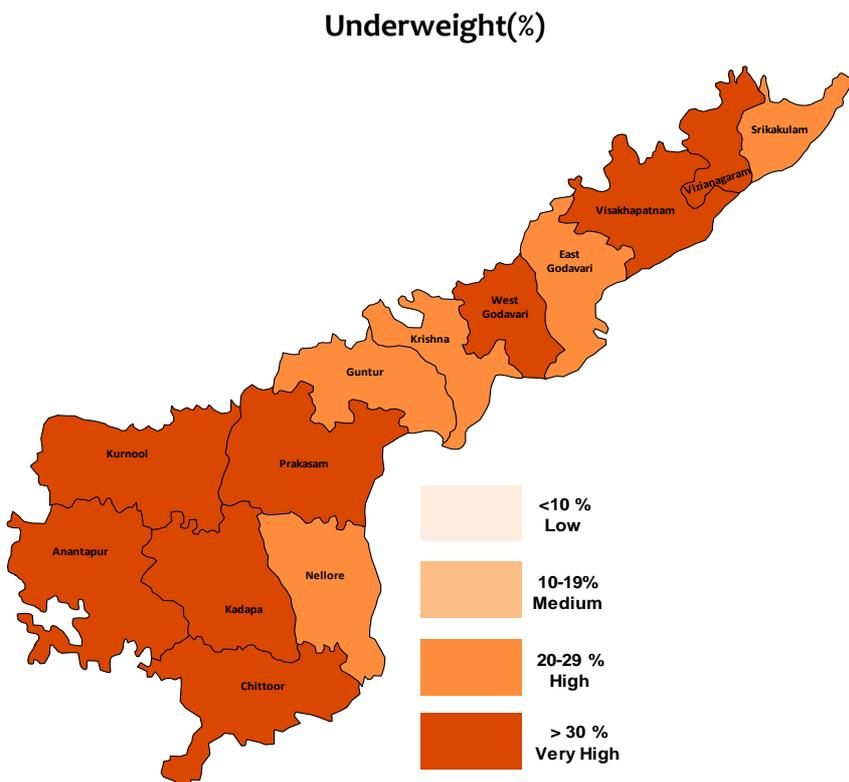
The NHFS-4(2015-16) reveals that almost all the districts in the State call for attention in respect of the key health-nutrition related parameters. As regards stunting, Kurnool and Ananthapuramu fall in ‘Very high’ category(>40%) while Vizianagaram and Visakhapatnam are running closely behind under ‘High’ category with a prevalence range of 30%-39%.



In respect of 'Wasting', alarmingly all the districts in the State are in 'critical' category (>15%) and call for an urgent attention.



Underweight in children also remains a concern with no district featuring in the 'Low(<10%)' or 'Medium (10-19%)' category and 8 out of the 13 districts falling in 'Very High(>30%)' range.



### Anemia among women and children

The NHFS-4(2015-16) data on anemia among children(6-59 months) and women in the reproductive age reveal that Vizianagaram district requires special attention with highest levels of prevalence in both categories.

#### Percentage of children age 6-59 months classified as having anaemia and percentage of women age 15-49 with anaemia, 2015-16

District	Children having any anaemia (age 6-59 months) (<11.0 g/dl)	Women having any anaemia (age 15-49 years)(<12.0 g/dl)
Anantapuramu	53.0	52.7
Chittoor	46.6	48.8
East Godavari	63.1	64.6
Guntur	68.1	57.9
Krishna	58.1	59.4
Kurnool	54.5	54.5
Prakasam	56.3	57.7
SPS Nellore	50.4	59.1
Srikakulam	70.6	71.8
Visakhapatnam	64.5	66.4
Vizianagaram	78.7	75.5
West Godavari	55.1	59.9
Y.S.R.Kadapa	55.8	57.7
Andhra Pradesh	58.6	60.0

Source: NFHS 2015-16.

#### Latest data on Equity in prevalence of anemia in Women, Men and children (%) - NFHS-5 (2019-20)

Anaemia among Children and Adults	2019-20			2015-16
	Rural	Urban	Total	Total
Children age 6-59 months who are anaemic (%)	65.0	58.7	63.2	58.6
Non-pregnant women age 15-49 years who are anaemic (%)	59.5	57.8	59.0	60.2
Pregnant anaemic women age 15-49 years (%)	52.7	56.2	53.7	52.9
All women age 15-49 years who are anaemic (%)	59.3	57.8	58.8	60.0
All women age 15-19 years who are anaemic (%)	59.1	62.3	60.1	61.1
Men age 15-49 years who are anaemic (%)	17.3	13.8	16.2	27.0
Men age 15-19 years who are anaemic (%)	21.4	12.8	18.7	29.3

The NFHS-5 data presented mixed trends as regards to prevalence of anemia among adults and children as compared to previous survey(NHFS-4). While both males and females have shown progress during the period, the improvement is more prominent in case of men(of all ages). However, pregnant women have turned more anemic (up from 52.9% in 2015-16 to 53.7% in 2019-20). Similarly there is decline in the performance during this period in respect of children (6-59 months age), as there is almost 5% increase in prevalence of anemia.

**Key interventions to handle malnutrition issues:**

**Integrated Child Development Services (ICDS) Scheme**

The scheme stands as one of the World’s largest and 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 55607 AWC).

**Supplementary Nutrition Programme**

The scheme aims at provision of hot meals and take-home rations to all children who are under six years of age, as well as pregnant and lactating mothers.

**YSR Amrutha Hastham:** Under the scheme, spot feeding is provided to pregnant and lactating women at AWC with one full meal with egg and 200 ml of milk for 25 days in a month @ a cost of Rs.22.50/-per woman.

**YSR Sampurna Poshana Plus:** This project implemented in 77 scheduled mandals of the State provides additional nutrition supplementation (irrespective of nutritional status) to all children (6 months to 6 years), pregnant & lactating mothers.

<p><b>YSR SampurnaPoshana- Special Nutrition program</b></p>	<p><b>YSR SampurnaPoshana- Food Items</b></p>
<p><i>To address the problem of anaemia and malnutrition among pregnant and lactating mothers and children aged 6 months to 72 months, the AP State has launched the scheme with YSR Sampurna Poshana plus (+) in 77 Tribal and sub plan mandals and YSR Sampurna Poshana program in the remaining mandals of the State under supplementary nutrition through Anganwadi centres in supersession of the existing schemes of supplementary nutrition.</i></p>	 <p><i>Food items- Eggs, jaggery, milk, peanut bar, sesame bar, Ragi (finger millet) powder, multi-grain/ wheat atta.</i></p>

Under this scheme, the State Govt. is providing:

- ❖ Take Home Ration to Children (6-36 months) for 30 days to 1.54 Lakh children.
- ❖ Feeding the Children (36 – 72 months) at AWC daily with hot cooked meal, egg, milk for 20 days per month covering 1.64 Lakh beneficiaries.
- ❖ Feeding of pregnant women and lactating mothers at AWC daily with one hot cooked meal.

**Revamped Public Distribution System:** On 6th September 2019, government has launched a program in Srikakulam District on pilot basis to supply rice in packed form under PDS at the doorsteps of the eligible households through village/ward volunteers to ensure good quality and quantity and to arrest diversion of stocks. This scheme will be extended to all districts by end of the year 2020. There is one FP Shop for every 1417 persons in the state. 1.47 crore BPL families are supported by the state under the PDS.

**YSR RythuBharosa – PM Kisan:** The objective is to provide financial assistance to the farmer families including tenant farmers across the state @ Rs.13,500/- per annum per farmer family.

- ❖ 46.69 Lakh farmer families got benefitted under the scheme with an amount of Rs. 6303.66 Crores during the year 2019-20.

**Free Crop Insurance:** The Government has launched “Free Crop Insurance” on 08.07.2019 under Navaratnalu scheme from Kharif 2019 onwards. During Kharif 2019, 25.72 lakh farmers were enrolled under the free crop insurance scheme covering an extent of 30.93 Lakh acres with a state share of premium subsidy of Rs.1455.34crores.

**Interest free loans:** The Government is committed to implement the Interest Free Crop loans to all the farmers who availed crop loans up to Rs.1.00 lakh and repaid on time. An amount of Rs. 100 Cr is allocated towards Interest Free loans for 2019-20.

**JALA KALA** (Free Bore-Wells will be made available to farmers): The Govt. has issued orders for procurement of 200 Rigs in the state towards drilling of bore-wells to the farmers under YSR Rythu Bharosa.

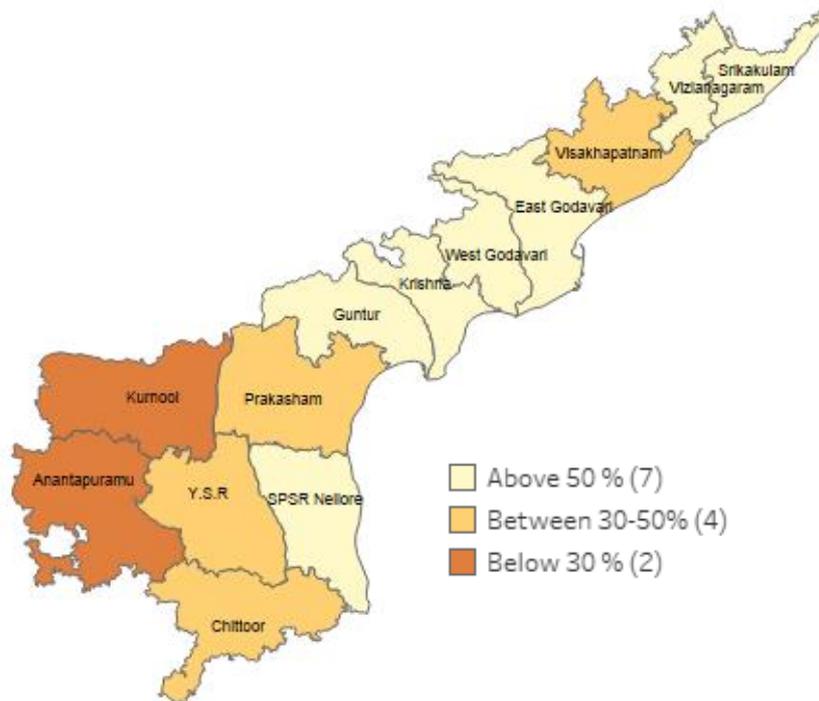
**Nine hours Free Electricity** for Agriculture during Day time: 9 hours power supply was extended to the agricultural feeders during day time from 17-6-2019 onwards. Under the scheme 17, 57,451 farmers got benefitted with the cost of 275.25 Crs.

### Findings of SDG India Index - 2019

**Agricultural Productivity:** India currently produces 2,516.67 kg of agricultural produce of rice, wheat, and coarse cereals from one Ha of land annually. The target is to double this by 2030 to 5,033.34 kg/ Ha. While no State has achieved this target yet, Punjab and **Andhra Pradesh** are nearing the targeted productivity with current levels at 4,169.67 kg/Ha and 3,917.50 kg/Ha.

**Electricity to Aqua farmers @ Rs. 1.50 per unit:** Govt. has increased Aqua subsidy from Rs.1.86 to Rs. 2.35 per unit benefitting 54,053 aqua consumers with Rs.948.11 crores. Around 14% growth in total food grains production in 2019-20 compared to previous year 2018-19 and productivity of Rice was 5886 kgs/Ha.

### Improving share of Irrigated area to total sown area (%) – 2019-20



### Irrigation Intensity in Andhra Pradesh



**Cold Storage / Godowns / Food processing units (on need basis) in every Assembly Constituency:** Towards achieving food security, the state is preparing to establish Cold Storage/Godowns/Food processing units (on need basis) in every Assembly Constituency. Under this initiative, 5 Cold Storages with a capacity of 30,000 MTs have been completed so far as against the target of 15 Cold Storages with a capacity of 75,000 MTs. In addition, 5 Primary Processing units with a capacity of 1000 MTS are also completed with a capacity of 12000 MTs.

### **AP State's Vision:**

The State has a vision of ensuring zero malnutrition amongst children while providing adequate, safe and nutritious food for all residents of Andhra Pradesh, particularly women of reproductive age, children and vulnerable populations. It is planned to achieve this target by making farming efficient, economically viable and sustainable and climate resilient.

### **Addressing the nutrition issues:**

The Union government has given utmost attention to tackling the nutrition related issues through various path breaking interventions like Poshan Abhiyan. With a view to address the issues of malnutrition and anaemia among the children and women, the State Government is implementing various innovative schemes besides the Gol schemes.

### **Focus Areas:**

- ❖ Eliminating malnutrition and reduction of Anaemia in children and women.
- ❖ Providing access to safe, nutritious and adequate food for all.
- ❖ Increasing agricultural productivity through the development of all factors of production and value chains, while also augmenting food processing.
- ❖ Increasing irrigation intensity and ensuring sustainable food production, as well as maintaining and enhancing the agricultural ecosystem and genetic diversity.

### **Strategies to achieve the Vision targets**

#### **Agriculture**

- Adoption of best agronomical practices and high yielding varieties
- Promotion of Actual cultivators for enrolling in e-Crop data based on which the Banks will provide Crop loans.

- Maximum No. of tenant farmers will be provided Crop loans with individual CCRCs (or) by forming them into Joint Liability Groups (JLGs).
- Identification and coverage of all non-loanee farmers.
- Providing financial investment support of Rs.13,500 per year per farmer family including tenants under YSR Rythu Bharosa, thereby enabling the farmers to purchase inputs i.e. Seed, Fertilizer and pesticide well before the Cropping season
- 10606 nos. of Dr.YSR Rythu Bharosa Kendralu (Dr.YSR RBKs) & 65 Hubs established by the Government of Andhra Pradesh through integration of Agri Input Shop and Farmer Knowledge Centre coterminous with Village Secretariats /Gram Panchayats for rendering all services of Agriculture and Allied sectors.
  - Agri Input Shop ensures the availability of Certified & quality multi-branded Agri inputs to farmers at their village.
  - Farmer Knowledge provides scientific Advisories pertaining to Agriculture & Allied sectors to the farmers timely.
- e-Crop booking is done to create farmer's database through e-Karshak Application. This database is made mandatory for usage in implementation of Crop Insurance, Procurement of Agriculture produce, Input subsidy etc.
- Encouraging the farmers to go for market driven cropping system based on market intelligence system.
- Extending free crop insurance scheme to all the farmers.
- Extending Sunna vaddi panta Runalu to all the eligible farmers
- High cost farm implements are made available to farmers through custom hiring centers
- Encouraging Organic farming / AP Community managed Natural Farming.
- Promotion of integrating farming systems in rainfed areas of Rayalaseema districts and Prakasam district and strengthening their resilience to drought through soil and water conservation methods in Andhra Pradesh Drought Mitigation Project
- All the eligible farmers will be covered under the Scheme after duly verifying and purifying the web land details.
- All the landless Actual Cultivators will be assisted with YSRRB Scheme benefits
- New Recognition of forest rights (ROFR) farmers will be covered
- New farmers identified will be included in the scheme from time to time.

- By deploying the staff to the STLs during analysis period and Strengthening the existing labs with sufficient and advanced equipment
- ZBNF/APCNF Video dissemination through Pico projectors, and Farmer friendly content and Package of practices.
- Mobilization, Planning, Monitoring, input preparation by Women Self Help Groups
- Convergence with Agriculture and allied departments & other departments like WCD (Nutri gardens), MGNREGS (Horticulture multilayer plantations), SERP (SHG linkages, Kitchen gardens).
- Engagement with International Organizations
  - **FAO:** FAO along with other UN agencies have launched scaling up initiative of agro-ecological approaches in three countries Senegal, Mexico and India (specifically Andhra Pradesh). FAO has also been partnering on piloting Farmer Field School initiatives and scaling up the same. FAO is also instrumental in providing technical grants in bringing world-renowned scientist, Mr. Walter Jehne to interact with stakeholders from Andhra Pradesh on how ZBNF could be one of the potential ways to reverse climate change
  - **CIRAD:** French Agency for Agriculture Development, CIRAD is conducting a foresight study with the goal of forecasting Scenarios for 2030/2050 with successful implementation of ZBNF in collaboration with FAO. The report is expected to be released in 2020.
  - **Global Alliance for Future of Food:** The initiative is documenting the positive impacts of transitions towards more sustainable food systems and develop recommendations for supporting and accelerating the transition process. APZBNF has been recognized as one of the 21 Beacons of Hope.
  - **ICRAF:** ICRAF has been one of the important partners in establishing science behind ZBNF. Three important studies are being conducted by ICRAF – namely: Land Degradation Surveillance Framework, Life Cycle Analysis of ZBNF practices, Performance Evaluation and Impact Assessment of AP ZBNF programme.
  - **SIFF:** Sustainable India Finance Facility, established by UNEP is facilitating scale-up of ZBNF and deliver transformative environmental and social

impact in India; and also, in induction of national and international fellows interested in ZBNF.

### **Horticulture**

- ❖ By encouraging Additional area under Area expansion programme in convergence with MNREGS, Watershed programmes and Dryland Horticulture.
- ❖ Shifting of cropping pattern from Agriculture to Horticulture crops on a promising and remunerative mode by creating awareness, Training programmes and exposure visits.
- ❖ Encouraging Horticulture crops in Tribal areas with assured irrigation.
- ❖ Identified new areas based on potentiality under Oil Palm cultivation and taking up additional plantation programme.
- ❖ Promoting Horticulture in Semi-Urban and Urban areas.
- ❖ Crop Diversification from Tobacco, Sugarcane and other Agriculture Crops
- ❖ By taking up Micro Irrigation on Saturation mode in Rayalaseema region and also by considering Aspirational districts on priority
- ❖ Bringing Micro Irrigation as a mandatory under the Ayucut area where ever Major and Medium Irrigation projects were taken up.
- ❖ Encouraging farmers in construction of Individual and Community Farm pond and creating water resources there by bringing additional area under Drip Irrigation
- ❖ Encouraging farmers in taking up Fertigation practices to Horticulture crops and conducting periodic on field training programmes regarding Maintenance of the Units.

### **Civil Supplies**

- ❖ To supply food grains to the identified households at their door step at subsidized rates through MDUs

### **Challenges Ahead**

- ❖ Reduction of anemia – Diversification of food basket – inclusion of proteins, iron
- ❖ Exploring ways to provide continuous and lifelong nutritional support to needy
- ❖ Increasing area under millets as these are adoptable to climate change
- ❖ Meeting dietary requirement through distributing millets through PDS
- ❖ Effective cold chain infrastructure to minimize post-harvest losses

## Key Outcomes

Indicator	2019-20
Percentage of children aged under 5 years who are underweight.	31.9
Percentage of pregnant women age 15-49 years who are anaemic (<11.0g/dl) (Source: WD&CW)	62.5
Percentage of Children age 6-59 months who are anaemic (<11.0g/dl) (Source: WD&CW)	58.8
Proportion of Net Sown Area to cultivable land	66.64
Agriculture marketing and farmer friendly reforms index - NITI Aayog (Rank among states)	7

## Key Vision Outcome Indicators

Indicator	2019-20	SDG – Vision Targets		
		2022-23	2024-25	2029-30
Percentage of children under age 5 years who are stunted	31.4	25.4	21.4	11.4
Percentage of children under age 5 years who are wasted	17.2	14.2	12.2	2.2
Proportion of population (marginalized and vulnerable) with access to food grains at subsidized prices (Households in crore number)	1.47	1.54	1.55	1.57
Productivity of rice (yield per hectare)	3879	3933	4133	4333
Productivity of maize (yield per hectare)	7055	7850	8090	9000
Short term credits to farm sector (agriculture) (Rs. in Cr.)	89273	99000	105000	120000
No. of farm families supported under investment support scheme (@ Rs.13,500 per year ) under YSR RythuBharosa (in lakh number)	46.69	53.00	54.00	55.00
% change in horticulture crops in dry land farming areas	17.84	20.10	21.60	25.30
Water efficiency at farm levels (% of sprinkler & drip irrigation)	13.43	16.50	18.50	23.50
Soil Health Cards issued to farmers during the year (in lakh number)	2.26	9.00	11.00	15.00
Area covered under AP Community managed Natural Farming (Lakh Ha.)	1.77	5.00	6.30	60.00
Farmers adopted AP Community managed Natural Farming (in lakh number)	4.42	10.00	12.00	60.00
Proportion of budget allocation in agriculture to GVA in agriculture.	39.74	37.08	36.1	32.18





3

## Good Health & Well-being

Ensure healthy lives and promote well-being for all at all ages



### 3 GOOD HEALTH AND WELL-BEING



#### **Ensuring healthy lives and promoting well being**

Major health priorities - including reproductive, maternal and child health; communicable, non-communicable and environmental diseases; universal health coverage continues to draw attention of policy makers across the globe. This has raised the urgency for more research and development, increased health financing, and strengthened the capacity in health risk reduction and management. The main factors influencing health are communicable, neonatal, maternal and nutritional diseases, Non- communicable diseases

#### **Encouraging progress on mortality related parameters:**

Andhra Pradesh has shown better performance in terms of Mortality rates as compared to India at all levels in the recent period. Significant reduction in number of births attended by skilled health personnel as reflected in huge surge in institutional deliveries largely contributed to longevity of new born children. As a result of implementation of various programmes, the state has made improvement in various health parameters.

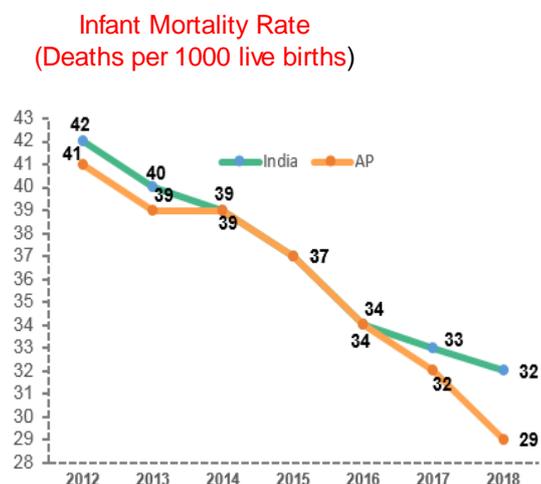
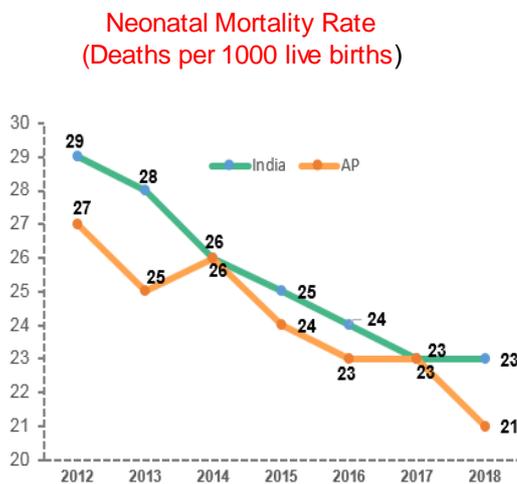
As per the latest SRS Bulletin-May 2019, the estimated Crude Birth rate, Crude Death rate and Infant Mortality Rates in the state stand at 16.0, 6.7 and 29 respectively as compared to 20.0, 6.2 and 32 for All India. The male and female expected life at birth for the combined state of Andhra Pradesh state are 68.4 and 71.1 respectively almost matching with Nation's respective figures of 68.8 and 71.1 in (2016-20). Out of the total reported deliveries, 99% are institutional and around 93.45% of the children aged 1-5 years are covered under full Immunization.

#### **Infant Mortality Rate:**

The Infant Mortality Rate in Andhra Pradesh has reduced to 29 from 41 by the year 2018 in a span of 7 years. This performance is better than that of India's which has recorded a 10point decline as compared to 11 points for AP for the same period. The consistent decline

in Neo-natal mortality rate for AP also augurs well for future generations. Establishment of 1.50 lakh Wellness centres and bringing 10 crore families in the country under the national health insurance under the game changing Ayushman Bharat helped the state to supplement the State’s own health initiatives in reducing IMR and MMR.

Year	Neonatal Mortality Rate		Infant Mortality Rate		Under five Mortality Rate	
	India	AP	India	AP	India	AP
2012	29	27	42	41	52	43
2013	28	25	40	39	49	41
2014	26	26	39	39	45	40
2015	25	24	37	37	43	39
2016	24	23	34	34	39	37
2017	23	23	33	32	37	35
2018	23	21	32	29	36	33

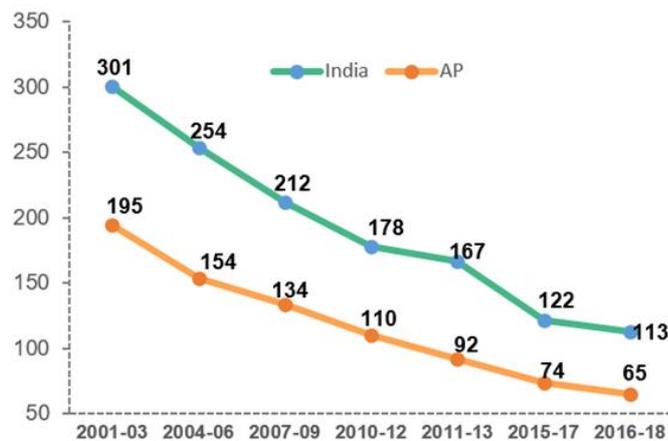


### Maternal Mortality Ratio

The Maternal Mortality Ratio-MMR (the number of mothers dying per 1 lakh live births) has shown a significant progress during the last 7 years. While there is a decline of 62% in MMR in seven year span for country, AP recorded a better progress with 67% decline.

Year	Maternal Mortality Ratio	
	India	AP
2001-03	301	195
2004-06	254	154
2007-09	212	134
2010-12	178	110
2011-13	167	92
2015-17	122	74
2017-18	113	65

### Maternal Mortality Ratio (Deaths per 1 lakh live births)



#### **Sustained efforts – significant decline in Communicable diseases:**

The ‘rapid economic and lifestyle transformations’ during the last two decades has changed the disease profile of the state. In the beginning of the 21st century the share of communicable, neonatal, maternal and nutritional diseases (CNMNDs) in the total disease burden was 49%. Since then, the state had made significant progress in the areas of access to drinking water, sanitation and hygiene, increased coverage of supplementary nutrition programme, expansion of public health facilities as a result of which this share has now come down to 27%.

The State government with sustained efforts was able to reduce the CNMNDs to a certain extent by implementation of immunization, vaccination, supply of supplementary nutrition to pregnant women/lactating mothers /adolescent girls etc., and by extending the healthcare services to the mandal/ GP level. The share of CNMNDs was further reduced by introduction of mother and child healthcare schemes (both central and state) such as PoshanAbhiyan, Janani SurkshaYojana, Janani Shisu Suraksha Karyakram, ICDS- Supplementary Nutrition Programmes (SNPs), YSR SampurnaPoshana, Balasanjeevini in identified Tribal areas and few other programmes implemented by the State with solid commitment.

#### **Focus on total health care:**

Universal Health Care: Ensuring all people especially the people under the Below Poverty Line to access the health services they require without suffering financial hardship is the top priority of the State. The State is implementing **Dr.YSR Aarogyasri Health Insurance Scheme - Universal Health Coverage** to BPL families providing end-to-end cashless

services. The **India Voluntary National Review (VNR)-2020** of NITI Aayog also highlighted this as one of the major health-related breakthroughs in the recent past.

### **Strategic interventions**

#### **Nadu-Nedu**

Government has decided to establish 16 more medical colleges in addition to the existing 11 medical colleges so as to have at least one medical college in each Parliament Constituency of the state. Setting the stage for a healthy and competitive Andhra Pradesh, the state government has undertaken total revamp of the health infrastructure in the state under the 'Naadu-Nedu' initiative to improve the infrastructure in Sub Centres, PHCs and Area Hospitals in a phased manner by spending about ₹12,000 crore to ₹13,000 crore in the next three years to achieve the goal and maintain the national-level standards in government hospitals on par with corporate hospitals.

- Modernising hospitals in three years with the highest Indian standard.
- In the first phase, Out of 7458 health sub-centres, 4906 would get new buildings. 2552 would be modernized.
- In the 2nd phase of total 1145 PHCs 149 new ones would be constructed and the rest 996 would be repaired.
- A part from that 169 Community Health Centers (CHC) and Area Hospitals would also be strengthened. For CHCs the government has allocated Rs.1212 crores and Rs.700 crores to Area Hospitals.

#### **Dr. YSR Arogyasri**

Government is committed to provide end to end cashless health care services to reduce Out-of-Pocket expenses through YSR Arogyasri to 1.44 crore BPL families in Empanelled Network Hospitals for 2059 procedures with a limit of Rs. 5 Lakhs per family per annum.

- The Govt. will bear the entire expenditure of treatment and provide financial assistance @ Rs.225/- per day to the patients who undergo surgeries under Dr.YSR ArogyaSri for the post-op recovery period to a maximum of Rs. 5000/-.
- 4.42 Lakh patients benefited under YSR Aarogyasri during 2019-20.
- Employees Health Scheme introduced for the benefit of State Government Employees, Pensioners their dependents and Journalists.

- The government is providing cash less dialysis treatment to the patients suffering from chronic kidney diseases.
- Considering the rapid spread of COVID-19, the government has brought the treatment for it under the ambit of Arogyasri.

#### **YSR AAROgyASRI SCHEME - A SPECIAL MENTION IN VNR INDIA REPORT**

Towards achievement of coverage for BPL families, terms of financial and effective use of Government of Andhra the YSR Aarogyasri Scheme. The aim of the **Universal Health families**. The scheme has side mechanism that **mobilises and channels additional public financing to health**, introduced an explicit benefits package, pioneered cashless care and fostered public private partnerships.



universal health whether defined in protection or access to healthcare, the Pradesh is implementing Health Insurance scheme is to **provide Coverage to BPL** established a demand-

#### **104 & 108 Services :**

104 Seva Kendram functions round the clock (24X7 for 365 days). This toll free call center provides health advices. Under emergency health transportation scheme trained technical staff (24 hours) available to the patients and pregnant women during emergency time under 108 facility.

**Vaidya Pariksha Scheme** :27.83 Lakh patients availed free laboratory services.

#### **Dr.YSRKanti Velugu**

This scheme provides comprehensive eye care and rectify vision defects among the State's five crore population free of cost to reduce avoidable blindness from 1% to 0.3%.

- Being implemented in 6 phases over a period of 3 years on a mission mode.
- Primary Basic Eye screening of all school children completed covering 60401 schools and 6615467 children,
- Identified 4.33 lakhs children with eye problems. 129373 Spectacles provided.

#### **YSR Village Clinics**

The State govt. is setting up village clinics in all the Panchayats by April, 2021. 13000 clinics would be setup wherein 54 types of medicines to be available.

### **Pension to patients of chronic ailments**

The government is providing an amount of Rs. 10,000/- per month as pension to the patients suffering from serious chronic ailments such as Thalassemia and Kidney diseases. 38101 patients suffering from such diseases have been enrolled for monthly pensions and Rs. 27.26 crores is released every month.

### **Ban on Liquor**

In order to improve health and hygienic conditions, Prohibition of Liquor is being implemented in (3) phases and availability of liquor will be confined to 5-star hotels.

### **Handling COVID-19 pandemic**

The State has visualized the probable impact of the pandemic well in advance and started taking immediate preventive measures. The state has so far tested 94.09 Lakh samples free of cost. Active cases are reducing and testing is being done on a hectic basis. Quarantine facilities have been made. Masks and other kits have been distributed to all at free of cost.

The health system has geared up with exemplary resilience to manage COVID-19 pandemic, as is evident in the way in which Andhra Pradesh along with few other states in the country has been managing the crisis.

### **Other Health Initiatives**

- A.P State govt. is providing basic services which includes free HIV/AIDS counseling, testing services and also prevention of transmission and treating 3 lakhs patients.
- Blood Transfusion services are provided through blood banks. AP Blood Cell APP was started for improving the blood donations.
- Family Planning Indemnity Scheme, under the scheme sterilization operations are conducted in case of death due to sterilization operation the scheme will applicable.

#### **Mention in SDG India Index 2019**

**Family Planning:** Around 47.8 per cent of currently married women, aged 15-49 years use modern methods of family planning. The UN target for this indicator is 100 per cent. The highest percentage is in **Andhra Pradesh**, at 69.4 per cent.

## **AP State's Vision:**

Andhra Pradesh, in line with the country's thinking of radically revamping the public and preventive health system through strategic interventions, started taking measures to improve the health sector performance. The AP state government has recognized that primary health is a key enabler for higher life expectancy, better health outcomes and lower costs. Primary health interventions help detect diseases early well before complications arise thereby pre-empting the need for secondary and tertiary care. The recent Covid-19 pandemic has further stressed the importance of this change. The State has initiated working in this direction and focused on lowering the mortality rates.

### **Strategies to achieve the Vision targets:**

- ❖ Revamp of health infra - Strengthening health infrastructure under Naadu-Needu initiative
- ❖ All in One approach to resolve health issues of poor through Dr YSR Aarogyasri
- ❖ Focus on Communicable and Non-communicable diseases
- ❖ Setting up of YSR Village Clinics in every GP/Municipal Ward
- ❖ Providing comprehensive eye care and rectify vision defects among the State's five crore population free of cost under YSR Kanti velugu scheme.
- ❖ Gearing up the health system in the State with effective containment, treatment, surveillance and tracking systems
- ❖ Establishing 16 more medical colleges so as to have at least one medical college in each Parliament Constituency of the state.
- ❖ Implementation of ban on liquor in a phased manner.

### **Challenges ahead: rate (IMR)**

- ❖ Reducing IMR and MMR.
- ❖ Reducing deaths due to non-communicable diseases.
- ❖ Reducing the burden of communicable diseases
- ❖ Completely wipe out the Out of Pocket expenditure for poor
- ❖ Ensuring that the state health facilities meet the minimum service requirements to enhance quality health care and improve their utilization.
- ❖ Take steps to engage the private sector in a creative and positive manner as partners for health action coordinated by the government.

- ❖ Revamp the health sector so as to take care of the additional health concerns arising out of the climate change, pollution and urbanization besides the already threatening life style diseases.

### Key Outcomes:

Indicator	2019-20
Maternal Mortality Ratio (per 1,00,000 live births)	74
Percentage of births attended by skilled health personnel (Period 5 years)	99.5
Percentage of births attended by skilled health personnel (Period 1 year)	99.8
Percentage of women aged 15-49 years with a live birth, for last birth, who received antenatal care, four times or more	100
Under-five mortality rate (per 1000 live births)	35
Neonatal mortality rate (per 1,000 live births)	23
Percentage of children aged 12-23 months fully immunized (BCG, Measles and three doses of Pentavalent vaccine)	94.08
Number of new HIV infections per 1,000 uninfected population	8.14
Tuberculosis incidence per 100,000 population	180
Malaria incidence per 1,000 population	0.07
Viral Hepatitis (including A & B) incidence per 100,000 population	32
Dengue: Case Fatality Ratio (CFR)	0
Number of Chikungunya cases during reference year (in number)	103
Covid 19 - Case Fatality Ratio (CFR)	0.01
Mortality rate attributed to major communicable diseases	3
Mortality rate attributed to major non communicable diseases ( no. of deaths per 1 lakh population)	27
Proportion of Liquor shops closed	33.00
Reduction in liquor (IML) consumption over last year (%)	20
Reduction in liquor (Beer) consumption over last year (%)	24
Death rate due to road traffic accidents per 1,00,000 population	14.97
No. of hotspots for road accidents identified	1771
Percentage of currently married women (15-49 years) who use any modern family planning methods	81.50
Percentage of women aged 15-19 years who were already mothers or pregnant.	0.30
Percentage of Institutional Births	99.60
Percentage of TB cases successfully treated (cured plus treatment completed) among TB cases notified to the national health authorities during a specified period	92.20

Indicator	2019-20
Percentage of people living with HIV currently receiving ART among the detected number of adults and children living with HIV	71.50
Prevalence of hypertension among men and women age 15- 49 years	12.98
Percentage of population in age group 15- 49 who reported sought treatment out of total population in that age group having diabetes	11.60
Percentage of women age 15-49 who have ever undergone Cervix examinations	36.90
Prevalence of current tobacco users among men and women aged 15 -49 years	26.80
Total physicians, nurses and midwives per 10000 population	18.29
Persons Financially assisted for Post-surgery / ailment recovery period under YSR Arogya Sri (in lakh number)	1.09
Persons benefitted who undergone surgeries under YSR Arogya Sri (in lakh number)	5.82
No.of persons benefitted who get medical treatment outside A.P. under YSR Arogya Sri	3020
No.of persons benefitted with Medical Expenditure exceeds Rs.1000 under YSR Arogya Sri	13597
No.of Universal Health cards distributed to persons with annual income below Rs. 5 lakh under YSR Arogyasri (in crore number)	1.32
No.of persons benefitted with Rs.10,000 per month for serious chronic ailments, including Thalassemia & Kidney disease patients (in number)	14265
Performance on Health Outcome Index – Niti Aayog (Rank among states)	2
Mortality rate attributed to unintentional poisoning Rate (per 1,00,000 population)	0.06
Proportion of men and women reporting Asthma 15-49 years	30.14
Prevalence of current tobacco uses among men and women aged 15 -49 years	26.8





4

## Quality Education

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



## 4 QUALITY EDUCATION



The importance of education as a process of facilitating learning or the acquisition of knowledge, skills, values, beliefs and habits has been recognized as an essential tool for overall human development. Universal school education with special emphasis for women is recognized as critical for improving educational levels and also health practices in the community. Every goal in the 2030 SDG Agenda lays emphasis on education to empower people with the knowledge, skills and values to live in dignity, build their lives and contribute to the societies.

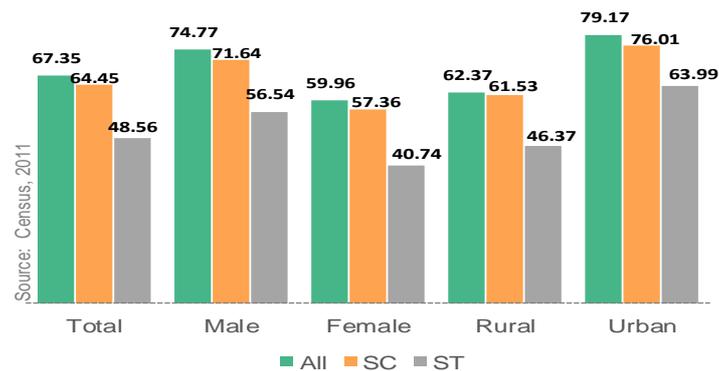
Despite the importance attached to education, quality of educational outcomes remained a concern in the country and in states as well. The UN charter stressed Quality education as the foundation for sustainable development. Access and promotion of inclusive and high quality education and life-long learning opportunities for all and eliminating gender disparities at all levels in education continues to garner attention of the government. Thus, education has become a human right and a force for sustainable development and peace.

### **Current Scenario of literacy and education in Andhra Pradesh**

The literacy rate of the Andhra Pradesh State has been lower than that of India for decades. There has been improvement in the literacy rate of AP state which has surged to 67.35 percent in 2011 from 62.07 percent in 2001. However, the literacy rate of the State is lower than the all India literacy rate of 72.98 percent. The male literacy rate in AP state has is up from 71.28 to 74.77 percent, while the female literacy rate, although lower than the male literacy rate, has gone up from 52.72 % in 2001 to 59.96 % in 2011.

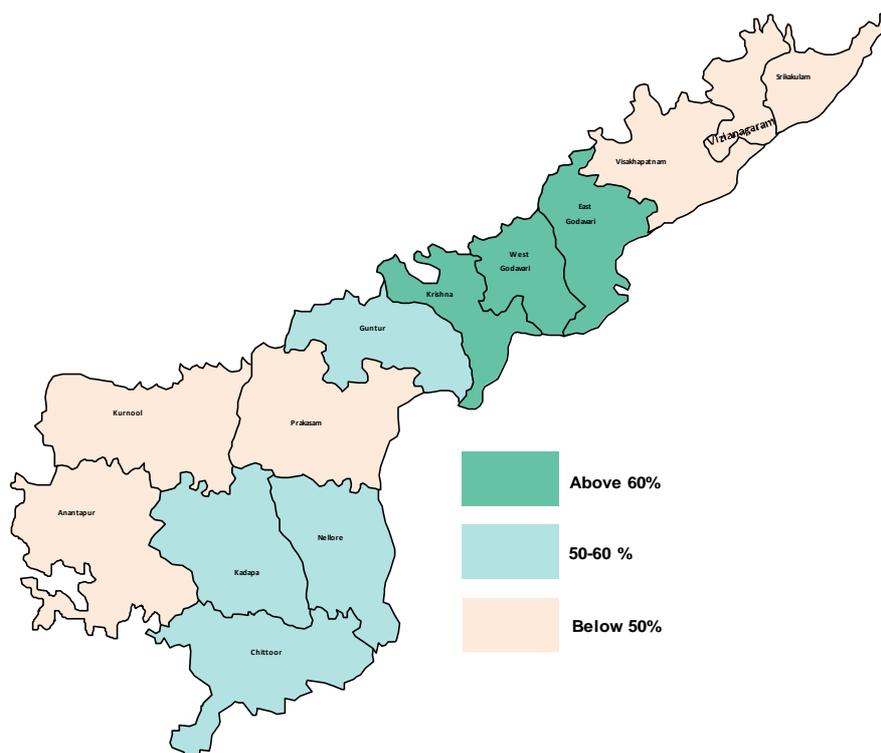
The Literacy in Urban areas is relatively better in AP state compared to rural literacy. However, the female literacy rate needs to improve across all social categories, more so in rural areas. While the literacy among SCs is significant, tribal areas call for a major improvement.

## Status of Sex-wise, Social Group-wise Literacy Rates in Rural & Urban Areas of AP state



### District-wise Literacy rate status for Rural Female in AP:

As mentioned above, the rural female literacy needs a special drive. West Godavari district with 68.5% rural female literacy tops the list while Kurnool district lags behind with 43.6%, way below the State's rural female literacy rate of 54.2%.



### Ensuring Equity, inclusiveness and quality

On the parameters of universal access in school education, Andhra Pradesh has achieved 99% at elementary level and 91.5% at secondary level. Primary schools and secondary schools have been started in areas, where these were not served earlier.

The State is striving hard to ensure inclusive and equitable quality education from pre-school to senior secondary stage in accordance with the Sustainable Development Goal

(SDG) for education. Towards this endeavour, the Government is committed to achieve 100% literacy in the imminent future and bring quantitative and qualitative improvement through Samagra Shiksha Abhiyan, now an integrated scheme that envisages the 'school' as a continuum from pre-school, primary, upper primary, secondary to Senior Secondary levels. The government provides schooling facility to school aged population of 72.74 lakh children in the State (Aadhaar linked enrolment).

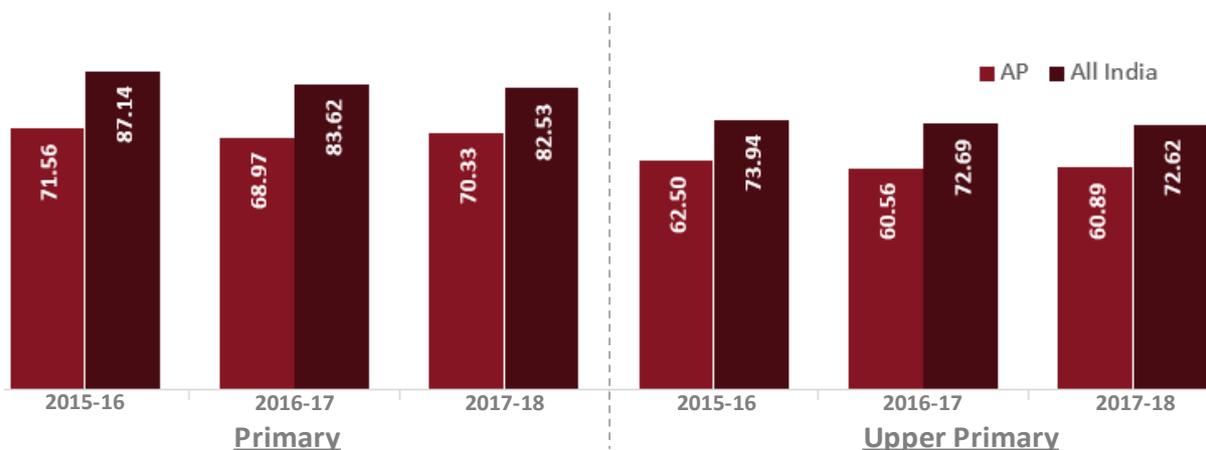
The Government also recognised the importance of maintaining an optimum teacher-pupil ratio to achieve the goal of universal enrolment, retention and improve the Education of children. The teacher-pupil ratio has been close to national benchmarks at all levels with primary at 26, upper primary at 22 and 25 for High school level.

### Enrolment and Dropout

Efforts are on to ensure 100% access to Education. While the total enrolment in all types of schools in the state during 2019-20 stands at 72.74 Lakhs, it progressively declined at higher levels :37.95 Lakhs (52.17%)in I-V classes, 21.37 Lakhs (29.38%) in VI-VIII classes and 13.42 Lakhs (18.45%) in IX-X classes. Retention of children at Secondary level in the schools (3.8%) remains a constraint, although it has been outstanding at primary and elementary levels with zero percent dropout rates.

The Net Enrolment Ratio(NER) in Andhra Pradesh are less than that of India in both the categories of Primary and Upper Primary schools. Even within Andhra Pradesh, there has been marginal decline in the Upper primary level during the years 2015-16 to 2017-18.

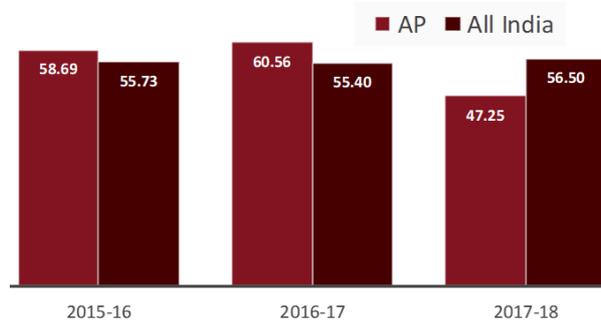
**Net Enrolment Rate (NER) in Primary and Upper Primary education**



The Gross Enrolment Ratio(GER) in higher secondary education is hovering around 55% at the National level and has been more consistent while it requires greater improvement in

AP state with the data (MOSPI, GoI, SDG NIF Progress report 2020 version 2.1) showing a GER of 47.3% for 2017-18, down from 60.56% in 2016-17.

### Gross Enrolment Rate in higher secondary education

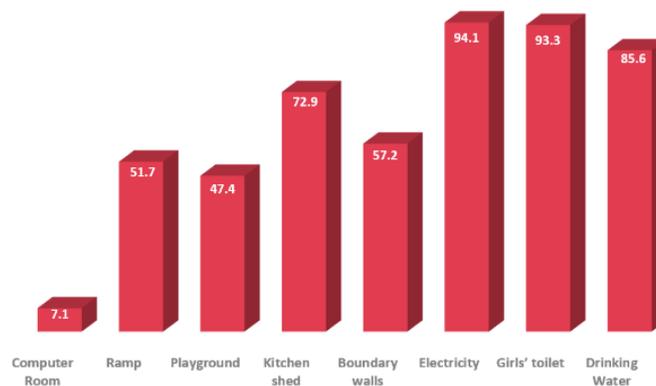


### Transition Rate

The transition rates from Primary level to Upper primary are showing great promise with 99.3% transition rate in the State as compared to the Nation’s rate of 90.6% for 2016-17.

### School Infrastructure

The state has made impressive progress in providing adequate infrastructure in the schools. As per latest available data for 2019, 93% schools have a girls’ toilet, 86% schools have drinking water facility, 94% schools are connected with all-weather roads, 94% schools have electricity, 57% schools have boundary walls, 73% have kitchen sheds and 47% schools have play grounds.



Source: School Education department, Govt. of AP.

The Govt. has embarked on a game changing initiative ‘**Mana BadiNaadu-Nedu**’ to strengthen the infrastructure and transform the existing infrastructure of the schools in the mission mode in a phased manner over a period of three years from 2019-20. In the first year, 15715 schools are being taken up. Priority facilities like toilets with running water, Electrification with fans and tube lights, drinking water supply, furniture for students and

staff, painting to school, Major and minor repairs, Green chalk boards, English labs and Compound walls are taken up under Mana BadiNaadu-Nedu.

### **Learning outcomes**

Learning outcomes is a concern in the rural areas of Andhra Pradesh. Studies have shown that the comprehension levels and ability to perform basic skills in the areas of reading, writing and arithmetic remained low. As per Annual Status of Education Report (ASER)-2018, only 22.4% of children in Class-III could successfully read a Class II text. In the subject of Mathematics too, the performance called for improvement as only 50.8% of students in Class-III could recognize numbers up to 100.

### **Important innovative schemes/programmes**

**JaganannaAmmaVodi:** In order to ensure that poverty of the parents should not be a barrier for educating their children, the Government has launched a unique and innovative scheme “JaganannaAmmavodi”, providing financial assistance of Rs.15,000/- per annum to each BPL mother of children studying Class I to XII for sending her children to schools/ colleges. Under the scheme, an amount of Rs. 6349.64 crores have been transferred to the bank accounts of 42.33 lakh eligible mothers.

#### **District-wise beneficiaries under JaganannaAmmavodi (Class I to XII) – 2020**

District	No.of Beneficiaries	Amount distributed (Rs.in Crs.)
Srikakulam	235841	353.76
Vizianagaram	204095	306.14
Visakhapatnam	400292	600.44
East Godavari	461619	692.43
West Godavari	339259	508.89
Krishna	357539	536.31
Guntur	400377	600.57
Prakasam	276115	414.17
SPSR Nellore	228275	342.41
YSR Kadapa	250136	375.2
Kurnool	382935	574.4
Anantapur	357003	535.5
Chittoor	339612	509.42
Total	4233098	6349.64

**JaganannaVidyaKanuka:** This scheme was started with an aim to protect every child's education and provide the best education system to all and move towards increasing enrolment in government schools. About 42.33 lakh students will be provided with student kits worth Rs 1,600 each, costing the government Rs. 650 crore. Each kit contains three pairs of uniform dress, one pair of shoes, two pairs of socks, a belt, one set of textbooks, notebooks and a school bag.

**JaganannaVidya and VasathiDeevana:** To support the poor students, Government introduced full fee reimbursement to all eligible students studying ITI, Polytechnic and Degree & above level course in Govt/Aided/Private colleges through "JaganannaVidyaDeevana and to provide food and hostel expenses to every eligible student @Rs. 10,000/- to ITI students, Rs. 15,000/- to polytechnic students, Rs. 20,000 for other Degree and above courses per year under 'JaganannaVasathiDeevana".

**Mana BadiNaadu- Nedu:** This scheme is intended to strengthen the infrastructure of the schools taken up in 3 phases, Rs.1500 crores has been allocated for modernization of infrastructure in schools in 2019-20.

### **AP State's Vision:**

Andhra Pradesh has recognised that education as an essential component of Human Development. The state is working towards building a system which ensures that education programmes are made accessible, inclusive and responsive to the needs of diverse groups of children and young people, with a special focus on students from disadvantaged population groups.

### **Focus Areas**

- ❖ To improve the literacy rates
- ❖ Quality education linked with enhancing learning outcomes.
- ❖ The enrolment rate for Higher education is only 37.74%
- ❖ Skills in education and employability after education.

### **Key Strategies**

#### **School Education**

- ❖ To revamp the School infrastructure through Mana BadiNaadu-Nedu initiative
- ❖ To encourage and incentivize the poor families to understand the need for education in transforming their lives – through schemes like AmmaVadi

- ❖ To encourage students of marginalized and vulnerable sections to pursue higher education through the JganannaVidyaDeewena and VasathiDeevena schemes.
- ❖ To improve employable skills by promoting English medium education

### **Collegiate Education**

- ❖ Promotion of enrolment of girls in higher Education through establishment of more integrated women's colleges in all parliamentary constituencies
- ❖ Ensure institutional access, quality and delivery are equitable across the State
- ❖ Promoting women education by incentivizing through various schemes, fellowships, free ships etc
- ❖ Establishment of Incubation Centres and Promotion of Innovations through Start Ups, introduction of internships
- ❖ To enhance the skilled technical manpower through Polytechnic education to cater to the needs of the Industry
- ❖ To establish a proper linkage of Engineering Education with Industry to promote employability.
- ❖ To achieve better accreditation levels in the higher and professional education.

### **Social Welfare**

- ❖ Government of Andhra Pradesh has established GramaSachivalam system in every village in the state. For every 50 houses, one Grama Volunteer has been appointed by the Government to monitor all the Government Welfare Schemes. With the field level mechanism, the awareness on the Government sponsored schemes going on.

### **Challenges ahead**

- ❖ To improve the literacy rate of the State of 67.4% as compared to the national average of 74%.
- ❖ Improve the long term learning outcomes of Elementary education students
- ❖ Quality of infrastructure at polytechnics colleges and ITIs demands attention
- ❖ Enrolment rate for Higher education.
- ❖ To achieve global standings in technical and higher education.

## Key Outcomes

Indicator	2019-20
Gross Enrolment Ratio in higher secondary education	62.42
EBC student benefited under maintenance Fee (for food and Hostel) of Rs.20,000/- per annum along with full fee reimbursement under JaganannaVasathiDeevena (MTF) (In Lakh number)	1.88
BC Students benefited under Maintenance fee (for Food & Hostel) of Rs. 20,000 per annum along with full fee reimbursement under Jagananna-Vidya-Deevena (in lakhs)	7.43
EBC students benefitted under JaganannaVidyaDeevena reimbursement of tuition fee (lakhs)	2.06
BC students benefited under JaganannaVidyaDeevana Reimbursement of Tution Fee (RTF) (in lakh number)	9.30
School education quality index - NITI Aayog (rank among states)	11
Proportion of male-female enrolled in technical education	0.25
Proportion of male-female enrolled in vocational education	0.98
No. of enrolment of children with disability in all schools (Grade 1 to 12)	88807
Gender Parity Index for Secondary Education	1.02
<b>School Infrastructure</b>	
Pupil/trained teacher ratio at primary level (%)	25
Pupil/trained teacher ratio at upper primary level (%)	20
Pupil/trained teacher ratio at secondary level (%)	26

## Key Vision Outcome Indicators

Indicator	2019-20	SDG - Vision Targets		
		2022-23	2024-25	2029-30
Net Enrolment Ratio in primary	79.02	82.97	86.92	94.82
Net Enrolment Ratio in upper primary	68.29	71.70	75.12	81.95
Adjusted Net Enrolment Ratio in primary	83.27	87.43	91.60	99.92
Adjusted Net Enrolment Ratio in upper primary	74.21	77.92	81.63	89.05
Adjusted Net Enrolment Ratio in secondary education	63.79	66.98	70.17	76.55
Participation rate in organized learning one year before official primary entry (%)	75.21	80.00	85.00	90.00
<b>Students Proficiency levels in learning outcomes</b>				
Performing Learning Outcomes - In Class 3 – Mathematics(%)	74	77.70	81.40	88.80
Performing Learning Outcomes - In Class 3 - EVS (%)	73	76.65	80.30	87.60
Performing Learning Outcomes - In Class 3 - Language (%)	79	82.95	86.90	94.80

Indicator	2019-20	SDG - Vision Targets		
		2022-23	2024-25	2029-30
Performing Learning Outcomes - In Class 5 - Mathematics (%)	64	67.20	70.40	76.80
Performing Learning Outcomes - In Class 5 - EVS (%)	64	67.20	70.40	76.80
Performing Learning Outcomes - In Class 5 - Language (%)	67	70.35	73.70	80.40
Performing Learning Outcomes - In Class 8 - Mathematics (%)	50	52.50	55.00	60.00
Performing Learning Outcomes - In Class 8 - EVS (%)	48.5	50.93	53.35	58.20
Performing Learning Outcomes - In Class 8 - Language (%)	58	60.90	63.80	69.60
Gross intake ratio to the last grade (primary)	77.85	81.74	85.64	93.42
Gross intake ratio to the last grade-(upper primary)	82.31	86.43	90.54	98.77
Number of years (i) free and (ii) compulsory education guaranteed in legal frameworks	14	14	14	14
Mothers benefited under "JaganannaAmmaVodi scheme" (in lakh number)	42.33	44.45	46.56	50.80
SC Students benefited under "JaganannaAmmaVodi scheme" - (in lakh number)	8.68	9.85	11.81	60.31
ST students benefitted with maintenance fee (Food & Hostel) of Rs. 20,000 per annum along with Full fee Reimbursement (in number)	27607	65688	72257	86708
ST students benefitted under JaganannaVidyaDeevana Reimbursement of Tuition fee (RTF) (in number)	75424	92681	101949	122339
Proportion of male-female enrolled in higher education	0.82	0.87	0.91	1.00
Gross enrolment ratio for Higher Education	37.74		45	60
<b>Gender Parity indices</b>				
Gender Parity Index for Primary	0.95	1.00	1.05	1.14
Gender Parity Index for Higher Secondary Education	1.11	1.07	1.12	1.22
Gender Parity Index for Tertiary Education	0.81	0.92	0.98	1.05
<b>School Infrastructure</b>				
electricity (%)	93.98	95.86	98.68	100.00
students with disabilities/ disabled friendly ramp and toilets (%)	47.06	49.41	51.77	56.47
basic drinking water (%)	83.02	87.17	91.32	99.62
basic hand washing facilities (%)	56.55	59.38	62.21	67.86





5

# Gender Equality

Achieve gender equality and empower all women and girls



## 5 GENDER EQUALITY



Gender disparities continue to exist despite provision of equal rights for men and women by the Constitution of India. Some such areas where the disparities are deliberately sustained and meticulously fostered from times immemorial include: female-male ratio, literacy and education, food and nutrition, health care system, sexual exploitation, domestic violence, work participation rate, opportunity to employment, the unequal division of unpaid care and domestic work access to economic resources and the most important political participation.

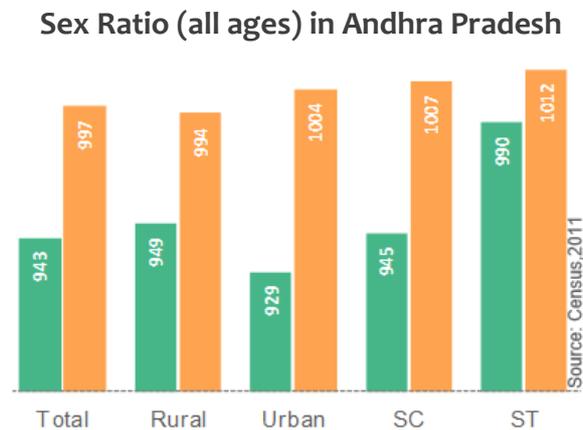
### **Gender sensitive governance**

The government in the recent past has brought about revolutionary reforms in the economic and social sectors with focus on self-reliance of women for ensuring equal rights and women empowerment. The government has been focusing on the social sector and the other areas where focus can be extended are Agriculture, Manufacturing and Service sectors. The state government have strengthened its efforts on gender-responsive planning and budgeting across sectors, eliminating violence and discrimination against women and ensure gender-responsive governance. The state is also committed to improve child health care and nutritional intake for becoming better citizens by promoting social, emotional and cognitive and development of the child.

### **Women development - Current scenario in Andhra Pradesh**

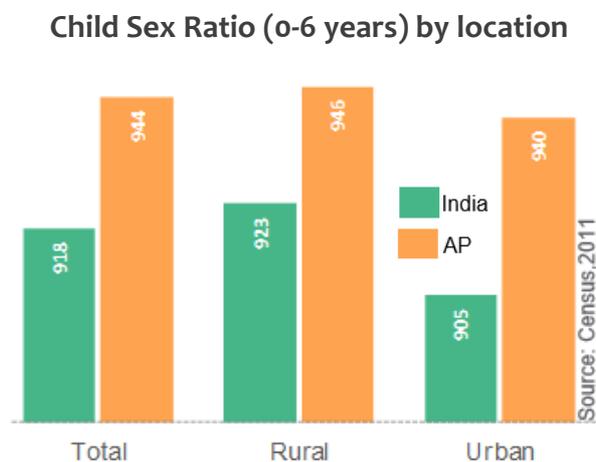
Andhra Pradesh state has shown noteworthy progress in certain areas pertaining to women and called for additional attention in respect of certain other areas. Several studies have revealed that the extent of education attained by girls and women is important determinant of child's health. Though the Female literacy rate has gone up from 52.72 percent in 2001 to 59.96 percent in 2011, it is considerably less compared than the male literacy rate of 74.77 percent.

The schemes and Policies implemented by the state for girl child empowerment, encouraging the parents to build a fund for future education and marriage expenses for their female child have shown a marked improvement in the sex ratio (the number of females per 1,000 males,) in AP, as it was up from 983 in 2001 to 997 in 2011 and is higher than India's 943.



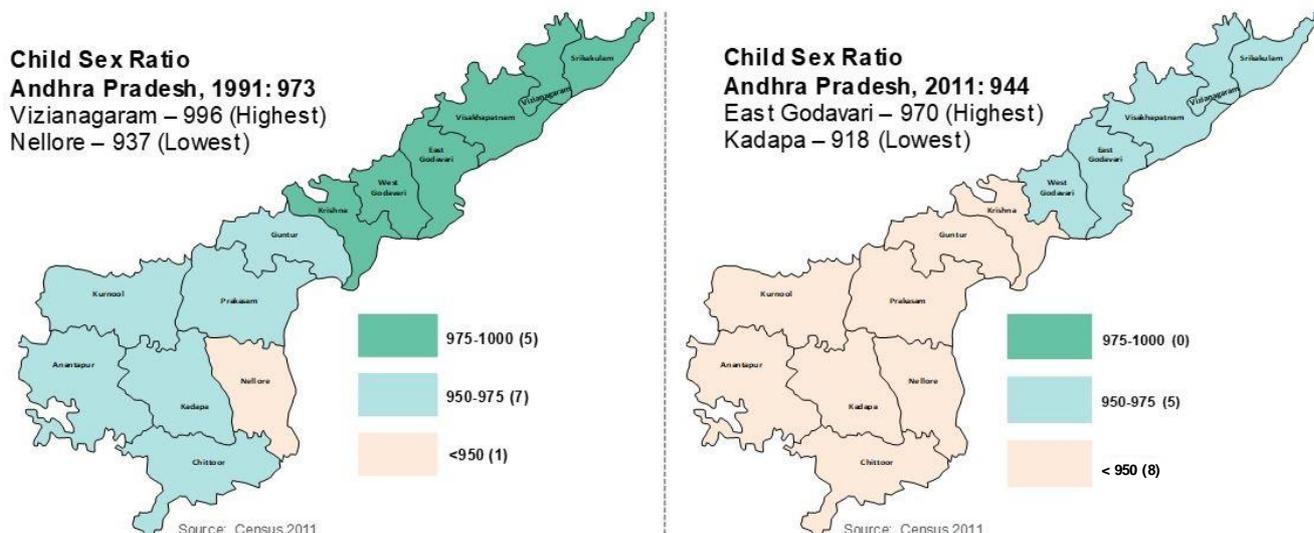
### Child Sex Ratio

The child sex ratio of AP state is better than that of India. Similar trend is visible in case of rural and urban areas also.



The district-wise child sex ratio comparative scenario (between 1991 and 2011) exhibited interesting trends. While Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari and Krishna districts have reported sex ratio more than the State average (973) in 1991, in a span of 20 years i.e., by the census 2011, these districts barring Krishna have slipped to moderate range (950-975). Krishna district have comparatively performed even worse, slipping into the poor zone (<950) during this period. While Nellore district with a

sex ratio of 937 is at the bottom of the table in 1991, YSR Kadapa district with a child sex ratio of 918 achieved this dubious distinction in 2011.



**Sex ratio scenario as per the latest NFHS-5 (2019-20) data:**

Item	2019-20		
	Urban	Rural	Total
Sex ratio of the total population (females per 1,000 males)	1,024	1,055	1,045
Sex ratio at birth for children born in the last five years (females per 1,000 males)	877	957	934

The latest NFHS-5 (2019-20) data, presents an encouraging picture of the Adult Sex Ratio in AP state with an impressive sex ratio of 1045 females per 1000 males. However, the child sex ratio revealed that the poor trend continues with the urban scenario more alarming with just 877 females per 1000 males, as against a relatively better position in rural areas with the ratio of 957.

**Female labour:**

**Female Labour Force Participation Rate (PS+SS) - 15-59 years**

Type	Rural	Urban	Total
	<b>India</b>		
2011-12	37.81	22.20	33.11
2017-18	26.56	22.35	25.27
2018-19	28.29	22.50	26.47

Type	Rural	Urban	Total
	<b>Andhra Pradesh</b>		
2011-12	61.40	28.06	52.08
2017-18	54.60	34.01	47.53
2018-19	53.40	29.88	45.11

#### Ratio of Female LFPR to Male LFPR (PS+SS) - 15-59 years

Type	Rural	Urban	Total
	<b>India</b>		
2011-12	0.45	0.27	0.40
2017-18	0.33	0.28	0.32
2018-19	0.35	0.28	0.33
	<b>Andhra Pradesh</b>		
2011-12	0.71	0.34	0.61
2017-18	0.63	0.41	0.56
2018-19	0.64	0.37	0.55

The overall Labour Force Participation Rate(LFPR) for females in the productive age group has shown a decline from 52.08% in 2011-12 to 45.11% as per the latest 2018-19 (PLFS) Survey. However, this is better than the LFPR for India at 26.47% steeply declined from 33.11% in 2011-12. The LFPR for rural females of AP state is fairly higher at 53.40% for 2018-19 (although fell from 61.40% in 2011-12) as compared to the Country's much lesser share of 28.29%. While the urban LFPR for females in urban areas have marginally improved to 29.88% in 2018-19 from 28.06% in 2011-12, the urban LFPR for the country almost remained stagnant at around 22%.

The Ratio of female LFPR to male LFPR for AP state as per PLFS (2018-19) is higher at 0.55 as compared to India's 0.33. This ratio is higher in rural areas compared to urban areas both in the State as well as for the Country.

#### Women in Institution Building

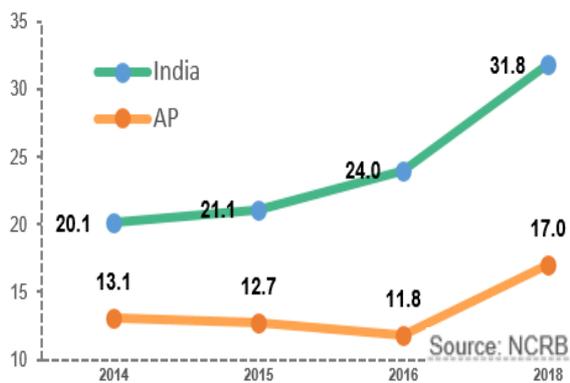
Community Based Organisations (CBOs) have built up enormous financial capital base through savings corpus. Besides this, the human capital aspect of the SHG members has been built over the years and is continuously in the process of being strengthened through

various programs and initiatives. 85.48 lakh rural women have been institutionalized into 8.20 lakh SHGs. The total savings by the members is Rs.6,968.22 and the corpus available with SHG members is close to Rs. 9647.81 Crore. Out of 85.48 lakh rural SHG members, around 100% of the members have their individual member SB accounts in banks

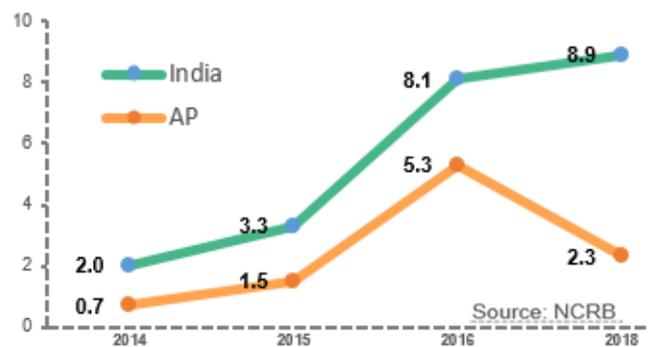
### Sexual exploitation and crime against girls and women

Ujjawala Homes established for the women rescued from trafficking Women Empowerment Cells (WEC) are established in all Govt. degree colleges and aided degree colleges to prevent sexual crimes against children and women by spreading awareness and by taking action. AP has the highest prevalence of Child marriages among Southern States as per NFHS – IV. Prohibition of Child Marriage Act, 2006 is being implemented with the involvement of community, youth and adolescent group for supporting network. 819 child marriages have been stopped during 2019-20.

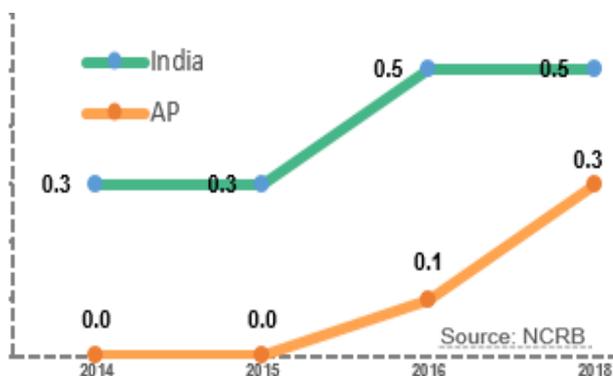
**Rate of Cognizable crime against Children**  
(Per 1 lakh population)



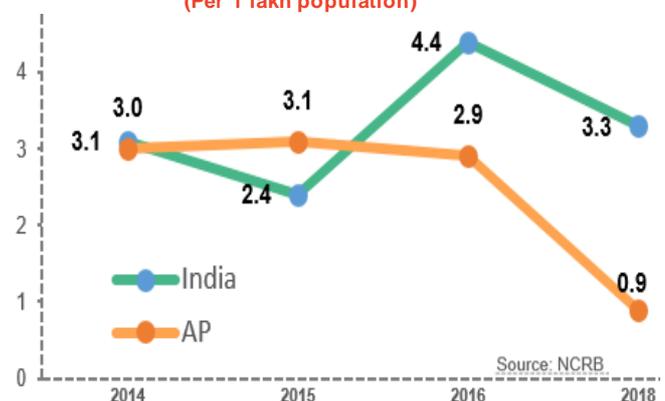
**Incidence rate of POCSO cases**  
(Per 1 lakh population)



**Incidence rate of JJ Act cases**  
(Per 1 lakh population)



**Incidence rate of rape cases**  
(Per 1 lakh population)



## Violence against women

The NFHS 2015-16 data presented a dismal picture of physical, sexual, or emotional form of spousal violence of ever-married women aged between 15 to 49 years. The survey highlights that spousal violence reduces with a rise in education and wealth control amongst women. As per the report, the State has established Domestic Violence Cell for women who are facing domestic violence. One in every three women experience spousal violence.

The **latest NFHS-5(2019-20) survey** which has studied gender-based violence across age groups of 18-29 years and 18-49 years presented a gloomy picture on violence in the state as can be seen from the following table:

<b>Gender Based Violence (age 18-49 years)</b>	<b>Urban</b>	<b>Rural</b>	<b>Total</b>
Ever-married women age 18-49 years who have ever experienced spousal violence (%)	28.8	30.5	30.0
Ever-married women age 18-49 years who have experienced physical violence during any pregnancy (%)	3.5	3.9	3.8
Young women age 18-29 years who experienced sexual violence by age 18 (%)	3.8	3.7	3.7

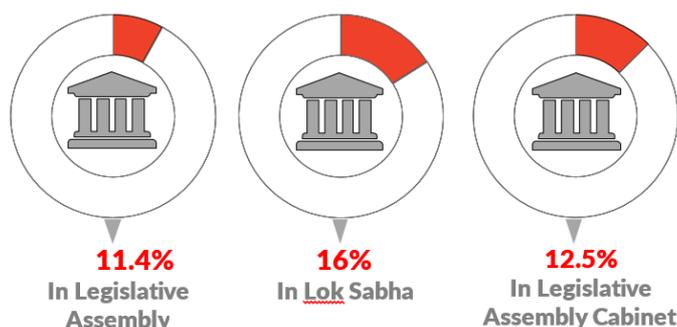
Source: –NFHS-5, 2019-20.

## Administrative and political Powers

For a very long period, women have secluded themselves from politics. Public Administration and politics, by and large, are considered to be the exclusive privilege of men. In the recent years the women’s participation in politics and in policy making spheres has significantly increased.

However, statistics clearly show that the representation of women in Legislatures both at central and state are awfully low far lower than their legitimate share of 50%.

### Proportion of seats held by women in National Parliament, State Legislation



### ***Schemes and strategic interventions targeting women empowerment***

Economic Empowerment is a precursor to women's all-round development – with this motto, the state has taken up all possible social security welfare measures for strengthening and empowering the women.

#### **YSR Aasara:**

Believing that sustainable and inclusive governance can only be achieved through women led development, the State government introduced 'YSRAasara', a Flag ship program under "Navaratnalu" aimed to achieve this objective of Women Empowerment.

- With a view to improve and reinforce the Women Empowerment efforts and strengthen the economic development of poor SHG women in both rural and urban areas, Government proposed to reimburse the entire Bank Loan of Rs.27,168 crores of DWCRA/SHG groups outstanding as on 11th April 2019, in four installments starting from next year i.e., 2020-21.

#### **YSR Cheyutha**

Government has launched the scheme on 12<sup>th</sup> August 2020 to empower socio-economically deprived women, by ushering them into entrepreneurship and helping them build strong, rewarding businesses. Govt provides a financial assistance of Rs.75,000/- to SC, ST, BC, and Minority women in the age group between 45 to 60 years in a Phased manner in 4 years period from 2020-21 onwards through respective Corporations. Financial assistance of Rs.18,500/- has been transferred to women this year and will be done for 4 years period benefiting 23 Lakh beneficiaries.

#### **YSR KalyanKanuka**

This scheme is being implemented by the state for ensuring socio –economic security for the brides and promotes compulsory registration of marriages. The State Govt provides a wedding gift of Rs.50,000 for BC brides and Rs 1,00,000 for brides belonging to SC, ST and Minority communities.

#### **YSR "o" Vaddi**

With an intent to encourage better repayment culture and to reduce interest burden on the rural and urban poor on SHG bank loans, the state government decided to continue the interest subvention programme as YSR "o" Vaddi. SHGs which availed bank loans, outstanding as on 11.04.2019 up to Rs.3 lakhs are eligible for YSR "o"Vaddi for the FY 2019-

20. Under YSR Sunna Vaddi, 8,78,874 SHG loans were given and an amount of Rs.1365.08 Crs paid.

### **StreeNidhi**

StreeNidhi Credit Cooperative Federation Limited operates in rural and urban areas with an objective of providing livelihood loans to poor SHG women in transparent and easily accessible manner through SHG federations. Under StreeNidhi, loans have been provided to an extent of Rs.1804.56 Crores to 364485 SHG members comprising of 112768 SHGs during 2019-20.

### **Housing**

In order to empower women, the state is planning to construct 30 Lakh houses for all the house less eligible. The land/ house sites along with the house will be registered on the name of women.

### **Jagnanna AmmaVodi**

In order to ensure that poverty of the parents is not a barrier for educating to their children, the government has launched a unique scheme “Jagananna Ammavodi” providing financial assistance of Rs.15,000/- per annum to each BPL mother of children studying Class I to XII for sending her children to schools/ colleges. An amount of Rs. 6336.45croreshave been transferred to the bank accounts of 42.33 lakh eligible.

### **50% Reservations to Women in Nominated posts and in Contract works**

To ensure equal participation and representation of women in the policy making bodies of the State, and as a measure to ensure social justice and also conforms to the principles of equality of opportunities, the government enacted ‘The Andhra Pradesh (50 Percent Reservation to Women in Works Contracts and Service Contracts given on Nomination) Act, 2019.

### **Disha Act**

In order to effectively Control the sexual offences against women, the state has introduced ‘The Andhra Pradesh Disha Bill - Criminal Law(Andhra Pradesh Amendment) Act, 2019 (L.A. Act, No. 47 of 2019)’. Disha Act is a landmark legislation that will help create a safe society for women and children in Andhra Pradesh by providing speedy justice. This act for the first time in the country provides for completion of investigation within 7 days and trial within 14 days in cases of heinous offences of rape where substantial conclusive evidence is available. The act provides for awarding death sentence for offences of rape

and gang rape and expediting verdict in trials of such cases within 21 days and prescribes life imprisonment for sexual offences against children and includes Section 354 F and 354 G in IPC.

### **Abhayam Project**

The 'Abhayam Project' (app) specially designed for the safety of children and women travelling alone in autos and taxis. The state government is giving utmost priority to the protection and security of woman, children.

### **AP State's Vision:**

This government has recognised that focusing on economic empowerment of women/girls leads to family welfare. Empowerment of women by building awareness of gender issues and providing them equality of opportunities irrespective of sex in education, health and employment opportunities is the cornerstone of the government's thinking.

### **Focus areas**

- ❖ Improve the contribution of women to economic activity,
- ❖ Increasing rate of participation of Women in labour and work force.
- ❖ individual account ownership in Scheduled Commercial Banks
- ❖ ownership of proprietary establishments
- ❖ The political representation of women in state legislature and national legislature demands improvement.
- ❖ Improve female Literacy rate.
- ❖ Arresting Child and early marriages
- ❖ Reduce sexual violence, exploitation, abuse and Crimes against women and girls

### **Food,Nutrition and Health Care**

The state is implementing schemes relating to immunization, vaccination, supply of supplementary nutrition to pregnant women/lactating mothers/adolescent girls besides the mother and child healthcare schemes such as PoshanAbhiyan, Janani SurkshaYojana, Janani Shisu Suraksha Karyakram, Supplementary Nutrition Programmes (SNPs), YSR AmruthaHastham (One Full Meal),YSR SampurnaPoshana, Balasanjeevini in identified Tribal areas besides Mid- day meal programme to reduce maternal mortality, malnutrition, anemia among children and women. In addition the following schemes targeting women/girl development will be implemented:

- ❖ YSR Aasara:
- ❖ YSR Cheyutha
- ❖ YSR KalyanKanuka
- ❖ YSR “o” Vaddi
- ❖ StreeNidhi
- ❖ Housing
- ❖ JagnannaAmmaVodi
- ❖ 50% Reservations to Women in Nominated posts and in Contract works
- ❖ Disha Act
- ❖ Abhayam Project

### Key outcomes

Indicator	2019-20
Rate of crimes against women per every 1,00,000-female population	66.19
Proportion of women subjected to dowry related offences to total crime against women	38.69
Sex Ratio at Birth (Rate per 1,000 live births)	938
Proportion of crime against women to total crime reported in the state during the calendar year	10.07
Proportion of sexual crimes against women to total crime against women during the calendar year	8.12
Proportion of cruelty/ physical violence on women by husband or his relative to total crime against women during the calendar year	22.96
Proportion of sexual crime against girl children to total crime against children during the calendar year	61.78
Proportion of trafficking of girl children to total children trafficked during the calendar year	77.78
Percentage of Ever Married Women Age 15-49 Years Who Have Ever Experienced Physical or Sexual Violence committed by their Husband (%)	1.00
Child Sex Ratio (0-6 Years)	944
Proportion of cases reported under the Prohibition of Child Marriage Act (early marriage of children below 18 years of age) to total crime against children.	3
BC Women aged between 45 to 60 years provided with financial assistance @ Rs. 75,000 under YSR Cheyutha (in lakh Number)	8
SC Women aged between 45 to 60 years provided with financial assistance @ Rs. 75,000 under YSR Cheyutha (in lakh number)	4.14
ST Women aged between 45 to 60 years provided with financial assistance @ Rs. 75,000 under YSR Cheyutha (in Number)	3243

Indicator	2019-20
Percentage of currently married women (15-49 years) who use any modern family planning methods	81.53
Proportion of population aged 15-24 years with comprehensive correct knowledge of HIV / AIDS	47.8
Female Operated Operational Holdings (%)	30.09
Male Operated Operational Holdings (%)	69.91
Proportion of female agricultural labourers	49.36
Percentage of women having an account at a formal financial institution - PMJDY (Number in Cr.)	57.59

### Key Vision Outcome Indicators

Indicator	2019-20	SDG- Vision Targets		
		2022-23	2024-25	2029-30
SC Women aged between 45 to 60 years provided with financial assistance @ Rs. 75,000 under YSR Cheyutha (in lakh number)	NA	2.05	2.46	12.55
ST Women aged between 45 to 60 years provided with financial assistance @ Rs. 75,000 under YSR Cheyutha (in Number)	3243	162635	196788	216467
Minority Women aged between 45 to 60 years provided with financial assistance @ Rs. 75,000 under YSR Cheyutha (in Number)	NA	2,82,095	3,41,336	5,49,726
Amount distributed to DWCRA / SHG Groups under YSR Asara Zero interest loans for economic development (Rural) - (Rs. in Cr.)	N A	5385.32	6193.12	7122.09
DWCRA / SHG Groups assisted with Zero interest loans under YSR Asara (Rural) (in Number)	N A	701993	807292	928386
DWCRA / SHGs having Bank Loan (Outstanding) (in Number)	836760	841000	846000	851000
Amount of Bank Loan Outstanding provided to DWCRA/SHGs under YSR Aasara (Rs. Cr.)	23808.85	24300.00	248000.00	25300.00
Percentage of Women SHGs given outstanding credit during the reference financial year	123.20	128.00	133.00	140.00
Percentage of women employed in IT and ITeS industry	40	42	45	50





6

## **Clean Water and Sanitation**

Ensure availability and sustainable management of water and sanitation for all



## 6 CLEAN WATER AND SANITATION



### **Water scarcity despite abundance**

Clean water is critical to survival, and its absence can impact the health, food security. Despite abundant water availability on the globe, bad economics and poor infrastructure can skew supply unfavorably. Drought afflicts some of the world's poorest countries, worsening hunger and malnutrition. Global goals and national priorities on reliable energy, economic growth, resilient infrastructure, sustainable industrialization, consumption and production and food security, are all inextricably linked to a sustainable supply of clean water.

As per one UN Environment observation, around 1.9 billion people live in potentially severely water scarce areas. By 2050, this figure could increase to around 3 billion people. Globally, over 80 per cent of the wastewater generated by society, flows back into the environment without being treated or reused. An estimated 64–71 per cent of natural wetlands have been lost since 1900 as a result of human activity.

### **Current scenario of Water and Sanitation in Andhra Pradesh**

The Government is working towards giving assurance to the residents of Andhra Pradesh that they will have access to reliable and clean drinking water supply at their doorstep in both urban and rural areas, sewerage and storm water systems in urban areas.

**Rural Water Supply:** Basic sources for rural drinking water in Andhra Pradesh are of various types such as bore wells with hand pumps/single phase-motors, direct pumping schemes, MPWS schemes, PWS schemes and CPWS schemes. 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.

At present, 591 CPWS schemes, 36917 PWS/MPWS Schemes and 13773 Direct Pumping schemes are created covering 40548 Habitations. In addition to this, 210466 Hand pumps & Shallow Hand Pumps and other assets like Open wells and Ponds are also created.

Currently, 58 % of habitations are covered with 55 LPCD, 42% of habitations are covered with 40 LPCD service level and 1% of habitations are quality affected. Out of 95.66 Lakh rural households, about 31.93 Lakh households are having house connections. The State Government is planning to provide safe & adequate drinking water with minimum of 70 LPCD service level through sustainable surface/ground water sources by 2030.

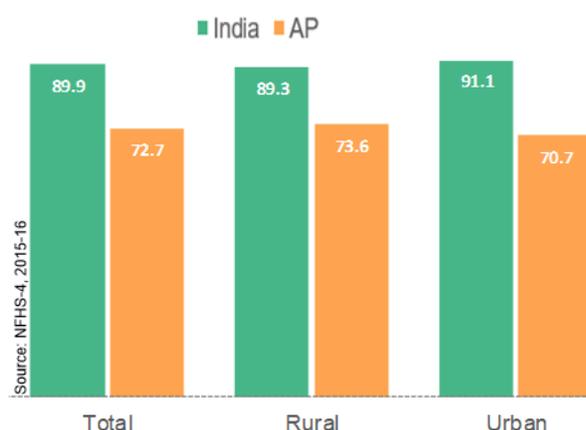
Government have sanctioned 1082 rural waterworks to 1611 habitations with a commitment of Rs. 522.84 crores under NRDWP/JJM. Under NABARD, 228 works were sanctioned in 558 habitations at a cost of Rs. 266.83 crores. Government also sanctioned 416 works to 447 habitations with Rs 74.60 crores under State Development scheme.

Under YSR SujalaPathakam, 2779 habitations (Quality Affected and Stressed) are programmed to cover 49 water purification plants through hub & spoke model during 2020-21 costing Rs. 225.00 crores.

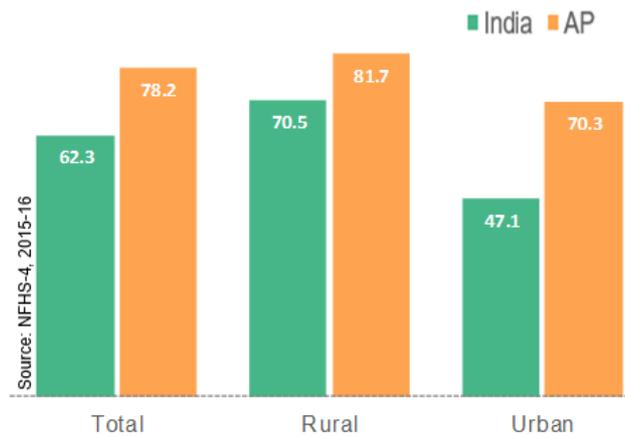
**Urban Water Supply:** As of 2019, 95% urban population are having safe and adequate drinking water within their premises and all ULBs are having facility with 135 LPCD drinking water supply. Frequency of supply and per capita supply has been improved in 5 ULBs, about 32,000 house service connections have been added in this year. During the year 2019-20, five water supply schemes have been completed under AMRUT, HUDCO & UIDSSMT.

Water Supply Project at a cost of Rs. 585.05 Crore in Nellore is completed under HUDCO scheme. And Under AMRUT-Phase-I, water supply projects costing Rs. 787.97 crore were taken up in 25 towns which are in progress with 90% of work completed in Phase-II water supply projects have been taken up in 27 towns at a cost of Rs. 2001.93 crores and about 60% of work completed.

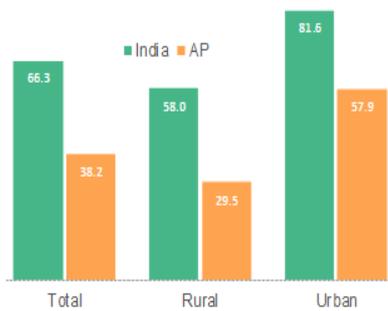
**HH with access to improved source of drinking water (%)**



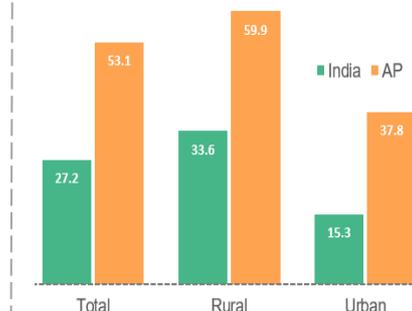
### Drinking water without any purification treatment (%)



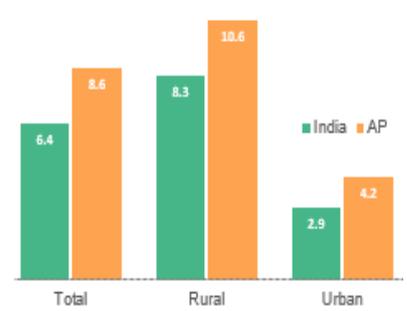
### Water within the premises (%)



### Water Less than 30 minutes (%)



### Water 30 Minutes/ more (%)



### Water Supply and Sanitation status in Andhra Pradesh:

Item	Urban	Rural	Total
Population living in households with an improved drinking-water source (%)	99.4	95.4	96.7
Population living in households that use an improved sanitation facility (%)	89.1	72.1	77.3

Source: NFHS-5 Report (2019-20)

From the above table, as per the latest NFHS-5 data, it is evident that nearly 97% of the population in the State have access to improved drinking water facility and 77% have access to improved sanitation facility and the population living in urban areas have a comparatively better access.

### Strategic interventions

The Government of Andhra Pradesh is working towards ensuring that every person living in the state shall get basic services like sufficient safe water for drinking, cooking, raising livestock and other domestic needs and sanitation including septage management,

sewerage management, solid waste management, storm water drainage, throughout the year for both rural and urban areas.

- ❖ Through Drinking Water Project Proposals (WATERGRID), government is planning to provide bulk water supply mains and deliver water to rural, urban (Municipalities & Corporations) and Industrial demand through sustainable surface/groundwater sources.
- ❖ Under Nadu- Nedu programme the Government seeks to strengthen the school infrastructure such as drinking water, Toilets etc. in 3 phases, Rs.1500 crores has been allocated for modernization of infrastructure in schools in 2019-20.

With an aim to provide 100% house service connections to ensure that adequate level of water is available at the consumer's doorstep at convenient timings, @ 100 LPCD in rural areas (including human and cattle needs), 135 LPCD to urban (Municipalities), 150 LPCD to corporations and industrial as per demand, the government has prepared DPRs for an amount of Rs. 46,675 cr. The drinking water projects are being planned in a phased manner and it is programmed to complete by 2024.

**Waste Management:** The Government of Andhra Pradesh has a vision on waste management and sanitation and initiated several Institutional reforms towards achieve the goal. Online Waste Management System (OWMS) has been developed for managing Sanitation and Solid Waste Management Activities on real time basis.

**Door to Door Garbage Collection:** The total garbage generation in the state in 110 ULBs is 2.02 Lakh MTs and waste lifted is 1.99 Lakh MTs per month, lifting 99% of garbage generated. Out of total 40.33 lakh households, door to door garbage collection is covered in 38.23 lakh households covering 96%. Out of 40.33 lakh households, segregation of waste at sources has been covered in 25.42 lakh (63%) households.

**Solid Waste Management:** The daily generation of garbage is 6,766 Metric Tons per day. To manage dry waste, material recovery facilities are established in 72 ULBs. Under Extended Producer Responsibility in terms of PWM Rules, 2016, Plastic Waste Collection Centers are established in 5 ULBs. To process on- recyclable plastic waste, 25 ULBs have so far tied up with nearby cement plants and so far 95.30 MTs plastic waste has been sent to cement plants. The plastic waste is also being used in construction of roads in the ULBs and so far about 19.1 Kms of road laid by using 26.5 MTs.

**Sanitation:** Recognizing the importance of behavioural changes in influencing sanitation levels within the state, the Government of Andhra Pradesh has focused its efforts on measures which promote and incentivize the adoption of new sanitation norms. Individual water connections are being encouraged by the state in rural and urban areas to facilitate both drinking water and latrine functions.

**Storm Water Drains:** Government is taking necessary steps to provide storm water drains in ULBs to avoid inundation and fly nuisance. During 2019-20, about 128 Kms of storm water drainage network has been added to the existing network in 5 ULBs.

## **AP state's Vision**

The Government of Andhra Pradesh commits to providing basic services and facilities for clean drinking water and sanitation in rural and urban areas to ensure a better quality of life for all its residents.

### **Focus Areas**

- ❖ To provide safe drinking water for all, at all times, in rural and urban areas
- ❖ Providing sewerage system in all villages and to achieve 100% coverage of urban areas with sewerage systems, as well as sewage treatment plants for the treatment of waste water.

### **Strategies to achieve the target – Rural Water Supply**

- ❖ The entire rural population is planning to cover with 55lpcd service level by 2024-25 through sustainable surface/ground water sources
- ❖ It is planning to provide safe & adequate drinking water facilities with minimum of 70 LPCD service level through sustainable surface/ground water sources by 2030
- ❖ It is planned to achieve 100% Functional Household Tap Connections(FHTCs) :
  - By 2024-25, with the supply level of minimum 55 LPCD
  - By 2029-30, with the supply level of minimum 70 LPCD

### **Challenges Ahead**

- ❖ Provision to minimum of 70 LPCD service level through sustainable surface/ground water sources by 2030 in rural areas and 135LPCD to all ULBs.
- ❖ To achieve 100% coverage of urban areas with sewerage systems, as well as sewage treatment plants for the treatment of waste water.

## Key Vision Outcome Indicators

Indicator	2019-20	SDG- Vision Targets		
		2022-23	2024-25	2029-30
Proportion of rural population having safe and adequate (55 LPCD) drinking water within their premises (%)	46	80	100	100
Rural population having safe and adequate drinking water within their premises (%)	67	90	100	100
Percentage of population using an improved drinking water source (Rural)	46	80	100	100
Percentage of rural households with 70 lpcd piped water supply	21	42	55	100
Percentage of rural households with Functional Household Tap connections	33	84	100	100
Percentage of urban households with 135 lpcd piped water supply	95			100
Primary schools with separate toilet facility for girls (%)	91.09	92.91	95.64	100.00
Upper primary schools with separate toilet facility for girls (%)	94.56	96.45	99.29	100.00
Secondary schools with separate toilet facility for girls (%)	87.40	89.15	91.77	96.14
Proportion of waste water treatment capacity created vis-à-vis total generation	95.76			100.00
Percentage ground water withdrawal against availability	44.00			
Per capita storage of water (m3/Person)	1018.92	1174.47	1185.94	1185.94
Per capita availability of Water (m3/Person)	1685.19	1967.71	1983.20	2120.83
New Area Created Under Major Irrigation (in Lakh Acrs)	0.14	27.31	5.09	4.01
AyacutStabilised Under Major Irrigation (in Lakh Acrs)	0.06	37.01	7.74	20.00
New Area Created Under Medium Irrigation (in Acrs)	0	85648	0	0
Percentage of Developed Irrigated command Area brought under water users association(WUAs)	60.87	30	9.13	



## **Affordable and Clean Energy**

Ensure access to affordable, reliable, sustainable and modern energy for all



## 7 AFFORDABLE AND CLEAN ENERGY



Government has recognised equitable and universal access to affordable, reliable and clean energy as a prerequisite for socio-economic development. The Goal aims to eliminate inefficient energy sources and instead promote universal access to safe cooking fuel and electricity generated from non-polluting and affordable renewable sources. At the National level, power sector has witnessed a paradigm shift over the years due to persistent efforts of successive governments to foster investment in the sector. Similar efforts at the State level helped to overcome the energy crisis.

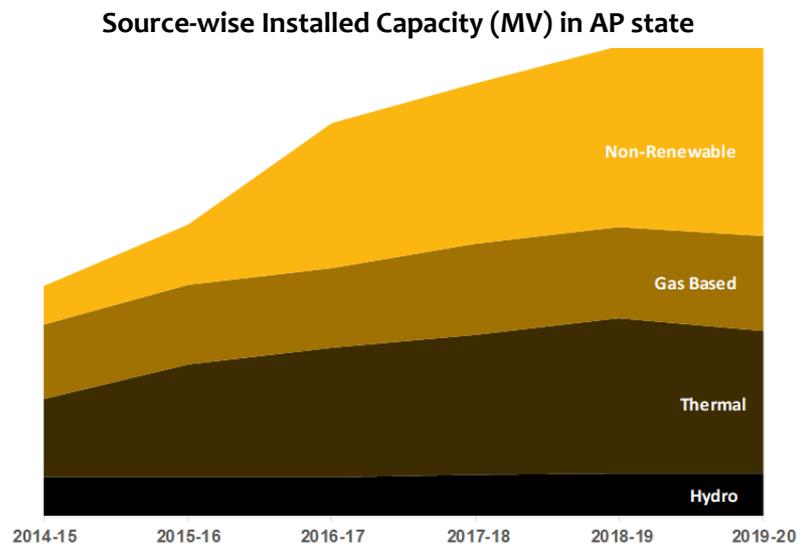
### Current Scenario of power sector

Andhra Pradesh has shown commendable performance in ensuring access to electricity. From a power deficit state, Andhra Pradesh has transformed into a power surplus state. 100% of the state population has access to electricity. Andhra Pradesh is the third state in the country to achieve this milestone. The state has an efficient, resilient and financially robust power sector which is essential for growth and poverty reduction aiding to record significant performance in terms of generation, transmission and distribution.

### Key Energy Statistics

Sl.No	Parameters	Unit	2018-19	2019-20
1	Installed Capacity	MW	20200	20206
2	EHT Substation	No.s	320	332
3	33/11 Substations	No.s	2949	3123
4	Energy Met	MU	64130	65668
5	Peak Demand Met	MW	9453	10207
6	Domestic Services	Lakh	132.75	136.87
7	Agricultural Pumpsets energized	Lakh	16.9	17.54
8	Total Consumers served	Lakh	167.17	172.45
9	Per capita consumption	Units	1234	1203
10	Transmission loss	%	3.1	2.91
11	AT&C losses	%	13.79	10.34
12	T&D losses	%	12.21	13.33

Efforts are being put in to considerably reduce the AT&C and other losses and providing quality power. The Installed Capacity in the state as on 31-03-2020 stands at 20206 MW.



Having saturated household-level power connections, the state now focuses on affordability of power. The availability of reliable, quality and affordable power helps in the rapid Agriculture and Industrial development and the overall economy of the state. With increased focus on quality of power supply, all households and industries will have 24X7 access to electricity in the near future.

### **Clean and safe cooking Fuel**

The government has recognised that universal access to clean cooking solutions is essential to reduce global mortality and improve overall wellbeing. The options that are clean at point-of-use include: electricity, gas, ethanol, solar, and the highest performing biomass stoves. Andhra Pradesh has registered an unparalleled growth in ensuring access to non-solid cooking fuel (LPG) with 100% of the population having an LPG connection. The state is providing free LPG Gas connections to women of BPL families under Deepam Scheme to reduce dependence on forest for fire wood, improve their health status and remove drudgery due to conventional cooking.

### ***Strategic interventions and tangible outcomes in power sector***

#### **Renewable Energy**

The Government of Andhra Pradesh has given top priority for promotion of Renewable Energy Power Projects in particular solar power projects in line with the Policies of the Ministry of New & Renewable Energy, Government of India. The focus areas of the state

are Solar and Wind power. The state has taken up 4 ultra-mega solar parks at Kurnool, Anantapuramu, and Kadapa with a capacity of 4,000 MW.

The cumulative Renewable Energy capacity installed in the State is 8142.77 MW, of which 3470.99 MW is from Solar Power Projects, 4079.37 MW from Wind Power Projects, 102.59 MW from Small Hydro Power Projects and 489.81 MW from Bio-Mass, Bagasee, Municipal & Industrial Waste Power Projects.

Under renewable energy

- ❖ 32,000 Solar pump sets have been installed for Irrigation purpose.
- ❖ Grid connected solar roof top systems with capacity of 120 MW installed.
- ❖ Efforts to provide quality power and nine-hour daytime free supply to farmers,
- ❖ Solar energy as an alternative to fulfill the requirements due to its lower cost.

### **Energy Efficiency Activities**

Andhra Pradesh state is committed to improve energy efficiency and is promoting energy conservation and efficiency measures in a big way through enforcing necessary standards and labelling of equipment and appliances.

The state government, in co-ordination with the Energy Efficiency agencies of Golis implementing several energy conservation and energy efficiency activities to ensure optimal utilization of available resources and realize the huge scope of energy saving potential in all sectors to the tune of 15,000MU per annum.

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. To achieve significant energy savings and monetary benefits, the government departments are also advised to implement energy conservation measures.

Some of the key achievements include:

- ❖ 2.32 crores LED bulbs have been distributed to households as a replacement for incandescent bulbs
- ❖ 6.20 lakh street lights have been replaced in urban local bodies with energy efficient lights
- ❖ 27.11 lakh street lights in Gram panchayats have been replaced with energy efficient lights

- ❖ 1.48 lakh energy efficient tube lights have been distributed to the households. The energy savings per LED bulb is 77.33 units per annum.
- ❖ About 3,23,939 Energy Efficient 5 star ceiling fans have been distributed resulting in annual energy savings of 20 MU.
- ❖ Under the Agricultural Demand Side Management (AgDSM) project around 69,016 Energy Efficient Pump sets have been replaced with new energy efficient pumps and the estimated annual energy savings is 125 MU
- ❖ All the district court buildings of the State to result in an expected annual energy savings of 2.2MU and monetary savings of Rs.2.27 crore
- ❖ 1.48 Lakh LED tube lights of 20W were distributed to interested consumers. Each LED tube light is expected to save 62% of energy.
- ❖ Energy Efficiency measures are being implemented in Housing, Rural Water Supply and Sanitation department.

#### **Power subsidies to Farmers**

- ❖ The total agriculture services released as on 31-03-2020 stands at 18.72 lakh.
- ❖ Provided concessional tariff of Rs.1.50 per unit for 77,650 Aquaculture farmers.
- ❖ Planning to introduce Direct Benefit Transfer (DBT) on the subsidy extended towards free electricity to farmers. There are more than 1.7 million agriculture electric connections that consume 12,232 MU. The annual subsidy on these connections amounts to ₹83.53 billion. The subsidy per connection is ₹47,601.

#### **PM-Kusum Scheme**

- ❖ The State has proposed for the inclusion of the 10,000 MW solar power plants under Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan scheme.

#### **JagjevanJyothi scheme**

- ❖ Free power upto 200 units per month is extended to SC/ ST domestic consumers. 5.24 Lakh households have been benefitted so far.
- ❖ 27,10,676 LED street lights have been installed in 11,323 GPs across the state

#### **Deepam Scheme**

- ❖ Providing free LPG connections to women of BPL families.

#### **Various Solar Photo Voltaic (SPV)**

- ❖ Implementation of lighting systems like home lighting systems and street lighting.

## Concessional Tariff

- ❖ Providing Concessional tariff @ Rs.3.75 per unit out of Rs.9.20 per unit to Rolled Gold Covering Industry.

## Transparency in tendering process through Judicial Preview

- ❖ The state Government have formed Judicial Preview Committee in order to fast track infrastructure development in state through transparent processes to secure competition and equal opportunity of all infrastructure projects including PPP Projects requiring an investment of Rs.100 Crores and above.

## AP Sate's Vision

While the gross availability of power has been taken care of, the State will focus on working towards select priority areas like

- ❖ Minimizing the T&D losses to be the best in the world.
- ❖ Implementation of second generation reforms in power sector.
- ❖ To harness the vast potential of green energy, reduce its carbon footprint
- ❖ Encouraging more efficient consumption by adopting energy efficient measures. One such area where the state will prioritize its action is agriculture, particularly through solar pump sets
- ❖ Efforts towards tariff reduction by improving energy efficiency
- ❖ Reduction in cost of power through greater interface of renewable energy and grid automation based on adoption of digital technologies
- ❖ Making Andhra Pradesh a major hub for electric mobility.

## Key Outcome Indicators

Indicator	2019-20
Percentage of households electrified	100
Percentage of household using clean cooking fuel	100
T&D losses (%)	13.02
Minutes of outage ( minutes per customer)	08:32
Renewable energy share in total final energy mix (%)	19.21
Renewable energy installed capacity (GW)	7.601
Total Primary Energy during the reference year (MW)	2575
Gross State Domestic Product during the reference year (Rs. Cr)	972782





8

## **Decent Work and Economic Growth**

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all



## 8 DECENT WORK AND ECONOMIC GROWTH



### Global economic vulnerability

The general global economic slowdown in the recent past has induced apprehensions at the National level about the likely prospects of growth in the current year, largely driven by various external factors. Experts believe that India's aspiration to become a \$5 trillion economy by 2024 depends on strengthening markets to provide equal opportunities, enable fair competition and ease of doing business. However, the most unexpected fallout of the Covid-19 on the global economies including India has been threatening.

### Growth via gainful employment

The making of a prosperous and vibrant India, calls accelerated and consistent economic growth, which is not to achieving higher Sustained high growth strategy to create eliminate poverty, and well-being. Given the economy especially pandemic, sustaining a will be a challenge for will be for all nations However, the learnings the State's growth years, in alignment with

*The immediate steps taken by the State to support and revive the MSMEs along with the timely assistance extended to the farmers, vulnerable sections in these difficult Covid-19 times have brought great relief to the poor and marginalized under the integrated initiative Navaratnalu. The latest financial assistance being extended to 10 lakh Street vendors and informal business persons through bank lending under 'Jagananna Thodu,' is expected to help the poor and vulnerable in a big way.*

the end but the means levels of development. is country's main gainful employment, improve prosperity and uncertainty in the global following the **COVID-19** high growth trajectory the State, Country, as it across the world. from the past will depict plans for the next ten the targets of SDG 8.

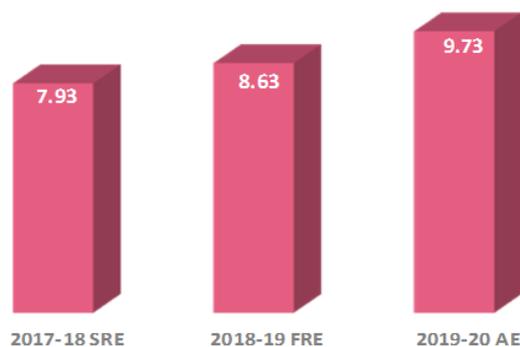
The Covid-19 pandemic which has been troubling all the nations for the last 9 months, is adversely impacting the economy of the

country and the AP state. The robust fiscal stimulus provided by the Central and State government to spur domestic demand and to sustain investment, to a certain extent have made the economy to slowly come back on track. With over Rs. 20 lakh crore pushed into the system under Atmanirbhar Bharat Package by the Centre together with the steps taken by the AP state government have provided some relief to the large segment of persons in the informal sector who have lost jobs. In order to achieve this, the government is committed to give special thrust to focus on education, health, skill development and employment generating activities.

### Macro-Economic Aggregates - Scenario in 2019-20

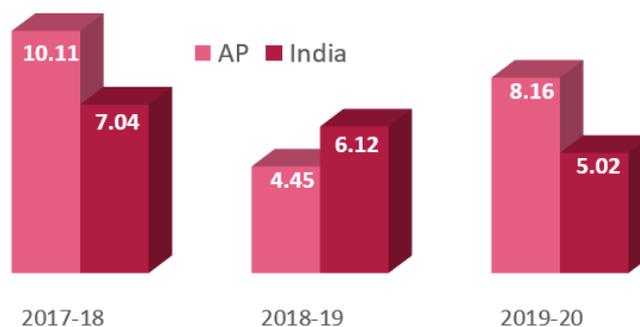
The GSDP of Andhra Pradesh at Current Prices for the year 2019-20 (Advance Estimates) is estimated at Rs.9,72,782 crores as against Rs.8,62,957 crores for 2018-19. As per the Advance Estimates, the GSDP at constant (2011-12) prices for the year 2019-20 is estimated at Rs.6,72,018 crores as against Rs.6,21,301 crores for 2018-19 (FRE) indicating a growth of 8.16% in comparison with the All India GDP growth rate of 5.0% for 2019-20.

**GSDP Estimates of AP state at Current Prices – (lakh crores)**



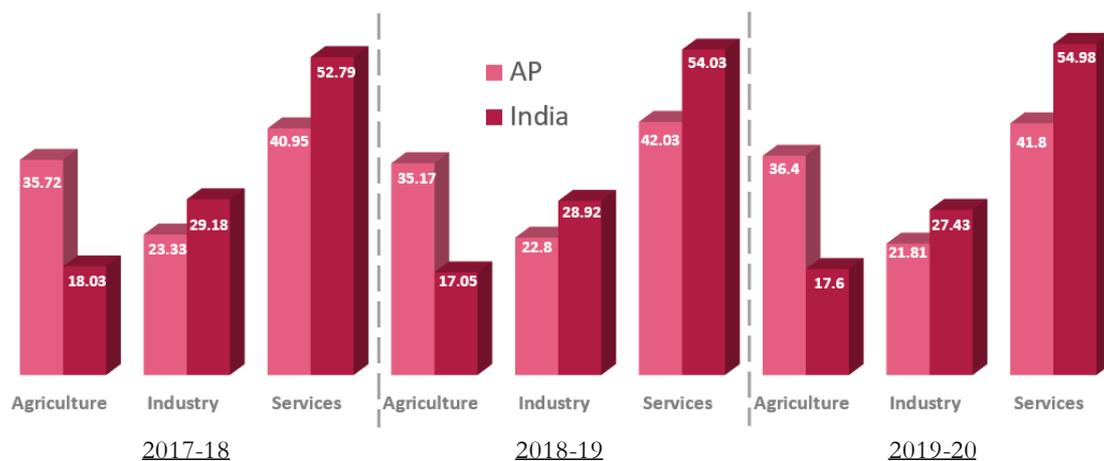
The sectoral growth rates of GVA of Andhra Pradesh at constant (2011-12) prices are Agriculture: 8.60%, Industry: 5.67% and Services sector: 9.11%. AP’s growth performance during 2019-20 is comparatively better in Agriculture and Services sectors during 2019-20.

**GSDP/GDP Growth (%) at Constant (2011-12) Prices**



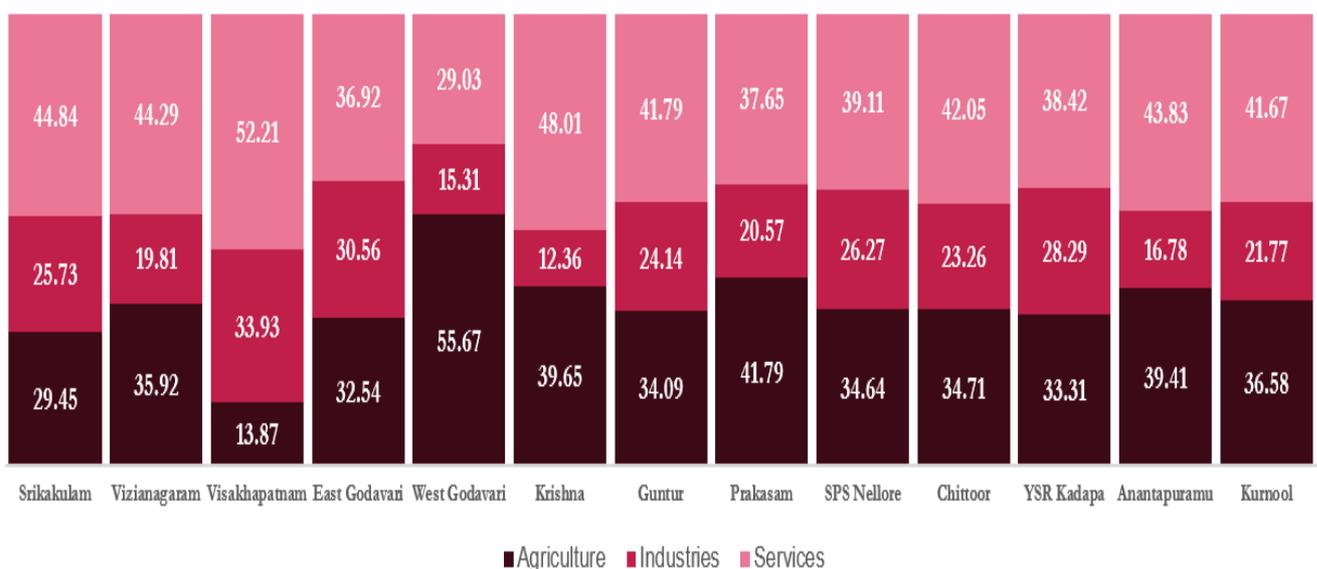
The sectoral contributions of broad sectors of the economy indicate that the share of agriculture sector is quite high in AP state around 36% as compared to India's 17%. The share of Industries sector of the Nation is higher (around 28%) as compared to the AP state, which hovered around 22%. The contribution of Services sector at the National level is highly encouraging around 55%, as compared to AP state's 42%. The following figures shows the relative contributions of the three sectors over the year period.

### Sectoral Contribution - Andhra Pradesh Vs India



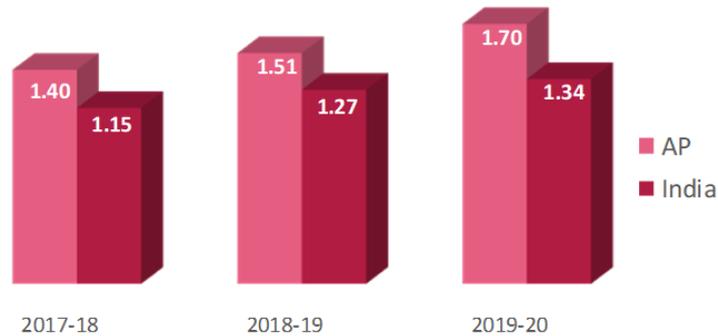
The District-wise sectoral contributions of broad sectors of the economy indicate that the share of Industries sector is encouraging (>30%) in only districts, namely, Visakhapatnam (33.93%) and East Godavari (30.56%) and is lowest in Krishna district(12.36%). In services sector, Visakhapatnam tops the list with 52.21% share, lowest being West Godavari.

### District-wise Sectoral Contribution 2019-20



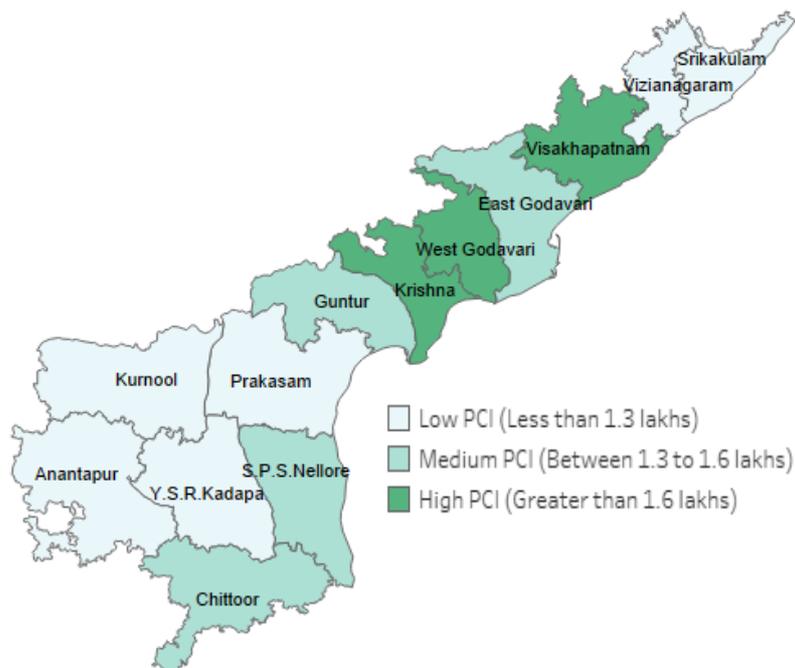
The Per Capita Income (NSDP) of Andhra Pradesh at current prices has registered a growth of 12.14 percent as it increased from Rs.1,51,173 in 2018-19 (FRE) to Rs.1,69,519 in 2019-20, as compared to the Per Capita Income of All India which has increased from Rs.1,26,521 in 2018-19 to Rs.1,34,432 (AE) in 2019-20.

**Per capita Income at current prices( in rupees)**



District-wise analysis of Per Capita Income(PCI) reveal that only three districts, namely, Visakhapatnam, West Godavari and Krishna districts have fallen in the High PCI range (more than Rs. 1.6 lakh) while Srikalulam, Vizianagaram, Anathapur, Prakasam, Kurnool and YSR Kadapa are in the low PCI range (<Rs. 1.3 lakh).

**District-wise Per Capita Income (PCI) 2018-19 FRE – Rupees**

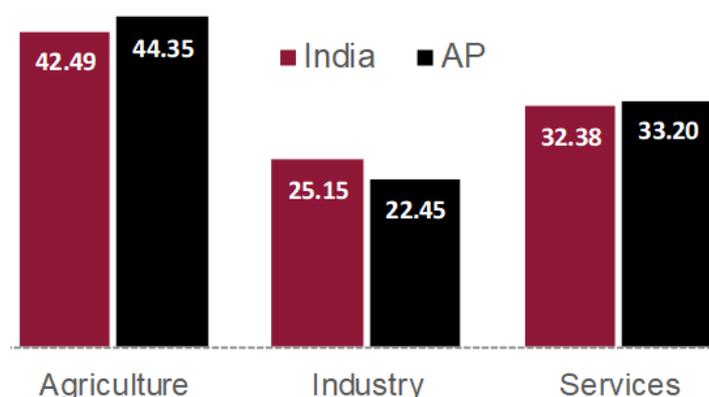


### Employment scenario in Andhra Pradesh

Distribution of labour force across sub-sectors of the broad sectors of Agriculture, Industries and Services has been culled out from the results of the latest Periodic Labour

Force Participation Survey (PLFS-2018-19). The detailed sub-sectoral shares in employment as per the PLFS 2018-19 data are given in the table. The sectoral distribution of employment by and large remained identical in Andhra Pradesh and India.

**Sector-wise share of employment – 2018-19**



In Andhra Pradesh State, Agriculture, Forestry and Fishing sector has a fair employment share of 44.35% while Construction (10.89%) and Manufacturing (10.6%) have emerged as the next best employment shareholders. The broad sectoral labour shares are depicted in the following figure.

**Detailed Sector-wise share of employment – 2018-19**

Sector	Description	AP	All India
Agriculture	Agriculture, forestry and fishing	44.35	42.49
Industry	Mining and quarrying	0.29	0.42
Industry	Manufacturing	10.6	12.07
Industry	Electricity, gas, steam and air conditioning supply	0.5	0.3
Industry	Water supply; sewerage, waste management and remediation activities	0.17	0.26
Industry	Construction	10.89	12.1
Service	Wholesale and retail trade; repair of motor vehicles and motorcycles	9.24	10.76
Service	Transportation and storage	6.53	4.94
Service	Accommodation and Food service activities	2.9	1.86
Service	Information and communication	0.55	0.99
Service	Financial and insurance activities	1.02	1.17
Service	Real estate activities	0.29	0.2
Service	Professional, scientific and technical activities	0.47	0.89
Service	Administrative and support service activities	0.47	1.1
Service	Public administration and defence	1.97	1.66
Service	Education	3.45	3.89
Service	Human health and social work activities	1.54	1.29
Service	Arts, entertainment and recreation	0.14	0.31
Service	Other service activities	4.63	3.32

Source: PLFS 2018-19.

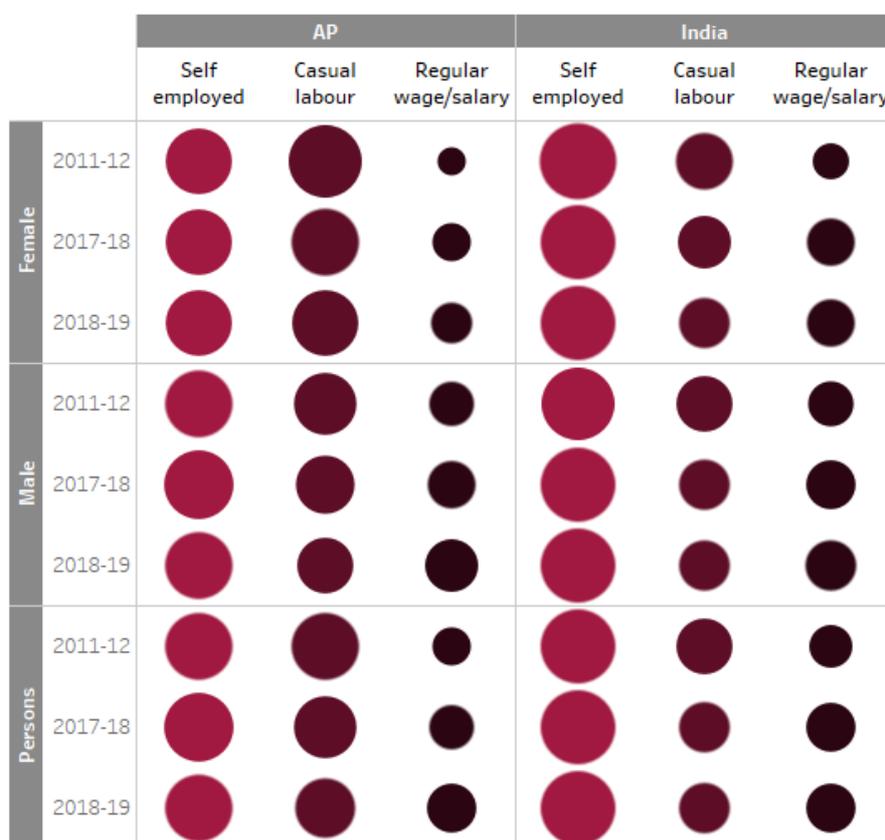
### Distribution of workers (PS+SS) all ages by employment status (%) - Total

A comparative picture of PLFS (2018-19) data with the NSS 2011-12 data reveals that for all persons of all ages, there has been a substantial jump in regular/wage salaried category of employees(PS+SS: Principal Status+ Secondary Status) both in AP state and the National level also. This indicates, jobs in formal sector are increasing and is a clear sign of better organised employment. More importantly, the female workers share for India improved from 12.68% in 2011-12 to 21.90% in 2018-19. Similar rise in female regular wage employment is visible in case of Andhra Pradesh also as the share of females has increased from 7.68% in 2011-12 to 16.20% in 2018-19.

There has been a perceptible decline in Casual labour during this period for both AP state and India. For females in AP state, it fell from 51.27% in 2011-12 to 42% in 2018-19 as compared to decline from 31.18% to 24.7% by 2018-19 for India.

The share of Self-employed category by and large remained unchanged both for India and AP state, although there is a 3 percent drop in female self-employed category for India (from 56.14% in 2011-12 to 53.40% in 2018-19).

### Distribution of workers (PS+SS) all ages by employment status (%) - Total



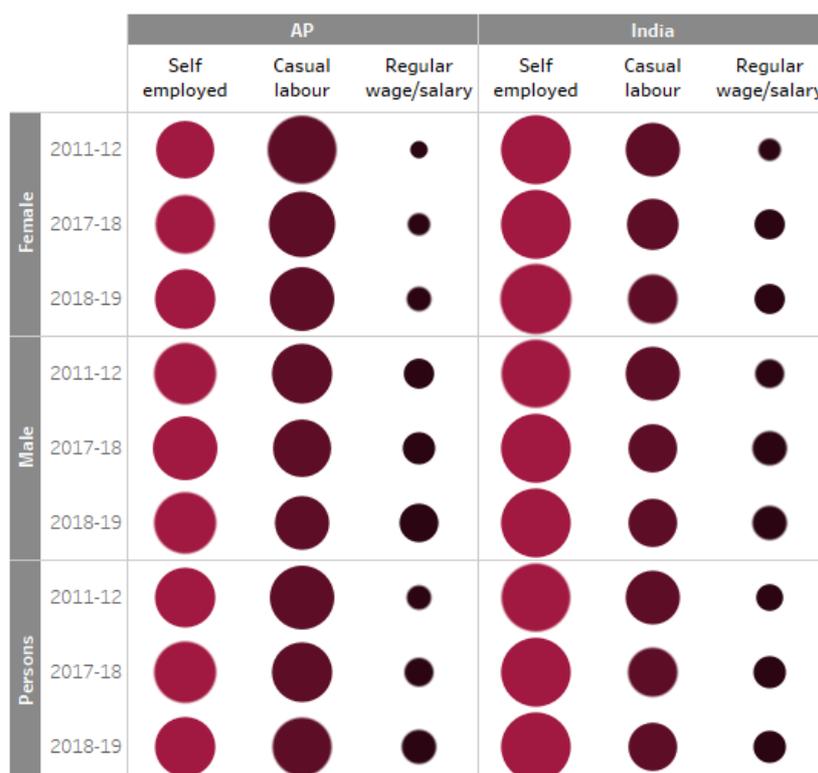
### Distribution of workers (PS+SS) all ages by employment status (%) - Rural

A comparative picture of PLFS(2018-19) data with the NSS 2011-12 data revealed that in Rural areas for persons of all ages, there has been an increase in regular/wage salaried category of employees(PS+SS: Principal Status+ Secondary Status) both in AP state and the National level also. More importantly, the female workers share in rural areas for India improved from 5.61% in 2011-12 to 11% in 2018-19. Similar rise in female employment is visible in case of Andhra Pradesh also as the share of females has increased from 3.64% in 2011-12 to 7.20% in 2018-19.

There has been a perceptible decline in Casual labour in rural areas during this period for both AP state and India. The share of casual labour category for all persons in rural areas has shown a significant decline in AP state and India also. While the share fell from 49.06% in 2011-12 to 41.3% in AP, similar decline in casual labour is visible in rural areas of the Nation as the share fell from 35.38% to 28.6% during the same period.

The self-employed category however has shown increase in rural areas both in India and AP state as well. The increase is more prominent in India(up from 55.92% in 201-12 to 58% in 2018-19). In case of females, the share of self-employment is higher (up from 40.2% in 2011-12 to 43.40%) in AP state as compared to All India, which is almost stagnant at 59%.

### Distribution of workers (PS+SS) all ages by employment status (%) - Rural



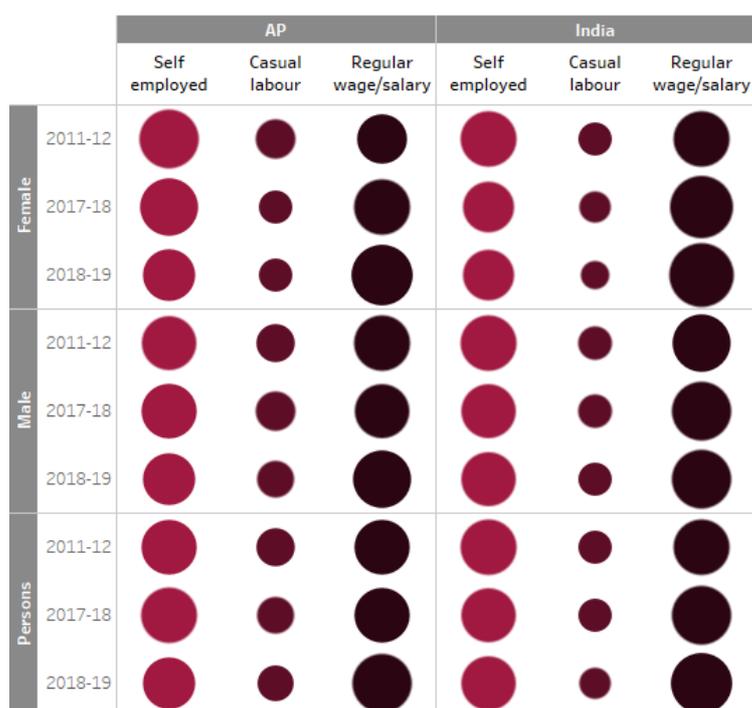
### Distribution of workers (PS+SS) all ages by employment status (%) - Urban

A comparative picture of PLFS(2018-19) data with the NSS 2011-12 data revealed that in Urban areas for persons of all ages, there has been an increase in regular/wage salaried category of employees(PS+SS: Principal Status+ Secondary Status) both in AP state and the National level also. More importantly, the female workers share in urban areas for India improved from 42.81% in 2011-12 to 54.7% in 2018-19. Similar rise in female employment is visible in case of Andhra Pradesh also as the share of females has phenomenally increased from 32.77% in 2011-12 to 49.3% in 2018-19.

There has been a decline in Casual labour in urban areas during this period for both AP state and India. The share of casual labour category for all persons in urban areas has not changed significantly in AP state and India also. While the share of casual labour in urban areas for females fell from 20.86% in 2011-12 to 14.7% in AP, similar decline in casual labour is visible in urban areas of the Nation as the share fell from 14.35% to 10.7% during the same period.

The self-employed category has shown a decline in urban areas both in India and AP state as well. In case of females, the decline in the share of self-employment is more steeper (from 46.38% in 2011-12 to 36%) in AP state as compared to All India where it fell from 42.84% in 2011-12 to 34.5% in 2018-19.

### Distribution of workers (PS+SS) all ages by employment status (%) - Urban



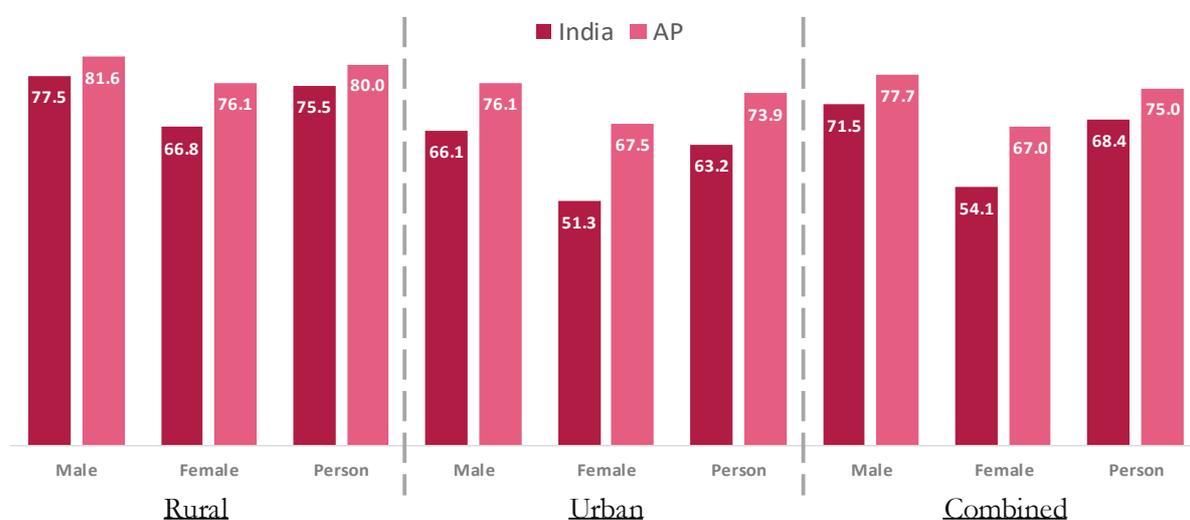
## Employment in Informal sector (%) in Andhra Pradesh

The PLFS 2018-19 data on Employment in informal sector (%) in non-agriculture and AGECC [Agricultural sector excluding only growing of crops, market gardening, horticulture and growing of crops combined with farming of animals] shows that in all 75% of the labour are working in the informal sector as compared to 68.4% at the National level. 67% females in AP state are informal sector, as compared to 54% in India.

80% labour in rural areas of AP state are in the informal sector, as compared to 75.5% are working at the Country level. While 73.9% labour in urban areas are in informal sector, this share is a little lower at 63.2% in the Country.

### Employment in informal sector (%) in non-agriculture and AGECC

Category of workers	India	AP
	<b>Rural</b>	
Male	77.5	81.6
Female	66.8	76.1
Person	75.5	80.0
<b>Urban</b>		
Male	66.1	76.1
Female	51.3	67.5
Person	63.2	73.9
<b>Total</b>		
Male	71.5	77.7
Female	54.1	67.0
Person	68.4	75.0



### AP State's Vision:

The government is committed to give special thrust to focus on education, health, skill development and employment generating activities.

### Strategies to achieve the Vision

- The State has been improving the growth rates in Per Capita Income and the efforts being made will also push the state economy, Per Capita Income and the employment potential
- To improve the LFPR and WPR of women through providing employment
- Establishment of Incubation Centres and Promotion of Innovations through Start Ups, introduction of internships.

### Key Outcome Indicators

Indicator	2019-20
Per capita income (Amount in Rupees)	169519
Annual growth rate of GDP (adjusted to price changes) per capita	12.14
Total number of patents issued	14
Annual growth in manufacturing sector	2.3
Annual growth in agriculture sector	8.6
Coverage under ESI and EPS (in number)	47479
No. of MSME units registered (in number)	88109
Total number of patents issued.	14
Registered Micro, Small and Medium Size Enterprises (current year)	14988
Total loans outstanding to micro, small and medium enterprises ( in lakhs)	13.31
Outstanding Credit to Micro, Small and Medium Enterprises	58073
Business Reform Action Plan Implementation-DIPP, GoI (Rank among states)	1
Renewable energy share in the total final energy mix (%)	19.21
Per capita fossil fuel consumption (Rate per kg)	343.91
Unemployment rate (in Percentage)	4.5
Workforce Participation Ratio (WPR)	45
Wages earned by male in regular employment (Average - Rupees)	19435

<b>Indicator</b>	<b>2019-20</b>
Wages earned by female in regular employment (Average-Rupees)	13196
Wages earned by male in casual employment (Average-Rupees per day)	348
Wages earned by female in casual employment (Average-Rupees per day)	200
Number of employed persons with disabilities in public services.	267
Total population with disabilities covered under social protection schemes (in lakh number)	6.22
Unemployment Rate (15- 24 years)	16.1
Total crimes relating to human trafficking (in number)	191
Number of missing children (in number)	3050
Workers covered under Employees State Insurance (ESI) Act (in lakh number)	12.91
Percentage of households receiving social protection benefits under MGNREGA (%)	45.09
Percentage change in number of tourists (domestic)	22.06
Percentage change in number of tourists (foreign)	1.55
Number of accounts (include deposit and credit accounts) of scheduled commercial	216.66
Number of banking outlets per 1,00,000 population	19.91
Automated Teller Machines (ATMs) per 1,00,000 population	19.91
Number of person days' employment provided under MGNREGA during the reference year (lakh person days)	2000.07

### Key Vision Outcome Indicator

<b>Indicator</b>	<b>2019-20</b>	<b>SDG- Vision Targets</b>		
		<b>2022-23</b>	<b>2024-25</b>	<b>2029-30</b>
Total number of patents issued (Govt. and Aided degree Colleges)	3	5	10	20





# Industry, Innovation and Infrastructure

Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation



## 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



NITI Aayog, Government of India, while designing the strategy for New India @ 75 has set an ambitious agenda in respect of achieving targets relating to Industry by the year 2022. These include: Doubling the manufacturing sector growth rate, targeting a rank of 50 in the World Bank's Ease of Doing Business Index and Promote adoption of the latest technological advancements, popularly referred to as Industry 4.0 that will have a defining role in shaping the manufacturing sector.

The SDG-9 encompasses three important aspects of sustainable development: infrastructure, industrialisation and innovation to respectively take care of the basic physical systems and structures essential to the operation of a society or enterprise, driving economic growth, create job opportunities and finally to advance the technology capabilities of industrial sectors and prompts the development of new skills.

### **Job creation through industrialization:**

The multiplier effect of industrialization on job creation and therefore on the wellbeing is fairly high, as every 1.1 jobs in manufacturing creates 2.2 jobs in other sectors globally. The manufacturing sector is an important employer, accounting for around 14.2% of the world's workforce of 2.9 billion. In India 111 million people employed in Micro, Small and Medium Enterprises produce 33% manufacturing output.

### **Current Scenario of Industry Sector in Andhra Pradesh**

Despite being predominantly agrarian, Andhra Pradesh is planning to be a leading destination for industrial investment in India. The state boasts of the second longest coastal line in the country and six operational ports. Blessed with abundant mineral resources, agricultural base and surplus electricity, the state has good industrial base in pharma, electronics, food processing, textiles and automotive set up over several decades.

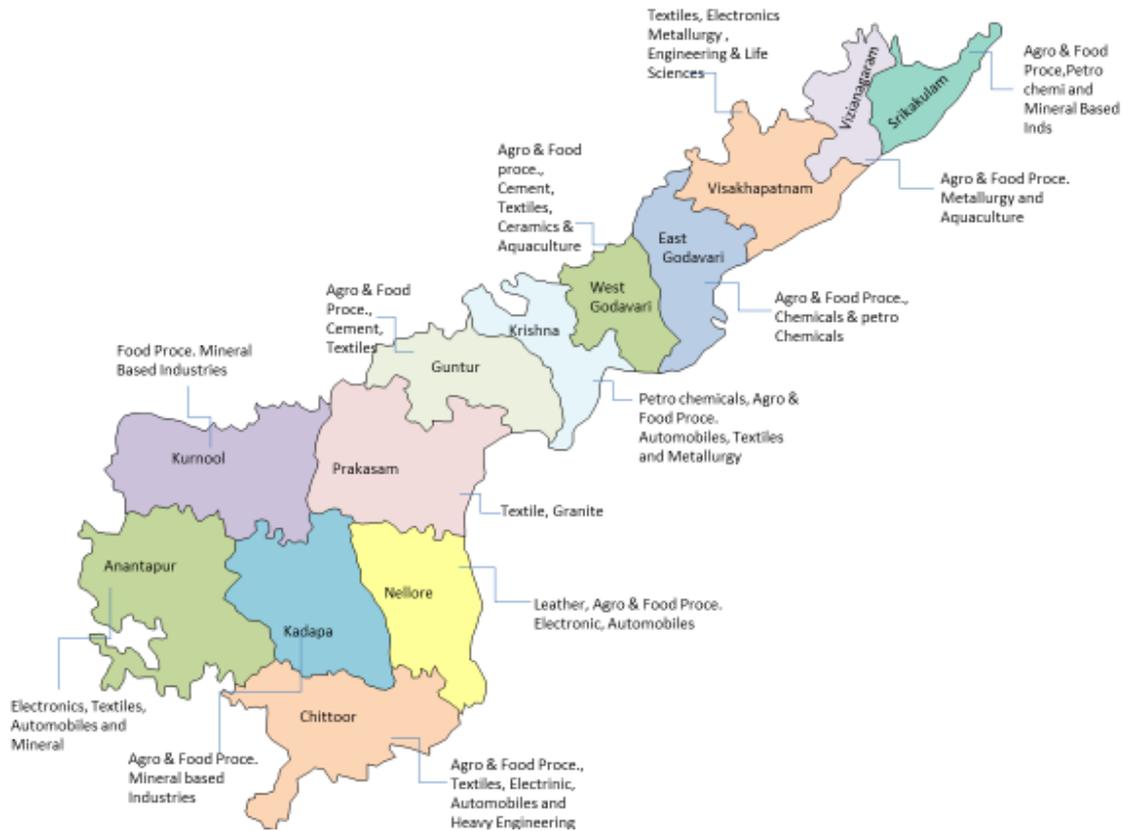
Manufacturing sector, as an employment provider remains the high focus area in the state. As per Advance Estimates of 2019-20, the Industry Sector contributes around 22% to state GSDP with a growth rate of 5.67% and manufacturing sector remains highest contributor within Industry sector with a growth rate of 2.3%. Industrial exports from Andhra Pradesh in the year 2018-19 stand at Rs. 98,983 crores. The major exports from the state are Drugs & Pharmaceuticals, Marine products, Agricultural& Agro-based produce, Handicraft and Engineering products.

#### Sub sector-wise performance in Industry sector

Item	2014-15	2015-16	2016-17 TRE	2017-18 SRE	2018-19 FRE	2019-20 AE
<b>GSDP Estimates at Current Prices</b>						
Mining & Quarrying	12914	17023	19316	22222	25049	31608
Manufacturing	54532	58840	64715	70801	75172	77155
Electricity, Gas, Water Supply	11513	12835	15962	20727	19935	21332
Construction	45324	45603	50401	55440	58701	61761
<b>Industry Sector</b>	<b>124282</b>	<b>134301</b>	<b>150394</b>	<b>169189</b>	<b>178858</b>	<b>191857</b>
<b>Sector-wise Contribution of GVA at Current Prices</b>						
Mining & Quarrying	2.65	3.06	3.09	3.06	3.19	3.59
Manufacturing	11.18	10.57	10.36	9.76	9.58	8.77
Electricity, Gas, Water Supply	2.36	2.31	2.56	2.86	2.54	2.42
Construction	9.29	8.2	8.07	7.64	7.48	7.02
Industry Sector	25.48	24.14	24.08	23.33	22.8	21.81
<b>Sector-wise Growth Rates of GVA at Current Prices</b>						
Mining & Quarrying	-9.01	31.82	13.47	15.04	12.72	26.18
Manufacturing	28.54	7.9	9.99	9.4	6.17	2.64
Electricity, Gas, Water Supply	13.52	11.49	24.36	29.85	-3.82	7.01
Construction	11.49	0.61	10.52	10	5.88	5.21
industry sector	15.71	8.06	11.98	12.5	5.71	7.27
<b>GSDP Estimates at Constant (2011-12) Prices</b>						
Mining& Quarrying	12798	17393	20632	20196	19243	21091
Manufacturing	48828	54969	60545	63419	63849	65319
Electy., Gas, Water Supply	10251	11546	14481	17855	15235	16716
Construction	39963	39947	43657	44846	48007	51502
Industry Sector	111842	123855	139316	146317	146334	154627
<b>Sector-wise Growth Rates of GVA Estimates at Constant (2011-12) Prices</b>						
Mining& Quarrying	-7.79	35.9	18.62	-2.11	-4.72	9.6
Manufacturing	26.58	12.58	10.14	4.75	0.68	2.3
Electy., Gas, Water Supply	4.45	12.63	25.42	23.3	-14.68	9.72
Construction	7.79	-0.04	9.29	2.72	7.05	7.28
Industry Sector	12.58	10.74	12.48	5.03	0.01	5.67

The government is planning to lay emphasis on the manufacturing sector duly identifying value creation and enhancement opportunities, making the Vizag-Chennai Industrial Corridor (VICIC) and Chennai-Bangalore Industrial Corridor as viable options to promote growth and enhance the employment avenues.

### Industrial Potential in Andhra Pradesh



**Large & Mega Projects:** During 2019-20, 44 Large and Mega industrial projects are established with an investment of Rs. 22282.16 crores providing employment to 18385 persons and 243 Large and Mega Industries have filed their proposals for clearances / approvals from various departments.

**Micro, Small & Medium Enterprises :**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. The state has identified development of MSMEs as a catalyst for job creation and balanced regional development. Government of Andhra Pradesh is working to provide a holistic framework for sustainable development of MSMEs in the State and to make them globally competitive. During 2019-20, 10,019 Micro, Small

and Medium Enterprises were established, with an investment of Rs. 2979.86 crores providing employment to 76716 persons.

With an intent to support and nurture the growth of MSMEs in the State, the government has introduced “**Y.S.R Navodayam**” scheme which creates a new ecosystem for MSMEs ensuring that all the eligible MSME units are covered for One Time Restructuring (OTR) of accounts upto 31-03-2020. The government provide support by reimbursing 50% (not exceeding Rs.2,00,000/- (Two Lakhs) per account) of the auditor's fee for preparation of Techno Economic Viability (TEV) report, wherever such report is applicable, for the cases restructured by the banks under OTR.

### **Re-Start Package**

Andhra Pradesh is the first State to take measures to revive the economy hit by the global pandemic Covid-19 and revive the small and medium scale industries with a ReSTART package. The ReSTART package includes the payment of sanctioned incentives, working capital loans, preferential market access etc. to MSME units. All incentive dues left unpaid for 5 years have been cleared by the government. An amount of Rs. 904.83 crore has been paid by the State Government to benefit 16,725 MSME units in the State.

### **Andhra Pradesh Industrial Development Policy-2020-23**

The state Government has recently unveiled its new Industrial Policy 2020-23 with the aim of providing incentives for certain industries in the state along with an investment-friendly environment. The Industrial Development Policy portrays the action plan of the Government for the next three years for manufacturing sectors as well as Food Processing Industries. Broadly, the proposed policy interventions include:

- ❖ Infrastructural interventions (related to the development of industrial parks),
- ❖ Ease of doing business measures,
- ❖ Improving labour access / skilling, developing a support centre for entrepreneurs, incentives (such as GST reimbursements for certain industries) and
- ❖ Special incentives for socially disadvantaged groups such as women, members of the scheduled caste, scheduled tribes and other communities.

### **Key Measures of the Policy**

**Industrial Parks:** The development of industrial parks and provision of plots at affordable rates are a key area of focus for AP Government under the new policy with the AP

Government intending to promote new industries only in industrial parks/ estates to ensure greater environmental sustainability. To accomplish this, the AP Government proposes the following:

- Andhra Pradesh Industrial Infrastructure Corporation (APIIC) to develop multi-sector or sector specific industrial parks.
- The APIIC will then complete the Environmental Impact Assessment for the park, along with all other necessary clearances.
- The parks dedicated towards micro, small and medium enterprises ("MSME") shall have all basic facilities (roads, water, power, built factory shells).
- The development of industries on private land, outside of these parks shall be permitted only under specific circumstances by the AP Government.
- The AP government has reduced the upfront cost of land acquisition.

#### **Ease of Doing Business**

- Among the transparency measures undertaken is the 'deemed approval' granted to all green and white category industries.
- Creation of a robust, single desk portal for all necessary approvals and clearances.
- Other efficiency measures such as more frequent department meetings for quicker approvals and disbursement of loans.

#### **Ranking of Business reforms action plan – Andhra Pradesh**

Year	Number of Reforms	AP- Rank	Compliance
2019	187	1	100.00
2017	405	1	98.30
2016	340	1	98.78
2015	285	2	70.12



## **Fiscal Incentives**

The AP Government has granted certain fiscal and other incentives based on the size of the enterprise. Micro and small enterprises shall receive benefits like:

- ❖ Reimbursement of stamp duty on land purchased for industrial use;
- ❖ leases, Reimbursement of 100% of net SGST for a period of 5 years from the date of commencement of commercial production,
- ❖ Investment subsidy on fixed capital investment up to INR 2,000,000,
- ❖ Interest subsidy of 3% on the term loan taken for fixed capital investment by new industries,
- ❖ Reimbursement on land conversion charges for industrial use of 25% and Medium enterprises,
- ❖ large and mega industries shall receive a reimbursement on SGST for a period of 5 years from the date of commencement of commercial production, or up to realisation of 100% of fixed capital investment, whichever is earlier.

## **Entrepreneurship**

- ❖ The AP Government proposes to set up a support centre called YSR AP One to provide one stop shop support to entrepreneurs including support regarding the business model, market research, branding, sales etc.

## **Special Incentives for Disadvantaged Groups**

- ❖ The AP Government shall grant fiscal incentives to socially disadvantaged groups such as women, scheduled caste, scheduled tribe and other backward class community members ensuring inclusive development.
- ❖ In addition, the AP Government shall reserve plots in industrial parks for members belonging to these groups.

## **Infrastructure Development**

Infrastructure development is highly positively correlated with economic development, and as an instrument towards bridging of disparities-regional, income based, and social. Government of Andhra Pradesh has envisioned to augment its Infrastructure capacities. Towards meeting this vision of provisioning last mile connectivity to all in the State, the Government has benchmarked the performance of its airports, ports, roads, inland-waterways, gas grid, fibre grid, and power sector.

## **AP Infrastructure at a glance**

- ❖ Andhra Pradesh has 1,32,415 km. road network including National Highways, State Highways, District and Rural roads.
- ❖ The total Rail network in the state is 3,703 km and has excellent connectivity with all other Metros in India.
- ❖ Currently, there are 6 operational Airports in Andhra Pradesh that connect to major cities. One International Airport at Bhogapuram is under development and some more Green field Airports are proposed to be developed.
- ❖ The total installed capacity of power is ~ 24,800 MW as of January, 2020 and the state is committed to provide 24X7 power to all Manufacturing units.
- ❖ The total water resources (Surface & Ground Water) of the state is estimated be over 108 BCM. The state envisages 10% water for the industrial use both from the existing and upcoming projects.

## **Vision of the Government**

The Vision of the Government is to make the state the most preferred destination in India for doing business, building resilient and globally competitive infrastructure towards ensuring greater environmentally sustainable Industrial Development and connecting all the habitations with all-weather roads.

### **Focus Areas**

- ❖ Focus on MSME clusters as a major instrument of industrialization.
- ❖ Extensive job creation
- ❖ Resilient and reliable infrastructure including IT
- ❖ Create pipeline of skilled labour tailored to needs of industries

### **Key Strategies**

To achieve growth in Industry sector and enhancing the efficiency and scale of existing units and create new units, the state is taking a number of strategic actions through the New Industrial Developmental Policy-2020-23. Some of these are:

- ❖ Development of industrial parks and provision of plots at affordable rates are a key area of focus for AP Government under the new policy
- ❖ Industrial corridor approach of development refers to creation of infrastructure (typically transport & logistics) to stimulate industrial activity.

- ❖ Medium enterprises, large and mega industries shall receive a reimbursement on SGST for a period of 5 years from the date of commencement of commercial production, or up to realisation of 100% of fixed capital investment.
- ❖ **Skilling:** Development of skills as per industrial requirement is to provide employment to local people in industries. The State Government proposed to establish Skill University & 25 World class multi-skill centers in 25 Parliamentary constituencies as YSR Multi Skill Development Centres (MSDC) in two phases. Aim of the University and centers is to design courses as per demand.
- ❖ The AP Government proposes to set up a support centre called YSR AP One to provide one stop shop support to entrepreneurs including support regarding the business model, market research, branding, sales etc.

### Challenges ahead

- ❖ Allot Industrial plots and develop MSME Parks and offer basic facilities in MSME parks as per requirement.
- ❖ Creation of Industrial need based skilled labour and to provide employment to localised skilled labour.
- ❖ Attracting external flow of investment.

### Key Outcome Indicators

Indicator	Value 2019-20
Road Transport : Passenger in millions	2263
Road Transport : Fright in million tonnes	0.264
Airline : Passenger in millions	5.15
Airline : Fright in million tonnes	0.01
GVA growth rate of manufacturing	2.3
Percentage Share of GVA in Manufacturing to Total GVA	8.77
Manufacturing employment as a proportion of total employment (%)	27
Per capita power consumption (KWh)	1203
Percentage/ Proportion of Credit Flow to MSMEs (as a % of Total Adjusted Net Bank Credit)	17



10

## Reduced Inequalities

Reduce inequality within and among countries



## 10 REDUCED INEQUALITIES



### **Inequalities in opportunities and access – Inclusive growth strategy**

Inequalities in societies not only adversely impact the pace of development but also weaken social cohesion and erode people's trust in government and institutions. The inequalities are diverse and include: inequalities in income and consumption; structural inequalities based on gender, religion, caste and social groups as well as regional inequalities, all of which manifest in inequalities of opportunities and access. Goal 10 calls for progressive reduction of income inequalities along with inequalities of other variants within society and enhance representation and voice of all people.

Economic growth can be used as a powerful propeller towards an inclusive, prosperous economy and ultimately happy society only if the growth strategies are combined with inclusive and sustainable mechanisms to cover all sections of the society including the socially and economically vulnerable groups.

### **Andhra Pradesh – welfare model for inclusive governance**

In the context of Andhra Pradesh, goal 10 of SDGs seeks to lessen inequalities among various socio-economic groups in terms of access to services, economic opportunities, and overall quality of life. The core agenda of the state government is welfare and there is a long term action plan to significantly lift the human development levels of the state citizens through meaningful and effective interventions in health, education and skill development areas.

### **Different variants of deprivations and inequality**

Higher relative poverty, which is one of the grave consequences of inequality, can impede the journey of the state towards a happy and developed society. To create an enabling mechanism for achieving a higher income and sustaining it in the long run, state has adopted a multi-pronged strategy that aims to address not only poverty but also various forms of deprivations.

Though the Per Capita Income (PCI) of the State stands at Rs.1,69,519 against all India's PCI of Rs.1,34,432, within the state huge variations exist with only a handful of districts contributing to the State PCI, while few others are way below the state average.

### **Prominent Segments of exclusion**

Of the total population of about 4.96 crore in Andhra Pradesh, 17.08% are accounted by Scheduled Castes, another 5.53% by Scheduled Tribes. A little over 50 lakhs(10.14% of State total population) constitute elderly population. While 24.4 lakh people are having some disability (2.46%), 50,000 are trans-genders. While some of these groups have constitutional protection for access and opportunities, all these groups and a few other segments have remained in pockets of inequality over the decades.

### **Social Exclusion in Andhra Pradesh**

<b>Total Population</b>	<b>SC Population</b>	<b>ST Population</b>	<b>Elderly (60+)</b>	<b>People with Disability</b>	<b>Trans-Gender</b>
495.77 lakhs	84.69 Lakhs	27.40 Lakhs	50.09 lakhs	24.40 lakhs	43769
4.09 % of India	17.08 % of AP total	5.53 % of AP total	10.14 % of AP total	2.46 % of AP total	0.08% of AP Total

### **Strategic government interventions:**

#### **Protecting the old aged and deprived sections – YSR Pension Kanuka**

The government has put in place robust mechanisms to reduce poverty and inequality. The state has introduced 'Navarathnalu', a programme to fulfil the basic requirements of the needy. With a view to ameliorate the hardships of the poor and vulnerable sections of such classes, government started implementing YSR Pension Kanuka where in about 62 lakh pensions are distributed every month with an amount of Rs.1496.07 crores. The beneficiaries include: Old Age Persons & Widows, Artists, Single Woman, Trans-genders, Aids Patients, Disabled Persons, Fishermen, and Tappers etc. In addition, Pension of Rs. 10,000 per month is being given for patients with serious chronic ailments, including Thalassemia & Kidney disease.

#### **Informal labour force**

The MGNREGS, a GoI funded demand driven scheme provides wage employment to 64.14 Lakh persons. Street vendors and persons with petty business are being financially assisted under 'Jagananna Thodu' initiative.

### Social Category-wise person days generated (%)

Year	SC	ST	Women
2015-16	22.58	12.33	57.80
2016-17	22.35	11.11	58.15
2017-18	22.08	10.48	59.64
2018-19	21.46	10.15	59.90
2019-20	21.14	11.37	60.05

### Vulnerable Groups

SC, ST communities are historically the disadvantaged social groups in the state. Their upliftment will drastically bring down inequality. The Scheduled Caste (SC) and Scheduled Tribe (ST) components, presented as parts of the State's annual budget every year are the main vehicles for the development of the vulnerable sections of the State. The outlays are distributed across departments, which are used solely for targeted schemes and programmes for SCs and STs, such as scholarships for students and financial support for entrepreneurs.

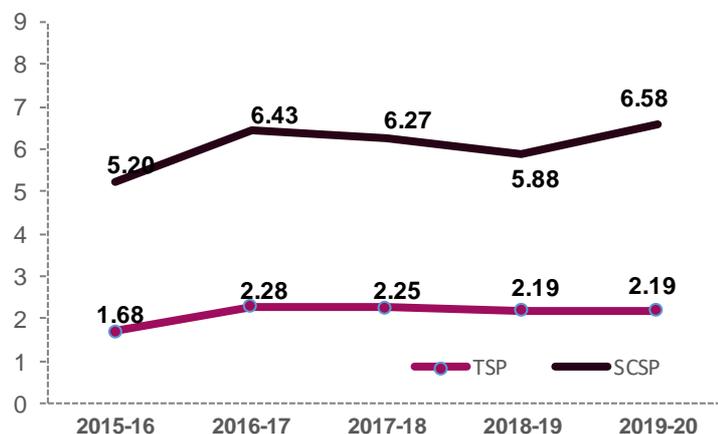
### SC Sub Plan (SCSP)

- ❖ The State government has spent Rs 11,205.4 crore under the SC Sub Plan (SCSP) in 2019-20, which is 26.1 per cent more compared to 2018-19.

### Tribal Sub Plan

- ❖ The total budget under STC (earlier TSP) for the financial year 2019-20 is Rs.4988.52 Crores. Out of this, Rs. 3726.65 was incurred. The budget under STC (earlier TSP) is allocated Rs. 4988.52 crores to 48 line departments.

### Allocation for SCSP & TSP out of total State Budget (%)



### **AP State's Vision:**

Andhra Pradesh government is committed to reduce inequalities and protect the interest of the vulnerable sections, minorities, women, disadvantages sections of the society including the differently abled population. Several schemes/programmes targeting these sections have been put in place by this government.

### **Strategies to handle inequalities:**

#### **Education**

With a strong expectation that education alone can change the fate of poor and towards this endeavour and to make sure that poverty of the parents does not come in the way of educating their children, the Government has launched a unique and innovative scheme “**JaganannaAmmavodi**” under which financial assistance of Rs.15,000/- per annum is being provided to each mother/recognized guardian from BPL families who are sending their children to schools or colleges from Class I to XII.

Through **JaganannaVidyaDeevena** and **JaganannaVasathiDeevena** schemes, Govt. is providing scholarships, reimbursing the tuition fees, financial assistance towards hostel and mess charges etc. to about 11.88 lakh students from low-income families belonging to SC, ST, BC and Minority communities.

#### **Skilling of Youth**

The state government has taken initiatives to provide skill training to 10 Lakh youth and enhance employability skills of the students to make them job ready, offer placement linked, industry relevant skill courses thereby place one million youth in jobs by March, 2024. There are dedicated skill development schemes for SC and ST youth with an aim at encouraging skill development by providing employability linked training programs.

Under Skill Development, 7.80 Lakh unemployed youth were trained through short term training programs, coaching given for Entrepreneurship Development Program/Competitive Exams, Up-skilling (Job Holders) and placed 26,382.

#### **Women**

The 87 Lakh strong SHG force has been a significant contributor in improving access to economic opportunities for women. With a view to strengthen the economic development of poor SHG women in both rural and urban areas, government has launched the YSR Aasara program, where government reimburses the entire outstanding Bank Loan of Rs.27,168 crores as on 11th April 2019, in four instalments from 2020-21.

### **YSR Aasara – Loans to SHGs at Zero interest**

- ❖ Zero Interest loans are made available to DWCRA/SHG Groups. (Interest amount will be paid to banks on behalf of SHG rural women). Rs. 941.46 crores were credited into respective loan accounts of 6,27,347 SHGs.
- ❖ Zero Interest loans will be made available to DWCUA/SHG Groups. (Interest amount will be paid to banks on behalf of SHG urban women)
- ❖ YSR Zero Vaddi is applicable for all outstanding bank loans for the financial year 2019-20 in urban SHGs. Under this scheme Rs. 1185.98 crore were credited into respective loan accounts of 14,53,437 beneficiaries

### **YSR Cheyutha – financial assistance to BC, SC & ST women**

- ❖ Under the Scheme, BC, SC, ST & Minority women, between 45 to 60 years will be provided Rs. 75,000 in Phases.

### **YSR Housing Scheme - Pucca houses to all poor**

- ❖ To provide 30 lakh house sites for all the eligible houseless poor in the State irrespective of caste, religion etc. and thereafter to construct Houses and registered in their name.
- ❖ to construct 30 lakh houses for all eligible houseless poor irrespective of caste, religion etc. To construct 15.00 lakh houses in the 1st phase.

### **50% Reservations to Women in Nominated posts and in Contract works**

- ❖ To ensure equal participation and representation of women in the policy making bodies of the State, and as a measure to ensure social justice and also conforms to the principles of equality of opportunities, the government enacted 'The Andhra Pradesh (50 Percent Reservation to Women in Works Contracts and Service Contracts given on Nomination) Act, 2019.

### **Fighting discrimination against women**

Andhra Pradesh is one of the few states in India to adopt a policy for fighting discrimination against members of the transgender community. Under Disha Act, women now have a better protection from social misconduct and behaviour.

### **GoI special programmes**

Towards reducing regional inequality, Special Development Package (SDP) and Aspirational district programmes are being implemented respectively in 7 and 3 of the

backward districts in the state under which various developmental activities are taken up to bring them at par with the other districts.

### **Challenges Ahead**

- ❖ The proportion of children aged under 6 years in ST mandals (where ST population =>33% of total population) who are severely underweight, wasted and stunted are respectively higher than the respective proportions in the other mandals (where ST populations (where ST population <6%).
- ❖ The nutrition and rural infrastructure initiatives of the state will focus more on these backward mandals.
- ❖ Crime against SC and ST persons is a concern for the government. The state has taken steps to address this issue.



11

# Sustainable Cities and Communities

Make cities and human settlements inclusive, safe, resilient and sustainable



## 11 SUSTAINABLE CITIES AND COMMUNITIES



Sustainable and resilient cities have become the backbone in the economic development of any state. The world cities occupy less than 3% of the earth's surface but account for 60-80% of energy consumption and 75% of carbon emissions. Many cities are already struggling with environmental degradation, traffic congestion, inadequate urban infrastructure, and a lack of basic services, such as water supply, sanitation, and waste management. Environmental footprints of cities are quite alarming and can threaten the natural resources required to sustain the economic development and poverty alleviation rates. Maintaining economic growth, while creating sustainable liveable cities for all, is the biggest urban challenge facing Asia and the Pacific today.

### 'Smart Cities' Mission

The Union government is keen to leverage the 'Smart Cities' concept in select urban clusters across the Country by the year 2022-23 to drive job creation and economic growth to significantly improve efficiencies in service delivery through technology for inclusive and participatory development. The Smart Cities Mission, which focuses on water supply, smart transportation, redevelopment of parks, solar rooftops, etc. through their respective SPVs, is being implemented in 10 cities in the State.



### SUSTAINABLE CITIES IN ASIA AND THE PACIFIC





UN Environment Programme has come out with assessment of population living in urban slums and estimated that about 700 million live in urban slums in the Asian countries (as in 2017) and the cities in these countries account for 80% of their GDP.

### Sustainable development – managing urban spaces

Urbanization has become a necessary and irreversible process, and it is an integral determinant of economic growth and poverty reduction. Rapid urbanization has increased employment, opportunities to millions of people, provided new jobs, and contributed to poverty reduction and economic growth.

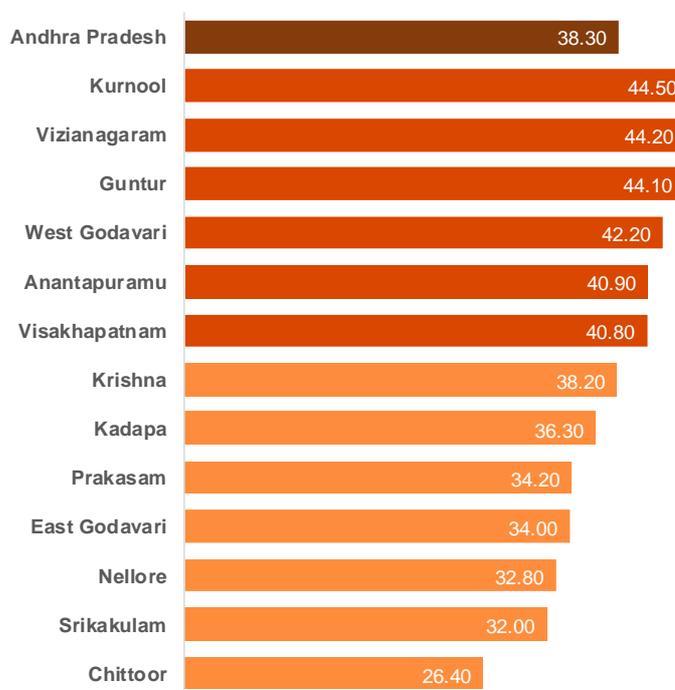
However, the concern that remains is that rapid urbanization adds pressure to the resource base and increased demand for energy, water, and sanitation, as well as for public services, education and health care. Therefore, efficient urban planning and management practices must be put in place to deal with the existing and upcoming challenges brought about by urbanization. It has been noticed that sustainable development cannot be achieved without significantly transforming the way urban spaces are built and managed. Goal 11 aims to promote inclusiveness and sustainable urbanization so that the cities can be productive, accessible places that attract talent, encourage innovation and create economic growth.

Government has recognised the need for having a scaling-based urban development in order to measure the impact of on-going development projects in terms of the parameters of Ease of Living, economic growth, investments and citizen’s participation.

**Current Scenario of Urbanisation in AP**

According to 2011 census, almost 30% of Andhra Pradesh’s population lives in cities. The decadal urbanization growth rate has been 7%. Andhra Pradesh has the highest proportion of slum population (38.3% in the country). Kurnool, Vizianagaram, Guntur, West Godavari, Ananthapur and Visakhapatnam districts have higher slum population than the State average.

**Slum population (%) in Andhra Pradesh**



**AP State’s Vision**

AP state has paid adequate focus on dealing with issues relating to urban areas and has been paying attention to the issues of building infrastructure to withstand the huge rural to urban migration, drinking water and sanitation issues, maintaining greenery through urban forestry and other attendant issues.

**Focus areas**

- ❖ To harness internet connectivity and its various applications in the Urban governance and service delivery.

- ❖ A dedicated single-window facilitate the urban poor to access basic services such as drinking water, drainage and sewerage.
- ❖ Only 12 out of the 120 ULBs have provisioned the minimum mandatory requirement of 135 LPCD water. To cover remaining ULBs with 135 LPCD water supply.
- ❖ Setting up of FSTP (Faecal sludge treatment plants) in all 120 ULBs.
- ❖ Waste to energy and waste to compost projects have been awarded covering 88 ULBs with a capacity of treating 5035 TPD. 1105 TPD waste generated in the remaining 22 ULBs are yet to be awarded.
- ❖ To pay attention to areas concerning pedestrianization, recycling and reuse, rain water harvesting, promotion of local culture and tourism, civic participation in urban governance and ULBs financial independence to make cities more liveable and resilient.
- ❖ To prepare strategies to face the unexpected and huge rainfall devastating the cities.
- ❖ Two Waste to energy plants in 2021 and one plant in 2024 will be functional

### **The following are some of the key strategic interventions**

#### **Focus on improvement of critical urban infrastructure**

- In order to provide better living standards to its citizens, it has adopted several measures to provide permanent housing to all including the most vulnerable sections of the society, clean and safe drinking water, drainage system, sanitation, road connectivity and other services for better living. Andhra Pradesh is undertaking a Critical Infrastructure Investment Plan (CIIP) in Urban Local Bodies (ULBs) to ensure that basic infrastructure like Water, Sewerage, Storm Water Drainage, Roads, Burial Grounds, Green Spaces, is saturated across all 120 ULBs.

#### **Housing**

- Government of AP have been assigning top priority for implementation of housing programmes in the state. Through “Navaratnalu” Programme, The state government in line with the Gol’s goal of providing ‘Housing for all’, have planned to construct 23.00 lakh houses for all the eligible during the next four years 2020-2024. As a part of this, 15.00 Lakh houses are being taken up during the financial year 2020-21.

## **Drinking Water Project (WATER GRID) and Sanitation**

- The State Government has accorded priority to provide protected drinking water to all urban local bodies by strengthening existing infrastructure and improving service levels. Government is planning to provide bulk water supply mains and deliver water to rural, urban (Municipalities & Corporations) and Industrial demand through sustainable surface/ground water sources. The projects are envisaged to provide 100% house service connections to make designed level of water supply available at the consumer's doorstep at convenient timings at 100 LPCD including human and cattle needs to rural, 135 LPCD to urban (Municipalities), 150 LPCD to corporations and industrial as per demand.
- The government is committed to achieve universal access to sanitation and making the entire state smart, clean, safe and healthy. To ensure sustainability of all its urban areas, it aims to be declared as an ODF+ state and provide every Municipal Ward with functional water conservation and water harvesting structures and to establish functional solid and liquid waste management system.
- **Solid waste management** - Having achieved ODF status for all 120 ULBs, the government has moved on to focusing on ODF+ outcomes. As one of the steps towards this goal, FSTP (Fecal sludge treatment plants) is proposed to be set up to cover in all 120 ULBs. FSTP tenders floated for 32 AMRUT cities and 76 Non AMRUT ULBs
- Under Urban Sanitation – Door to Door Garbage is collected in all 120 ULBs in the state. 99% of the total garbage generated in ULBs is lifted. Door to door garbage collection is covered in 38.23 lakh households covering 96%. Segregation of waste at sources is covered in 25.42lakh households covering (63%).
- Plastic Waste Collection Centers are established in 5 ULBs and to process non-recyclable plastic waste, 25 ULBs have so far tied up with nearby cement plants. The plastic waste is also being used in construction of roads in the ULBs and so far about 19.1Kms of road laid by using 26.5MTs.

## **Sewerage Treatment and Storm Water Drains**

- Government has taken decision to provide UGD facilities and Treatment plants in all ULBs duly acknowledging the directions of the National Green Tribunal. Government is taking necessary steps to provide storm water drains in ULBs to

avoid inundation and fly nuisance. In order to avoid inundation and to clean the accumulated sludge, Storm Water Drains and treatments plants are set up in the ULBs.

### **Parks and green spaces**

- Median and avenue plantations, development of parks and water bodies, and expansion of greening are being taken up to increase green cover space in all ULBs in a phased manner. Nagarvanams or urban forests have been announced to be set up in all cities to provide green and recreational getaway for city residents. 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 different theme parks to highlight the historical significance of the temple.

### **Climatic disasters:**

- Overburdened drainage, frenzied and unregulated construction with regard to the natural topography all together are making urban floods a man-made disaster in the recent past. The submergence of major cities in the country has yet again demonstrated that the vulnerability of the poor to the changing climate is profound and lingering in India's cities. It is a reminder that the Nation is unprepared to face the extreme climate events.

### **Key outcome Indicators**

<b>Indicator</b>	<b>2019-20</b>
Percentage of Slums covered through formal/affordable housing.	75
Percentage of households covered through formal/affordable housing.	55
Proportion of Urban Population Living in Slums, informal Settlements or Inadequate Housing	7
No. of cities with integrated development plans	67
Net Density	4314
Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	1214
Proportion of urban solid waste regularly collected and with adequate final discharge out of total urban solid waste generated, by cities in Andhra Pradesh	99

Indicator	2019-20
Annual mean levels of fine particulate matter PM2.5 (Standard 40 µg/m <sup>3</sup> ) in cities (population weighted)	28
Annual mean levels of fine particulate matter PM10 (Standard 60 µg/m <sup>3</sup> ) in cities (population weighted)	62
Number of days the levels of fine particulate matter PM2.5 (Mean value of 28 µg/m <sup>3</sup> ) above mean level	41
Number of days the levels of fine particulate matter PM10 (Mean value of 62 µg/m <sup>3</sup> ) above mean level	50

### Key Vision Outcome Indicators

Indicator	2019-20	SDG- Vision Targets		
		2022-23	2024-25	2029-30
Solid waste treatment: Waste converted to energy - urban (%)	3.3	26.5	35.5	40
Liquid Waste (sewage) treatment: waste treated against waste generated - urban (%)	18.5	55	75	95



12

# Responsible Consumption and Production

Ensure sustainable consumption and production  
patterns



## 12 RESPONSIBLE CONSUMPTION AND PRODUCTION



Sustainable Consumption and Production is broadly defined as a systemic change, decoupling economic growth from environmental degradation and applying a lifecycle thinking approach, taking into account all phases of resource use in order to have optimum their use. It is opined that by paying due attention to both consumption and production only the type of transformative change that is needed, be possible.

It is at the heart of progress towards building a sustainable economy that works for both people and planet in the long term. Achieving economic growth and sustainable development calls for an urgent reduction in our ecological footprint by changing the way we produce and consume goods and resources. Agriculture is the biggest user of water worldwide, and irrigation now claims close to 70 percent of all freshwater appropriated for human use.

### **Optimum resource use – a global concern**

Globally, certain parameters which revolve around consumption (practices) and production (availability) of several natural and human-centric resources such as water and energy, food wastage, emissions have attracted the planners' attention in the recent past, especially in the light of their misuse affecting the environment. As per one estimate, 1.3 billion tonnes of food is wasted every year globally, while almost 2 billion people go hungry or under nourished. Only 3 percent of the world's water is fresh (drinkable), and humans are using it faster than nature can replenish it. The environmentally sound recycling of e-waste increased at a slower pace, from 0.8 kg per capita to 1.3 kg per capita. On the positive side, if people everywhere switched to energy efficient lightbulbs, the world would save US\$120 billion annually.

### **India's standings on the major resource use**

India is home to 18% of the world's population, it has only 4% of global water resources and only 19.9% of India's urban waste is processed. The Country is the third highest emitter of

carbon-dioxide and is responsible for 6.9% of global emissions. However, in October 2015, India made a commitment to reduce the emissions intensity of its GDP by 20-25% from its 2005 levels by 2020 and by 33-35% by 2030.

### **Way to achieving the Goal**

Efficient management of natural resources, and the way of dispose of toxic waste and pollutants, are important targets to achieve this goal. Encouraging industries, businesses and consumers to recycle and reduce waste is equally important, as is supporting developing countries to move towards more sustainable patterns of consumption by 2030. COVID-19 offers an opportunity to develop recovery plans that will reverse current trends and shift our consumption and production patterns to a more sustainable course.

### **AP State's drive towards Sustainable Consumption and Production**

To meet the needs of the increasing population, the agriculture sector in the state has been practicing un-balanced productive methods such as excessive use of fertilizers, Energy and water to instant increase its productivity. However, studies World over have revealed that these practices lead to water and air pollution and environmental degradation. Towards achieving sustainability in agriculture in terms of productivity enhancement, improvement in soil quality and water use efficiency, the government is making efforts.

**Zero Budget Natural Farming (ZBNF):** Zero-Budget Natural Farming (ZBNF) has emerged as a transformational technology, as an alternative to the current agriculture practices. The vision of the Government of Andhra Pradesh is to universalize ZBNF and make AP a 100% natural farming state by 2024.

- ❖ 5.80 lakh farmers from 3011 GPs are targeted for the year 2019-20.
- ❖ Around 4.42 lakh have been verified by Self- Help Groups to be practicing ZBNF in this year which includes 1,68,039 landless poor who are being motivated to grow kitchen gardens.
- ❖ 1.80 lakh Hec. Area is covered under the ZBNF and 4.42 lakh farmers adopted ZBNF system so far in the state.

**Horticulture:** The Government has identified Horticulture as a climate resilient alternative involving less risk, assuring higher income to farmers and sustainable consumption of natural resources. Several farmer-oriented activities are being taken up to encourage adoption of modern technologies, evolving sustainable farming practices. The State is

turning out to be a role model in Micro irrigation practices. Organic farming has been promoted in an extent of 11250 ha of Mango, Cashew, Turmeric, Chilli and Vegetables.

**Green Cover:** with an objective to create a sustainable living space for the citizens of the State while at the same time doing its part in creating a safer and sustainable planet, The state government has set an ambitious target of 50% green cover for the State by 2029 as it envisions a green Andhra Pradesh with abundant green cover with thriving biodiversity, which at the same time acts as a huge carbon sink. The Government envisages to improve Green cover outside Reserve Forest by planting “One- Plant by One-Citizen” and by involving Grama Volunteers to distribute and plant seedlings.

### **Interventions related to Renewable Energy**

The Government of Andhra Pradesh has been working towards the promotion of clean energy and development of alternative sources of energy. These efforts have focused on using the sun and water towards energy production and improving the quality of soil and air. The Cumulative Renewable Energy Capacity installed in the state is 8193.76 MW, of which 3521.99 MW from solar, 4049.37 from wind, 102.59 MW from small hydro and 489.81 from Bio- Mass. Energy efficiency activities which promote use of solar power in government and semi-govt. buildings to meet energy needs, is undertaken in the State. There has been an impressive progress in the Solar and Wind power during the last three years.

Parameters	Unit	Andhra Pradesh		
		2017-18	2018-19	2019-20
Installed Capacity (Cumulative)	MW	18046	19160	20208
Grid Consumption	MU	55437	58453	62750
Peak Demand Met	MW	8983	9453	10207
Solar (Cumulative)	MW	2174	3030	3522
Wind (Cumulative)	MW	3952	4077	4079

### **Interventions related to Sustainable Water Use**

The state vision proposes to make it 100% drought proof and provide water security to all its citizens for domestic, irrigation and industrial needs and to maintain the ground water levels between 3-8 meters below ground level. Therefore, sustainable water conservation

and management are essential for Andhra Pradesh, especially as it is a lower riparian state and a majority of the state's population depend on agriculture for their livelihoods. Government adopted the following strategies to achieve the vision of making the state drought proof and to provide water security to all its citizens:

**Projects under Jalayagnam:** out of 54 Jalayagnam Irrigation projects in the divided state of Andhra Pradesh, 14nprojects are completed. The other projects under Jalayagnam scheme also prioritized based on their progress and action plan is chalked out for completion of these projects in phased manner.

**Polavaram Project:** Government has given highest importance to the completion of the Polavaram project, which is likely to become the lifeline of the state. The Project is expected to provide irrigation facility to 7.20 lakh Acres, generate 960 MW Hydro power, facilitate diversion of 80 TMC of Godavari Water to Krishna , supply of 23.44 TMC water to industrial development and provide drinking water facility to 28.5 lakh population in 540 villages. The project is scheduled to be completed by 2021.

**SUB-SURFACE DAMS – REFERENCED IN ASPIRATIONAL DISTRICT REPORT, GoI**

To address the issue of Aspirational District of Pradesh, has dams using Z sheet locations on river dams not only play an proper utilisation of but also help in fluctuations in the Before implementation



water shortage, the Y.S.R Kadappa, Andhra **constructed sub surface piling technology** at six Papagni. Subsurface effective role in the groundwater resources **controlling undesired groundwater level.** of this initiative, the

water table in the adjoining areas of the river was very low. After the intervention, water percolation of the surface runoff to the sand layers, and in the adjoining alluvium along the river has increased the water table, resulting in increased water availability for sustainable irrigation practices.

**Minor Irrigation:** Minor Irrigation sources plays important role to achieve sustainable water use particularly drought prone areas and areas outside command of Major and Medium projects. As a major source of irrigation, Minor Irrigation s providing irrigation facilities to increase agriculture production by means of creating new ayacut, stabilising the existing ayacut. The State is planning to restore 6700 tanks, construct 2600 check

dams and undertake 450 repair works to irrigation channels to bridge gap ayacut of 3.00 lakh Acres during 2021-22 and 2022-23.

### Vision of the Government

The government 'Green Economy' vision is structured around Sustainable Water Use, Green Cover, Clean Energy, Healthy Environment, Disaster Resilience and Climate Change Mitigation.

### Focus Areas

- ❖ Efficient management of waste through prevention recycling, re-use, etc.
- ❖ Air Quality Monitoring and reducing the Air pollution levels to permissible limits
- ❖ Sustainable Water use and Management.

### Challenges Ahead

- ❖ Treatment of liquid and solid waste is a major concern in the state.
- ❖ Energy consumption per capita in the state has been increasing steadily
- ❖ Concentration of alternative energy sources.

### Key outcomes

Indicator	2019-20
Number of municipal corporations using waste segregation techniques	16
Number of ULBs using waste segregation techniques	104
Number of municipal corporations banning use of plastic.	16
Number of ULBs banning use of plastic.	104

### Key Vision Outcome Indicators

Indicator	2019-20	SDG- Vision Targets		
		2022-23	2024-25	2029-20
Solid waste treatment: Waste converted to energy - urban (%)	0.00	26.5	35.5	40
Liquid Waste (sewage) treatment: waste treated against waste generated- urban (%)	12.5	55	75	95





13

## **Climate Action**

Take urgent action to combat climate change and its impacts



# 13 CLIMATE ACTION



## Managing Climate Change – the new imperative

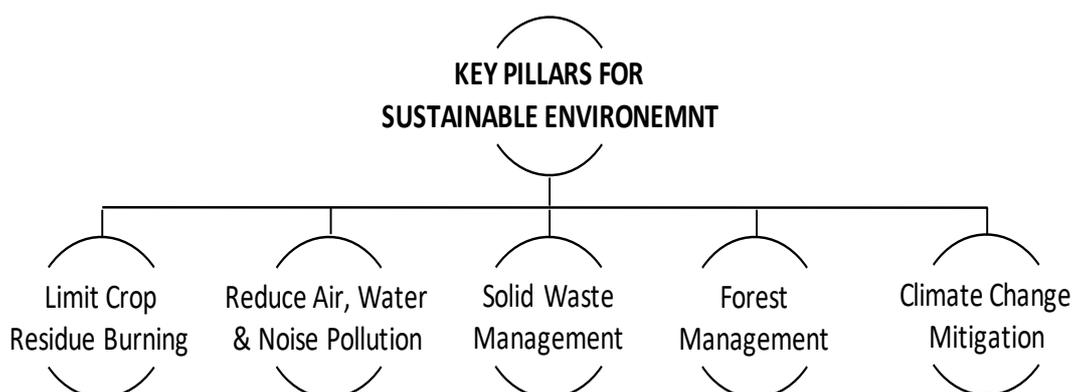
Keeping in mind the development imperatives of the Country, India under the Paris Agreement has made certain commitments including reduction in emission intensity of GDP by 33 to 35% of its level in 2005 by the year 2030, share of non-fossil source fuel contribution to be 40% of the installed capacity and increase its forest cover.

Climate change is increasing the frequency and intensity of extreme weather events such as heat waves, droughts, floods and tropical cyclones, water management problems, reducing agricultural production and food security, increasing health risks and others.

Goal 13 aims to integrate climate action into national policies and strategies and promote mechanisms for raising capacity for effective climate change planning and management. The focus on the "urgent action" to "combat climate change and its impacts" requires incorporation of both climate change mitigation and climate change adaptation. Thus, a comprehensive strategy is required to combat the effects of climate change, in all its dimensions.

## Strategies for achieving sustainable environment

The Union Government has been advocating methods to handle Climate change and the National Action Plan on Climate Change has identified 5 key pillars that are critical for sustainable environment.



## Handling Natural calamities in Andhra Pradesh

Andhra Pradesh, with a long coast line of 974 kms is vulnerable to natural disasters. Over the years, the State is battered by various kinds of natural disasters such as cyclones, storm surges, floods and inundation, drought and heat waves. Social and economic life of the people are hence characterized by vulnerability to recurring natural disasters. It is now estimated in the 'State Action Plan on Climate Change (SAPCC)' that climate change will have profound impact on the nature and scale of these natural disasters significantly altering the corresponding vulnerabilities of the people. A comprehensive system with mapping, early warning and monitoring has been put in place to minimize the risk of disasters.

## Strategic interventions for Green Economy

The Green Economy of the state is structured around Sustainable Water Use, Green Cover, Clean Energy, Healthy Environment, Disaster Resilience and Climate Change Mitigation.

- Under **Sustainable Water Use** the state proposes to become 100% drought proof, maintain ground water levels between 3-8 m and achieve 60% water use efficiency through interlinking of rivers, irrigation projects and water conservation measures.
  - Completion of Polavaram
  - Improving Irrigation Potential: Completion of 54 Irrigation Projects taken up under Jalayagnam Programme for providing irrigation to cultivable lands, drinking water and industrial water.
  - Modernization of existing systems
  - Restoration of Minor Irrigation Tanks under Navarathnalu
- For **increasing Green Cover**, the government has set a target of 50% of the state's area through a combination of forest and non-forest eco-systems.
  - As per Indian State Forest Report, 2019, AP has forest cover area of 37392 Sq. Kms, amounting to 22.94% of the total geographical area. The state proposed to bring an additional forest and tree cover to achieve 50% of green cover.



- To promote **Clean Energy** the government has proposed increasing renewable energy generation to 40% of the total energy mix, primarily from solar and wind energy and 25% reduction in energy consumption through energy efficiency measures.
  - The State government is committed to meet the growing energy needs at affordable price through clean sources. The prime focus is on two broad aspects - Renewable Energy Generation and Improved Energy Efficiency.
  - The state has given top priority for promotion of Renewable Energy Power Projects in particular solar power projects in line with the Policies of the Ministry of New & Renewable Energy, Government of India.
  - Energy efficiency is promoted through enforcing standards and labelling of equipment and appliances, energy conservation building codes for commercial buildings, energy consumption norms for energy-intensive industries and strengthening regulatory institutions and infrastructure.
- For **Healthy Environment** the government targets to achieve 100% solid and liquid waste management, all cities have air pollution levels under permissible limits and 100% farmers practicing ZBNF by 2024.
  - The government proposes to make the state a Natural Disaster Prepared state- by strengthening its disaster management capacity and disaster resilient infrastructure.
  - The state also envisages to ensure clean and healthy environment for all its citizens. The state targets to achieve 100% solid and liquid waste management, 100% ULBs with outdoor air pollution levels under permissible limits and no households using solid fuels as primary source of energy.
  - Other focus areas include: Ensuring that no standards are violated is the key to maintain good air quality, ensuring that noise standards are not violated to maintain good air quality, No Water Pollution and effective Solid and liquid waste management.
- To minimize Climate Change impacts, the government targets to implement the State Action Plan for Climate Change and reduce GHG emissions in the state
  - The highest contribution to GHG emissions were estimated from electricity generation, cement production, industries other manufacturing industries,

agriculture and road transport. Strategies are being evolved to effectively the emissions.

### **Disaster management in the State:**

There has been an improvement in the impact of different types of disasters in the State. The disaster statistics reveal that incidents of Lightning, Heat wave and floods/heavy rains have shown a decline in 2019 as compared to the previous year. Due to the efforts of the NDRF and the State Disaster Management Units in the State, the number of people affected due to cyclones have also shown considerable decline. The State has earmarked Rs. 534 crore for the year 2019-20 under the State disaster response fund as against Rs.509 crore in 2018-19.

### **Distribution of deaths during major disasters in AP**

Type	No. of Deaths	
	2018	2019
Lightning	137	80
Heat Wave	8	28
Floods/Heavy Rains	26	13

### **Effected people due to disasters**

Item	2018	2019
No. of people effected due to cyclones (in lakhs)	24.76	0.08
No. of people effected due to drought (in lakhs)	18.52	6.30

### **AP state's Vision:**

The State is committed to achive global standards in respect of various climate related issues and arrest pollution. The following are some of the areas that receive focus:

- ❖ Per capita GHG emissions in Andhra Pradesh
- ❖ Preparation of comprehensive action plan to reduce emissions, majorly in power generation, transport, cement production, and agriculture will be put in place.
- ❖ Air quality index values are satisfactory in almost all the Cities and Towns of Andhra Pradesh. The 24-hour average is meeting the National Ambient Air Quality Standards and PM 10 is exceeding the 24- hour average at Vijayawada. Action plans

have been prepared for Vijayawada, Visakhapatnam, Tirupati, Kurnool and Guntur to further minimize the pollution levels in Ambient Air.

**Key Vision Outcome Indicators**

Indicator	Value (2019-20)	SDG- Vision Targets		
		2022-23	2024-25	2029-30
Green Cover (%)	20.28	21	22	27
Amount utilized from Natural Calamity relief fund(Rs.in Cr.)	1666.98			
Whether the state has developed strategies for enhancing adaptive capacity and dealing with climate extreme weather events (Yes/No)				Yes
Whether the state has integrated climate mitigation and adaptation in education curricula and outreach programs				Yes





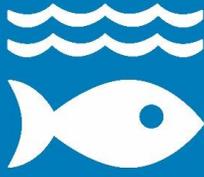
14

## **Life Below Water**

Conserve and sustainably use the oceans, seas and marine resources for sustainable development



## 14 LIFE BELOW WATER



Healthy oceans and seas cover 70 percent of our planet and we rely on them for food, energy and water. Yet, tremendous damage is being done to these precious resources. We must protect them by eliminating pollution and overfishing and immediately start to responsibly manage and protect all marine life around the world.

The 2030 agenda particularly SDG 14 seeks to address some of the challenges faced by the life under water - threats of marine and nutrient pollution, resource depletion and climate change, degradation and loss of biodiversity, ocean acidification, all of which are caused primarily by human actions.

### **Global marine strengths**

Oceans cover three quarters of the Earth's surface, contain 97 per cent of the Earth's water, and represent 99 per cent of the living space on the planet by volume. With over three billion people globally depend on marine and coastal biodiversity for their livelihoods, the market value of marine and coastal resources and industries is estimated at \$3 trillion per year or about 5 per cent of global GDP.

As per one estimate, Oceans absorb about 30 per cent of carbon dioxide produced by humans, buffering the impacts of global warming and they serve as the world's largest source of protein, with more than 3 billion people depending on the oceans as their primary source of protein. Marine fisheries directly or indirectly employ 200 million people.

### **India and coastline and conserving marine ecosystems**

According to India's Fifth National Report to the Convention of Biological Diversity 2014, India has a long coastline of about 7,517 km in length which sustains and provides a source of livelihood to over 250 million people. India is the second largest producer of fish in the world. The Indian government's Sagarmala Project, also known as the Blue Revolution, is working to improve the state of India's ports and coastlines. To conserve marine

ecosystems, the government has undertaken a National Plan for the Conservation of Aquatic Eco-systems. Marine biodiversity protection is a key area of focus for India.

The Visakhapatnam Regional Centre of the Central Marine Fisheries Research Institute undertakes research on areas such as impact of climate change on marine fisheries, development of Fisheries Management Plans (FMPs), pollution and litter in coastal and marine ecosystem and their impact etc. The Institute's multidisciplinary approach to research in marine capture and culture fisheries has won it recognition as a premier institute comparable to any well-established marine laboratory in the world.

### **Current Interventions of Andhra Pradesh related to Sustainable use of Marine Resources**

Andhra Pradesh, besides being a riverine state with two major rivers i.e. the Godavari and the Krishna, has a coastal line of about 974 KMs of Bay of Bengal with one Major port at Visakhapatnam and 15 notified forts, out of which 4 are functional ports.

### **Water Quality Monitoring System**

Water being the second essential commodity after air for the survival of living beings on earth, the government has recognized the importance of water quality monitoring for rational development and management of water resources.

Andhra Pradesh Pollution Control Board (APPCB) has three fully equipped Zonal Laboratories and nine Regional Offices to cater the needs of the water quality monitoring in the State of Andhra Pradesh. The Andhra Pradesh State Pollution control Board works in Collaboration with the Central Pollution Control Board, which runs a nationwide network of water quality monitoring.

For making the marine fishing as sustainable and economically viable to coastal fishermen and to protect ocean fishery resources and bio-diversity during the breeding season, the government enforces a ban every year, restricting the fishing activities by all mechanised and motorised vessels fitted with inboard or outboard engines, excluding the non-motorised crafts. Cash compensation is provided in lieu of the loss of income during the ban period.

Assistance of Rs. 10,000 is given to all the families of fisherman in the State in the lean period where there is ban on Fishing under the scheme *YSR MatyakaraBharosa*. So far in the AP State, 1,09,231 such families have been benefited in two phases with an amount of Rs. 211.70 crore.

**Mangrove Forest:** Mangroves are considered the most productive wetlands. They are a vital source of livelihood for the coastal communities and also protect the coastal areas during storm surges or tsunamis. Andhra Pradesh has got an area of 582 Sq. KM. of Mangrove forests, accounting for about 9% of local forest area of the State, which amounts to just about 2% of the local geographical area of the State.

#### **AP State's Vision:**

AP is keen to garner the potential benefits from the species under water and has plans to boost the productivity and enhance export earnings from the marine products

#### **Focus Areas**

- ❖ Measures towards sustainable Marine Fishing
- ❖ Increase area under Mangroves to protect coastal bed from erosion.
- ❖ Discharge of Industrial effluents and dumping of plastic material into Ocean and Rivers.

#### **Strategies**

- ❖ Sensitizing Farmers on soil test based fertilizer application.
- ❖ 100% Neem Coated Urea Supply to Farmers.
- ❖ Special focus on promoting Green Manure crops and Organic Fertilizers.
- ❖ Sensitize farmers about customised fertilizers, which are Crop specific, Crop stage specific & location specific. So that efficient (or) optimum availability of plant nutrient to the crops. This reduces fertilizer usage / plug excess usage.
- ❖ Encourage farmers to adopt 'Natural Farming / Organic Farming'.
- ❖ Encourage farmers to use Micronutrients for correction of Micronutrient deficiencies and also use of Soil Amendments for correction of Soil Salinity and Alkalinity,
- ❖ Encourage farmers to go for Micro Irrigation method of watering and Fertigation method of fertilizer application.
- ❖ Massive afforestation being taken up under Jagananna pachhathoranam/ twenty point programme. 0.5% area equal to 200 ha of Mangrove.
- ❖ Target to increase 1% green cover per annum.

## Challenges Ahead

- ❖ Sustainability of food stocks and thereby sustain food security in the context of fish products.
- ❖ Protection of coastal line from pollution and reducing over marine fishing.
- ❖ Minimize and address the impacts of ocean acidification.

## Key outcomes

Indicator	Value (2019-20)
Marine fish catch (lakh MT)	4.4
Fishermen benefited under YSR MatsyakaraBharosa (in lakh Number)	1.22
Fishermen benefited during marine fishing ban period (in lakh Number)	1.02

## Key Vision Outcome Indicators

Indicator	Value (2019-20)	SDG- Vision Targets		
		2022-23	2024-25	2029-30
Consumption of Nitrogenous fertilizer (Lakh MTs)	35.38	34.68	33.98	33.30
Consumption of total fertilizer (N, P & K) (Lakh MTs)	16.83	16.49	16.16	15.84
Percentage change in area under mangroves	0.00	0.50	0.50	0.50
Forest cover as a percentage of total geographical area (%)	17.88	19	20	21



15

## **Life on Land**

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss



## 15 LIFE ON LAND



### **Protecting the Planet Earth – Time for action to reduce natural habitats**

Human life depends on the earth as much as the ocean for our sustenance and livelihoods. Plant life provides 80 percent of the human diet. Forests cover 30 percent of the Earth's surface, provide vital habitats for millions of species, and important sources for clean air and water, as well as being crucial for combating climate change. Every year, 13 million hectares of forests are lost, while the persistent degradation of drylands has led to the desertification of 3.6 billion hectares, disproportionately affecting poor communities.

While 15 percent of land is protected, biodiversity is still at risk. As per one estimate, nearly 7,000 species of animals and plants have been illegally traded. Wildlife trafficking not only erodes biodiversity, but creates insecurity, fuels conflict and feeds corruption. Urgent action needs to be taken to reduce the loss of natural habitats and biodiversity which are part of our common heritage and also support global food, water security, climate change mitigation and adaptation, peace and security.

### **Global scenario**

As per UN report, around 1.6 billion people depend on forests for their livelihood and forests are home to more than 80 per cent of all terrestrial species of animals, plants and insects. The report revealed the urgency to protect the forests and save environment, where there is scare for extinction of forests and degradation of forest lands. While 74 per cent of the poor are directly affected by land degradation globally, as many as 80 per cent of people living in rural areas in developing countries rely on traditional plant-based medicines for basic healthcare. 8 per cent of the total known animal breeds are extinct and 22 per cent are at risk of extinction. Over 80 per cent of the human diet is provided by plants while the cereal crops rice, maize and wheat provide 60 % of energy intake.

### National Forest and Wild life protection

India, with 2.4 per cent of the world’s land area and accounting for one-sixth of the global human population and approximately 8 per cent of all recorded species, has made sustainable management of the terrain ecosystem a priority. Over the last decade, around 3 million hectares (mha) of forest and tree cover have been added, leading to forests occupying 21.54 per cent of the total geographical area of the country. Nearly 30 per cent of India’s land is degraded or facing desertification, which needs attention.

With 275 million people living within forests, the country has adopted the Joint Forest Management (JFM) approach which proved to be productive both in terms of better protection and management of forest and improved livelihoods of forest-dependent people. The number of Protected Areas increased to 868 in 2017, with the extent of the total forest area going upto 1,65,088.10 Sq. Km. India aims to achieve land degradation neutrality by 2030 and has pledged to ensure restoration of 21 million hectares of degraded and deforested land by the year 2030.

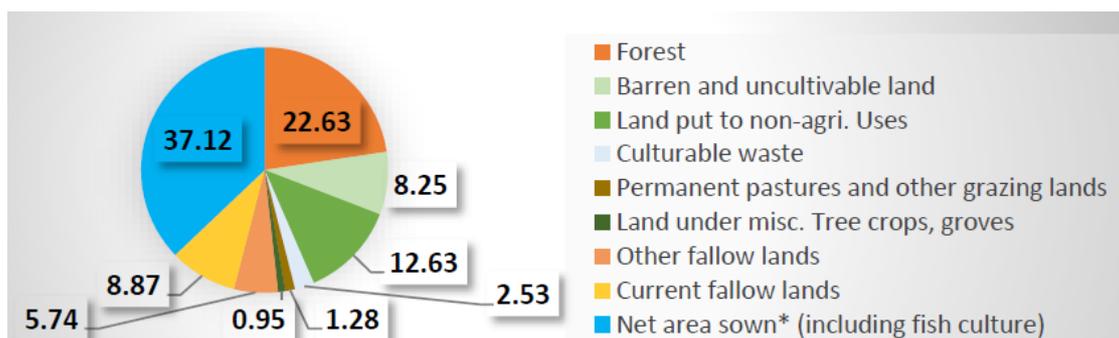
Due to implementation of several schemes and initiatives, the country could register an increase in the carbon stock - up from 7044 million tonnes in 2013 to 7083 million tonnes in 2017, with the annual increase working out to 19.50 million tonnes which are 71.5 million tonnes of CO<sub>2</sub> equivalent.

A significant achievement was that the tiger population increased to 2,967 by nearly 33 per cent since the last census in 2014. According to the revised estimate based on the 2017 census, the wild elephant population across the country stood stable at 29,964 as against the mean figure of 29,576 recorded in 2012.

### Current Interventions of Andhra Pradesh towards Sustainable Life on Land

Andhra pradesh is the 8<sup>th</sup> largest state in India in terms of Geographical area with 1,62,760 Sq.KM.

Land Use Particulars (%) -2018-19

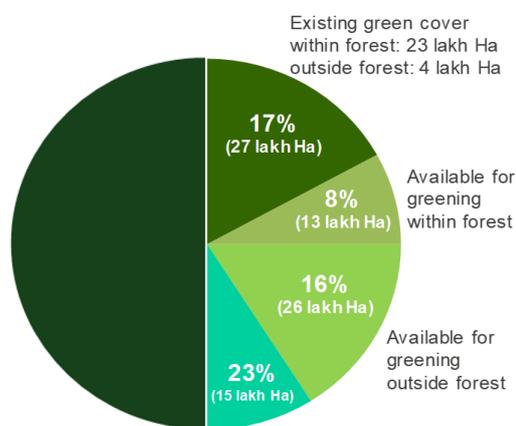


The state comprises 4.96% of India's geographical area and area under forest is 36.88 lakh hectares and accounted for 22.63% of geographical area of the state.

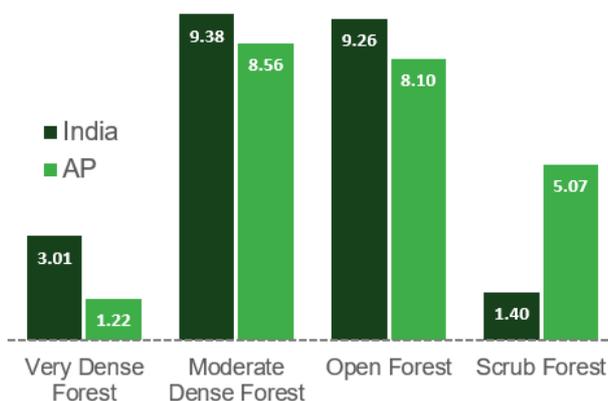
### Forest Cover in Andhra Pradesh & India – 2019

Classification	All India		Andhra Pradesh	
	Area (sq km)	% of Geographical Area	Forest Cover Area (sq km)	% of Geographical Area
Very Dense Forest	99,278	3.01	1994	1.22
Moderately Dense Forest	3,08,472	9.38	13938	8.55
Open Forest	3,04,499	9.26	13205	8.10
Total Forest Cover	7,12,249	21.67	29137	17.88
Tree Cover	95,027	2.89	3914	2.40
Total Forest and Tree Cover	8,07,276	24.56	33051	20.28
Scrub	46,297	1.40	8255	5.07
Non-Forest	25,28,923	76.92	125576	77.06
Total Geographic Area	32,87,469	100	162968	100.00

### AP State – Green Cover - 4.5 Lakh Ha. to be Greened per year

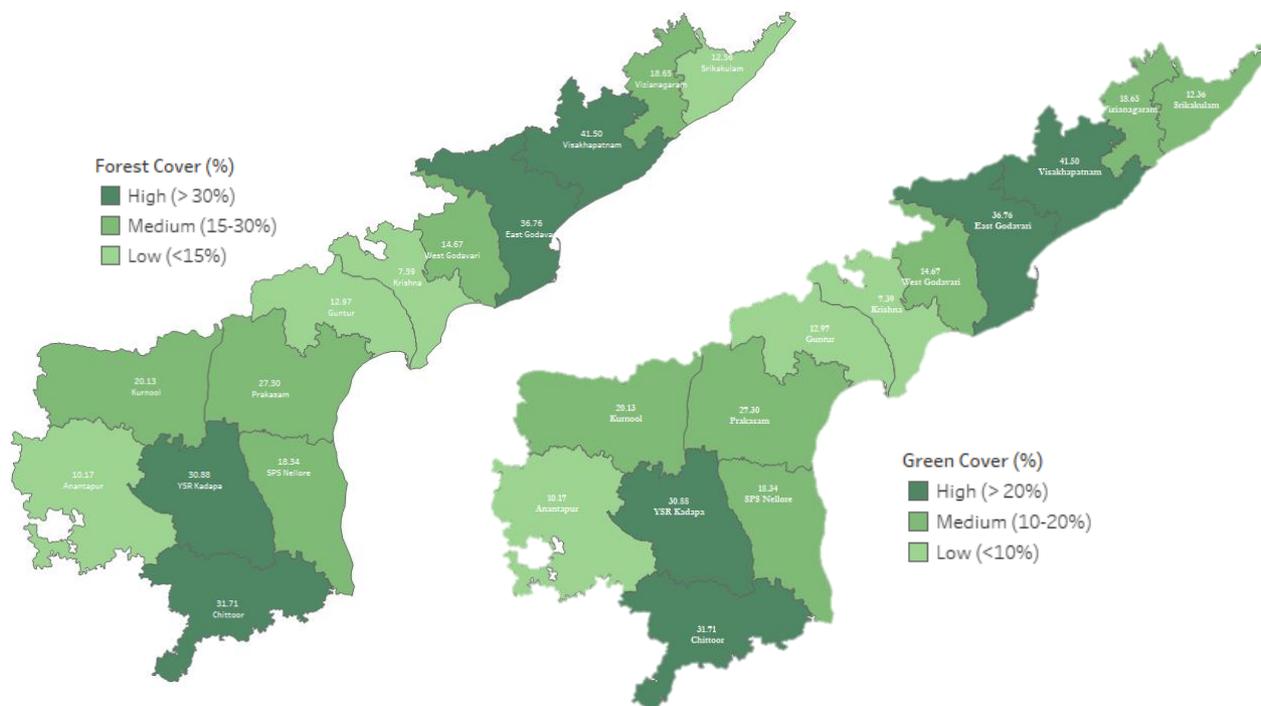


### Forest Cover (%)



## District-wise forest cover and green cover (%)

Visakhapatnam, East Godavari, YSR Kadapa and Chittoor districts have the highest forest as well as green cover as they fall in the high range - >30% for Forest cover and >20% in case of green cover.



## District-wise green cover status (Hectares)

Sl. No	District	Forest Area	Green Cover	Green cover as % of Forest area
1	Anantapuramu	1945.60	986.83	50.72
2	Chittoor	4805.39	3200.43	66.60
3	East Godavari	4709.67	4994.10	106.03
4	Guntur	1476.92	888.00	60.12
5	Krishna	644.52	650.18	100.87
6	Kurnool	3554.79	2172.57	61.12
7	Prakasam	4811.09	3303.84	68.67
8	S.P.S.Nellore	2397.83	1341.66	55.95
9	Srikakulam	721.72	819.31	113.52
10	Visakhapatnam	4631.37	3756.43	81.11
11	Vizianagaram	1219.28	1051.99	86.28
12	West Godavari	1247.61	1604.40	128.59
13	Y.S.R.Kadapa	4743.59	4367.66	92.08
	Andhra Pradesh	36909.37	29137.40	78.94

### **Interventions to combat land degradation and foster afforestation**

The state government has set an ambitious green cover target for the State as it envisions a green Andhra Pradesh with abundant green cover with thriving biodiversity. The objective is to create a sustainable living space for the citizens of the State while at the same time doing its part in creating a safer and sustainable planet.

The State Government has launched a massive people's movement involving public and farmers in a big way to increase tree cover outside reserve forests to improve environment and to provide gainful employment to thousands of unemployed youths. City Forests are proposed for providing wholesome living environment and contributing to Smart, Clean, Green and Healthy cities to Urbanites.

The state has started Vana Viharischeme for creation of new community based eco-tourism centers and strengthening the existing eco-tourism centers inside the forest area. Dr. Y.S. Raja Sekhara Reddy SmruthiVanam project was developed in an extent of 22.80 Hain Nallakalva Village of Atmakur Mandal

**Afforestation:** The Government envisages to improve Green cover outside Reserve Forest by planting “One- Plant by One- Citizen” and by involving Grama Volunteers to distribute and plant seedlings. During 2019-20, 16.71 Crore seedlings have been planted as against the target of 25.00 crore seedlings by all line Departments and public during 2019 monsoon.

### **Interventions for enhancing Biodiversity**

Andhra Pradesh has 1,62,760 Sq.km of geographical area of which, the Notified Forest area is 37,221.11 sq.km., which is 22.63% of its geographical area. Forest under Protected Area Network is 8139.88 sq.km, which is 21.87%. The State Biodiversity Board is mandated towards conserving and restoring Biodiversity and Ecosystems to deliver benefits essential for all sectors of the society in a sustainable manner, in accordance with the provisions as stipulated under the Biodiversity Act, 2002.

### **Vision of the Government**

The Government of Andhra Pradesh aims at conserving and restoring Biodiversity and Ecosystems to deliver benefits essential for all sectors of society in a sustainable manner and to achieve zero loss of biodiversity and ecosystems services by the year 2030.

## Focus Areas

- ❖ To achieve forest cover and tree cover to 50% of the total geographical area.
- ❖ To minimise forest fire incidences and assist in restoring productivity of forests.
- ❖ Enhance biodiversity in the state through preservation of local flora and fauna

## Strategies

- ❖ Bringing the culturable wastelands into cultivation.
- ❖ Massive afforestation being taken up under Jagananna pachha thoranam/ twenty point programme. Target to increase 1% Tree cover per annum
- ❖ Departmental plantation under schemes like CAMPA, MGNREGS, NAP, GIM etc will be taken up.

## Challenges ahead

- ❖ To bring an additional area of under forest and tree cover to achieve 50% of green cover
- ❖ Protect land by combating desertification and degradation.

## Key outcome Indicators

Indicator	Value (2019-20)	SDG- Vision Targets		
		2022-23	2024-25	2029-30
Forest cover as a percentage of total geographical area (%)	17.88	19	20	21
Green Cover (%)	20.28	21	22	27
Percentage of Tree Outside Forest (TOF) in total forest cover.	30.66	31.5	32.5	33.5
Percentage change in Forest Area coverage	3.52	1.0	1.0	1.0
Tree cover as percentage of total geographical area(%)	2.40	3.40	4.40	5.40
Nagar-vans and School Nurseries created (in Number)	23.00	25	27	29
Percentage increase in net sown area (%)	58.84 Lakh ha	2.55%	4.25%	5.95%



16

## Peace, Justice and Strong Institutions

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels



## 16 PEACE, JUSTICE AND STRONG INSTITUTIONS



Governments across the globe are striving hard to significantly reduce all forms of violence. The Goal 16 of the SDGs attempts to achieve this by working with governments and communities to end conflict and insecurity. In this process, promoting the rule of law and human rights are the key issues. This Goal lays down the basic principles which enable the achievement of all the other goals mainly by building the foundations for peaceful and inclusive societies, robust system of justice for all, and inclusive and accountable institutions.

### **Key strategies**

In Andhra Pradesh State, various national and state initiatives have been taken in the form of policies, schemes and programmes to uphold justice and ensure accountability and transparency at local, district and state levels. The focus of the state in law and order is to reduce overall crime-rate to one of the lowest in the country with special focus on crime against women and crime against SC & ST. The government has set up Special Courts to ensure speedy trial of atrocities committed against Scheduled Castes and Scheduled Tribes on the ground of caste. Initiatives have been launched for other vulnerable groups as well.

### **Check on Crime**

There has been an increase in overall cognizable *crime* over the years. The State accords top priority for safety and security of women. Several measures including preventive activities, awareness programs, Redressal Mechanism and Legal Action have been put in place to prevent and reduce the crime against women and children. To improve law and order, the state is adopting latest technology methods and encouraging use of technology assisted tools. Government constituted Juvenile Justice Boards (JJB) in all the 13 districts in the state to deal with the cases of children in conflict with law.

As per the Crime in India Report – 2019 of National Crime Records Bureau, Andhra Pradesh contributes to 3.7% of India's total cognizable criminal cases under the Indian Penal Code (IPC). The state is the 8th state in the country to have recorded the highest crime rate in 2019. In terms of Special and Local Laws (SLL) cases, there has been a 46 % increase in cases booked by cops in 2019.

Crimes against women in the state increased by 7.9% in 2019 compared to 2018, the rate of total crime against women in the state is 67.9 contributing 4.4% of all India. AP stands at the tenth place in the country with respect to crimes against women. 12.8% increase in terms of crimes against SCs in AP in 2019 compared to 2018. In 2019, 2524 crimes were reported against children – a decrease of 5.5% from 2018. In 7350 road accident cases, 8161 people lost their lives due to negligence were reported in the state during 2019. The corruption offences decreased by 18.5% in 2019 compared to 2018

In order to ensure responsive, inclusive, participatory and representative decision-making at all levels by women, the state government has introduced landmark legislations:

- ❖ DISHA ACT: Disha Act is a landmark legislation that will help create a safe society for women and children in Andhra Pradesh by providing speedy justice. This act provides for completion of investigation within 7 days and trial within 14 days in cases of heinous offences of rape where conclusive evidence is available.
- ❖ Two Acts have been made providing 50% Reservation in Nominated Posts for the Political Upliftment of: 1) BC, SC, ST and Minorities and 2) Women.
- ❖ An Act has been made providing 50% Reservation to Women cutting across all Communities including OCs, as a measure of horizontal Reservation.
- ❖ Two Acts providing 50% Reservation in Nominated Posts have been made for the Economic Upliftment of – 1) BC, SC, ST and Minorities and 2) Women

### **Building effective, accountable and inclusive institutions - Village/Ward Secretariats**

The State government taking cue from the Mahatma's vision for a GramaSwraj, has ushered in a new era of governance by establishing Village & Ward Volunteers and Village & Ward Secretariat System in the State to deliver services efficiently at the doorsteps of citizens in a transparent, accountable and corruption-free manner. 11,162 Village Secretariats were established in rural areas and 3842 Ward Secretariats in urban areas. 541 Services relating to 28 Departments are brought onto a Single portal and service

deliverance and grievance redressal is made possible at Village / Ward Secretariat level without the citizen needing to go to next higher levels, thereby significantly cutting down cost burden and saving time.



### **Corruption-free governance**

As part of a transparent, accountable and corruption-free governance model which utilizes technology to ensure seamless service delivery, the state has established systems to ensure people-centric governance taking advantage of technology to reach the last mile beneficiary by putting in place requisite policies.

With a view to sincerely curb corruption a toll free number 14400 has been launched under the Spandana initiative to redress the public grievances within 72 hours through **Spandana** Program. Under the programme, anyone can make a complaint relating to corrupt activities of the public servants which will be transferred to the Anti-Corruption Bureau (ACB) for redressal.

### **Decentralized Governance**

The regional imbalances and absence of equitable growth have caused an acute sense of deprivation among various sections of the state population leading to disturbances. To ensure that the fruits of development are enjoyed equally by all sections and regions of the population the state government have decided to lay emphasis on distributed capital and decentralized administration and enacted ' The Andhra Pradesh Decentralisation and Inclusive Development of All Regions Act, 2020'

## **Performance of AP**

As per SDG India Report 2019-20, Andhra Pradesh with a score of 86 is the top-performer among States under this goal. To measure State's performance towards the Goal of Peace, Justice, and Strong Institutions, 23 state-level indicators have been identified.

## **Challenges**

- ❖ Bringing down the crime rates, especially against women, SCs and STs.
- ❖ To bring significant reduction in road accidents and death.
- ❖ Promote the rule of law at all levels and ensure equal access to justice for all.
- ❖ Reduce corruption and bribery in all their forms
- ❖ Develop effective, accountable and transparent institutions at all levels.



17

## Partnerships for the Goals

Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development



## 17 PARTNERSHIPS FOR THE GOALS



Sustainable Development Goal 17 is about "partnerships for the goals." The Goal has 17 targets to be achieved by 2030, broken down into five categories: finance, technology, capacity building, trade and systemic issues. Progress towards targets will be measured by 25 indicators.

Partnerships and Goals refers to the need for cross sector and cross country collaboration in pursuit of all the goals by the year 2030. It is a call for countries to align policies. SDG 17 is a vision for improved and more equitable trade, as well as coordinated investment initiatives to promote sustainable development across borders. It is about strengthening and streamlining cooperation between nation-states, both developed and developing, using the SDGs as a shared framework and a shared vision for defining that collaborative way forward.

However, in case of India, the indicators are being finalized at the National level. Andhra Pradesh state is yet to work on the goal.