



Sustainable Development Goals

ANDHRA
PRADESH | STATUS REPORT
2018

SUNRISE ANDHRA PRADESH

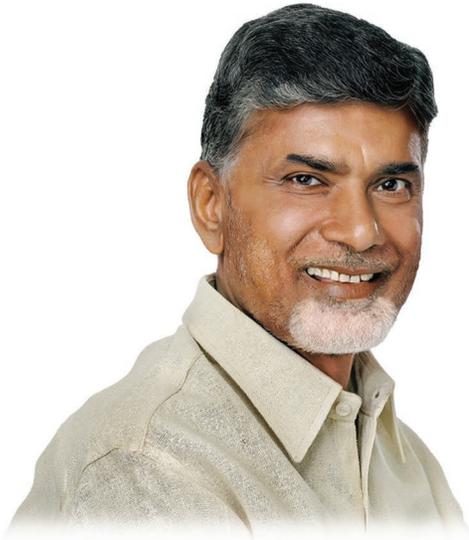
VISION
2029



PLANNING DEPARTMENT
GOVERNMENT OF ANDHRA PRADESH
INDIA

Contents

	Foreword	2
	Overview	4
	Goal 1: No poverty	5
	Goal 2: Zero hunger	8
	Goal 3: Good health and well being	11
	Goal 4: Quality education	14
	Goal 5: Gender equality	17
	Goal 6: Clean water and sanitation	20
	Goal 7: Affordable and clean energy	23
	Goal 8: Decent work and economic growth	25
	Goal 9: Industry, innovation and infrastructure	27
	Goal 10: Reduced inequalities	30
	Goal 11: Sustainable cities and communities	32
	Goal 12: Responsible consumption and production	35
	Goal 13: Climate action	37
	Goal 14: Life below water	39
	Goal 15: Life on land	40
	Goal 16: Peace, justice and strong institutions	42
	Goal 17: Partnerships for the goals	43
	SDG framework adoption by Andhra Pradesh	44



Foreword

“My government is committed in its endeavour of transforming the state of Andhra Pradesh into a happy, inclusive, responsible, sustainable, globally competitive and innovation-driven society through structural transformation and by sustaining inclusive double-digit economic growth, to become one amongst the three best states in India by 2022, the best state by 2029, and a leading global investment destination by 2050. Key reforms and approaches undertaken by us are in various stages of progress towards attaining the aforementioned goals.”

Following the bifurcation and re-organization in 2014, the state confronted a host of development related challenges. Despite all the constraints, I am elated to share with the people of Andhra Pradesh that we have had some impressive achievements. Andhra Pradesh is currently one of the fastest growing states in the country, with the economy registering double-digit growth since 2015-16. There has been a considerable improvement in the standard of living with the Per Capita Income (PCI) having risen from Rs. 94,000 in 2014-15 to Rs. 1.42 lakh in 2017-18.

The enrolment rates and gender parity in school education have been notable. Andhra Pradesh is the third state in the country to electrify all the households and has emerged as the first big State in the country to achieve the 100 % LPG connection state. The government is therefore moving with a saturation approach in terms of providing basic amenities. We are committed in improving the infrastructure available in the state. We have made tremendous progress in our efforts to build internal Cement Concrete (CC) Roads, connecting rural habitations particularly, and have been successful in adding highest forest area in the country in 2017-18. Further, the state has gone from power deficit in 2014-15 to power surplus with noteworthy reduction in T&D losses. I am also pleased to announce that Andhra Pradesh is now an Open Defecation Free (ODF) state. Successful implementation of appropriate health measures have significantly reduced prevalence of stunting, wasting, and underweight in children.

The State is now considered to be the best state as per implementation of Business Reform Action Plan put in place by Department of Industrial Policy and Promotion, Government of India. With active participation in the World Economic Forum and strengthened ties with countries such as the USA, Singapore, Malaysia, and Japan, to name a few, the state has been successful in ensuring productive partnerships with global investors and multilateral organizations.

The government has identified its pressing focus areas for the near future and has put in place interventions with immediate effect in order to improve the situation of solid and liquid waste management, to ensure 55 lpcd of water in all rural habitations and 135 lpcd in all the ULBs and to provide with LED street lights in all the GPs.

With an aspiration to grow faster, the government has adopted new governance strategies such as digital financial inclusion, real time governance and an integrated framework consisting of themes - KPI, SDG, Samaja Vikasam (Basic Amenities for all villages) and Kutumba Vikasam (Securities for all Families), to accomplish the vision targets and to set global benchmarks. Further, to prioritize the development agenda for the state, it has in place a multi-pronged strategy in the form of 7 missions, 5 grids and 5 campaigns. Under Real-time Governance, RTG centres and call centres have been established for grievance redressal and perception surveys, to promote accountability among state government officials and bureaucrats and ensure transparency for the people of Andhra Pradesh.

Andhra Pradesh, along with other national and regional governments, has astutely prioritized the adoption of the Global Sustainable Development Goals 2030 (SDG 2030) post 2015. The inclusive and integrative framework of the SDGs form the guiding agenda to tackle the range of challenges posed by the three pillars – economy, society and environment in our endeavour to attain holistic development. The Government has been keen in adopting the SDG framework because it complements the Vision 2029 framework, thereby enabling us to prioritize development action and challenge ourselves by setting ambitious goals and targets. Andhra Pradesh has been one of the leading

states in SDG implementation. It is the only state in the country to have participated in the High-Level Political Forum on Sustainable Development 2017 (HLPF 2017) at the UN headquarter in New York, where 44 countries including India had submitted their Voluntary National Review (VNR) report to track progress. Under the SDG framework all the 17 goals have been adopted. The targets and the indicators have been mapped under various existing schemes across all the departments, contextualised with the local priorities. Further, the SDG priorities have been aligned with the state's outcome budget for the BE 2018-19, so that the departments allocate financial resources accordingly. In accordance with local challenges, capacities and existing resources, the government has identified key concern areas under the SDG framework. Successful implementation of the SDGs also requires robust monitoring and reporting system which is present in the form of the Real-time Outcome Monitoring System (ROMS) of the state government which monitors the progress of all districts, key departments, and key programmes. Discussions around the SDG framework have been held in the Legislative Assembly and during the Janmabhoomi programme in January 2018.

The objective of the report is to highlight the achievements and strategies of the state under the SDG framework until now, draw attention to focus areas and set targets for the future. My government is continually striving to deliver results to improve the lives of people of Andhra Pradesh, across all walks of life.

Nara Chandrababu Naidu
Chief Minister of Andhra Pradesh

Overview

This report offers a high-level view of the SDG-aligned development framework of the Government of Andhra Pradesh. It spells out the priorities identified by the state in the form of goals, targets, and indicators; current status of achievement and targets for the future; strategies which will drive the State's SDG implementation in the coming years; and the specific areas which demand extra attention.

The state has identified that it must upgrade its statistical capacity significantly to be able to monitor and review progress under the SDG framework. Actions in this direction have already been initiated by the Directorate of Economics and Statistics (DES), the statistics wing of the Government. As one of the first steps, a monitoring framework encompassing 17 goals, 121 targets, and 212 indicators has been developed for monitoring progress at the state-level. This framework has been integrated with the Real-time Outcome Monitoring System (ROMS) of the state

government. The SDG-related activities in the state are being coordinated by the Planning Department of the state government.

In this report, the key targets and indicators for which data exist in the state's statistical systems are furnished. Latest values for the key outcome indicators for the state and India are mentioned, along with targets set for them for every year from 2018-19 to 2022-23, and 2029-30. Values for key input indicators are indicated for 2016-17 and 2017-18; targets for the same are stated for 2018-19. In most cases where data are not presently available for the specific target, indicator, or year, efforts are underway to capture and integrate them with the state's statistical system. Under the state's commitment to ensure target realization, the government has instituted studies for specific indicators with no base value information through collaboration with premier research organisations.



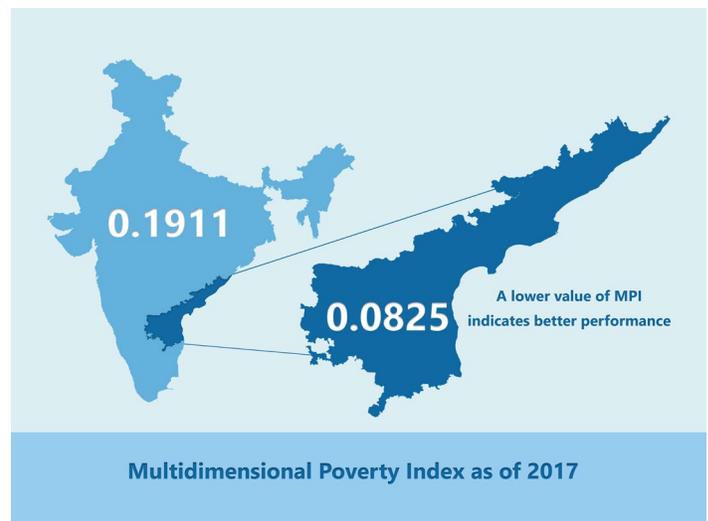
Andhra Pradesh reduced the multidimensional poverty headcount ratio from 41.6% in 2005-06 (in the erstwhile state) to 21% in 2016-17. As per official poverty estimates the state is 6th best in the country with a headcount ratio of 9.2%.

The first goal of the SDG framework discusses the target of eradicating the strongest barrier against human progress - poverty; not just in monetary terms but in all its forms by 2030. While the number of people living in extreme poverty in the world dropped by more than half between 1990 and 2015 - from a number of 1.9 billion individuals to 836 million – many are still struggling to fulfil even the most basic human needs.

The national poverty line calculated for 2011-12, pegged the poverty headcount ratio to 9.2% for the erstwhile state of Andhra Pradesh with urban poverty at 5.81% and rural poverty at 10.96%. This headcount ratio is not only lower than the India rate of 20.9% but also the lowest among the larger states with a population greater than 4 crore.

The state has made similar strides in reducing poverty captured by the Multidimensional Poverty Index (MPI). The

headcount ratio for the MPI poor in the state is 21% (2016-17) and has significantly improved from the 2005-06 figure for the erstwhile state of Andhra Pradesh which stood at 41.6%.



Key outcome indicators and targets

Indicator	Latest status		Target					
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
Poverty as per national official poverty line (%)	21.9	9.2	3.6	2.8	2.4	2.1	1.7	0.0
Multidimensional poverty rate (%)	41.3	21	18	15	12	10	8	<5
Human Development Index (HDI)	0.59	0.66	0.68	0.7	0.73	0.76	0.8	0.9

Strategies Adopted

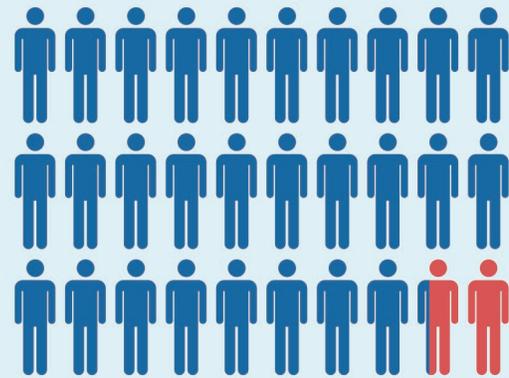
Social protection, opportunities for gainful employment and livelihoods, and provision of basic amenities are the key strategies the state has adopted in its fight against poverty.

Social protection schemes play a crucial role in ensuring access to economic resources and mitigate risk exposure for households. The NTR Bharosa pension scheme, which covers more than 44 lakh people, is one of the most important social security schemes run by the state government. From INR 4312 crore in 2017-18, the allocation for the scheme for 2018-19 has been increased by 16% to INR 5000 crore.

Realising that the out of pocket expenditure during a health crisis stresses household income and assets, the state government through NTR Vaidya Seva programme provides annual medical cover up to INR 2.5 lakhs at zero premium cost for every BPL household in the state. Treatment for 1044 medical and surgical procedures are covered in the programme. Chandranna Bima, another flagship scheme, provides coverage for those employed in the unorganized sector against accidental death or disability and natural death. Over 29,000 families have availed this scheme in 2017-18.

Self Help Groups (SHGs) have mobilized 87 lakh rural and urban women who in turn, through the SHG vehicle, have availed economic incentives-based schemes such as Sthreenidhi, SHG capital infusion and Vaddi Leni Runalu. 10.35 lakh rural households have been brought above INR 10,000 monthly income in 2017-18 and another 6 lakh households are targeted for 2018-19. Streenidhi Cooperative Society is arranging INR 1000 crore interest free bank loans to SHG women for undertaking livelihood activities to improve their income. This initiative included 9,30,000 individuals as beneficiaries in 2017-18. Furthermore, the government has revived the defunct land purchase scheme for landless SC women by substantially enhancing the unit cost to up to INR 15 lakh per acre during 2017-18.

MGNREGS - the employment guarantee scheme has been linked to the construction of physical infrastructure which in turn fulfils basic needs pertaining to sanitation through the construction of individual household latrines, construction of



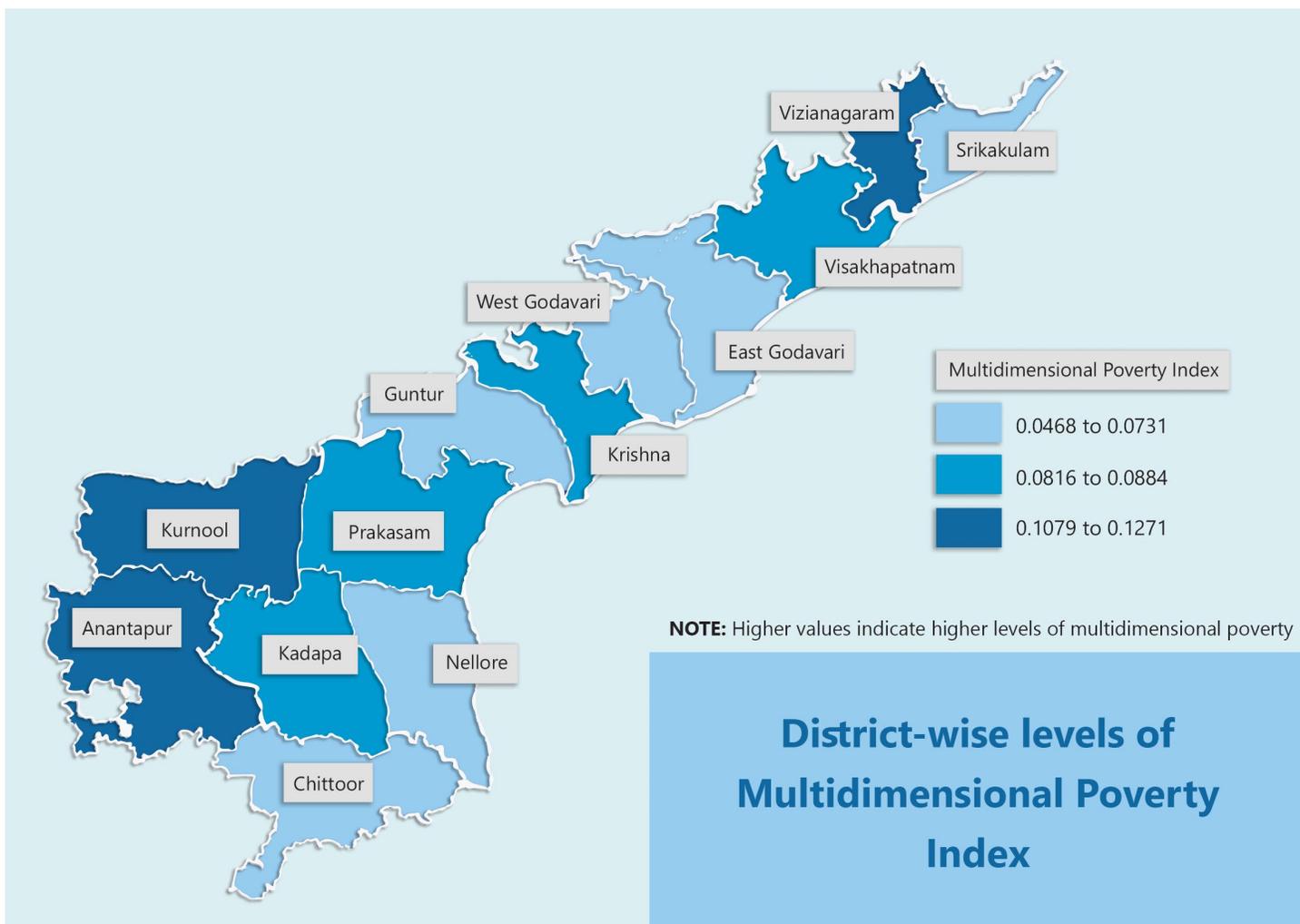
94.3% of households have at least one member with a bank account

CC roads and other assets. Average person days employed per household under MGNREGS has come down from 53 in 2016-17 to 49 in 2017-18, which implies that the demand for the scheme has diminished indicating that people have availed better economic opportunities in the last year.

A functional bank account has both intrinsic and instrumental effects on the economic well-being of a household. In Andhra Pradesh, 94.3% of households have at least one usual household member who has a bank or a post office account. More than 9.02 million bank accounts have been opened under the financial inclusion scheme of Pradhan Mantri Jan Dhan Yojana (PMJDY).

The state government, through pre and post matric scholarships in education and in the provision of market linked skill development and training programmes, is involved in the capacity building of the future generations and the youth. In 2017-18, 6 lakh beneficiaries were trained under various skill development programmes; the target for 2018-19 has been increased to a million. Furthermore, 1000 skill development centres will be set up in social welfare and tribal welfare schools, and degree and engineering colleges across the state to improve the students' employability and train them in new technologies.

Basic needs in terms of access to clean cooking fuel and energy have been saturated – every eligible household in the state now has access to Liquid Petroleum Gas (LPG) cylinders and electricity.



Challenges Ahead

Ensuring a minimum income of INR 10,000 for all households is a priority for the government.

Furthermore, disbursement against allocation should improve for livelihood activities for SCs, STs, and BCs, which stood at around 50% in 2017-18.

Inter-district divergence in the MPI headcount ratio suggests the requirement for planned efforts which are spatially targeted towards bridging the gaps between them.

Key input indicators and targets

Indicator	2016-17	2017-18	2018-19 Target
Number of beneficiaries (lakhs) of pension scheme (NTR Bharosa)	40.67	44.90	51.75
Average person days employed per household under MGNREGA (No.)	53	49	75
Annual allocation under Tribal Sub Plan (TSP) component (INR crore)	3100	3529	4177
Number of persons trained under skill programme (lakhs)	2.2	6	10.5



The proportion of underweight and wasted children aged under 5 years have fallen down from last year. The percentage of children suffering from stunting is still very high at 39%. Acknowledging the importance of nutrition for women during pregnancy and new born children in the early years, the supplementary food programme has been expanded to 257 projects from 107 projects in 2017-18.

Malnutrition remains a daunting barrier to human and economic development. The goal aims to end all forms of hunger and malnutrition by 2030, making sure all people - especially children - have access to sufficient and nutritious food all year round. Realisation of this goal means taking substantial efforts in formulating resilient agricultural practices in order to augment food production as well as productivity, sustainable means of food distribution, access to technology, and well-functioning markets.



Between February 2017 and March 2018 malnutrition in children has reduced substantially
 Under-weight from **17% to 8%**
 Stunting from **46% to 39%**
 Wasting from **9% to 6%**

Nutritional programmes, which are in place to combat challenges of undernourishment, especially in mothers and children, have achieved commendable results in the last year. Prevalence of under-weight in children has reduced from 17%

Key outcome indicators and targets

Indicator	Latest status		Target					
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
Prevalence of stunting in children (%)	38	39	37	35	30	25	20	0
Prevalence of wasting in children (%)	21	6	4	2	2	1	1	0
Prevalence of underweight in children (%)	36	8	6	4	3	2	2	0
Prevalence of anemia in children (%)	58	59	48	32	16	8	6	5
Prevalence of anemia in women aged 15-49 years (in %)	53	60	40	30	20	10	8	5
Net irrigated area (lakh ha)		27	32	35	37	38	40	51
Food-grain productivity (MT/Ha)	2.06	3.757	3.79	3.8	3.82	3.83	3.85	4.4
Cropping intensity	1.42	1.25	1.32	1.35	1.40	1.45	1.50	2.00

in February 2017 to 8% in January 2018. Stunting has reduced from 46% to 39%, and wasting has fallen from 9% to 6% during the same period.

To facilitate augmentation of food production, the net irrigated area has been widened to 2.72 million Ha. The cropping intensity marginally improved to 1.25 in 2016-17 from 1.24 in 2015-16. Further, the state has stood first for the second consecutive year in the year 2017-18 in the country in distributing Soil Health Cards (SHC) to farmers which carry crop-wise recommendations for optimum use of fertilisers and nutrients.

Strategies Adopted

Introduction of measures to improve food production as well as productivity and strengthening the Public Distribution System (PDS) have been the major strategies of the state to achieve food security. The state has made significant progress in ensuring food security by going beyond the 268 lakh units (persons) mandated by the National Food Security Act, 2013, and extending the coverage to another 134 lakh units. Andhra Pradesh is the first state in the country to automate the Fair Price Shops, an initiative through which INR 1526 has been saved in expenditure.

The state has introduced nutritional interventions to compliment the programmes launched by the Central Government to specifically target the ones whose needs have not been adequately met. Anna Amrutha Hastam, which supports pregnant and lactating mothers through spot feeding of one full meal and administration of iron and folic acid tablets to reduce the incidence of anaemia, has been expanded to 257 ICDS projects in the state from April 2018, from 107 in 2017-18. Nearly 3 lakh women were benefited under this programme in the last year. The Mid-day Meal Scheme has been extended to intermediate students for which the government has allocated an amount of INR 494 crore for 2018-19. Further, INR 266 crore has been allotted to increase the number of eggs served per week from 3 to 5 in order to improve the nutritional quotient.

The agriculture sector posted a highly encouraging growth rate of 12.3% in 2017-18. With the impressive performance

Growth of Primary Sector 2017-18	
	Agriculture 12.3%
	Horticulture 17.16%
	Livestock 13.05%
	Fisheries 30.84%

of the state in the distribution of soil health cards and the substantial increase in the number of farmers covered under Zero Budget Natural Farming programme, the consumption of fertilizers and pesticides has come down drastically in the last few years. The government has distributed 13.69 lakh soil health cards, 1 lakh MT micronutrients and 14.63 lakh quintals quality seeds in 2017-18. An amount of INR 81,530 crore was disbursed as agricultural credit in 2017-18 against the annual credit plan of INR 87,471 crore. A loan amount of INR 3,098 crore was disbursed to tenant farmers in 2017-18. To ensure that farmers get fair price for their produce, 56 new Rythu Bazars were sanctioned by the government in 2017-18 to be made operational in 2018-19. 11 Rythu Bazars have been upgraded into model Rythu Bazars out of the existing 96 in 2017-18. To enhance awareness on best practices in agriculture, about 11,633 demonstrations were conducted in the state during the last three years under Chandranna Rythu Kshetralu.

The horticulture sector showed a remarkable growth of 17.16% in 2017-18. Increase in the production of milk, meat and egg has resulted in an encouraging growth rate of 13.05% in the livestock sector in 2017-18. Maintaining the uptrend, the increase in the production of marine fish, inland

fish and prawns/shrimps led to register an impressive growth rate of 30.84% in the fisheries Sector in 2017-18. Under the Chandranna Aqua Rythu Kshetralu, on-farm demonstration ponds are being used to popularise the latest technology interventions to continue the growth in the sector.

The state department hosted an Agriculture-Tech Summit in the last year, where global leaders, business heads, start-up founders, leading policy makers, and technology experts came together to discuss innovative ideas for agricultural transformation in the state.

Challenges Ahead

Anaemia reduction is one of the major challenges the state faces. 59% of children aged 6-59 months and 60% of women aged 15-49 years are anaemic. Addressing this calls for diversification of the food basket by including components high in proteins, iron, and vitamins. Additionally, it is imperative to explore ways to provide continuous and lifelong nutritional support to the needy.

The area under millets cultivation has decreased from 2.93 lakh Ha in 2015-16 to 2.02 lakh Ha in 2016-17. Millets are highly adaptable to climate change, require less resources and have higher nutrition value than other cereals. Increasing area under cultivation of millets can help in mitigating the losses to farmers due to adverse natural events, and distributing them through PDS can also contribute in meeting the recommended dietary allowance for micronutrients among women and children.

Access to credit for tenant farmers needs attention. In the last year, only 27% of the annual target for loan disbursement was met. Another area of concern for the state is the high (up to 15%) post-harvest losses in horticulture produce. The cold chain infrastructure, and backward and forward linkages have to be effectively put in place in order to manage these losses.

Key input indicators and targets

Indicator	2016-17	2017-18	2018-19 Target
Number of pregnant and lactating mothers covered under supplementary nutrition programme (lakhs)	3.8	3.1	
Number of children (under 6 years of age) covered under supplementary food programme (lakhs)	29.8	25.3	
Number of farmers covered under insurance schemes (PMFBY & WBCIS) (for Kharif) (lakhs)	15	19	
Area brought under micro irrigation (lakhs ha)	1.4	1.9	2.4
Number of farmers covered under 'Zero Budget Natural Farming' initiative (lakhs)	0.4	1.6	5
Consumption of fertilizers (lakhs MT)	35	15	



A host of measures such as ANC checkups, transportation to and from the hospital, and NTR Baby Kits have resulted in better than national IMR and MMR. This has also contributed to reducing the share of communicable, maternal, neonatal and nutritional diseases in the total disease burden from 43% to 27% in the last decade.

More than 6 million children in the world still die before their fifth birthday every year. 16,000 children globally die each day from preventable diseases such as measles and tuberculosis. Every day hundreds of women die during pregnancy or from child-birth related complications.

Goal 3 aims at enhancing health and well-being related outcomes for all by focusing on a range of issues which affect human life. The focus areas under the goal are maternal and child health, reducing communicable and noncommunicable diseases, universal access to medicines and vaccines, and minimizing substance addiction, road traffic injuries and deaths, and pollution related illnesses.

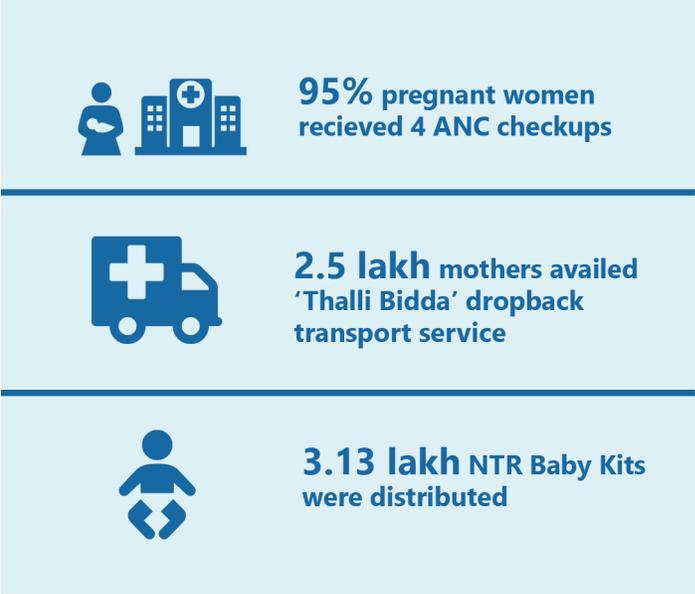
Health Adjusted Life Expectancy (HALE), which computes life expectancy of an individual at birth by accounting for the possible loss of healthy years due to diseases and injuries, stands at 59.4 years for the state, which is almost the same as that of the country average.

IMR for the state, at 12, is below the national average. The MMR, at 93, is much better than the all-India figure of 130. 99% of all reported deliveries are institutional; 93% of the children aged 1-5 years are immunized.

Health infrastructure plays a crucial role in the delivery of health services. In this context, 61% of public healthcare centres fulfil minimum service requirements and is above the national average of 13%; by 2019 the state aims to have 100% of public healthcare centres fulfilling the stipulated criteria.

Strategies Adopted

Maternal and child health is the key focus area for the state. To meet its targets pertaining to IMR and MMR the state operates several programmes like Thalli Bidda Express, Janani Suraksha



Key outcome indicators and targets

Indicator	Latest status		Target					
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
Health Adjusted Life Expectancy (years)	58.9	59.4	60	61	61	62	62	64
Households with any usual member covered by a health scheme or insurance (%)	27	75	80	87	93	100	100	100
Maternal Mortality Ratio (MMR)	130	93	50	40	37	33	30	16
Infant mortality rate (IMR)	34	12	8	6	7	5	5	3
Mortality rate attributed to major non-communicable diseases (number of deaths per 1,00,000 population)	375	394	354	333	313	293	273	273
Public healthcare centers fulfilling minimum service requirements (%)	13	61	66	70	75	80	85	85

Yojana, NTR Baby Kits and other post-partum schemes. In 2017-18, 2.5 lakh mothers availed the service of Thalli Bidda express, and 3.13 lakh NTR Baby Kits were distributed. In terms of ante-natal care, 95% of the pregnant women received four ANC check-ups. The state government has strengthened the implementation of Mission Indradhanush to achieve its goals of immunizing all children under the age of 5 years.

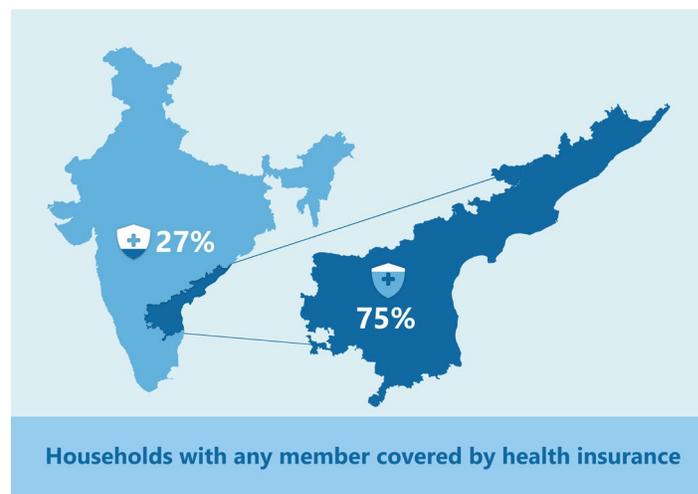
The state operates Supplementary Nutrition Programmes (SNPs) to improve nutritional status of pregnant and lactating women, and children below six years. The meal under SNP meets 25-40% of the daily nutrition requirement of a day. SNP food distribution has benefitted 93% of the enrolled women, 95% of the enrolled children under 3 years, and 80% of the enrolled children aged 3-6 years. Giri Gorumuddalu Scheme, a special feeding programme for children up to 5 years, have benefitted 42,640 children categorized under severely underweight (SUW), severe acute malnourished (SAM) and moderate acute malnourished (MAM).

The share of communicable diseases in total disease burden has fallen from 28% in 2006 to 15% in 2016. To improve the screening rates for the detection of communicable diseases and noncommunicable diseases the government provides free diagnostic tests under NTR Vaidya Pariksha.

Andhra Pradesh is the only state to provide free CT and MRI scan services at all district hospitals. The government also provides healthcare services in remote areas through mobile medical services under Chandranna Sanchara Chikitsa. With the Rashtriya Bal Swasthya Karyakram (RBSK) the government

has adopted a systemic approach of early identification and link to care, support and treatment of a set of 30 health conditions prevalent in children less than 18 years of age. In order to mitigate the burden of TB, the state government has targeted to provide comprehensive treatment to one lakh outpatients under RNTCP (Revised National TB Control Programme) in 2018-19.

The government provides medical cover up to INR 2.5 lakh for 1044 major medical procedures to all BPL households under the flagship health insurance programme NTR Vaidya Seva. In addition, the non-BPL households are covered under Aarogya Raksha health insurance scheme. The department has targeted to increase the coverage of NTR Vaidya Seva to be 1.5 crore families and Arogya Raksha from 53,382 to 60,000 families in 2018-19. 1.97 lakh patients availed treatment under NTR Vaidya Seva in 2017-18. Both the programmes have contributed majorly in bringing down out of pocket expenditure on health for households.



Challenges Ahead

Though the rate of institutional deliveries has increased to almost 100 percent and more than 90% pregnant women completed four ANC check-ups, the number of infant and maternal deaths have not reduced substantially. Only 36% of women received their first PNC check-up within 48 hours of delivery and only 29% of the children received a health check-up within 2 days of birth.

The share of non-communicable diseases (NCDs) in the total disease burden for the state has increased from 40% in 2000 to 60% in 2016; therefore tackling NCDs is one of the top priorities for the state. Deaths due to cardiovascular diseases are the highest among NCDs.

Only 61% of the state public health facilities meet minimum service requirements. Though this figure is better than the national average, it not only affects the quality of care but also reduces the utilization of public health services.

The national health policy 2017, exhorts all states to increase state sector health spending to >8% of their budget by 2020. The state currently spends less than 4.5% of total budget on health and family welfare, and it has remained unchanged for the last two years. This leaves little fiscal space for health department to either enhance coverage of existing programmes or anchor any new initiative to tackle an emerging health concern.

Key input indicators and targets

Indicator	2016-17	2017-18	2018-19 Target
Infants (0-1 year) received full immunization (%)	92	100	100
Children (1-5 years) received full immunization (%)	97	93	100
Pregnant women registered within first trimester to total ANC registration (%)	80	78	
Newborns having weight less than 2.5 kg to newborns weighed at birth (%)	6.5	6.7	
Institutional deliveries (%)	98	99	100
Number of persons availed free diagnostic tests (lakhs)	48	58	
Number of mothers utilized transport service under 'Thalli-bidda' scheme (lakhs)	2.3	2.5	
Number of persons treated through mobile medical units under Chandranna Chikitasalu (lakhs)	38	65	
Newborns breast fed within 1 hour of birth to total live birth (%)	94	95	
Number of persons availed free X-Ray test service (lakhs)	4.2	4.8	
Number of persons availed free CT-scan service (thousands)	26	57	



Gross enrolment ratios at primary, upper primary and secondary have shown improvement in the last three years. The gender parity ratios at elementary and secondary level are close to 1. Bolder efforts are required to achieve basic literacy and numeracy among adult population. Provision of basic furniture in schools remain a challenge.

A strong basic education system helps build the foundation for human development and producing sustained economic growth. The scope of goal 4 extends beyond access to education to parity, quality, infrastructure, and lifelong learning.

The state has been successful in providing a primary school within 1 km of 99% of habitations, upper primary school within 3 km of 99% habitations and secondary school within 5 km of

92% habitations. Gross Enrolment Ratio (GER) in 2017-18 was 86% in primary, 84% in upper primary, and 79% in secondary education. The state has achieved gender parity in enrolment in upper primary and secondary levels whereas at primary level, gender parity index stands at 0.95.

Strategies Adopted

The government is moving with saturation approach for primary education enrolment, infrastructure and learning

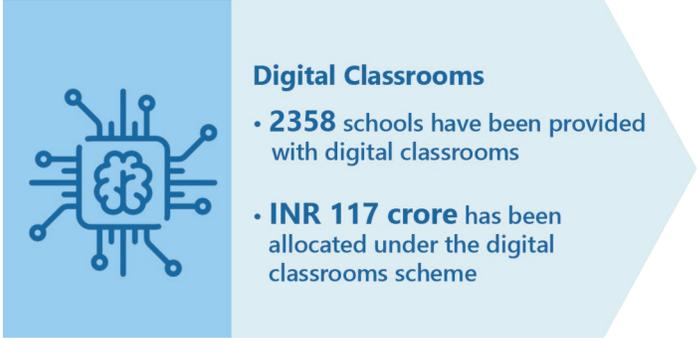
Key outcome indicators and targets								
Indicator	Latest status		Target					
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
GER - Primary	95	86	95	100	102	103	105	105
GER - Upper primary	91	84	92	100	100	100	100	100
GER - Secondary	80	79	90	95	97	98	100	100
GER - Higher secondary	56	60	73	80	83	87	90	100
GER - Higher education	25.8	30.8	33	35	36	38	40	50
Literacy rate of 15-49 years old- men (%)	86	74	91	100	100	100	100	100
Literacy rate of 15-49 years old- women (%)	68	57	86	100	100	100	100	100
Average NAS score (EVS, language, mathematics) in class III (out of 100)	66	75						
Average NAS score (EVS, language, mathematics) in class V (out of 100)	56	65						
Average NAS score (language, mathematics, social science, science) in class VIII (out of 100)	47	51						

outcome as a foundation for lifelong learning. Various steps like providing MIS for schools, Aadhaar seeded student enrolment data, biometric attendance, KPIs on performance of students, teachers and school infrastructure to upgrade school education, ensuring proper teacher-pupil ratio are producing encouraging results.

The state has made laudable progress in providing adequate infrastructure in the schools. As per U-DISE 2017-18 reports, 99.8% schools have a boys' toilet, 99.7% schools have a girls' toilet, 95% schools have drinking water facility, 94% schools are connected with all-weather roads, 93% schools have electricity, 63% schools have boundary walls and 31% schools have computers. Out of 172 schools selected by the central government for Swacha Vidyalaya Puraskar, 21 are from Andhra Pradesh.

Digital classrooms are an innovative aid to learning. The state has provided digital classrooms in 2358 schools and aims to extend the facility to 3680 schools by 2019. Virtual classrooms and internet connectivity are being provided to 4000 schools. The government has allocated Rs. 117 crore under Digital Classrooms Scheme to cover schools and colleges.

Quality of education is generally understood and measured in terms of learning outcomes. Learning outcomes have been measured in past by ASER (Annual Status of Education Report)



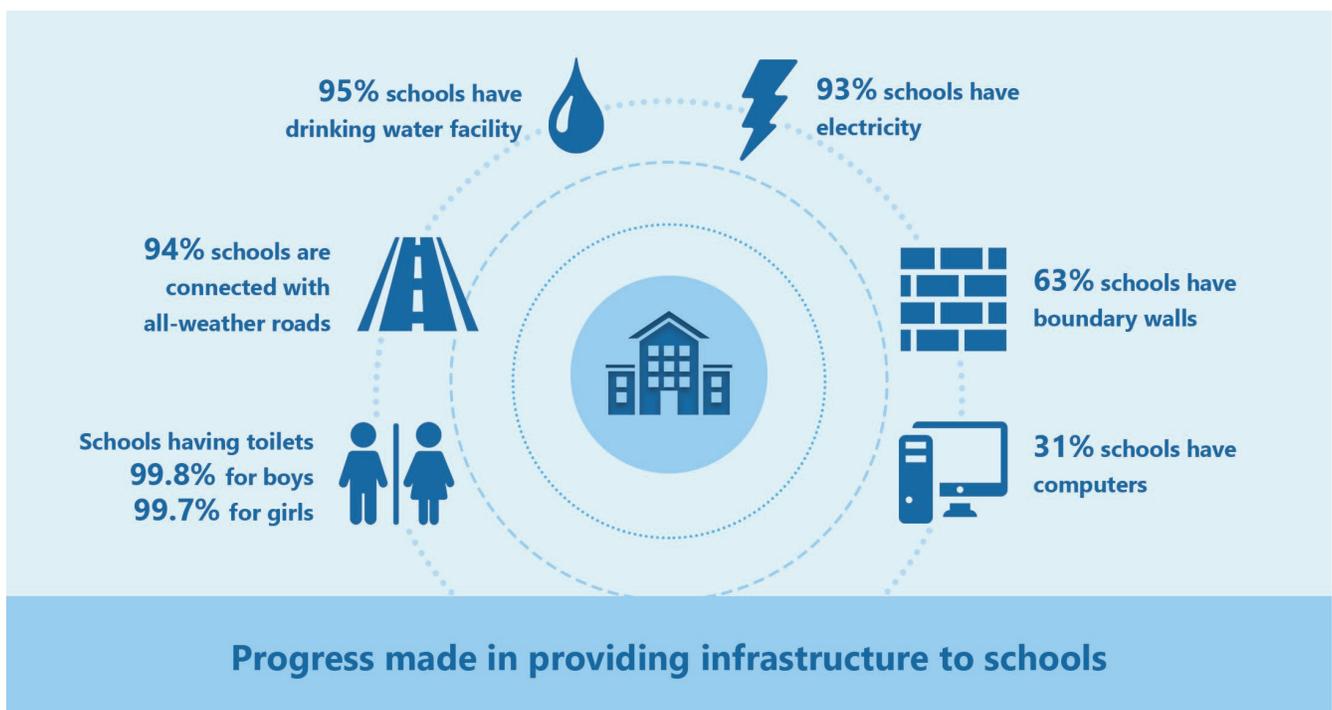
Digital Classrooms

- 2358 schools have been provided with digital classrooms
- INR 117 crore has been allocated under the digital classrooms scheme

and NAS (National Achievement Survey) and Andhra Pradesh has historically performed poorly on these surveys. However, recently conducted NAS 2017 for Class III, V and VIII has shown considerable improvement with the state performing better than national average in all subjects in all three classes.

There has been an increase of 18.7% in fund allocation for general education, from INR 20,385 crore in 2017-18 to INR 24,186 crore in 2018-19. Out of this, INR 100 crore has been allocated for maintaining hygienic toilets in school and INR 23 crore to provide with sanitary napkins to girls of class VIII to X to improve menstrual hygiene.

The state has taken provisions to inculcate independence among girl students. 3.8 lakh bicycles were provided to girl students of Class IX under the Badikosta scheme in 2017-18. Encouraged by the affirmative response, the government has decided to extend the scheme to class VIII girls.



6 Centres of Excellence and 34 Technical Skill Development Institutions have been operationalized in 2017 in partnership with the German major Siemens with a capacity to train 1 lakh students in industry relevant courses. The government has scaled up the skill development programmes so that it reaches out to 9 lakh beneficiaries in 2018-19. It has also been decided to set up 1000 skill development centres in identified social welfare and tribal welfare schools, degree and engineering colleges across the state to provide training in new technologies to make them employable and job-ready.

In higher education, 8 out of 11 universities accredited by NAAC have a rating of A or above. In NIRF Ranking 2018, 6 universities from the state have been ranked in top 100, of which Andhra University has secured the 22nd rank. The government is targeting to improve the GER in higher education and achieve 100% NAAC accreditation of universities. Towards this end, Private University Act has been enacted to attract world-class institutions.

Challenges Ahead

Andhra Pradesh falls short on literacy rate which stands at 67.4% in comparison to the national average of 74%. In order to achieve universal literacy by 2019, the state will implement initiatives in campaign mode. 14 lakhs persons are targeted to be made literate in 2018-19.

The enrolment rate for Higher education is only 30.9% and the state ranks 26th in the country on gender parity in higher education, which stands at 0.78.

The present quality of infrastructure at polytechnics colleges and ITIs demands attention. As of now, no government polytechnic college is NBA (National Board of Accreditation) accredited. The placement outcomes for major skilling programmes has remained low - less than 30%. Increased industrial collaborations with state training institutes could help in re-assessing the curriculum to meet market demands and improve training results.

Key input indicators and targets

Indicator	2016-17	2017-18	2018-19 Target
Elementary schools with computer (%)	31	NA	
Elementary schools with playground (%)	56	NA	
Pupil-Teacher ratio at elementary education level	22	23	
Pupil-Teacher ratio at secondary education level	27	26	
Number of schools with digital classroom	1212	2358	3680
Number of class 9 girls provided bicycles under Badikosta scheme (lakhs)	1.82	3.8	3.6
Number of out of school children enrolled in school (thousands)	38	100	
Number of persons made literate (lakhs)	5	6	14
Number of children covered under mid-day meal programme (lakhs)	37	35	38
Number of unemployed youth trained (thousands)	56	107	225
Number of Scholarship provided to ST, SC, Minorities, BC, EBC, OBC and Kapus students (lakhs)	32	33	26



In terms of economic participation in the economy - female labour force participation rate at 46.6%, proportion of female owned proprietary establishments at 27% and female individual bank account ownership at 31%, Andhra Pradesh is ahead of the country average; while the gender parity index in higher education (0.78) and the indicator for proportion of women with 10 or more years of schooling (34.3%) exhibit areas which require focus.

Goal 5 aims to eliminate discrimination against women and girls everywhere. Ending all forms of discrimination against women and girls is not only a basic human right, but is also crucial to accelerating sustainable development. Empowering women and girls has a multiplier effect, and helps drive up economic growth and development across the board. Sexual violence and exploitation, the unequal division of unpaid care and domestic work, and discrimination in public office, all remain huge barriers that deny women equal access to labor markets. Affording women equal rights to economic resources such as land and property, and universal access to sexual and reproductive health are vital targets to realizing this goal.

70% of the women in the state use modern methods of family planning, compared to 48% in the country. 82% of the women have normal BMI, while the country average stands at 77%. Maternal Mortality Ratio (MMR) of the state at 93 is far better than the country average of 130. In terms of sex ratio of the total population, Andhra Pradesh stands at 1020 females per 1000 males while the India average figure is 991. The state has achieved gender parity in enrolment in upper primary and secondary levels whereas at primary level, gender parity

index stands at 0.95. In terms of decision making in the public sphere, 50% of representatives in Panchayati Raj institutions are women while a strong penchant for participation in the democratic process is exhibited by the 74% women voter turnout for the Lok Sabha elections held in 2014.

Strategies Adopted

The state has launched an innovative initiative in 2018 in which for every 30-35 households, a local woman designated as Sadhikara Mitra, would be in direct contact with the



Who is a Sadhikara Mitra?

- Sadhikara Mitras are women who have been tasked with the responsibility of conveying government schemes and policies to the public
- There is one Sadhikara Mitra for every 35 households acting as liaison between government and beneficiary
- Around 5 lakh Sadhikara Mitras have been appointed and are organized and managed by MEPMA and SERP in urban and rural areas, respectively

Key outcome indicators and targets

Indicator	Latest status		Target					
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
Unmet need for family planning among currently married women ages 15-49 (%)	13	4.6	4	3	2	0	0	0
Female labour participation rate (%)	23.7	46.6						>70
Ratio of female to male labour force participation rate	0.32	0.6						1
Proportion of seats held by women in national parliaments and state legislature (%)	MLAs: 8.8; MPs: 8	MLAs: 11.4; MPs: 8						50
Women of age 15-49 with 10 or more years of schooling (%)	35.7	34.3	49	63	77	90	93	100
Gender Parity Index (GPI) in higher education	0.94	0.78	0.85	0.9	0.95	1	1	1

government and serve as a communication channel to enable the effective transfer of information and services. The mitras are also given the responsibility of educating pregnant and lactating women of any precautions that need to be adopted. Around 5 lakh mitras have been appointed; 3.5 lakh in rural areas and 1.14 lakh in urban areas.

The Sabala scheme has been successfully implemented through ICDS and is aimed at out-of-school girls within the age group of 11-18 years. It provides training to girls in life management, nutrition, education, personal hygiene, and skill development. Pubescent girls are also educated regarding bodily changes, gynaecology, and other related issues. Until 2017-18, this scheme had been implemented in four districts; since this year, it has been extended to six more districts. INR 60 crore has been allocated for the same.

In order to prevent inhibition of adolescent girls from attending school or participating in sports and extracurricular activities, the state has taken the initiative to provide sanitary napkins to adolescent girls in secondary schools and colleges.

Anna Amrutha Hastam, which supports pregnant and lactating mothers through spot feeding of one full meal and administration of iron and folic acid tablets to reduce the incidence of anaemia, has been expanded to 257 ICDS projects in the state from April 2018, from 107 in 2017-18. Nearly 3 lakh women were beneficiaries in this programme, last year.

Supporting entrepreneurial activities and livelihood promotion of women is a key strategy of the state. Bank linkages, capital infusion, affordable credit, and skill training are the major instruments used. In that capacity, the state has taken the decision to form and provide revolving fund to 4,000 SHGs in order to empower the already existent strong network of these particular groups in a bid to promote livelihood. Additionally, INR 10,000 has been extended to each of the 86 lakh SHG members to support their entrepreneurial activities, and INR 110 crore has been allocated to DWACRA women as interest-free loans.

The state has launched an initiative of distributing LPG package which consists of 5 kg LPG cylinder connection, ISI standard stove, regulator, pass book, and hose pipe, which is worth INR 2480, provided free of cost to women from BPL (Below Poverty Line) households. For landless SC women, the government has revived the defunct land purchase scheme by substantially enhancing the unit cost to up to INR 15 lakh per acre during 2017-18.

To further strengthen the initiatives for gender equality, budgetary allocation for the Department for Women,

Anna Amrutha Hastam



- Administering iron and folic tablets to lactating and pregnant women to reduce instances of anaemia
- Nearly 3 lakh women covered last year
- Programme has been extended to cover 257 ICDS projects in the state



From 2017-18 to 2018-19

Budget allocation for the Department for Women, Children, Disabled, and Senior Citizens has been increased by **70%**

Children, Disabled, and Senior Citizens has been increased by 70% from INR 1773 crore in 2017-18 to INR 3008 in 2018-19.

Challenges Ahead

The contribution of women to economic activity has a large scope for improvement, as the women labour force participation rate stands at 46.6% as on 2017. In the individual account ownership category in Scheduled Commercial Banks- 31% of accounts are held by women in the state while the country figure for the same is 29.2%. In terms of ownership of proprietary establishments, only 27% of them are held by women. The state aims to take concrete measures to increase

participation of women in the economy in a bid to sustain the double digit economic growth as well as to advance social progress.

The political representation of women in state legislature and national legislature demands improvement. Only 11.4% of the legislative assembly seats are occupied by women; only two out of 25 members of parliament representing the constituencies of the state are women.

63% of the women in the state are literate, compared to 79% of the men. An initiative in campaign mode is planned for improving literacy figures, especially for the working age population.

33% of the women aged 20-24 years in the state are married before they turn 18, while for India, the figure is lesser at 27%. Awareness generation campaigns will be conducted in this regard.



63% of the women in the state are literate, compared to 79% of the men.



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11.4% of the legislative assembly seats are occupied by women

Snapshot of challenges regarding gender



Andhra Pradesh has been declared as an ODF state on 8th June 2018. 73% of the population have access to improved water sources. The state is aiming to universalize households’ access to stipulated quantity of safe water by 2019.

Water scarcity affects more than 40 percent of people around the world, an alarming figure that is projected to increase with the rise of global temperatures as a result of climate change. Although 2.1 billion people globally have gained access to improved water and sanitation since 1990, dwindling supplies of safe drinking water is a major problem impacting every continent.

In 2011, 41 countries experienced water stress – 10 of which are close to depleting their supply of renewable freshwater and must now rely on alternative sources. Increasing drought and desertification is already worsening these trends. By 2050, it is projected that at least one in four people throughout the world will be affected by recurring water shortages.

Goal 6 aims at ensuring universal access to safe and affordable drinking water as well as clean and hygienic sanitary facilities to all. This goal is essential for a healthy and dignified life.

In 2017-18, 73% of the population had access to improved water sources and 97% of all households have individual toilet facility. Continuing on this pathway, the state aims at endowing 100% of the population the access to safe drinking water as well as building toilets in all households by 2019.

Strategies Adopted

The Water Grid which ensures adequate and safe water supply in both rural and urban areas is one of the five Grids of the state. In its endeavour to provide water for drinking, cooking, and other basic needs to all, the government has set the target of providing 55 lpcd water in the rural areas and 135 lpcd in the urban areas. Presently, around 50% rural habitations and 12 out of the 110 Urban Local Bodies are covered by the prescribed quantity. 921 habitations are targeted to move from partially covered to fully covered status in 2018-19. The state has set the ambitious target of increasing the minimum provision in rural areas to 70 lpcd by 2022.

Key outcome indicators and targets								
Indicator	Latest status		Target					
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
Population with access to improved drinking water source (%)	90	73	80	87	94	100	100	100
Households with individual toilet facility (%)	81	97	100	100	100	100	100	100

Providing people with access is not the end as water quality also plays a crucial role in furthering a healthy and thriving population. Under the National Rural Drinking Water Programme and NTR Sujala Sravanthi scheme the state aims to bring down the fluoride and salinity levels in 225 quality-affected habitations in 2018-19.

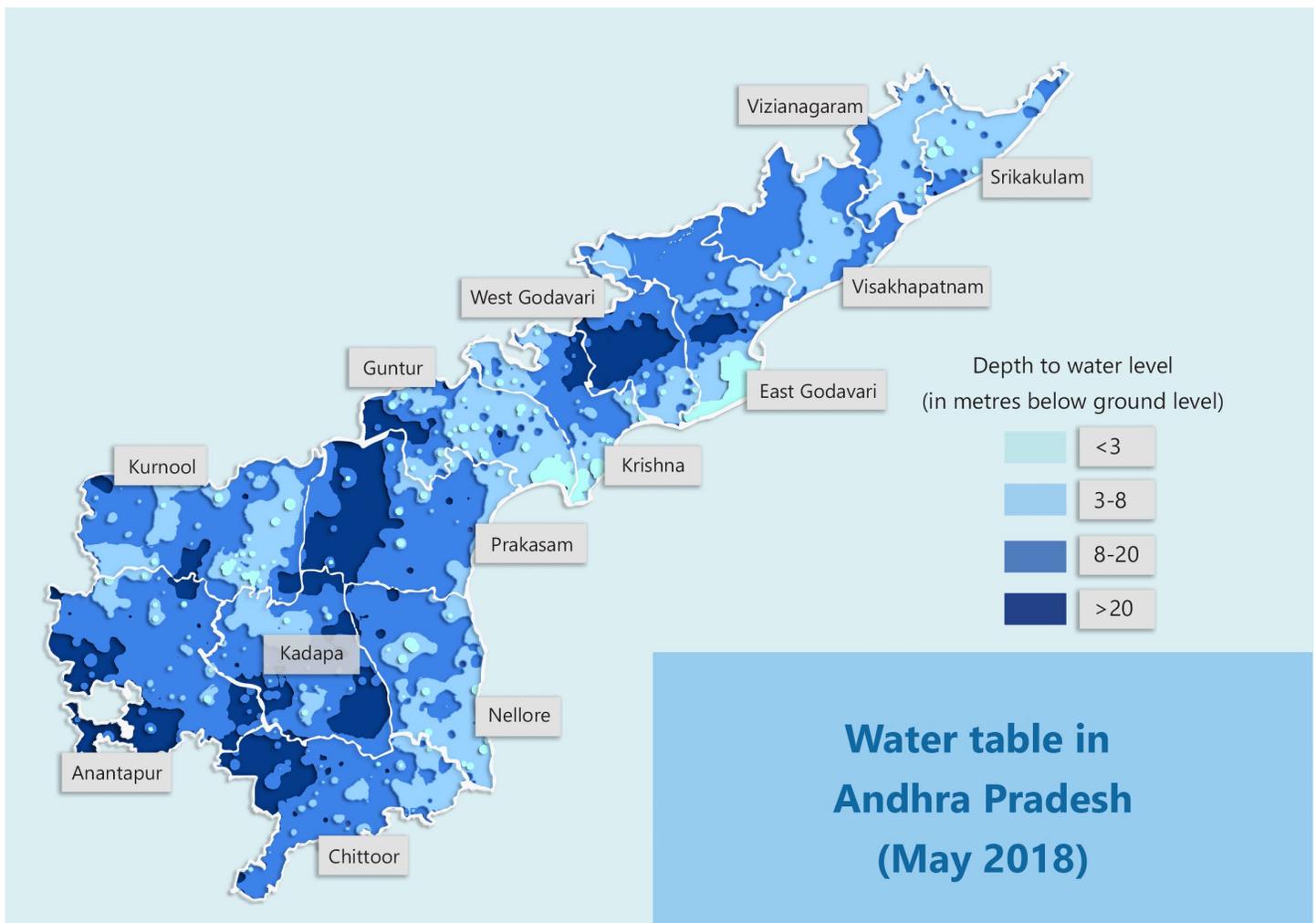
For conservation of water, 2,266 Mini Percolation Tanks (MPTs), 2.81 lakh Staggered Contour Trenches (SCTs) have been dug, 28632 number of check dams across streams have been installed, 785 Rock Fill Dams (RFDs) have been taken up, 293 km of Water Absorption Trenches (WAT) along the Block Boundaries has been initiated, 187.43 km of Peripheral Trenches have been undertaken and 387 cascades have been developed by the government in 2017-18.

Sanitation acts as an essential aspect of community well-being as it protects health, extends life-span, and maintain a clean environment. Andhra Pradesh, housing many cities which fall under the category of the cleanest in the nation, lays huge

stress on sanitation and cleanliness. Having been declared ODF the focus of the state is currently on achieving ODF+ status for all 110 ULBs.

Addressing the issue of health and hygiene, the state has made efforts by introducing new schemes which aims at distributing sanitary napkins to girls and women for which INR 23 crore has been allotted for 2018-19. This also targets the absenteeism which prevails among adolescent girls during the menstrual periods and tries to eliminate inhibitions which restrict them. Apart from the this, the government has also allocated INR 100 crore to maintain toilets in all schools.

On the solid waste management front, an estimated 3382 Gram Panchayats had solid waste management system in place by the year 2017-18. The State shall further include 4200 GPs and 110 ULBs under having fully functioning solid waste management system in 2018-19. An exemplary underground drainage system spanning over 2366 Km and covering 1340 GPs having a population of more than 5000 is planned.



Challenges Ahead

Ensuring the provision to a minimum of 55 lpcd of water to all habitations and 135 lpcd to all ULBs is a top priority item for the state.

Household access to toilets is almost 100%. Now the state needs to work on bringing behavioural change among citizens and persuading them to start using the toilet facilities. In the urban areas, 77 ULBs are being targeted for declaration of ODF+ out of the 110 declared ODF under non-AMRUT ULBs in 2018-19.

The proportion of sewage waste treated remains low at 26%. Augmentation in total capacity by setting up new plants and

maintaining higher capacity utilization ratio would help in achieving target of 100% sewage treatment by 2018.

Recycling and reusing of waste water stands at only 10%. There is a need to maximize recycling through regulation and enforcement of standards for reuse and disposal of wastes, and developing research & development for low cost, environmentally sound, energy saving techniques of treatment, and disposal (especially in coastal regions) with full cost recovery from wastewater.

Key input indicators and targets

Indicator	2016-17	2017-18	2018-19 Target
Number of IHHLs constructed (lakhs)	8	26	5
GPs having Solid Waste Management System (no.)	732	2543	4200
Fully covered habitations (>55 LPCD) (%)	50	50	55
Habitations not connected with drinking water facility (%)	0.7	0.7	
Habitations affected by drinking water quality (%)	0.9	0.7	
Ground water level range greater than 8 meters (%)	48	44	
Sewerage treated in urban areas (%)	23.6	26.4	100



Andhra Pradesh has achieved 100% household electrification. The renewable energy capacity of the state stands at 6.69 GW. Per capita power consumption of the state rose to 1,101 kWh in 2017-18, higher than the national average of 1,075 kWh; while T&D losses were brought down to 9.72% in the same period.

Goal 7 aims to eliminate inefficient energy sources and instead promote universal access to safe cooking fuel, and electricity generated from non-polluting and renewable sources which are affordable. The achievement of this goal has multiple positive outcomes on business opportunities, education, transport, health, and the future of our planet.

Andhra Pradesh has shown exemplary performance in ensuring access to electricity. From a power deficit state with a shortage of 22.5 million units in 2014, Andhra Pradesh is presently 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. T&D losses in the state stand at 9.72%, which is better than the national average of

23%. Registering an unparalleled growth in ensuring access to non-solid cooking fuel (LPG), 100% of the eligible population in the state has LPG connection.

Strategies Adopted

Having saturated household-level power connections, the state now focuses on affordability of power. The government provides 7 hours of free electricity to agriculture along with electrification of borewells for SC and ST communities. Under Jagjeevan Jyothi Scheme, INR 159 crore has been expended for 10.53 lakh SC households and INR 39 crores for 3.98 lakh ST households, for free electricity up to 75 units. Two additional LED bulbs are supplied free to 9.18 lakh SC families with outlay of INR 18.28 crores.

Key outcome indicators and targets

Indicators	Latest status		Target					
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
Population with access to electricity (%)	88	100	100	100	100	100	100	100
T&D losses (%)	23	9.72	9.3	9	7	6	5	<5
Population with access to non-solid fuels for cooking (LPG) (%)	80	100	100	100	100	100	100	100
Renewable energy installed capacity (GW)	69.022	6.69	7.25	8.1	10	12	14.3	29
Per capita power consumption (KWh)	1075	1101		1750			2300	3600
Minutes of outages per month per consumer (minutes per consumer)		575						

The state has added 464 MW to its installed capacity in 2017-18 taking it to 18,490 MW. Power outage, measured in minutes of outages per month per customer stand at 575 and is targeted to be reduced to 200 in 2018-19.

The government has distributed	
	2.17 crore LED Bulbs
	2.63 lakh Energy efficient fans
	72,639 energy efficient tube lights

The government has replaced	
	6.18 lakh streetlights in ULBs with energy efficient lights
	12,207 non-ISI pump sets with energy efficient ISI pump sets

Andhra Pradesh lays huge emphasis on renewable energy capacity addition. The non-conventional energy capacity of the state has touched 6500 MW which includes 3952 MW of wind and 2148 MW of solar energy. The state has met nearly 20% of its power requirement through renewable sources in 2017-18, compared to 3% in 2013-14.

The state has taken up 4 ultra-mega solar parks at Kurnool, Anantapur, and Kadapa with a capacity of 4,000 MW. It is also promoting solar pump sets for new agricultural connections; 22,955 pump sets have already been installed. The government has initiated a 160 MW Wind Solar Hybrid project with storage, which is postulated to be the world's largest wind solar hybrid project with energy storage. Due to these endearing efforts, the state has been ranked first in the country in energy efficient activities by the World Bank.

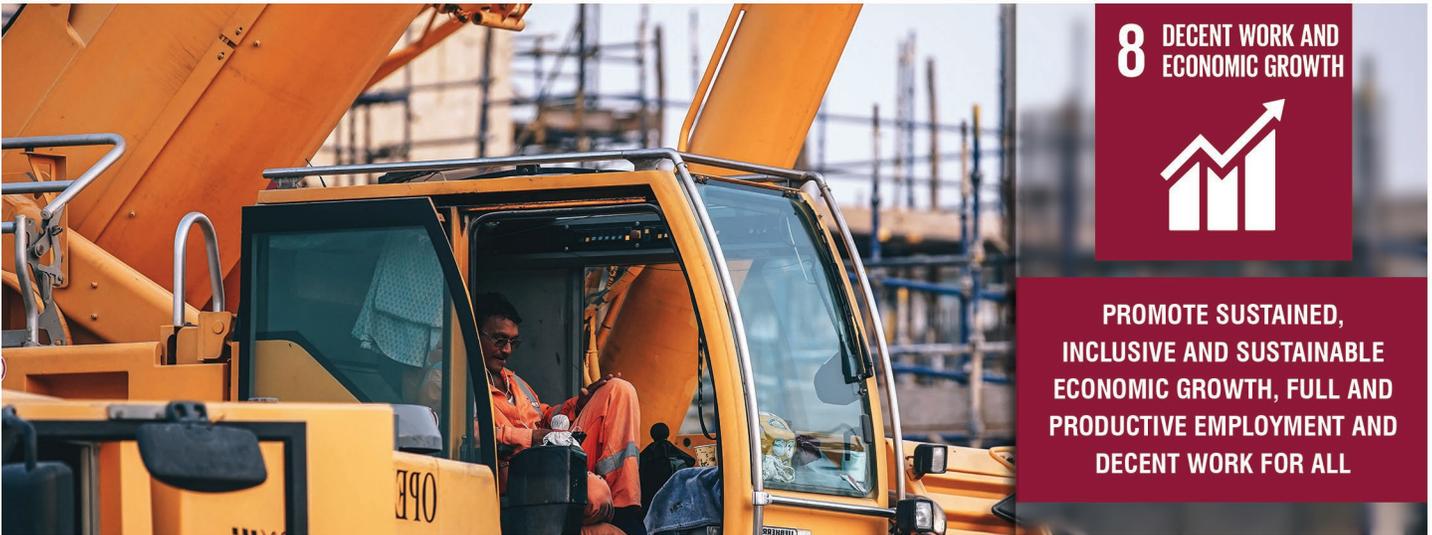
Challenges Ahead

Going forward, the main focus areas of the state are sources of renewable energy, mainly solar and wind. The government is promoting the above to essentially harness the vast potential of green energy and reduce its carbon footprint. As a testament, the state has approved the plan of creating the world's largest Solar Park of 1,000 MW capacity in Kurnool.

Per capita electricity consumption in the state has increased from 987 units in 2015-16 to 1101 units in 2016-17. While this is a positive indicator from the angle of economic development, the state realises the need to ensure that the increase in consumption is served by renewable sources.

Key input indicators and targets

Indicator	2016-17	2017-18	2018-19 Target
Total electricity installed capacity (Mega Watts)	16,471	18,490	18,866
Renewable energy capacity addition (Mega Watts)		500	464



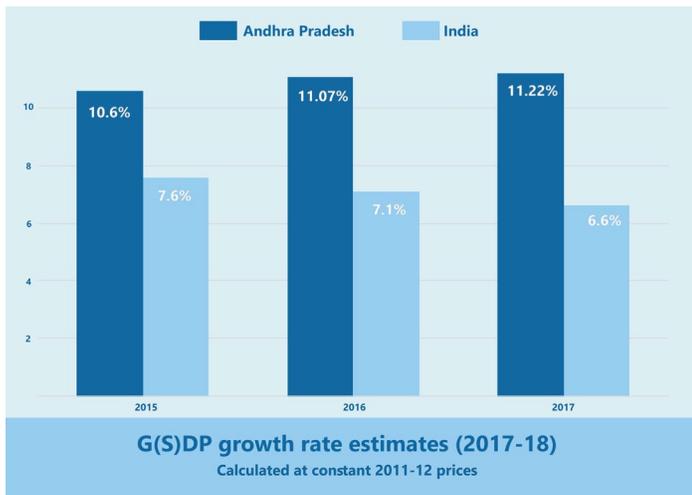
Since 2015-16 the state economy has been registering double digit growth. In 2017-18 the state GDP grew at 11.22% as compared to the national GDP growth rate of 6.5% for the same period. Per capita income of the state, rose from 1.24 lakhs in 2016-17 to 1.42 lakhs in 2017-18.

Economic growth is a key driver of sustainable development. This goal focuses on growth which is sustainable and inclusive in nature and seeks to address a host of concerns pertaining to productivity, full employment, unemployment, decent work and labour rights, formalization of sectors, sustainable tourism, and domestic financial institutions. The targets under the goal embody the understanding that for future generations

to reap the benefits of current economic growth, it has to be environmentally sustainable and must not involve over exploitation of resources.

Sustainable and inclusive double-digit growth is a key goal of the state’s Vision 2029 framework. Andhra Pradesh’s economy grew at a rate of 11.22% during 2017-18, with the agriculture

Key outcome indicators and targets								
Indicators	Latest status				Target			
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
GSDP growth (%)	6.5	11.22	15	15	15	15	15	15
Contribution of agriculture and allied sectors to GVA in current prices (%)	17.9	34.4						22-25
Contribution of industry sector to GVA in current prices (%)	29.3	22.1						25-28
Contribution of service sector to GVA in current prices (%)	52.8	43.5						50-52
Per capita income at current prices (INR lakh)	1.13	1.42	1.60	1.78	2.15	2.55	2.95	9.6
Households in which any usual member of the household has a bank account/post office account (%)	89.4	94.3	100	100	100	100	100	100
Households with at least one usual member covered by any health scheme or health insurance (%)	28.7	74.6	85	90	95	100	100	100
Unemployment rate (% of labour force)	Urban: 3.4 Rural: 1.7	Urban: 4.3 Rural: 1.2	U: 3.5 R: 1	U: 2.5 R: 0.8	U: 1.5 R: 0.6	0.5	0.5	0.5



and allied sector growing at 17.76% followed by the service sector at 9.11%, and the industries sector at 8.49%. The growth rate has been steadily improving since 2012-13.

Strategies Adopted

Considering the economic position of agriculture in terms of sectoral share, growth rate and employment – enhancing its market linkage is a top priority for the state. This is being driven through modernising Rythu Bazars and market yards with the aim of not only improving farmer experience but also customer experience. In 2018-19, 14 more Rythu Bazars are targeted to be made into Model Rythu Bazars thereby increasing the existing tally of 11 out of the existing 96. Presently, 22 Agriculture Market Committees (AMCs) have been established with e-NAM and further 13 are targeted to be implemented with the same in 2018-19.

The fisheries sector grew by 30.84% in 2017-18; the sector has seen an impressive average growth rate of 32.14% for the last three years. The share of this sector, to the GVA of the state, has expanded significantly since 2014-15 when it was 4.33%, to 7.40% in 2017-18. To realise the full potential of this sector, apart from the targeted increase in additional area under fish and shrimp production, the number of cold chain facilities are to be increased from 65 to 83 and capacity expansion from 29,519 tonnes to 34,000 tonnes is expected in 2017-18.

Industrial development is a major focus area for the government. Identification of priority areas has led to sector specific policies in aerospace and defence manufacturing, automobile and auto components manufacturing, biotechnology, electronics manufacturing, food processing,

MSMEs and textiles and apparels –with key targets up to 2020. The state has stood first in the country among all states in 2016 and 2017 in implementing the Business Reforms Action Plan, recommended by the Department of Industrial Policy and Promotion, Government of India. This is of course in line with active policy making in terms of engaging measures such as the single desk policy and the Andhra Pradesh Public Service Delivery Guarantee Act among other initiatives.

The state has conducted 22 job drives and melas which has facilitated employment of 37,000 youths. 2400 persons have been trained in travel, tourism, and hospitality sectors. 51% of the tourism MoUs signed in first two Partnership Summits have been grounded; the 3rd summit got a tremendous response with 49 projects worth INR 4400 crores getting initiated.

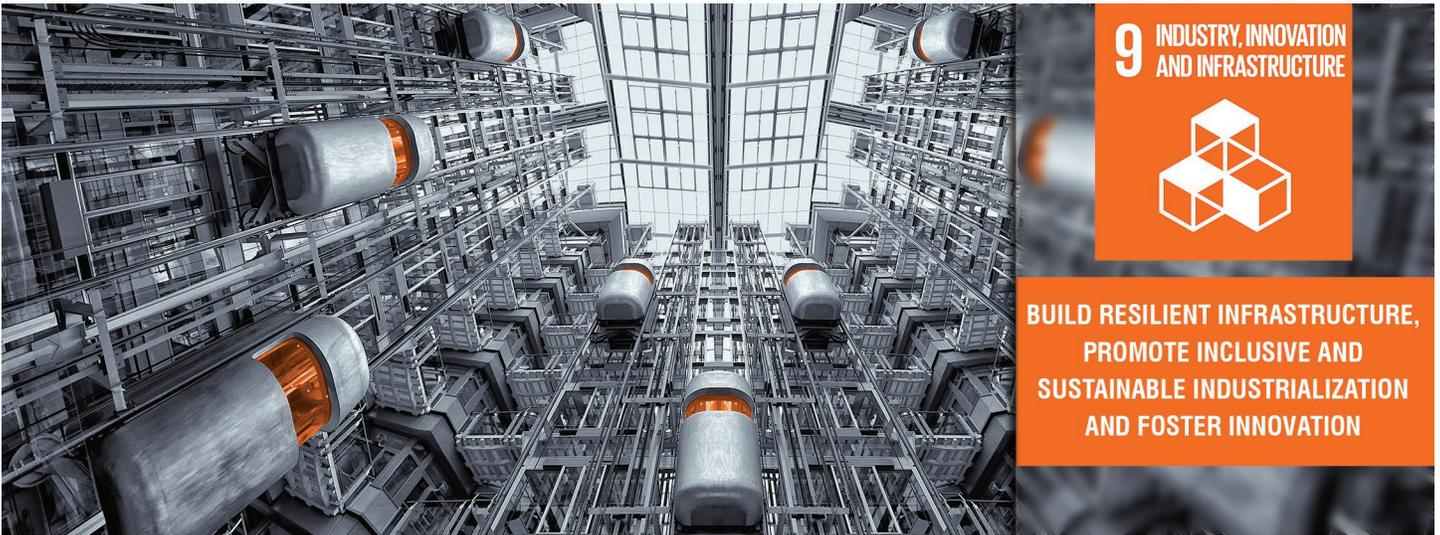
An environment of decent work would necessitate the existence of safety nets especially for those in the unorganised sector. Chandranna Bima, a flagship scheme, provides coverage for those employed in the unorganized sector against accidental death or disability and also against natural death. Over 29,000 families availed this scheme in 2017-18.

The state has identified eco-tourism as a key sector for jobs and revenue generation. Locations for nine theme-based premium resorts have been identified for phase 1.

Challenges Ahead

Economic growth which is double digit and sustainable in nature would require increase in productivity through diversification, technological upgrade, and innovation and shall require a simultaneous focus on labour-intensive sectors as well as high-value added sectors. The fisheries sector, which has been the highlight of Andhra Pradesh's growth story, will require a focus of sustainable management of resources which does not test the carrying capacity of the present units in terms of production and shall require a focus in terms of processing the products earmarked for exports which can in turn help the sector plug into higher points in the global value chain.

Women workforce participation in the state stands at 46.6%, which is far from impressive. For a productive economy, it is crucial to realise the full potential of its women stakeholders.



The industries sector grew at 8.49% in 2017-18 compared to 7.4% in the previous year. Manufacturing grew at 8.36% in 2017-18, while mining and quarrying and construction grew at 8.9% and 8.34% respectively in the same period. However realization of MOUs has been at a slow pace. INR 4.8 lakh crore should go into production between June 2018 and March 2020, at INR 21,000 crore per month to achieve vision growth targets.

This goal focuses on promoting inclusive and sustainable industrialisation, and building resilient infrastructure while stressing the importance of an ecosystem which can foster innovation. These drivers can create jobs and put in place facilities which can spur more efficient functioning of business and society.

Industries sector of the state has grown by 8.49% in 2017-18, compared to 7.4% in 2016-17. While mining and quarries, and construction sub-sectors have seen improvement in growth

rate in this period, electricity, gas, and water supply sub-sector has posted a fall in growth rate, from 15.79% to 9.07%. The growth rate in manufacturing too has fallen, although by a mere 0.2% year-on-year.

Rural infrastructure has achieved a few commendable milestones in the recent past, including 100% electrification, saturation of LPG connections, and connecting 80% of the habitations using all-weather roads.

Key outcome indicators and targets

Indicators	Latest status		Target					
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
GVA growth rate of Manufacturing (%)	7.9	8.36	9.5	10	12	12	12	12
Contribution of manufacturing to GVA in current prices (%)	16.8	9.65	11	12	13	15	16	17
Per capita power consumption (KWh)	1075	1101		1750			2300	3600
Proportion of households which possess mobile phone (%)	90.4	92.5	100	100	100	100	100	100
No. of universities in Times Higher Education top 1000 rankings	30	2	3	4	5	6	7	10

Strategies Adopted

Identification of two important economic corridors –the Vishakhapatnam-Chennai Industrial Corridor (VCIC) and the Chennai-Bengaluru Industrial Corridor (CBIC) have been key in terms of the state's approach towards industrial development. Development along these two corridors shall harness the investments in road, airports, ports and inland waterways related infrastructure and is envisaged to spatially distribute the economic activities across the districts. Seven nodes on the VCIC & CBIC are expected to boost economic development in and around 29 of the poorest mandals of the state. Other developments include the Coastal Employment Zone (CEZ), which is being considered near Krishnapatnam and the establishment of Information Technology Investment Regions (ITIRS) in Vishakhapatnam and Chittoor which would include IT/ITES & electronics manufacturing units along with integrated townships, Special Economic Zones (SEZs) and industrial parks.

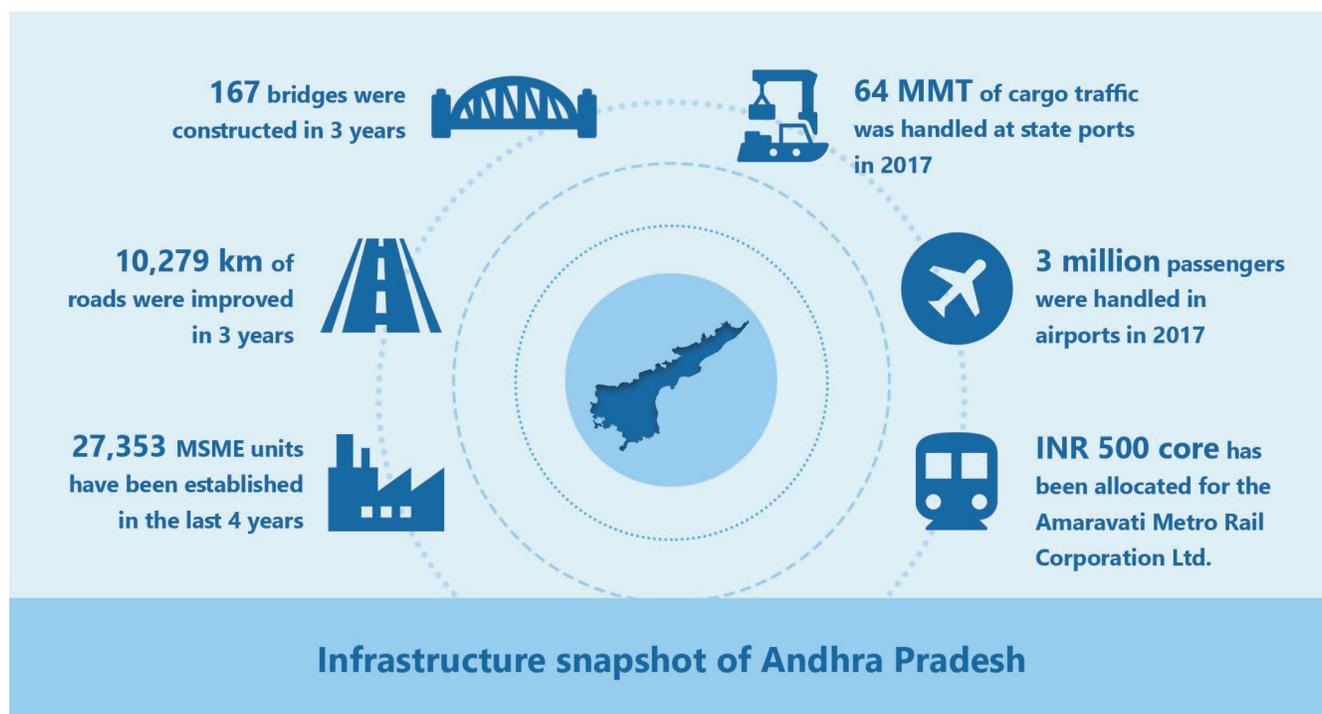
MSMEs with a share of 40% of the total output in manufacturing contributes to 40% of total exports in our country while contributing to 8% of its GDP. MSMEs are an important driver not only in terms of output and value but also in terms of employment. The decision to establish the MSME corporation has laid out the seriousness with which the state is looking at the creation of a favourable ecosystem for MSMEs.

The corporation is tasked at developing MSME clusters, in the revival of sick units, in the facilitation of access to credit and in the provision of support in terms of marketing and branding. Between April 2014 to March 2018, 27353 MSME units have been established, and this sector has employed 3.42 lakh persons. During this time period, INR 12,985 crore has been invested in this sector.

The expected demand for personnel from the aforementioned initiatives are planned to be met by the skill development programmes of the state. The government has scaled up the skill development programmes so that it reaches out to 1 million beneficiaries in 2018-19. The state will set up 1000 skill development centres in identified social welfare and tribal welfare schools, degree and engineering colleges across the state to provide training in new technologies to make them employable.

Further, the government aims to create one lakh jobs in the IT sector by bringing in investments worth USD 2 billion, and to create two lakh jobs in the electronics sector by attracting investments worth USD 5 billion.

In the last three years, 10,279 km of roads were improved and 167 bridges were constructed. 2973 km of roads were widened in 2017-18 alone. State ports have grown at nearly 20% year on year for the period April to December 2017 and



have clocked cargo traffic handling of 64 MMT. The airports in the states have grown at 12% year on year for the same period and have reached handling about 3 million passengers. Vijayawada, Tirupathi, and Vishakhapatnam are the three airports that witnessed highest growth in the country in terms of passenger traffic. New airports at Bhagapuram, Orvakallu, Dagadathi, Nagarjunasagar, Donkonda and expansion works at Vijayawada and Rajahmundry are under progress.

The government has allocated INR 500 crores for Amaravati Metro Rail Corporation Limited. 42.5 km Vishakhapatnam Metro Rail Project is being implemented on an innovative Public-Private-Partnership model. Further, 46 km Light Metro Rail System for Vijayawada city in 3 corridors has a DPR under preparation, work of which is to begin in 2018-19.

Andhra Pradesh aspires to transform into an innovation-driven economy in the near future. Incubation centres have been set up by the state at Vishakhapatnam, Kakinada, Tirupati and Anantapuramu. 13 Atal Tinkering Labs have been set up in various schools across the state. National Institute

of Electronics and IT, and International Institute of Digital Technologies are two of the key institutions in the state leading training, research, and collaborations in the electronics and IT sectors.

NASSCOM, in association with Andhra Pradesh Innovation Society has set up “10,000 Start-up Warehouse” in Visakhapatnam to contribute to create a world-class technology start-up ecosystem in the state.

Challenges Ahead

Out of the investment of INR 6.3 lakh crore which should go into production between June 2014 and March 2020, only INR 1.5 lakh crore has materialised until now. In the coming two years, around INR 4.8 lakh crore should go into production at INR 21,000 crore per month.

The state will also focus on MSME clusters as a major instrument of industrialization. 175 clusters are planned, one in each assembly constituency. Out of these 11 are prioritised for phase 1.

Key input indicators and targets

Indicator	2016-17	2017-18	2018-19 Targets
Commencement of production by new MSMEs (no.) (targets)		4140	4560
Proportion of G1 (gone into production) category investments in the Industries Sector (%)	25.29	5.33	
Proportion of G1 (gone into production) category investments in the Information Technology Sector (%)	29.73	27.27	
Road connectivity - laying of CC roads (kms)	4070	6039	5000
IT companies established (no.)	369	487	



The government has raised the budget allocation for SC welfare plan by 14% and ST welfare plan by 18% from last year. Andhra Pradesh is one of the few states in India to adopt a policy for fighting discrimination against members of the transgender community. The 87 lakh strong SHG force has been a significant contributor to improving access to economic opportunities for women.

Inequality has been recognized as a serious threat to the progress of humankind in the 21st century. 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. In the context of Andhra Pradesh, goal 10 seeks to lessen inequalities among various socio-economic groups in terms of access to services, economic opportunities, and overall quality of life.

Strategies Adopted

SC and ST communities are the historically disadvantaged social groups in the state; their upliftment will drastically bring down inequality. The government allocates resources for SC and ST communities under special component with schemes

for scholarships, basic infrastructure in SC/ST habitations, financial incentives to SC/ST entrepreneurs, skill development programmes for ST youth, among other things. During 2017-18, INR 13,375 crore has been allocated for SC and ST components. This has been increased to INR 15,404 crore for 2018-19. Additionally, another INR 4477 crore has been provisioned towards BC component.

It is planned to scale up the skill development programmes to reach out to 9 lakh beneficiaries in FY 2018-19, a jump from 6 lakh beneficiaries in 2017-18. A sizable proportion of the 1000 skill developments centers will be set up in identified Social Welfare/Tribal Welfare schools, to improve the students' employability and train them in new technologies. This will

Key outcome indicators and targets

Indicators	Latest status		Target					
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
Gini Coefficient of consumption expenditure	0.31	0.29	0.285	0.28	0.275	0.27	0.27	0.26
No. of cases on atrocities against SCs per 1,00,000 SC population	20.3	27.6	20	15	10	8	6	<5
No. of cases on atrocities against STs per 1,00,000 ST population	6.3	15.4	13	11	9	8	6	<5

play a key role in assisting the SC and ST youth in finding gainful employment.

To boost the business prospects of SC/ST, BC, and women entrepreneurs, the industrial policy (2015-20) of the state has outlined a special incentives package for them. The package has provisions with respect to land registration, subsidy for fixed capital investment, reimbursement of tax and quality certification/patent costs, interest subsidy on loans, and others. Further, 2.93 lakh SC, ST, and BC persons are targeted to be benefited through various livelihood activities in 2018-19.

The Andhra Pradesh Rural Inclusive Growth Project (APRIGP) is one of the key initiatives which targets 161 most backward mandals across the state, which have significant SC/ ST population. It aims to build up on the SHG platform to support people engaged in agriculture and allied sectors. The project focusses on farm value chains, rural retail chains, sanitation, and efficient delivery of services. INR 274 crore has been spent under the project until 30th May 2018.

Fully realizing the economic potential and social opportunities of women is another key strategy in reducing inequality. The government is focused on empowering women through Self-Help Groups (SHGs) through its several initiatives. INR 1000 crore interest free bank loans are being arranged through Streenidhi Cooperative Society for SHG women with 9,30,000 beneficiaries in 2018-19 for undertaking livelihood activities. As part of the Start-up Village Entrepreneurship Program, 2398 SHG entrepreneurs have been trained and provided with financial support of INR 9.15 crore.

There has also been a 70% increase in state allocation from INR 1,773 in 2017-18 crore to INR 3,008 in 2018-19 crore for women, children, differently abled, transgender and senior

citizens. Andhra Pradesh is one of the few states in the country to come up with a policy to fight discrimination against transgender community and improve their acceptance in the society. An amount of INR 20 crore is allocated in 2018-19 budget towards this end. The government has also introduced a new pension scheme of INR 1500 per month for transgender individuals.

Enabling the poor households in securing a monthly income of minimum INR 10,000 is an ambitious initiative of the state government. 10.35 lakh rural households have been brought above INR 10,000 monthly income in 2017-18; another 6 lakh households are targeted for 2018-19.

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 1.9 times, 1.4 times, and 1.2 times, respectively, to the respective proportions in the other mandals (where ST population <6%). The proportion of habitations unconnected to road are 2.9 times higher in ST mandals than the other mandals. All the habitations in the state that do not have access to drinking water are in the ST mandals. 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. 3289 crimes were reported against SC and ST persons in the state in 2017-18, against 2332 in 2016-17. The state' Home Department has taken steps to address this and have put down lower targets for crime rates to be achieved in 2018-19, in the Outcome Budget.

Key input indicators and targets

Indicator	2016-17	2017-18	2018-19 Target
Annual allocation under Schedule Caste Sub Plan Component (INR crore)	8724	9847	11228
Annual allocation under Tribal Sub Plan Component (INR crore)	3100	3528	4176
Beneficiaries under AP Rural Inclusive Growth Project (lakhs)	1.7		5.5
Beneficiaries (ST, SC, Minorities, BC and Kapu) received financial incentives under respective Corporations (lakhs)	1.5	2.4	



Providing basic amenities to all households is the top-most priority of the state government. 56% of the households have drinking water connections and 98% of households are covered with door to door solid waste collection facility. All the urban households have toilet facility within their premises. The proportion of sewage waste treated remains low at 26%. At 38% the state has the highest proportion of slum population in the country.

More than half of the world’s population now live in urban areas. The rapid growth of cities in the developing world, coupled with increasing rural to urban migration, has led to a boom in mega-cities. In 1990, there were ten mega-cities in the world with 10 million inhabitants or more. As of 2014, there are 28 mega-cities in the world, home to a total 453 million people. Sustainable development cannot be achieved without significantly transforming the way urban spaces are built and managed.

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.

While rapid urbanization has increased employment and economic growth, it has also brought in enormous challenges such as lack of access to basic amenities, inadequate housing, pollution, and others.

Strategies Adopted

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 in the country and 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. The state government has sanctioned 4.8 lakh economically weaker section houses to be

Key outcome indicators and targets								
Indicators	Latest status			Target				
	India	Andhra Pradesh	2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
Percentage of urban population with access to improved piped water	91	71	78	86	93	100	100	100
Proportion of urban population living in slums (%)	17.4	38.3	28	18	8	0	0	0
Urbanization rate (%)	31.16	30	32	34	35	37	39	43

constructed under the NTR -PMAY Urban Housing -Affordable Housing Program (AHP). Tenders have been awarded for over 4.5 lakh houses and grounded over two lakh houses so far.

The government has successfully been able to augment drinking water supply of >70 lpcd to 102 out of 110 ULBs in the state. 55% of the urban households have water service connections. Efforts are also being made to identify and address issues of water quality through regular chemical and bacteriological analysis, chlorination, fixing of leakages etc.

The government has taken up Andhra Pradesh Urban Water Supply and Septage Management and Improvement Project (APUWSSMIP) with a capital outlay of INR 4189 crore to provide infrastructure facilities in 42 non-Amrut Local Bodies with the assistance of Asian Infrastructure Investment Bank.



A critical Infrastructure Investment Plan with a capital outlay of INR 10,742 crore is being formulated for achieving service level benchmarks in key performance indicators in all 110 ULBs of the state

Further, the government is formulating a critical Infrastructure Investment Plan with a capital outlay of INR 10,742 crore for achieving service level benchmarks in key performance indicators such as water supply, sewerage, roads, solid waste management and parks and green spaces in all the 110 ULBs of the state. INR 300 crore has been allocated for remodelling the existing sewerage system for 2018-19.

The government has awarded 10 waste-to-energy projects under PPP mode to process municipal solid waste with a capacity to handle 5191 tons of waste per day. Almost all urban areas are covered under door to door waste collection and garbage.

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 Srikakulam, Eluru, Ongole, Kurnool, Ananthapur, Nellore,

Vishakhapatnam, Tirupati, Kakinada and Amaravati. INR 800 crore has been allotted for smart cities in 2018-19.

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. 13 Nagarvanams are planned for 2018-19. The government has allotted INR 119 crore in 2018-19 for improvement in existing infrastructural facilities in nagar panchayats and grade III municipalities.

The government has allocated INR 500 crores for Amaravati Metro Rail Corporation Limited. 42.5 km Vishakhapatnam Metro Rail Project is being implemented on an innovative Public-Private-Partnership model. Further, 46 km Light Metro Rail System for Vijayawada city in 3 corridors has a DPR under preparation, work of which is to begin in 2018-19.

Challenges Ahead

Only 12 out of the 110 ULBs have provisioned the minimum mandatory requirement of 135 lpcd water. This will be a key focus area for the government for 2018-19.

Having achieved ODF status for all 100 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 all 110 ULBs. Tenders in 32 AMRUT cities have already been floated.

There is a deficit of 1253 MLD capacity in the existing sewerage treatment plants. 581 MLD works are in progress and the remaining are proposed to be completed in the Critical



There is a deficit of 1253 MLD in the existing sewage treatment plants

581 MLD works are in progress

The remaining are to be completed in the Critical Infrastructure Investment Plan which

Infrastructure Investment plan (CIIP) projects announced by the department. Expansion of sewerage and drain network has been taken up in a big way through CIIP for which it has recently been awarded INR 12,000 crore. 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.

Provision of subsidized and nutritious food through Anna canteens have been announced in 203 locations and the delivery of the same will be expedited in the ensuing year.

In addition to above, the state will also need to pay attention to areas concerning pedestrianization, recycling and re-use, rain water harvesting, promotion of local culture and tourism, civic participation in urban governance, ULBs financial independence etc. to make cities more liveable and resilient.

Key input indicators and targets

Indicator	2016-17	2017-18	2018-19 Target
Houses constructed for economically weaker sections (no.)	3,204	33,451	
Sewerage treated (%)	24	26	100
Households covered with door to door solid waste collection facility (%)	94	98	100
Households covered with drinking water service connections (%)	46	56	77
Pucca roads to total road identified (%)	77	78	88
Solid waste composted to total targeted (%)		18	100



The state’s strategies towards this goal includes transition of 60 lakh farmers to 100% chemical-free agriculture by 2024, projects of eco-tourism, urban waste management where door to door waste management has reached near saturation, strides in LED street light project which covers 2,164 GPs, increase in the share of renewable energy to 19.75%, among others .

Achieving economic growth and sustainable development requires an urgent reduction of humanity’s ecological footprint by changing the way goods and resources are produced and consumed. Agriculture is the biggest user of water worldwide, and irrigation now claims close to 70 percent of all freshwater for human use.

To make agricultural processes more resource efficient, Andhra Pradesh has brought 1.9 lakhs ha of area under micro irrigation that is highest in the country. In the last year 1.63 lakh farmers were brought under ZBNF.

Strategies Adopted

Agriculture: Zero Budget Natural Farming (ZBNF) is an innovative way to promote sustainable agriculture, a key component of sustainable production efforts. In medium-term, ZBNF is targeted to cover 5 lakh farmers by 2019. Under National Mission for Sustainable Agriculture, 200 post-harvest storage structures are targeted to be constructed in 2018-19. Under Andhra Pradesh Food Processing Society, 15 primary processing units are planned to be set up, with the aim of reducing post-harvest losses.

Hazardous industries: Chemical contamination in industrial areas possesses significant threat to life and environment and is an outcome of unsustainable production processes. There are 80 Major Accident Hazard (MAH) units in the state which are monitored periodically. Only one accident has been reported in 2017-18 under Chief Inspector of Factories; no accident has been reported under Atomic Energy Regulatory Board, Chief Inspector of Dock Safety, and Chief Inspector of Mines.

Sustainable tourism: The state has taken proactive measures to promote eco-tourism, which has huge potential to facilitate job creation and growth. Nine locations have been identified across the state as potential spots for eco-tourism resorts. The Chief Minister’s Delivery Unit directly monitors the implementation of these projects.

Urban waste management: The extend of waste treatment is a measure of responsible production patterns. Garbage lifting in urban areas has improved from 98% in 2016-17 to almost 100% in 2017-18. Nearly all urban households are covered by door to door waste collection, up from 88% in 2016-17. Sewage treatment in urban areas is targeted to



increase from 450 Million Litres Daily (MLD) to the saturation level of 1703 by November 2018.

LED street lights: To reduce unnecessary power consumption, the state plans to saturate provision of LED street lights. 2164 GPs already have 100% LED street lights; the remaining 10,754 GPs are targeted to be covered in 2018-19.

Sustainable power: Efficient utilization of power is crucial from both sustainable consumption and productions standpoints. Renewable energy installed capacity in the state currently stands at 6.69 GW and is targeted to drastically increase 29 GW by 2029. T&D losses in the state stand at 9.72%, which is better than the national average of 23%

Challenges Ahead

Energy consumption per capita in the state has been increasing steadily in the past and is at 1085 KWh currently, which is higher than the national average of 1075 KWh. It is

targeted to reach 3600 KWh by 2029. While this will be a major boost for the state’s economy and quality of life of its people, it should be ensured that the increase in consumption is fuelled by renewable energy capacity addition. Additionally, to bring together the elements of responsible consumption and production, which are currently spread across different sectors, a comprehensive sustainable consumption and production policy is imperative. Treatment of solid waste in urban areas (less than 2%) is a concern.

To strengthen the state’s monitoring system for goal 12, it is planned to conduct primary research studies and/ or secondary data collection efforts to collate comprehensive data on post-harvest storage and distribution losses in agriculture, horticulture, livestock, and fisheries sector.

Key outcome indicators and targets

Indicators	Andhra Pradesh	Target				
		2018-19	2019-20	2020-21	2021-22	2029-30
Renewable energy installed capacity (GW)	6.69	8.1	10.1	12.2	14.3	29
Area covered under Zero Budget Natural Farming initiative (Ha)	82019	5,00,000				
Liquid waste (sewage) treatment: Waste treated against waste generated- Urban (%)	26.4	100				
Solid waste treatment: Waste converted to energy - Urban (%)	0	100				
GPs with solid waste management (%)	19	100				
GPs with liquid waste management (%)	0	6	60	100		



The State Action Plan on Climate Change drives the policies to combat climate change. Andhra Pradesh is the first state in the country to maintain a GHG inventory to identify, monitor and curb emissions from 10 sources which produce 92.48% of GHG emissions. It has also drafted a 'green vision' to couple economic growth with sustainability.

The 13th SDG aims to reduce the effects of climate change on the planet and its life. It focuses on building resilience to disasters, spreading awareness, and improving institutional capacity and funding mechanisms for efficient action. This goal is of particular relevance to Andhra Pradesh, which is prone to natural disasters such as droughts, cyclones, storms, and floods.

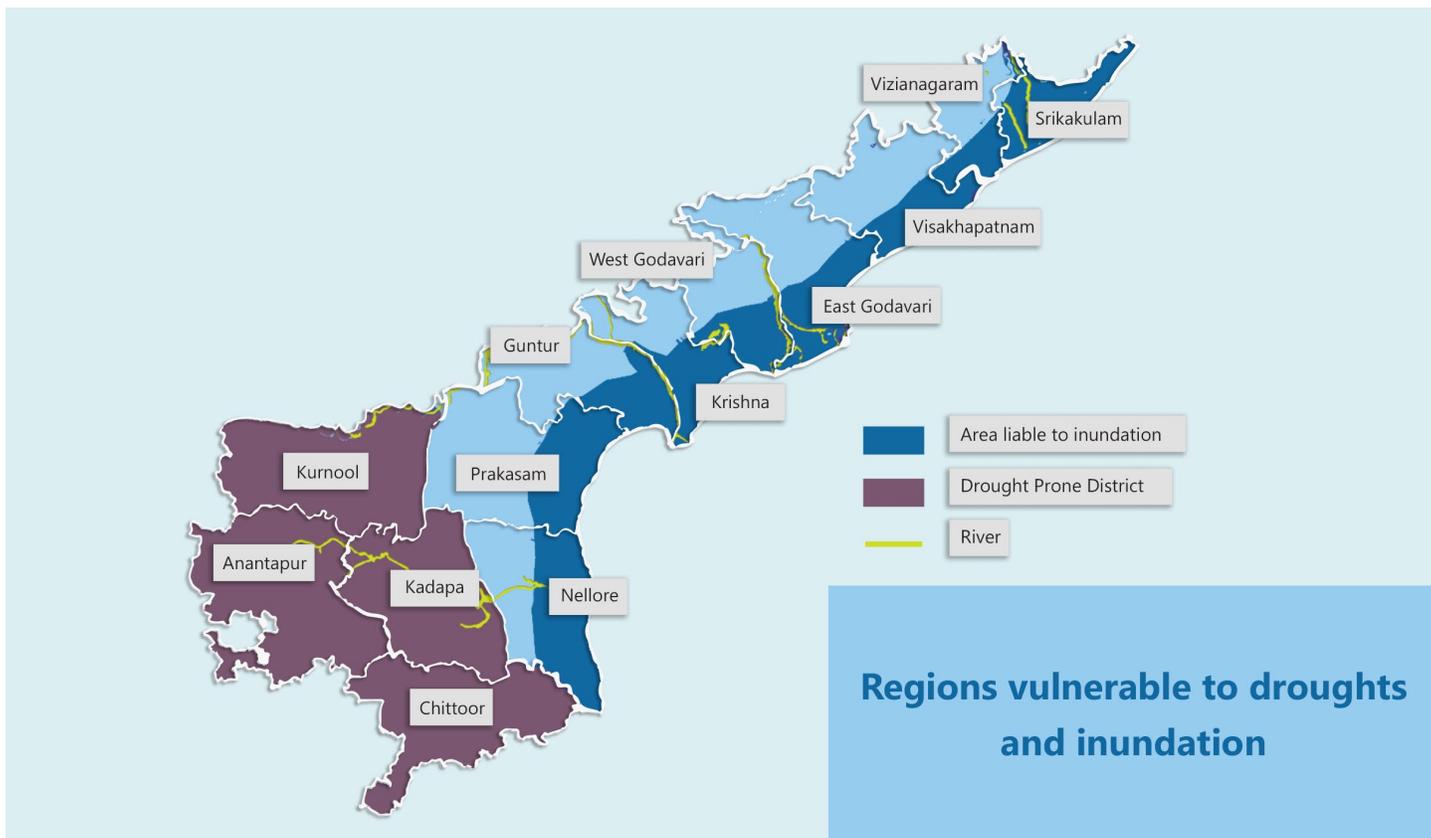
Strategies Adopted

State Action Plan on Climate Change: SAPCC forms the key policy measure of Andhra Pradesh to spearhead initiatives to achieve goal 13. Under SAPCC, various actions have been initiated in a wide range of areas.

GHG inventory: In 2017-18, Andhra Pradesh became the first state in the country to keep an inventory of Green House Gas (GHG) emissions.

The inventory identified top 10 GHG emitters which together produce 92.48% of the emissions. A range of measures have been proposed to curb such emissions. In the electricity generation sector, power generation from renewable sources will be focused on. Pursuing clean coal technologies such as Ultra Super Critical will bring down upto 21% of GHG emissions. In the transportation sector, promotion of electric vehicles is being pursued actively. The state electric vehicles policy is under preparation and will be released shortly.

Sectors	SAPCC interventions & strategies proposed	Action taken
Forestry and biodiversity	Protection and conservation of forests and mangrove restoration, including fire protection	Planting in recorded and outside forest area is given top priority to achieve 50% green cover
Energy	Energy efficiency & renewable energy	23% supply from Renewable Energy sources & tops in energy efficiency measures
Industries (including mining)	Enforce cleaner production processes and waste minimization across industries	
Transportation	Enhance the share of public transport & cleaner fuels	
Urban & rural development	Safe water supply & 100% coverage of sewerage and sanitation	<ul style="list-style-type: none"> • 47% of habitations have access to 55 lpcd water • 12 ULB's provide 135 lpcd of water • 110 ULB's achieved 100% ODF status
Health	Investigate links between pollution loads and disease patterns	



Groundwater: Groundwater level in Andhra Pradesh is monitored periodically using a network of sensors. 25,265 data points for automated digital water level recording are targeted for 2018-19. Currently, 35% of the state’s area has groundwater at a depth of 3-8 m. Furthermore, 4736 check dams were constructed in 2017-18. 1.64 lakh farmponds were completed in the last year; 4 lakh are targeted for 2018-19.

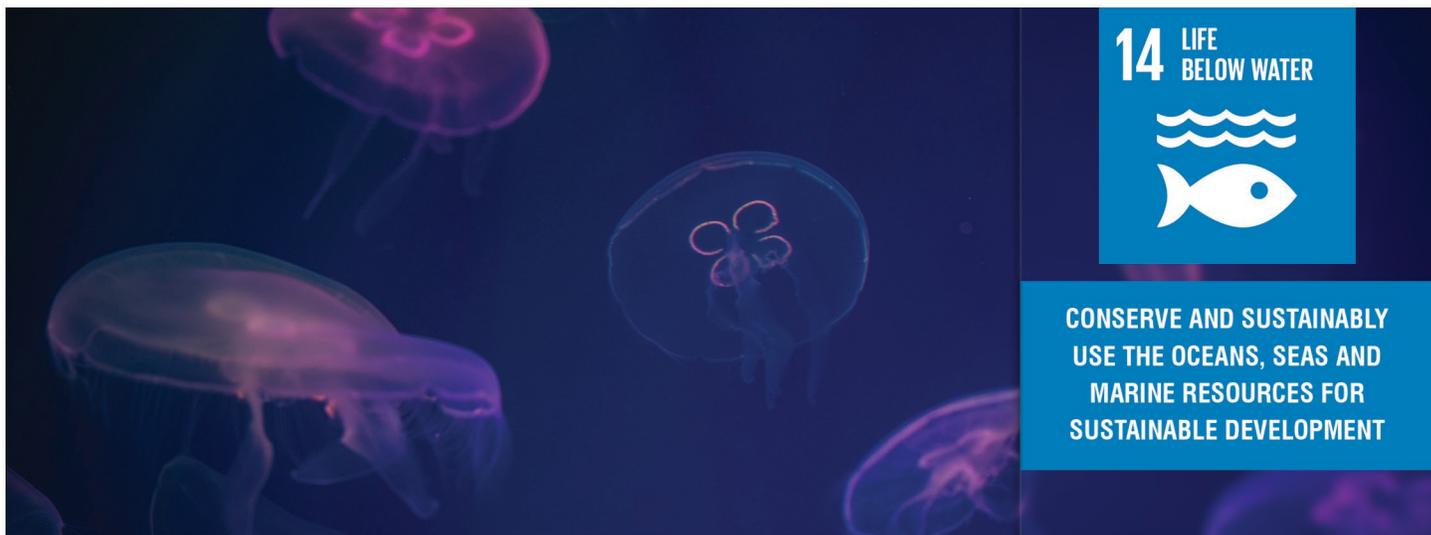
Disaster resilience: Improving disaster resilience, especially of the coastal areas, is crucial for Andhra Pradesh. A comprehensive system with mapping, early warning, monitoring, and dissemination has been put in place to minimize the risk of disasters.

Challenges Ahead

Per capita GHG emissions in Andhra Pradesh at 2.36 tonnes is higher than the of India which stands at 2.28 tonnes. A 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 outcome indicators and targets

Indicators	Andhra Pradesh	Target					
		2018-19	2019-20	2020-21	2021-22.	2022-23	2029-30
Green cover (%)	25.73	28	30	33	36	39	50



Catching a kilo of fish emits 1.26 kg of CO₂ in Visakhapatnam and 1.5 kg in Nizampatnam, two of the major fishing harbours / fish landing centres in the state. This is lesser than the global average of 2.2 kg of CO₂ per 1 kg of fish.

Oceans are sources of rich biodiversity, some of which are under threat. The Bay of Bengal supports livelihoods of lakhs of families along the coast of Andhra Pradesh and is a source of food for millions.

Strategies Adopted

Coastal Ocean Monitoring and Prediction System

(COMAPS): Andhra Pradesh on its eastern side has about 960 km of sea-coast of Bay of Bengal which is put to use for different activities. All the three major rivers, Godavari, Krishna, and Pennar are joining the coast of Bay of Bengal. Discharges such as sewage from urban areas, agriculture run-off, and industrial effluents are the potential threats to the water quality of the coastal waters. In view of this, Andhra Pradesh Pollution Control Board monitors coastal waters of Bay of Bengal on a monthly basis at 39 points under COMAPS.

Water Quality Monitoring: Water quality of major rivers which meet the Bay of Bengal directly impacts the quality of coastal waters of the state. Under National Water Monitoring Programme, the state's Pollution Control Board carries out monitoring of water quality of major rivers on monthly basis. Water quality of Krishna, Godavari, Penna, Nagavali, Vamsadhara, and Tungabhadra rivers are monitored at 18 stations along their path.

Institutional capacity: 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.

In a bid to protect the fishery resources and biodiversity 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.

Challenges Ahead

Discharge of industrial effluents and dumping of plastic material in to the oceans is resulting in increased pollution and damaging species and ecosystems. Creation of mechanisms to enforce the treatment of industrial effluents before its discharge will prevent ocean pollution and mitigate damage to life below water.



Area under green cover in the state has increased from 15.2% in 2014 to 23.4% till March 2018. Andhra Pradesh has set an ambitious target of increasing area under green cover to 50% by 2029.

Human life depends on the earth as much as on the ocean for sustenance and livelihoods. Plant life provides 80 percent of the human diet, and there is a reliance on agriculture as an important economic resource and means of development. Forests account for 30 percent of the Earth's surface, providing vital habitats for millions of species and important sources for clean air and water; as well as being crucial for combating climate change.

Currently, there is an unprecedented land degradation, and the loss of arable land globally at 30 to 35 times the historical rate. Drought and desertification is also on the rise each year, amounting to the loss of 12 million hectares and affects poor communities throughout the world. Of the 8,300 animal breeds known, 8 percent are extinct and 22 percent are at risk of extinction.

Goals 15 aims at sustainable management of forests, and combating desertification, land degradation, and biodiversity loss. Conservation and expansion of forests is crucial from ecological and economic standpoints.

A large section of the tribal population of Andhra Pradesh depend on forests for livelihoods. Desertification and land degradation make it further difficult for people in poverty to make ends meet.

Strategies Adopted

Andhra Pradesh has varied ecosystems, each of these unique ecosystems shelters diverse flora and fauna - over 3000 species of plants and over 5,700 species of animals. The state targets to have 50% of its land area under green cover by 2029. Green cover in the state has increased from 15.2% in 2014 to 23.4% by March 2018. Andhra Pradesh added 2141 sq km of green cover between 2015 to 2017, the highest among all states, owing to plantation and conservation activities during this time. The state has contributed to a positive change of 37 sq km of Mangrove forests and ranks 2nd in the country.

The government's initiatives of Nagarvanams and Pallevanams aim at improving green cover outside forest area, to spread awareness and provide recreational space. Three Nagarvanams have been completed in 2017-18, 13 more are targeted for 2018-19. Under Pallevanams, each GP has been provided INR 50,000 to develop gardens, with involvement of women and children. 23.67 crore seedlings have been planted for expansion in green cover. Further initiatives in the form of mangrove planting in 70 Ha and shelter belt afforestation in 448 Ha have been undertaken. 2 Nagarvanams have been inaugurated at Perecherla, Guntur and Gargeypuram, Kurnool.

2464 Ha of hillocks were greened in 2017-18; 3540 Ha are targeted for the next year. Additionally, 10,244 km of avenue plantations were planted in the last year; an additional 6500 km are planned for 2018-19. While the major chunk of avenue plantation addition and greening of hillocks is undertaken under MGNREGS, the Forest Department focuses on block plantations. 3644 Ha of block plantation addition is targeted for 2018-19.

Soil Moisture Conservation activities are taken up with an objective to enhance water table, arrest desertification and assist natural regeneration. 3,125 km of trenches - elephant proof trenches/ water absorption trenches, peripheral trenches, 4650 mini-percolation tanks, 65,966 check dams, 1,152 rock fill dams and other 64,702 soil moisture conservation works were undertaken in the last three years. Additionally, 2750 km trench works, 100 check dams, 5000 rock fill dams, 2500 mini percolation tanks are targeted for 2018-19.

Special efforts are being taken to protect Red Sanders from illegal felling and smuggling. The Red Sanders Anti-Smuggling Task Force, jointly operated by the Police and Forest Departments leads the effort in this direction.

For the protection of forests and wildlife, it is proposed to promote 193 base camps, 52 strike forces, anti-poaching squads, and 113 check posts.

Challenges Ahead

Enhanced measures to be taken to prevent forest fire and deforestation. Restoration of mangroves to protect coastal areas from natural calamities. Conservation of identified threatened species of flora and fauna by preserving the habitats from destruction, modification and pollution where threatened species of flora and fauna inhabit.

Preventing deforestation

Restoration of Mangroves

Conservation of identified threatened species of flora and fauna

Snapshot of challenges

Key outcome indicators and targets							
Indicators	Andhra Pradesh	Target					
		2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
Green cover (%)	23.4	28	30	33	36	39	50
No. of tigers	50-55						



The state has the 3rd highest rate of crime against STs in the country – 15.4 against the national average of 6.3. Similarly, Andhra Pradesh has the 7th highest rate of crime against SCs among all states – 27.6 compared to the national average of 20.3.

Strategies Adopted

Andhra Pradesh is the pioneer of real-time governance in the country. In 2017, the Real-Time Governance Centre (RTGC) was established which makes use of state-of-the art technologies and big data analysis to collect and analyse governance-related data including satisfaction levels, grievances etc. and help policy makers in taking the most appropriate actions.

Last year also saw the government setting up the biggest call centre run by any state government in the county to receive independent feedback from beneficiaries of various government schemes. Named Parishkara Vedika, the call centre employs more than 2000 people working 24/7 listening and interacting with the citizens on a day to day basis in three languages.

The Janmabhoomi programme through which government officials interact with citizens at the village and ward levels is an effective tool for awareness generation. During the programme conducted in January 2018, discussions on SDGs

were conducted in all villages and wards in the state wherein the SDG-related initiatives of the state government were detailed by the officials and feedback from citizens was sought.

The government aims to make available all its services online. In this regard, commendable improvement has been achieved last year. From 162 in 2016-17, the number of services present online stands at 328 currently. All the remaining services are targeted to be made online in 2018-19.

Challenges Ahead

The state will focus on bringing down crime rates, especially against women, STs, and SCs, which are higher than the national average. From 2332 crimes against SCs and STs in 2016-17 the figure has increased to 3289 in 2017-18.

There has been no significant reduction in road accidents and death from 2016-17 to 2017-18. The Home Department has explicitly targeted reduced crime rate in all these concern areas as per the Outcome Budget of the state for 2018-19.

Key outcome indicators and targets

Indicators	Andhra Pradesh	Target					
		2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
No. of crimes against women	16,362	15,173					
No. of crimes against SCs and STs	3,289	2299					



Existing collaborations of the state with the World Economic Forum, Oxford Poverty and Human Development Initiative, and the Asia Competitiveness Institute have forged the path for future engagements with third party institutions as partners in the SDG process.

Strategies Adopted

The Government of Andhra Pradesh has forged partnerships with reputed national and international organisations to avail their support in benchmarking, strategies, evaluation etc. In 2017-18, the state has collaborated with Oxford Poverty and Human Development Initiative (OPHI) and World Economic Forum (WEF) on estimation on Multidimensional Poverty Index (MPI) and Global Competitiveness Index, respectively. The estimation of these indices will benchmark Andhra Pradesh relative to other states and countries

In 2017, Andhra Pradesh has entered into an agreement with UNICEF and Asian Competitiveness Institute (ACI) of Lee Kuan Yew School of Public Policy, Singapore on independent third-party audit of the data collection and reporting system of the government. These partnerships will improve the Real-time Outcome Monitoring System (ROMS) of the state and equip the policymakers with better quality data.

The Outcome Budget of the state for 2018-19 is aligned with SDGs. The line departments have assigned physical targets to be achieved in 2018-19 and allocated financial outlays. This framework ensures that SDG priorities receive due attention from the implementing departments.

The state has signed an MoU with National Foundation for India (NFI) for developing strategies for SDG concern areas through national seminars and designing comics on SDGs for school children.

Challenges Ahead

The government has identified that going forward, the state will face four major challenges: improving economic and political participation of women, structural transformation of the government to meet new aspirations of its people, making citizens responsive and responsible, and fostering innovation in technology and processes. The state will focus on designing strategies in these areas to augment its efforts to achieve the SDGs, in partnership with external actors.

Key outcome indicators and targets							
Indicators	Andhra Pradesh	Target					
		2018-19	2019-20	2020-21	2021-22	2022-23	2029-30
No. of functional national partnerships	2	3					
No. of functional global partnerships	3	8					



SDG FRAMEWORK ADOPTION BY ANDHRA PRADESH

In 2015, Andhra Pradesh drafted its Vision 2029 framework which envisions saturating all basic amenities by 2019, becoming one of the three best states in the country by 2022, the best state by 2029, and a leading global investment destination by 2050. The SDG framework adopted by the state government aims to complement its Vision framework to create a happy, inclusive, and sustainable society.

The main building blocks of the Vision framework are the six transformational areas, 12 basic needs, 12 growth drivers, and 12 strategies through which the vision translates into reality. The six transformational areas are human development, inclusive growth, globally competitive economy, knowledge economy, sustainability, and governance. These areas have a broad scope and correspond to various themes under the SDG framework. The 12 strategies for transformation too are high-level themes which can be mapped to multiple SDG themes. However, the 12 basic needs and 12 growth drivers can be directly mapped to individual SDGs.

Andhra Pradesh SDG Framework

The state government has followed a rigorous and logical step-by-step process of adopting SDGs – including goal setting, target prioritization, indicator selection, scheme

analysis, and developing a monitoring system. The framework consisting of goals, themes, targets, departments, strategies, and indicators is the most important component of the SDG mechanism the state has instituted. This framework identifies the priorities, stakeholders, implementers, and metrics to measure progress. Andhra Pradesh has adopted all 17 goals, as all of them are relevant to the development agenda of the state. Out of the 169 targets, the state has adopted 121 which are relevant to it. Actions on some targets are designed to be taken at the national or international level, and do not call for any action at the sub-national level. 212 indicators have been identified to monitor the progress towards achieving the targets. These are largely from the list of indicators recommended by the UN and the KPI bank managed by the Planning Department of the state government.

Goals and themes

While goals, targets, and indicators are the basic building blocks of the SDG mechanism, Andhra Pradesh has further improvised it by introducing themes. A goal is too wide in scope and its target are too focused. Therefore, to gauge the overall status or progress under goals, they have been broken down into themes. For instance, goal 2 has been broken down

into four themes- end hunger, achieve food security, achieve improved nutrition, and promote sustainable agriculture. It has been realized that these themes make reporting the status/ progress to the leadership easier.

SDG target setting

The UN SDG framework provides quantitative 2030 targets for only some indicators, targets for remaining were fixed by taking into account AP vision 2029 milestones, best country/state values, and other national and state policies. Once the 2030 targets were decided, then the annual, quinquennial targets were back calculated after taking the nature of indicator and the past achievement rate of the state into consideration. The targets have been shared with the respective line departments which are currently drafting strategies to meet the targets on time.

SDG-aligned Outcome Budget

The achievement of SDG targets depends principally on the successful implementation of government schemes and programmes. A mapping exercise was conducted where all the government schemes and strategies were mapped to the corresponding SDG goal, theme, targets and equivalent indicators. This helped in identifying the areas where government efforts towards achievement of SDG targets remained sufficient, inadequate or non-existing and thus served as the base for aligning the SDG mandate with the state's Outcome Budget.

Monitoring system and progress review

The state's SDG framework has been integrated with its monitoring system- the Real-time Outcome Monitoring System (ROMS). ROMS consists of a large set of KPIs whose data are collected periodically from the ground and uploaded by the respective line departments. In this manner, progress on SDGs is periodically tracked and analysis reports are submitted to the leadership.

The state government continuously monitors the progress on SDG targets through other channels too. Every month, the state Chief Secretary's Office reviews the performance of line departments on a set of indicators. A similar exercise is done

by the Chief Minister's Office. The issues and concerns are then communicated to every district collector's office through a video conference for taking appropriate action. Every quarter the state government organizes a 'collectors' conference' where all the line departments present their progress status of the preceding quarter and request assistance from the district collectors in areas requiring their facilitation in meeting the targets. The Planning Department also does an annual review and prepares progress report on SDG targets achievement that summarizes the strategies adopted by the governments in terms of schemes, programmes, or bringing a new policy or legislation. It also highlights the way forward and the areas of improvement for the upcoming year. This report is the second in the series of SDG annual progress reports prepared by the planning department.

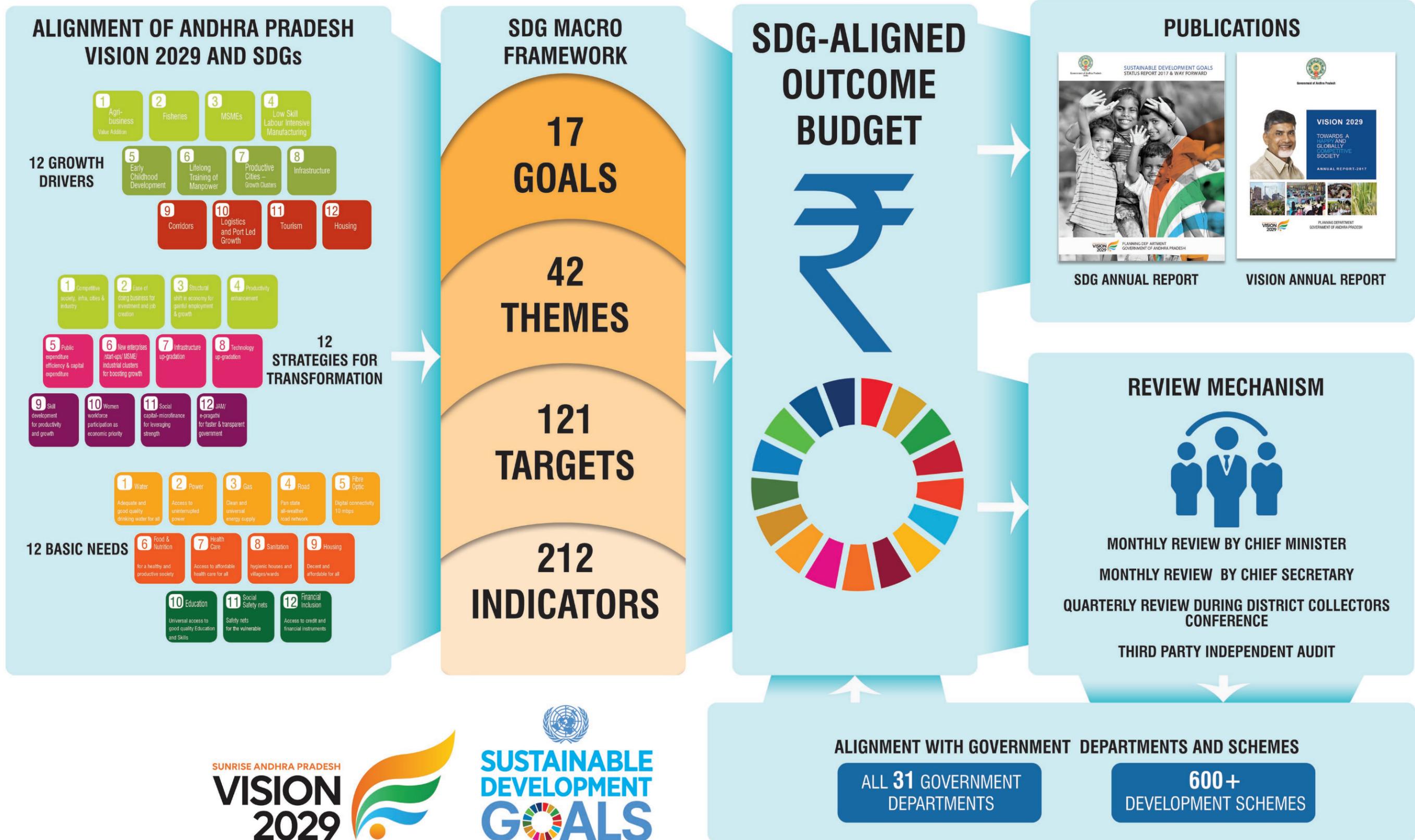
Planning Department as an orchestrator

Successful action on SDGs at the national or sub-national level calls for an "orchestrator" - a key actor within the government who can take the lead in adoption of SDGs, strategizing to achieve time-bound goals, and periodic monitoring for reporting and course-correction.

For Andhra Pradesh, the Planning Department shoulders this responsibility. The organic link with the Vision framework, identification of concern areas and design of strategies, and real-time progress reporting are undertaken by the Vision Management Unit (VMU) under the Planning Department. The periodic data for SDG reporting is obtained from all relevant line departments through the Real-time Outcome Monitoring System (ROMS) managed by the Planning Department. The Directorate of Economics and Statistics (DES), an organization under the Planning Department and the statistical arm of the state government, is responsible for conducting surveys in coordination with VMU, for collecting data on SDG indicators which currently do not exist in the statistical system of the government. The Planning Department also acts as a coordinating entity within the state government by engaging with other line departments on the issues pertaining to SDG goal and target setting while also coordinating with the national orchestrator for all state governments, NITI Aayog.

ANDHRA PRADESH STATE MONITORING SYSTEM

SDG FRAMEWORK AND PROCESSES



ABOUT VMU

Government of Andhra Pradesh established the Vision Management Unit (VMU) under the Planning Department for strategic management of vision programmes and projects to coordinate actions among all concerned stakeholders from within the government and outside, in terms of planning, implementation, and monitoring. Apart from integrating various vision initiatives and interventions into the annual planning and budgeting processes of the state government, the VMU also monitors and publishes periodicals and thematic studies on the transformation areas identified in the vision to provide an integrated picture of vision achievements.

The unit is a vibrant team of young professionals from diverse backgrounds who work together on data, targets, performance indicators, global studies, best practices and global standards to prepare recommendations to achieve the state's Vision 2029.



Visit us at:



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