



NATIONAL BANK FOR
AGRICULTURE AND RURAL
DEVELOPMENT

राज्य फोकस पेपर State Focus Paper 2025-26



आंध्र प्रदेश क्षेत्रीय कार्यालय, विजयवाड़ा

Andhra Pradesh Regional Office, Vijayawada

VISION

Development Bank of the Nation for Fostering Rural Prosperity.

MISSION

Promote sustainable and equitable agriculture and rural development through participative financial and non- financial interventions, innovations, technology and institutional development for securing prosperity.

State Focus Paper

Year: 2025-26

State: Andhra Pradesh



NATIONAL BANK FOR AGRICULTURE AND RURAL DEVELOPMENT
ANDHRA PRADESH REGIONAL OFFICE, VIJAYAWADA

Foreword

Andhra Pradesh stands at the cusp of a rural transformation, driven by targeted credit interventions, technological innovations, and sustainable development initiatives. NABARD, as the apex institution for rural finance, has been instrumental in channelizing credit, strengthening financial institutions, and fostering inclusive growth across the state. Beyond financial support, NABARD plays a proactive role in digitalizing rural credit planning, deepening financial inclusion, and advancing climate-resilient agriculture.

A milestone achievement this year is the digitalization of the State Focus Paper (SFP) 2025-26, marking a significant leap towards data-driven and efficient credit planning. This digital transformation enhances accessibility, fosters informed decision-making, and aligns with our broader vision of 'Fostering Rural Prosperity.' The SFP serves as a strategic roadmap, aggregating district-level Potential Linked Credit Plans (PLPs) and highlighting key insights into sectoral credit demand, infrastructure gaps, and policy interventions required for accelerating growth.

For the year 2025-26, the total priority sector credit potential for Andhra Pradesh is projected at ₹4,24,332 crore, reflecting the state's dynamic economic trajectory. Agriculture remains the backbone of the rural economy, with an estimated credit potential of ₹2,26,050 crore, comprising ₹2,07,510 crore for farm credit, ₹7,914 crore for agricultural infrastructure, and ₹10,626 crore for ancillary activities. The MSME sector, a key driver of employment and industrial expansion, is projected at ₹1,28,387 crore, while credit potential for housing and renewable energy stands at ₹21,701 crore and ₹4,054 crore, respectively. These projections reaffirm the growing credit demand and investment opportunities across diverse sectors.

I extend my deep gratitude to all stakeholders, including the Government of Andhra Pradesh, Reserve Bank of India, SLBC, Financial Institutions, and developmental agencies, for their unwavering support in shaping this strategic and forward-looking SFP. I am confident that SFP 2025-26 will serve as a powerful instrument for accelerating credit flow, fostering entrepreneurship, and driving sustainable rural prosperity in the state.

M. R. Gopal
Chief General Manager
NABARD, Andhra Pradesh Regional Office

State Focus Paper (SFP) Document prepared and finalised by:

NABARD, Andhra Pradesh Regional Office, Vijayawada

"The document has been prepared on the basis of information collected from publicly available sources and discussions with various stakeholders. While preparing the projections, every effort has been taken to estimate credit potential realistically. NABARD shall not be responsible for any material or other losses occurring to any individual/ organization owing to use of data or contents of this document.

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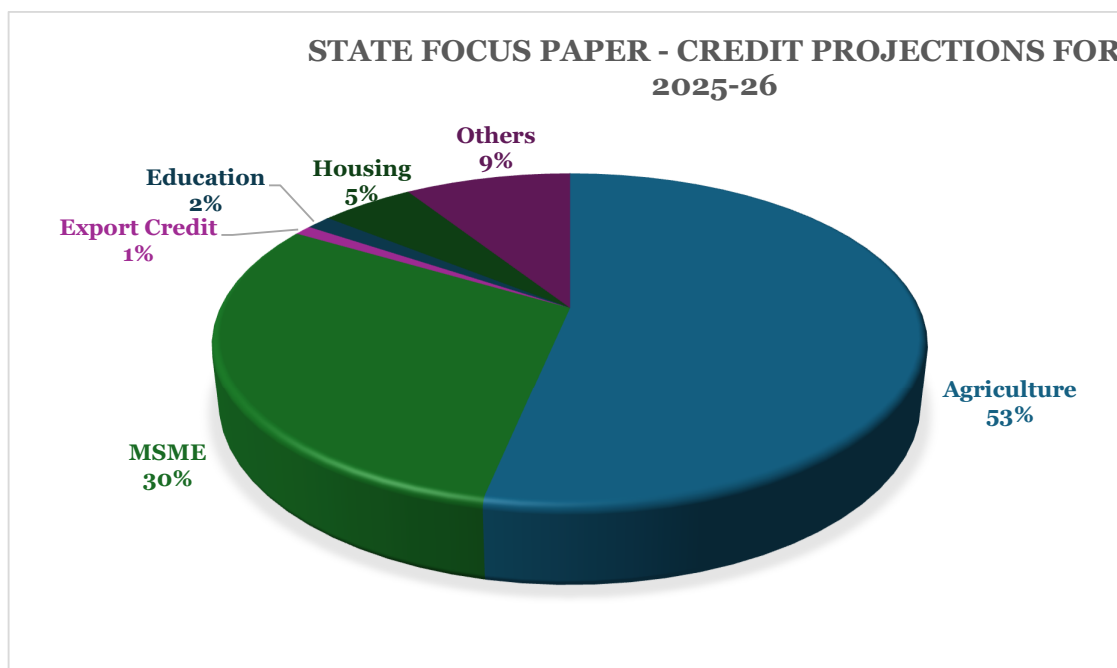
State Map



Broad Sector-wise PLP Projections for the Year 2025-26

(₹ Lakh)

Sr. No.	Particulars	Amount
A	Farm Credit	20751032.81
B	Agriculture Infrastructure	791359.30
C	Ancillary activities	1062598.30
I	Credit Potential for Agriculture A+B+C)	22604990.41
II	Micro, Small and Medium Enterprises	12838701.10
III	Export Credit	402815.00
IV	Education	577899.75
V	Housing	2170155.10
VI	Social Infrastructure	205400.80
VII	Renewable energy	405491.59
VIII	Others	3227842.05
	Total Priority Sector	42433295.80



Summary of Sector/ Sub-sector wise PLP Projections for the Year 2025-26

(₹ Lakh)

Sr. No.	Particulars	Amount
I	Credit Potential for Agriculture	
A	Farm Credit	
1	Crop Production, Maintenance and Marketing, and Working Capital Loans for Allied Activities	11436498.25
2	Water Resources	530807.95
3	Farm Mechanisation	540972.31
4	Plantation & Horticulture with Sericulture	608087.17
5	Forestry & Waste Land Development	59904.51
6	Animal Husbandry – Dairy	1726818.03
7	Animal Husbandry – Poultry	436970.54
8	Animal Husbandry - Sheep, Goat, Piggery	500380.06
9	Fisheries	1694393.27
10	Farm Credit- Others	3216200.72
	Sub total	20751032.81
B	Agriculture Infrastructure	
1	Construction of storage	580123.64
2	Land development, Soil conservation, Wasteland development	143775.78
3	Agriculture Infrastructure - Others	67459.88
	Sub total	791359.30
C	Ancillary activities	
1	Food & Agro. Processing	517650.55
2	Ancillary activities – Others	544947.75
	Sub Total	1062598.30
I	Credit Potential for Agriculture (A+B+C)	22604990.41
II	Micro, Small and Medium Enterprises	12838701.10
III	Export Credit	402815.00
IV	Education	577899.75
V	Housing	2170155.10
VI	Social Infrastructure	205400.80
VII	Renewable energy	405491.59
VIII	Others	3227842.05
	TOTAL PRIORITY SECTOR	42433295.80

Executive Summary

1. Introduction

NABARD, as India's apex development financial institution, is mandated to foster rural prosperity. A key function of NABARD is to assess credit potential across various sectors through a comprehensive and consultative credit planning process. This involves preparing district-level Potential Linked Credit Plans (PLPs), which help identify infrastructure gaps and necessary linkage support in each district. These PLPs serve as the foundation for the Annual Credit Plan formulated by banks at the district level.

At the state level, the State Focus Paper (SFP) consolidates district-level PLPs and acts as a critical reference for the State Level Bankers' Committee (SLBC) in credit planning and budgeting. The primary objective of this exercise is to assess sector-specific credit potential while considering infrastructure support, forward and backward linkages, local skills, natural resources, and the district's credit absorption capacity. Further, credit projections are fine-tuned to align with the policy priorities of the Government of India, State Governments, and the Reserve Bank of India (RBI).

2. State Profile

Andhra Pradesh is endowed with plenty of natural and human resources with competitive socio-economic advantages. Its geographical spread of 1,62,970 sq. km makes it the 8th largest State in the country. Situated in a tropical region, the State has the second-longest coastline in the country with a length of 974 km, indicating a rich potential for marine fisheries. Andhra Pradesh is the tenth largest populated state in the country accounting for 4.09% of the total population, as per 2011 census. The density of population as per 2011 census is 304 persons per sq.km.

The Gross State Domestic Product (GSDP) at Constant (2011-12) Prices for the year 2023-24 (AE) is projected to be ₹8,20,894 Cr. (₹8.21 Lakh Crores), compared to the First Revised Estimate for the fiscal year 2022-23 of ₹7.65 Lakh Crores, reflecting a growth rate of 7.35%.

The Agriculture & Allied Sector's GVA is estimated at ₹2,17,403 Cr. for 2023-24 (AE) with growth rate of 1.69%. The industry sector GVA estimated at ₹2,22,870 cr. with a growth rate of 8.02% for the year 2023-24 (AE) and ₹2,06,325 Cr. in 2022-23 (FRE). The GVA of Services Sector for the year 2023-24(AE) at Constant (2011-12) prices is estimated at ₹2,90,360 Cr as against ₹2,75,991 Cr. in 2022-23(FRE), with a growth rate of 5.21%.

The Per Capita Income (PCI) of Andhra Pradesh at current prices for 2023-24 (AE) is estimated at ₹2,42,479, up from ₹2,19,881 in 2022-23 (FRE). In comparison, India's PCI for 2023-24 (PE) stands at ₹1,84,205

Andhra Pradesh is contributing about 30% of National fish production and is a major exporter of shrimp in India with a share of 31% in total value of sea food exports of the country during 2022-23. Andhra Pradesh holds the top rank in India for the productivity of various crops, including chilli, cocoa, lime, oil palm, papaya, and tomato. It secures the second position for the productivity of mango, sweet orange, cashew, and turmeric. Notably, Andhra Pradesh takes the lead as the largest producer of fruits in the country (366.53 Lakh MTs), contributing 15.6% to the total national fruit production.

(Source: Socio Economic Survey of Andhra Pradesh 2023-24).

3. Banking Profile

Andhra Pradesh has a well-established banking network, comprising 33 Commercial Banks, including 12 Public Sector Banks, 21 Private Sector Banks, 3 Payment Banks, and 3 Small Finance Banks. Additionally, the state has 4 Regional Rural Banks (RRBs), 1 State Cooperative Bank (APStCB), 13 District Cooperative Central Banks (DCCBs), and the AP State Financial Corporation.

The cooperative banking structure plays a vital role in financial inclusion, with a strong presence of 2,037 Primary Agricultural Credit Societies (PACS), which have historically been instrumental in serving rural communities.

As of 31st March 2024, the state had a total of 8,236 bank branches, distributed as follows:

- 2,740 branches in rural areas
- 2,586 branches in semi-urban areas
- 2,910 branches in urban areas

Further, 9920 on-site ATMs were operational across the state, enhancing accessibility to banking services. This extensive financial network underscores Andhra Pradesh's commitment to banking penetration and inclusive economic growth.

Andhra Pradesh continues to witness a robust expansion in credit flow, reflecting the state's dynamic economic landscape. Under the Annual Credit Plan (ACP) for 2023-24, priority sector lending exceeded expectations, with disbursements reaching ₹3,68,760 crore against a target of ₹3,23,000 crore. For 2024-25, the state has set an ambitious credit target of ₹3,75,000 crore, with ₹3,26,024 crore (86.93%) already achieved as of 31st December 2024—a testament to the strong financial ecosystem supporting key sectors.

The Credit Deposit Ratio (CD Ratio), a key indicator of banking sector efficiency, stood at 158% as of 31st March 2024, reaffirming Andhra Pradesh's position among the top states in credit mobilization. Bank deposits saw a healthy growth of 12.4%, reaching ₹5,13,630.66 crore, while outstanding loans surged by 18.5%, touching ₹8,11,036.80 crore.

4. Potential Credit Outlay

For the fiscal year 2025-26, the State Focus Paper estimates a total credit potential of ₹4,24,332.96 crore under Priority Sector. This estimate takes into account the revised Priority Sector Lending (PSL) norms issued by the RBI and the emphasis given by the Government of India (GoI) to increase credit flow to the agriculture sector and key sectors identified as growth drivers for agriculture and rural development by the State Government. The credit potential assessed for Agriculture and Allied Sectors is pegged at ₹2,26,049.90 crore, constituting 53.28% of the total credit potential. Detailed district and sector-wise information is presented in Annexure I covering various sectors, their corresponding credit potentials, and issues along with suggested interventions.

4.1. Agriculture - Farm Credit:

Andhra Pradesh's agricultural sector remains a key driver of the state's economy, with paddy, maize, jowar, black gram, Bengal gram, and red gram forming the backbone of food grain production. Additionally, commercial crops such as chillies, cotton, sugarcane, tobacco, and groundnut play a crucial role in the state's agrarian economy. However, shifts in irrigation patterns and cropping intensity highlight evolving challenges in agricultural sustainability.

The gross irrigated area witnessed a decline from 36.56 lakh hectares in 2022-23 to 32.71 lakh hectares in 2023-24, while the net irrigated area stood at 26.03 lakh hectares in 2023-24. The

cropping intensity for the same period was recorded at 1.21, indicating changes in land utilization efficiency. The cultivated area for food grains in 2023-24 was 33.32 lakh hectares, marking a 10.44% decrease from the 36.80 lakh hectares in the previous year.

The Kisan Credit Card (KCC) scheme continues to be a vital tool in addressing farmers' financial needs. In a significant move, the loan limit under the Modified Interest Subvention Scheme has been enhanced from ₹3 lakh to ₹5 lakh, reinforcing the government's commitment to strengthening agricultural credit access.

Further strengthening farmer support, the Government of Andhra Pradesh is implementing several pro-farmer initiatives under Rythu Bharosa - PM KISAN, providing ₹13,500 per farmer family per year (including ₹6,000 from PM KISAN) as investment support. Further, initiatives such as crop insurance to tenant farmers, interest-free loans, nine hours of free power supply, a guaranteed minimum support price (MSP) for produce, and ex gratia of ₹7 lakh to families of farmers who fall victim to agrarian distress are being implemented to accord agrarian support.

To enhance service delivery at the grassroots level, 10,778 Rythu Seva Kendras (RSKs) and 154 hubs, integrating Agri Input Shops and Farmer Knowledge Centres with village secretariats and gram panchayats are operating in this state.

These comprehensive initiatives collectively aim to enhance agricultural productivity, provide financial stability to farmers, and ensure their socio-economic well-being. Considering the state's agricultural potential and Gross Cropped Area, the crop loan projections for 2025-26 are estimated at ₹1,14,364.98 crore.

4.2. Agricultural Term Loan

Water Resources: The potential for bank financing is significant in supporting the establishment of new groundwater extraction structures, pump sets, micro-irrigation systems, well deepening, well recharge, pipelines for water conveyance, and small lift schemes. Within the growth strategy of the Government of Andhra Pradesh (GoAP), a focal point has been the emphasis on irrigation. To realize this strategy, the government has actively undertaken major and medium irrigation projects, alongside initiatives for the modernization of delta systems and flood banks. These endeavors are aimed at creating new irrigation potential and ensuring the stabilization of the ayacut in the irrigation sector. The total credit outlay assessed in the State under water resources is ₹5308.08 crore for 2025-26.

Farm Mechanization: There is considerable potential for financing various agricultural equipment such as tractors, power tillers, rotavators, paddy transplanters, threshers, and harvesters. Recognizing the challenge posed by small and dispersed farm holdings, the establishment of Custom Hiring Centres has become imperative and can be facilitated through the involvement of entities such as Farmer Producer Organizations (FPOs), Self-Help Group Federations (SHG Federations), and Primary Agricultural Credit Societies (PACS). The concept of Uberization holds promise in agricultural mechanization, where individual owners can be networked through a common platform. This approach allows for real-time, cost-effective responses to demand. To expedite the scale-up of such services across the state, the promotion of a franchise model, particularly through encouraging agricultural start-ups, can be instrumental. The credit potential assessed under farm mechanization for the State in 2025-26 is ₹5409.72 crore.

Plantation & Horticulture and Sericulture: The production of horticulture stood at 366.53 lakh MTs (*Socio Economic Survey 2023-24*). Andhra Pradesh ranks first in area and production of fruits and fourth in Micro Irrigation area coverage. The GoAP is actively prioritizing this sector and has formulated a comprehensive perspective plan. This plan

encompasses various strategic aspects, including area expansion, implementation of micro-irrigation systems, promotion of protected cultivation, establishment of polyhouses, mechanization, development of cold storage and ripening chambers, as well as initiatives in fruit and vegetable processing and value addition.

Considering the scope available for the sector, the credit potential in 2025-26 is assessed at ₹6080.87 crore.

Forestry: Agroforestry emerges as a potential solution to mitigate the effects of climate change by offering microclimate moderation, conserving natural resources, and establishing supplementary sources of livelihood and income. The agroforestry system, with its multifaceted approach, not only contributes to climate resilience but also enables additional income generation. Through Integrated Farming practices, elements such as poultry, mushroom cultivation, fish farming, beekeeping, sericulture, and other diverse activities can be seamlessly integrated, fostering a holistic and sustainable approach to agriculture.

The credit potential assessed under forestry and wasteland development in 2025-26 is ₹599.05 crore.

Livestock and Fisheries: The livestock sector is a pivotal contributor to the economy, with direct contributions from the poor to overall growth. In the national landscape, the state holds a significant position, ranking first in total fish and shrimp production, as well as total egg production. Additionally, it secures the second position in meat production and the fifth position in milk production. Recognizing the importance of this sector, the Government of India (GoI) has directed its focus towards ensuring a consistent flow of credit to support Animal Husbandry, Dairy, and Fisheries. The combined potential estimated under livestock and fisheries sectors in 2025-26 is ₹43583.62 crore.

4.3. Agriculture Infrastructure

Agricultural infrastructure plays a critical role in driving sustained growth in the sector. The expansion and efficiency of agricultural output are directly linked to the development of essential infrastructure, including roads, irrigation networks, markets, post-harvest facilities, and accessible credit mechanisms. Strengthening these key components not only enhances productivity and market access but also ensures resilience, sustainability, and long-term growth in agriculture.

Land Development

Land, soil, water, and forests form the core of natural capital, serving as the foundation for economic growth and environmental sustainability. Andhra Pradesh has a net sown area of 47.65 lakh hectares, while the net irrigated area stands at 26.03 lakh hectares, underscoring the significance of efficient land and water management in boosting agricultural productivity. NABARD, through its participatory watershed approach, has been instrumental in land restoration and conservation efforts. As of 31st March 2024, NABARD has extended ₹245.94 crore in grant support for watershed projects, facilitating the treatment of 2.48 lakh hectares of degraded land with soil and water conservation measures.

Recognizing the importance of sustainable land management, the credit potential for Land Development, Soil Conservation, and Watershed Development for 2025-26 has been estimated at ₹1,437.36 crore, reinforcing the need for continued investments in regenerative land-use practices.

4.4. Ancillary Activities – Food processing sector

Agriculture remains a primary occupation in Andhra Pradesh, necessitating a strategic approach towards enterprise development, particularly in food and agro-processing. This sector serves as a critical link between agriculture and industry, facilitating value addition, reducing post-harvest losses, and ensuring higher farm incomes while delivering quality food products to consumers at competitive prices.

With six distinct agro-climatic zones, the state offers a diverse crop portfolio and favorable conditions for aquaculture, positioning Andhra Pradesh as a natural hub for food processing industries. Recognizing this potential, the Government of Andhra Pradesh has implemented key initiatives, including the establishment of Mega Food Parks and Agro Processing Clusters approved under the Ministry of Food Processing Industries (MoFPI).

The Andhra Pradesh Food Processing Society (APFPS), the nodal agency for food processing development in the state, plays a crucial role in policy implementation, infrastructure creation, and investment facilitation. APFPS is actively working to promote agro-processing clusters, encourage private sector participation, and support small and medium enterprises (SMEs) in the sector. The society also oversees initiatives such as Operation Greens, PM-FME, and value chain development programs, ensuring sustainable growth and increased farmer incomes.

In addition, the state government extends support through incentives for food processing enterprises, skill development initiatives, and infrastructure development, ensuring a conducive business environment for the sector.

The credit potential for the food processing sector in 2025-26 has been assessed at **₹5,176.51 crore**, reflecting the growth opportunities in processing, value addition, cold storage, and market expansion.

4.5 Ancillary Activities – Others

Loans for setting up of Agri clinic and Agri Business Centres (ACABC), lending to mFIs for on-lending to Priority sector, financing FPOs are included in this section. To encourage setting up Agri Clinic and Agri-Business Centres (ACABCs) by agriculture/Science/Veterinary Science graduates, a subsidy scheme is made available by GoI. In order that farmers get better remuneration for their produce, grant support is being provided by NABARD for formation and capacity building of FPOs. A total of 438 FPOs have been promoted and nurtured by NABARD in the state. A credit projection of ₹5449.48 crore has been made for the sector for the year 2025-26.

4.6. Micro, Small and Medium Enterprises (MSME)

The Micro, Small & Medium Enterprises (MSME) sector has been a key driver of economic growth, contributing 8% to India's GDP, 45% to manufacturing output, and 40% to exports. In Andhra Pradesh, MSMEs serve as a catalyst for employment and regional development, with a strong presence in food processing, mineral-based industries, pharmaceuticals, and services. The Industrial Development Policy 2023-27 aims to enhance the sector's global competitiveness through incentives, infrastructure development, technology upgrades, skill enhancement, and marketing support. In 2023-24 alone, 2.71 lakh MSMEs were established, attracting ₹8,286.48 crore in investment and generating employment for 19.86 lakh people. The state actively implements GoI schemes, such as PMEGP, PM Vishwakarma Yojana, and the MSME Cluster Development Programme, fostering self-employment, financial inclusion, and business formalization. PMEGP disbursed ₹172.01 crore in 2023-24, while PM Vishwakarma Yojana enrolled over 20.44 lakh artisans, ranking Andhra Pradesh fourth in India. Cluster-based industrial growth is also being promoted, with 28 ongoing projects worth

₹381.25 crore, and 58 new clusters under various stages of development. The Trade Receivables Discounting System (TReDS) and RAMP (Raising and Accelerating MSME Performance) are being leveraged to improve liquidity, market linkages, and financial stability. Additionally, feasibility studies are underway for 17 technology extension centers to support advanced manufacturing and skill development.

To strengthen financial access, the credit potential for **MSME investment and working capital in 2025-26 is estimated at ₹1,28,387.01 crore.**

4.6. Export Credit

Andhra Pradesh stands as the sixth-largest exporting state in India, leveraging its longest coastline and strategic port infrastructure to drive coast-led industrial and economic development. The state holds a dominant share in key exports, contributing 88.05% of India's tobacco exports, 75.71% of silver exports, 47.85% of fertilizers, 40% of marine exports, 36.84% of ship, boat, and floating structures, 10.32% of bulk drugs, and 7.85% of drug formulations. This export strength aligns with Andhra Pradesh's long-term vision of positioning itself as a globally competitive export hub, focusing on high-value industries and logistics-driven trade expansion.

To accelerate its export-oriented growth, the Andhra Pradesh Export Promotion Policy (APEX 2022-27) was introduced under G.O.Ms.No.24 (Industries & Commerce Department) on 17.05.2022. This policy aims to develop world-class logistics and export infrastructure, promote high-quality product portfolios, establish robust export-oriented institutions, and create integrated export ecosystems from districts to ports. In line with this vision, the District as Export Hubs (DEH) initiative has been adopted to boost district-level manufacturing and innovation, reducing transaction costs for exporters and enhancing their global competitiveness. Additionally, e-commerce and digital marketing platforms are being leveraged to expand the global reach of district-based products and services.

Recognizing the state's strategic export potential, the credit requirement for export financing in 2025-26 has been assessed at ₹4028.15 crore. With comprehensive policy support, strong logistics infrastructure, and a commitment to high-value exports, Andhra Pradesh is poised to strengthen its position as a major player in India's global trade landscape.

4.7. Education

Andhra Pradesh is committed to universalizing school education through a structured framework that ensures equitable access, quality learning, and skill development. With 58,606 schools catering to over 7 million students, the state has restructured its school system into six categories, integrating foundational to senior secondary education. The Samagra Shiksha Abhiyan, aligned with the National Education Policy (NEP) 2020, drives initiatives such as digital classrooms, STEM education, vocational training, and inclusive learning. Special focus is given to girl child education through KGBVs, skill-based education, and interventions for marginalized communities. Programs like Vidya Kanuka provide essential learning materials, while midday meals and transport allowances support student retention. The teacher-pupil ratio is optimized, and in-service teacher training enhances instructional quality.

Higher education reforms emphasize single-major curricula, skill hubs, digital learning, and job-linked training. The state runs 172 government degree colleges, 57 private aided colleges, and 475 junior colleges, focusing on affordable and industry-aligned education. Jawahar Knowledge Centres (JKCs) and APSSDC skill initiatives bridge education with employment, enhancing graduate employability. In technical education, 267 polytechnics offer modernized curricula with AI, EV technology, and industry-integrated programs, supported by virtual labs and internship-linked placements. The state's vocational education ecosystem is

strengthening apprenticeship programs and global collaborations for enhanced industry exposure.

Andhra Pradesh's education roadmap integrates equity, quality, and innovation, ensuring infrastructure development, e-learning, and inclusivity. With a focus on bridging learning gaps through FLN (Foundational Literacy & Numeracy), teacher capacity building, and NEP-driven reforms, the government is expanding higher education access, upgrading school facilities, and integrating digital education tools. The credit potential assessed for the education sector in **2025-26 is ₹5,779 crore**, reflecting the scale of investment required for a future-ready education system.

4.8. Housing

Andhra Pradesh has been at the forefront of implementing the Weaker Section Housing Programme, ensuring affordable, pucca houses for economically disadvantaged households under both Central and State-sponsored schemes. The Pradhan Mantri Awas Yojana (PMAY)—covering both urban and rural areas—is a key initiative, providing financial assistance, subsidized building materials, and streamlined approvals through an online portal. The PMAY-Gramin scheme ensures shelter access with essential utilities like electricity, LPG, and road connectivity, enhancing rural housing infrastructure. The PMAY-Urban initiative extends housing support across 125 urban local bodies and 21 urban development areas, while PMAY-JANMAN specifically addresses the housing needs of Particularly Vulnerable Tribal Groups (PVTGs). The state government facilitates cement, steel, and sand at concessional rates, alongside ₹35,000 low-interest bank loans to expedite housing completion. Quality control measures, including on-site testing laboratories, ensure construction standards, while digital geotagging and monitoring systems enhance transparency in project execution.

With a vision to complete 8.04 lakh houses currently under construction across PMAY-Urban, PMAY-Gramin, and PMAY-JANMAN, Andhra Pradesh continues its commitment to "Housing for All". The state aims to extend housing benefits to all remaining eligible beneficiaries who have received house site pattas, reinforcing its pledge to inclusive urban and rural development. The credit potential assessed for the housing sector in **2025-26 stands at ₹21,701.55 crore**, reflecting the scale of investment required to achieve comprehensive housing coverage.

4.9. Social Infrastructure Involving Bank Credit

Social infrastructure development, traditionally the realm of public investments, has seen increased private investments in response to the growing population and demand for improved education, healthcare, and drinking water facilities. This shift has resulted in the establishment of numerous private institutions and facilities. However, with a concentration of these developments in urban centers, the facilities are still not accessible in remote areas, highlighting the need for broader accessibility and equitable distribution of social infrastructure.

The potential for credit support assessed for Social Infrastructure sector is **₹2054.01 crore in 2025-26**.

4.10. Renewable Energy

Andhra Pradesh, endowed with a renewable energy potential of 120 GW, continues to make remarkable progress in harnessing solar, wind, hydro, and biomass energy. As of the latest data, the state's total installed capacity has reached 20,564 MW, with 9,033.21 MW coming from renewable sources. This includes 4,322.08 MW from solar power, 4,083.57 MW from wind energy, 106.80 MW from small hydro projects, and 520.77 MW from biomass, bagasse,

and municipal & industrial waste power projects. The state has also successfully implemented 123 MW of grid-connected solar projects, strengthening its clean energy portfolio. In line with the national goal of achieving energy security and sustainability, Andhra Pradesh is actively promoting the Surya Ghar Muft Bijli Yojana, a solar rooftop initiative aimed at encouraging households and commercial establishments to adopt solar energy, reducing dependency on conventional power sources and lowering electricity costs.

Looking ahead, Andhra Pradesh has set an ambitious target of achieving 20 GW of renewable energy capacity by 2030, comprising 10 GW from solar power, 5 GW from wind energy, and 5 GW from other renewable sources such as biomass and hydropower. To accelerate these efforts, the state has signed an MoU with Adani Green Energy for the development of 10 GW of solar power projects, slated for commissioning by 2025. Additionally, the Green Energy Corridor is being expanded to efficiently integrate renewable energy into the state's power grid, ensuring seamless transmission from solar and wind farms to load centers. The credit potential for the renewable energy sector in 2025-26 is estimated at ₹4,054.92 crore, highlighting the state's commitment to becoming a leader in clean energy and sustainable development.

5. Rural Infrastructure

Rural infrastructure encompasses essential facilities and services required for the well-being of rural communities, including both physical and social elements. Key components of rural infrastructure include irrigation structures for agriculture, rural roads, bridges, water supply, sanitation, rural energy, education, health, and communication systems. In the state, NABARD has played a significant role in supporting rural infrastructure projects for development. Notably, the state has been a leader in implementing micro-irrigation projects, drinking water initiatives, and the establishment of academic institutions to support agriculture, horticulture, and animal husbandry sectors. Despite these achievements, critical infrastructure gaps persist in specific sectors or areas within districts.

6. Microfinance

NABARD has been a steadfast advocate for inclusive financial development, pioneering the Self Help Group-Bank Linkage Programme (SHG-BLP) and Joint Liability Groups (JLGs) to integrate marginalized communities, particularly women, into the formal banking system. Andhra Pradesh, a frontrunner in this movement, has successfully leveraged the Velugu project and Society for Elimination of Rural Poverty (SERP) to drive participatory poverty alleviation. In FY 2023-24, 6.73 lakh SHGs in the state were credit-linked with ₹59,777 crore, with an outstanding loan portfolio of ₹82,364.57 crore and an impressively low NPA of 0.34%. To incentivize timely repayments and bolster rural enterprises, the Pavala Vaddi scheme was introduced, later evolving into Vaddi Leni Runalu (VLR), ensuring full interest reimbursement on loans up to ₹5 lakh per group. However, tenant farmers and sharecroppers still face hurdles in accessing institutional credit due to landownership constraints, despite the Andhra Pradesh Crop Cultivator Rights Act 2019, which seeks to safeguard their rights without affecting landowners. Moreover, challenges such as limited financial literacy, leadership stagnation in SHGs, and inadequate monitoring of loan utilization continue to hinder the sector's full potential.

7. Financial Inclusion

Financial inclusion remains a cornerstone of NABARD's developmental strategy, ensuring equitable access to banking and financial services for rural communities. Through targeted initiatives such as Financial and Digital Literacy Camps (FDLCs), mobile demonstration vans, and the promotion of digital banking platforms like BHIM UPI and PFMS, NABARD has actively worked towards bridging financial gaps, particularly in underserved regions. Special

attention has been given to the three Special Focus Districts (YSR, ASR, and Parvathipuram Manyam), where financial awareness campaigns have been intensified to promote institutional credit and digital transactions. By supporting banks with grant assistance under the Financial Inclusion Fund (FIF), NABARD continues to empower marginalized groups, reinforcing its commitment to inclusive growth and economic resilience in Andhra Pradesh.

8. Climate Change

Andhra Pradesh has taken significant strides in climate action through its State Action Plan on Climate Change (SAPCC), which identifies 11 key sectors, including agriculture, energy, forestry, and coastal zone management, to enhance climate resilience. The state has institutionalized climate governance by establishing a Climate Change Cell to implement mitigation and adaptation strategies. Flagship programs such as the Andhra Pradesh Community Natural Farming (APCNF) initiative promote sustainable agricultural practices, reducing chemical dependency and enhancing soil health. Similarly, the Andhra Pradesh Micro Irrigation Project (APMIP) and rainwater harvesting initiatives align with SAPCC's focus on water conservation. Coastal protection efforts, including mangrove restoration, help mitigate the effects of rising sea levels and cyclonic storms, while urban planning measures address waste management and sustainable energy solutions. These interventions collectively aim to build a climate-resilient Andhra Pradesh while supporting sustainable economic growth.

Under the National Action Plan for Climate Change (NAPCC), the state has implemented key projects such as the Climate-Resilient Dairy Farming Project in Anantapur, Nellore, and Vizianagaram, benefiting 2,500 families through climate-adaptive livestock management and fodder security. NABARD has also played a crucial role in climate adaptation by supporting mangrove restoration in Krishna district and implementing climate-proofing strategies in 38 watersheds across five districts. These interventions, supported by agencies like ICAR and KfW, contribute to soil rehabilitation, enhanced agricultural productivity, and sustainable livelihoods. Recognized for its pioneering efforts, Andhra Pradesh's natural farming model has received national and international accolades, including the Gulbenkian Prize for Humanity 2024. With its strong policy framework and collaborative approach, the state is poised to become a leader in climate resilience, ensuring long-term environmental sustainability and food security.

9. Way Forward: Transforming Rural Andhra Pradesh for Sustainable Growth

Andhra Pradesh stands at a pivotal juncture in its journey towards inclusive and sustainable rural development. With a robust banking network, proactive governance, and diverse agro-climatic conditions, the state is well-positioned to drive agricultural transformation, financial inclusion, and climate resilience. Strengthening rural infrastructure—especially irrigation, post-harvest facilities, and market linkages—will boost capital formation in agriculture, enhance credit absorption, and empower farmers with better price realization. Expanding banking services to remote areas, digitizing credit delivery, and improving tenant farmer financing will ensure seamless financial access to the last mile, reducing disparities in credit flow and fostering inclusive growth.

NABARD, in collaboration with the State Government, financial institutions, and community-based organizations, remains committed to harnessing the potential of innovative and climate-resilient agricultural practices. Emphasizing renewable energy adoption, cooperative credit institution strengthening, and digital transformation will accelerate progress towards sustainable and equitable rural prosperity. By aligning financial resources with developmental priorities and focusing on aspirational districts, Andhra Pradesh can create a resilient rural economy.

From a credit perspective, aligning financial resources with developmental priorities will be crucial in ensuring equitable access to credit, especially for small and marginal farmers, tenant cultivators, and rural entrepreneurs. Strengthening institutional credit mechanisms, deepening financial inclusion, and leveraging climate finance will enhance credit flow to underserved regions and sectors. By fostering synergy among banks, financial institutions, and developmental agencies, Andhra Pradesh can create a resilient rural credit ecosystem that not only supports agricultural growth but also accelerates rural enterprises, infrastructure development, and livelihood opportunities, ultimately driving the state towards long-term sustainable prosperity.

State profile

Geography

Andhra Pradesh is situated in the south-eastern part of India. It is the eighth largest state in the country with a geographical area of 1,62,970 sq. km and the tenth most populous state with population of 495.77 lakh. The state has 2nd longest coastline of 974 km running along the eastern coast of India. The state has three main physiographic regions: the coastal plains to the east; the Eastern Ghats; and Rayalaseema plateau in the southwest. On 02 June 2014, the north-western portion of the state was bifurcated to form the new state of Telangana. The re-organised Andhra Pradesh lies between 12°37' and 19°15'N latitude and 76°47' and 84°50'E longitude. The state shares its borders with Telangana to the northwest, Odisha to the northeast, Tamil Nadu to the south, Karnataka to the west, and the Bay of Bengal to the east. The topography of Andhra Pradesh is drained by important peninsular rivers like Godavari, Krishna and Penna. The deltas formed by these rivers-the Godavari and the Krishna make up the central part of the coastal plains, which is an area of fertile alluvial soil. Eastern Ghats are discontinuous and older mountains intersected by river valleys. The Rayalaseema plateau is a region of graded valleys, with red sandy soil and isolated hills. Black soil is also found in certain parts of the area.

Table 1.1 Andhra Pradesh Profile

Geography		Population	
Total Area	162,970 Sq. km	Total	495.77 lakh
Coastline	974 Kms	Rural	349.67 lakh
Districts	26	Urban	146.10 lakh
Area Rank	8 th	Population Rank	10 th
Revenue Divisions	77	Density	304 per Sq. km
Mandals	686	Literacy rate	67.35%
Gram Panchayats	13382	Female	59%
Revenue Villages	17464	Male	75%

(<https://censusindia.gov.in/census.website/>)

Demographic Profile

As per 2011 Census of India, Andhra Pradesh is the 10th most populous state with 495.77 lakh population and a population density of 304 persons per sq. km, as against 382 persons per sq. km at all India level. The rural population of the state is 349.67 lakhs (71%). The total population of the state includes 17.1% Scheduled Castes and 5.5% Scheduled Tribes. With 248.30 lakh male and 247.47 lakh female population, the state's sex ratio of 997 females per 1000 males is significantly higher than the national average of 943. The state has literacy rate of 67%, with female literacy of 59% and male literacy rate of 75%.

Macro-Economic Scenario

The Gross State Domestic Product (GSDP) at Constant (2011-12) Prices for the year 2023-24 (AE) is projected to be ₹8,20,894 Cr. (₹8.21 Lakh Crores), compared to the First Revised Estimate for the fiscal year 2022-23 of ₹7.65 Lakh Crores, reflecting a growth rate of 7.35%.

The Agriculture & Allied Sector's GVA is estimated at ₹2,17,403 Cr. for 2023-24 (AE) with growth rate of 1.69%. The industry sector GVA estimated at ₹2,22,870 cr. with a growth rate of 8.02% for the year 2023-24 (AE) and ₹2,06,325 Cr. in 2022-23 (FRE). The GVA of Services Sector for the year 2023-24(AE) at Constant (2011-12) prices is estimated at ₹2,90,360 Cr as against ₹2,75,991 Cr. in 2022-23(FRE), with a growth rate of 5.21%.

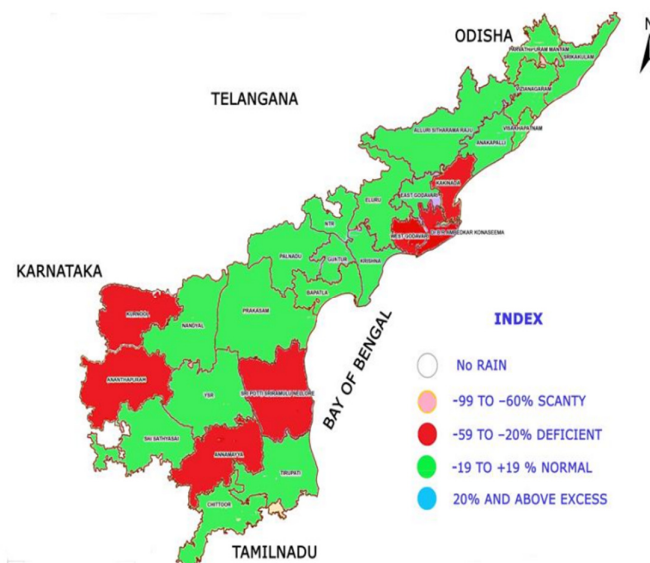
Soil

The diverse climatic regime, rock types and topography of the state has led to formation of variety of soils ranging from less fertile coastal sands to highly fertile deltaic alluviums of Godavari, Krishna and Pennar rivers, and the red and black soils developed from different parent materials. The state broadly has five different soil types. The state is dominated by red soils covering about 65% of the area, followed by black soils covering 25% of the area and alluvial soils in 5% area. The alluvial loamy clay soils found in Krishna and Godavari deltas cover 5% of the cultivated area. The coastal sands occupy only 3%, while the remaining 2% is covered by laterite soils in certain pockets of the state.

Rainfall and Agro-Climatic Regions

Majority of the net sown area of Andhra Pradesh (57%) is rainfed. Therefore, Southwest Monsoon and North East Monsoon, both play a crucial role in Agro-economy of the state. Majority of the rainfall is received from South-West Monsoon (59%) in the months of June to September. North-East Monsoon contributes remaining rainfall (28%) during October to December period and remaining 13% of the rainfall is received during the winter and summer months. Rainfall received by Andhra Pradesh in previous three years is given in the graph.

Based on the annual rainfall and temperature patterns, the state is divided into Six Agro-Climatic Zones – North coastal zone, Godavari zone, Krishna zone, Southern zone, scarce rainfall zone, High altitude & tribal areas zone. The diverse Agro climatic regions of the state have given rise to diversity in cropping pattern and agri-allied activities.



Land Utilisation

The land utilization in Andhra Pradesh is embedded in the socio-economic matrix and geography of the state. Land utilization patterns reveal that 30.40% (49.55 lakh hectares) of the state's geographical area is cultivated. Forests cover 22.63% (36.88 lakh hectares), while

14.90% (24.29 lakh hectares) is under current fallow lands. Non-agricultural use accounts for 12.84% (20.93 lakh hectares), and 8.19% (13.35 lakh hectares) is barren or uncultivable. The remaining 10.09% (16.43 lakh hectares) includes other fallow lands, cultivable waste, grazing areas, and tree crops, with 0.95% (1.54 lakh hectares) dedicated to miscellaneous groves.

Land Holding

The land holding pattern primarily decides the production and productivity of the agriculture. As per Census of Land Holdings 2015-16 (Provisional), the average size of land holdings in the state has declined to 0.94 ha from 1.06 ha in 2010-11. Small and marginal farmers have 88.60% of total land holdings, who operates on 58.40% of the area. Medium and large farmers account for 11.40% of land holdings, who operates on 41.60% of the area of the state. The number of holdings has increased from 76.21 lakh in 2010-11 to 85.24 lakh in 2015-16.

Irrigation

Andhra Pradesh has around 40 rivers, including 15 inter-state rivers. Water from the Krishna and Godavari rivers is shared based on tribunal resolutions, while other rivers are shared through state agreements. Key rivers like Godavari, Krishna, Pennar, Vamsadhara, and Nagavali are vital for irrigation.

Water availability varies across regions. To ensure equitable distribution, the state has implemented Smart water grids, restoration of water bodies, tank cascades, and micro irrigation projects. Real-time data is collected using weather stations, rain gauges, reservoir sensors, soil moisture sensors, and groundwater recorders.

In 2023-24, cropping intensity was stable at 1.21. The gross irrigated area was 32.71 lakh hectares, a 10.53% decrease from the previous year, and the net irrigated area was 26.03 lakh hectares, down 8.86%. The state has 37.90 lakh acres under micro irrigation, benefiting 13.49 lakh farmers, with Rayalaseema accounting for 26.85 lakh acres (71%).

Cropping Pattern

In 2023-24, Andhra Pradesh's food grains production decreased by 14.9% to 143.31 lakh tonnes from 168.41 lakh tonnes in 2022-23. The area under food crops reduced by 8.83% to 44.18 lakh hectares, while non-food crops decreased by 30.14% to 13.26 lakh hectares. Cropping intensity remained at 1.21, with the gross area sown dropping by 14.83% to 57.44 lakh hectares and the net area sown decreasing by 13.94% to 47.65 lakh hectares. Major foodgrain crops like paddy, maize, blackgram, bengalgram, and redgram accounted for 91.91% of the total area under foodgrains, which itself decreased by 9.67% to 33.24 lakh hectares. Paddy, the primary staple crop, covered 33.44% of the total cropped area and is grown in both Kharif and Rabi seasons across all districts.

(Source: Agriculture Statistics at a Glance, GoAP)

Agriculture and Allied Sectors

The performance of the agriculture and allied sector has been buoyant over the past several years, much of which is on account of the measures taken by the government to augment crop and livestock productivity, ensure certainty of returns to the farmers through price support, promote crop diversification, improve market infrastructure. The Agriculture and Allied Sector, which includes Agriculture, Horticulture, Livestock, Forestry & Logging, and Fishing & Aquaculture, is estimated to have a GVA of Rs. 2,32,296 crore for 2024-25 (FAE) with a growth rate of 10.70%.

Agriculture

Andhra Pradesh is “the bejewelled rice bowl of India” due to deltas of Krishna and Godavari, fertile alluvial soil, irrigation and favourable Agro-climatic factors. Agriculture plays an important role in the livelihood of people as more than 70% of the population lives in rural areas and depends on agriculture and related livelihood opportunities. The area under food grains is 33.24 lakh ha in 2023-24 and food grain production in 2023-24 is 144.31 lakh tonnes.

(Source: Agriculture Statistics at a Glance 2023-24, Govt of AP)

Horticulture

Horticulture sector has potential to enable the shift of “High Volume to High Value” crops, so as to improve the income of farmers and give stimulus to the food processing sector of the state. Andhra Pradesh has made significant contributions to India’s traditional Horticulture crops cultivation. Given that area and production of fruits and vegetables have been increasing steadily since recent few years, Andhra Pradesh has the potential to increase its contribution towards the economy by way of exports. There is a voluntary shift in the cropping pattern, as returns from Horticulture per unit of land are higher in comparison to Agriculture.

In Andhra Pradesh, the area under Horticulture crops is 18.23 lakh hectares with a production of 365.92 lakh MTs (Socio Economic Survey of Andhra Pradesh 2024-25). Andhra Pradesh ranks first in area and production of fruits, contributing 15.6% of India’s total fruit production. The Horticulture sector GVA for 2024-25 (FAE) estimated at ₹60,527 crore as against ₹55,007 crore (2023-24 FRE) with growth rate of 10.03%.

Livestock sector

Andhra Pradesh has some of the richest livestock resources in the Country and is one of the most advanced States in Animal Husbandry. The Livestock play a vital role in Socio-economic and cultural life of the state. The Livestock sector provides not only the “Risk Proofing” during agrarian distress, but also a credible source of remunerative income to the farmers. A growth rate of 3.76% was recorded in the livestock sector with Livestock GVA at ₹66456 Crore (FAE 2024-25). The State has the world-famous breed of Ongole Cattle, Godavari Buffaloes, Aseel breed of poultry, which is the principal source for the development of broiler breeds in the world. Andhra Pradesh is also famous for Nellore breed of sheep, which is well known for quality meat. As per the Livestock Census 2019, the state has 340.60 lakh of Livestock population and 1078.63 lakh Poultry population. During 2023-24, the state stood 1st in Egg Production (2548.74 lakh no.), 5th in Meat production (10.68 Lakh MTs) and 7th in Milk production (139.94 Lakh MTs) in the country.

(Source: Socio-economic survey 2024-25, Govt of AP)

Fisheries

Andhra Pradesh is endowed with water resources like rivers, lakes and coastline of 974 kms along the Bay of Bengal. These resources have created favourable conditions for the growth of fisheries and aquaculture in the state. The state is contributing about 30% of national fish production and is major exporter of shrimps with share of 35% in total value of sea food exports of the country during 2023-24. The sector is providing direct as well as indirect employment to nearly 16.5 lakh people of the state. The GVA of the sector for 2024-25 (FAE) is estimated at ₹77,085 crore as against ₹69,264 crore in 2023-24 (FRE), with a growth rate of 11.29%.

Forests

Andhra Pradesh has forest cover of 38,436.58 Sq. Kms, which amount to 23.59% of geographical area of the state. The state has 3 National Parks and 13 Wildlife sanctuaries. Andhra Pradesh is one of the Pioneer states of India to adopt Joint Forest management, which ensures participation of local people for conservation of flora and fauna. Most of the forest cover of the state is dry deciduous forest with few patches of moist deciduous forest.

Infrastructure

Infrastructure is the backbone of economic, social and human development. Physical, Social and Digital infrastructure being the important components of overall infrastructure development, can have a multiplier effect on the developmental paradigm of the state.

Roads: Andhra Pradesh has a total road network of 54,123 km including National Highways, State Highways, District Roads. The total R&B road network (excluding National Highways) in the state is 45379 Km (as of December 2023). There are 55 National Highways in the state of Andhra Pradesh covering a length of 8,744 Km, out of which 4,649 Km is four-lane and above, 3,613 Km two-lane with paved shoulder, 253 Km two lane, 85 Km intermediate lane and 144 Km are of Single Lane. The density of National Highways in the State is 17.64 Km per lakh population (2011) as against all India average of 12.09 km. In terms of area coverage, a length of 53.65 km is available for every 1,000 Sq. km in the State as against all India average of 44.46 km/1,000 Sq.km.

Railways: Andhra Pradesh comes under the South-Central Zone of the India Railways. The state has a total rail network of 3965 km with 460 railway stations and has rail density of 16.59 km of rail route per 1000 sq. km as compared to the national average of 20. (Source: Indian Railways Yearbook 2019-20). For augmentation of Infrastructural & Safety Projects, Ministry of Railways, Govt of India has allocated ₹8,406 crore for Andhra Pradesh in 2023-24. To improve the connectivity, two Vande Bharat Express trains (Visakhapatnam – Secunderabad and Tirupati – Secunderabad) have been started in the state.

Seaports: Andhra Pradesh has a coastline of 974 Km. The state has 12 coastal districts with deep draft coastal water. The state has a major Port at Visakhapatnam under the administrative control of GoI control and 16 notified ports under the control of State Government. The state has the advantage of having 3 deep water ports viz. Kakinada, Krishnapatnam and Gangavaram. Andhra Pradesh is the second-largest handler of cargo in the country. Visakhapatnam port achieved a significant milestone by handling a record 82.62 million MT of cargo in FY 2024-25. (Source: vizagport.com)

Airports: Andhra Pradesh has 3 international (Vijayawada, Visakhapatnam & Tirupathi) and 4 domestic operational Airports [Rajamundry, Kadapa, Kakinada, Orvakal (Kurnool)] and a private airport at Puttaparthi]. The State Government has planned new Greenfield airports at Bhogapuram (international airport) in Vizianagaram district, Dagadathi in Nellore district and Kuppam in Chittoor district, apart from developing the existing airstrip into the low-cost airport at Donakonda in Prakasam district.

Highlights of State Budget

The budget for the financial year 2024-25 has been proposed with a total expenditure of ₹2.94 lakh crore. Of this, revenue expenditure is estimated at ₹2.35 lakh crore, and capital expenditure is set at ₹32,712.84 crore. The revenue deficit stands at ₹34,743.38 crore, which is 2.12% of GSDP, while the fiscal deficit is projected at ₹68,742.65 crore, accounting for 4.19% of GSDP.

The Gross State Domestic Product (GSDP) of Andhra Pradesh for 2024-25 (at current prices) is estimated at ₹16.41 lakh crore, amounting to growth of 12.5% over 2023-24.

The government has prioritized balancing welfare and development, emphasizing inclusive growth and sustainable economic recovery.

The Andhra Pradesh Budget for 2024-25 has outlined significant allocations across key sectors to ensure inclusive growth and sustainable development. The Panchayat Raj and Rural Development sector received ₹16,739 crore, highlighting the government's commitment to grassroots development. School education continues to be a priority, with an allocation of ₹29,909 crore, while ₹18,421 crore has been set aside for healthcare and family welfare to enhance medical infrastructure and services. Welfare measures for marginalized communities feature prominently, with ₹39,007 crore allocated for Backward Classes, ₹18,497 crore for Scheduled Castes, and ₹7,557 crore for Scheduled Tribes. Urban development has also received a boost with ₹11,490 crore allocated to Municipal Administration and Urban Development, focusing on urban growth and the continued development of Amaravati as the capital city.

The Water Resources Department has been allocated ₹16,705 crore, reflecting the government's focus on irrigation projects and the introduction of a new Water Policy. In line with sustainable energy goals, the Energy Department has received ₹8,207 crore under the AP Integrated Clean Energy Policy 2024. Agriculture and allied sectors remain a cornerstone of the state's development strategy, with a dedicated and full-fledged budget outlay of ₹43,402 crore.

Agriculture: The 'Annadata Sukhibhava PMKISAN' scheme has been introduced to provide investment support to eligible farmers.

Social security pensions under the NTR Bharosa Pension Scheme have been enhanced to ₹4,000 per month, benefiting 64.38 lakh pensioners. The Deepam 2 scheme has been launched to provide 3 free LPG cylinders annually to eligible households, with ₹895 crore allocated for the first phase. The Housing for All initiative aims to deliver 25 lakh houses/house site pattas by 2029 under PMAY, with 6.9 lakh urban and 1.79 lakh rural houses planned for completion in the current fiscal year.

- Revival of the Amaravati Outer Ring Road project has been announced, alongside securing ₹15,000 crore for Amaravati capital city development through multilateral agencies.
- Andhra Pradesh is undertaking a first-of-its-kind Skill Census to assess workforce competencies and match them to industry demands, creating 20 lakh employment opportunities.
- The announcements in Budget 2024-25 like 192 Skill Hubs, Skills University, and Skill International programmes aim to bridge skill gaps and tap into global job markets.
- Housing: Under Housing for All, 25 lakh houses/ house pattas will be provided to economically weaker sections by 2029. (The budget envisages to complete construction of 9 lakh houses under PMAY by 2029)

Budget - Highlights related to Agriculture & Farm Sector

- The Government of Andhra Pradesh presented the exclusive Agriculture and Allied Sectors Budget for the financial year 2024-25 with a total outlay of ₹43,402 crore.
- GoAP introduced the Annadata Sukhibhava Scheme under Budget 2024-25 to support and enhance the welfare of farmers in the state. It aims to provide financial assistance of ₹20,000 per year to farmers, disbursed in three equal instalments towards investment support. This support consists of ₹6,000 from the central government and ₹14,000 from the state government. An amount of ₹4500 crore has been allocated for FY2024-25 towards this scheme.

- Programmes like Polam Pilusthondi, Vaddi Leni Runalu (interest-free loans), Soil Health Cards, and Polambadi (field schools) aim to enhance productivity and ensure comprehensive support to farmers.
- Vaddi Lenu Runalu: The State Government provides interest relief/ subvention of 4% on loans upto ₹ 1 Lakh under Vaddi Leni Runalu Scheme.
- Polam Pilusthondi Campaign: A field-based initiative where officials and scientists visit agricultural fields twice a week during kharif and rabi seasons to identify and address issues. Problems that cannot be resolved on-site will be escalated to higher authorities for solutions.
- An amount of ₹39 crore has been allocated for collecting and testing 4.50 lakh soil samples across the State. Based on the analysis of these samples, Soil Health Cards will be issued to farmers, providing recommendations for the use of fertilizers and micronutrients to improve soil health and agricultural productivity.
- The Andhra Pradesh Government has announced the implementation of drone-based services in all villages over the next three years to enhance agricultural monitoring and operations. The initiative includes the establishment of 875 service centers to support these activities. Drones will be utilized for tasks such as pest and disease identification, crop health monitoring, and precise application of fertilizers and pesticides. An allocation of ₹87.50 crore has been made for this purpose.
- Natural Farming: GoAP has allocated ₹423 crore towards Natural Farming. This initiative aims to expand the area under natural farming from 4.86 lakh hectares to 6.64 lakh hectares, while increasing the number of practitioners from 10.30 lakh to 13 lakh, thereby fostering environmentally friendly and economically viable farming practices across the State.
- ₹14,637 crore is earmarked for the maintenance of irrigation projects to ensure water availability for agricultural activities.
- Free power scheme: ₹7,241 crore has been allocated to provide free power to farmers, enabling cost-effective agricultural practices.
- "₹1,023 crore is allocated for a Government-backed crop insurance scheme to safeguard farmers against crop losses.
- Crop insurance is being restructured into a voluntary enrollment model from Rabi 2024-25, allowing farmers greater flexibility to choose participation based on individual needs."
- Andhra Pradesh continues to lead in livestock production, ranking 1st in egg production, 4th in meat production, and 5th in milk production. Measures like the Livestock Insurance Scheme, along with provisions for fodder, shelter, and medical care, are expected to boost rural livelihoods and incomes for communities dependent on livestock.
- Subsidized diesel will benefit 23,000 fishing boats, providing cost relief and supporting the marine and inland fishing industries.

Budget - Highlights related to Rural Development & Non-Farm Sector

- The government's rural development strategy aims to empower local communities, strengthen rural infrastructure, and foster sustainable livelihoods. The Department of Panchayat Raj and Rural Development has been allocated ₹16,739 crore
- Special Gram Sabhas were conducted across all 13,326 Gram Panchayats for participatory planning of MGNREGS activities, setting a world record.
- Initiatives under the "Swarna Panchayats" program aim to revitalize the Panchayat Raj system and promote local self-governance.
- Over 1.2 million households have completed 100 days of wage employment under MGNREGS, which now integrates with 16 line departments for projects such as horticulture, water resource management, and livestock shelters.
- The government is actively supporting SHGs by aligning with national schemes like PM Employment Generation Program and PM Vishwakarma, promoting digital commerce through ONDC, and enabling SHG members to access broader markets. By December 2024, over 5 lakh SHG women were connected to digital platforms for expanding their businesses.
- MGNREGS is now integrated with 16 departments, supporting projects that include - Horticulture Development for expansion of sustainable farming practices, Livestock Shelters for

extending Infrastructure support for cattle and poultry owners, Natural Resource Management for extending support for projects such as rooftop water harvesting, percolation tanks, and check dams to ensure water security in rural areas.

- Affordable housing for marginalized groups continues under PMAY, with 15,000 homes earmarked for Vulnerable Tribal Groups (VTGs) and 1.79 lakh rural homes targeted for completion under PMAY-Gramin.
- Over 192 Skill Hubs are being established, with programs to enhance the employability of rural youth in non-farm sectors.
- A Skill Census is underway, identifying gaps to align skilling efforts with market demands.
- Targeted capacity-building efforts are focused on providing sustainable incomes through training artisans and micro-entrepreneurs and facilitating access to government subsidies and financing.

Banking and Financial sector profile

2.1 Introduction

Banking and financial sector are the foundations of economic growth, human development and financial inclusion. Andhra Pradesh has an extensive banking network of 8060 bank branches (as on 31 March 2024) catering to the population of 495.77 lakh of the state.

As on 31 March 2024, the state had 39 Commercial Banks (12 Public Sector Banks and 21 Private Sector Banks, 03 Payment Banks and 03 Small Finance Bank), 04 Regional Rural Banks (RRBs), 01 State Cooperative Bank (APStCB), 13 District Cooperative Central Banks (DCCBs) and AP State Financial Corporation. Union Bank of India serves as the State Level Bankers' Committee (SLBC) to the state. The cooperative structure permeates the social fabric of the state through a sizeable network of 2,037 Primary Agricultural Credit Societies (PACS). The PACS, with their historical presence among rural households, are getting thrust from the government for furthering the objective of financial inclusion. As on 31 March 2024, a total of 8060 bank branches were evenly spread across the state, with 2734 branches in rural, 2492 branches in semi-urban, 2064 branches in urban and 770 branches in metro areas. Besides, the state has 10211 ATMs which are catering the demand of people in various regions.

To improve the effectiveness of banking services, doorstep delivery of banking services is being provided through Business Correspondents (BC). Banking institutions have strong network of 76256 active BCs in Andhra Pradesh as on 31 March 2024.

The Credit Deposit Ratio (CD Ratio) of all banks put together was 158% as on 31 March 2024, which is one of the highest in the country. The aggregate deposits of banks in the state as on 31 March 2024 was ₹5,13,630.66 crore, registering a growth of 12.40% over the previous year. The aggregate advances stood at ₹8,11,036 crore as on 31 March 2024.

2.2 Performance of the State under Annual Credit Plan (ACP)

As against the target of Priority Sector Advances of ₹3,23,000 crore under the Annual Credit Plan for the state for FY 2023-24, an amount of ₹3,68,760 crore was disbursed for various sectors. The ACP under priority sector for FY 2024-25 has been fixed at ₹3,75,000 crore, the achievement as on 31 December 2024 stands at ₹326024 crore.

Total Agriculture Credit Flow
(₹ lakh crore)

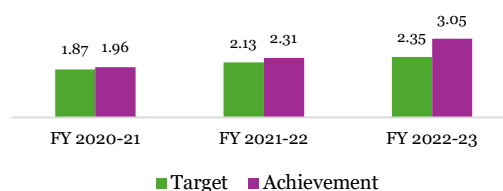
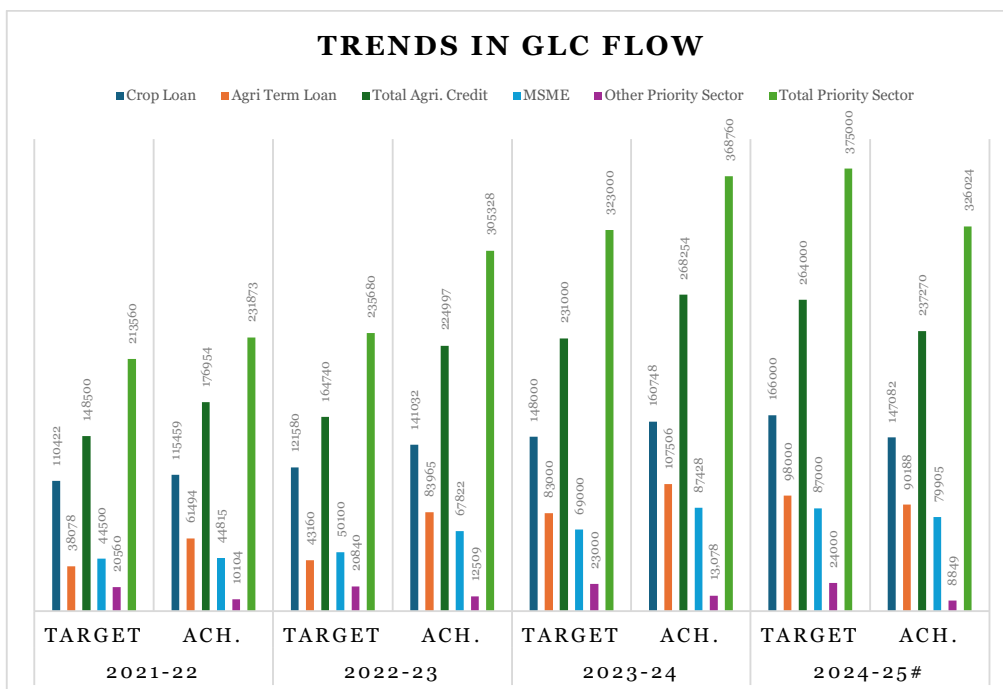


Table 2.1 Achievement of Annual Credit Plan during Last Three Financial Years (₹ crore)

Broad Sector	2021-22		2022-23		2023-24		2024-25#	
	Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.
Crop Loan	110422	115459	121580	141032	148000	160748	166000	147082
Agri Term Loan	38078	61494	43160	83965	83000	107506	98000	90188
Total Agri. Credit	148500	176954	164740	224997	231000	268254	264000	237270
MSME	44500	44815	50100	67822	69000	87428	87000	79905
Other Priority Sector	20560	10104	20840	12509	23000	13,078	24000	8849
Total Priority Sector	213560	231873	235680	305328	323000	368760	375000	326024

Achievement for 2024-25 as on 31 December 2024



2.3 Status of RRBs

During 2023-24, all RRBs in the state were in profit. The YoY growth of deposits of RRBs was recorded at 11%. Growth in advances was 20.31% during the year. The CRAR of all the RRBs was more than 9% as on 31 March 2024 and thus all of them complied with RBI stipulation. All RRBs in Andhra Pradesh are on CBS platform with RTGS/NEFT facilities. They are moving further towards technology up-gradation and have initiated necessary measures.

2.3.1. Suggestions to improve performance of RRBs

- RRBs to arrange to evaluate the performance of their FLCs by engaging an external agency.
- RRBs to explore various business opportunities available for banks for portfolio diversification. RRBs are required to focus more on Retail & MSME lending.
- RRBs have made significant progress under the Business Correspondents (BCs) programme. However, attrition/dormancy of the BCs is high due to poor viability and sustainability of their operations. It has to be ensured that transactions take place in all the accounts opened by BCs, particularly in the accounts opened under PMJDY.
- RRBs to put in place a system in adhering to the guidelines on Fair Practices Code for lenders on the lines of guidelines issued by RBI.
- The entry of differentiated banks backed by technology will be influencing the banking space. To retain existing clientele, enlist new clients and to improve the business levels, the RRBs need to upgrade the facilities offered to their clients.
- RRBs need to adopt technology more aggressively and achieve the targets set under viability plan.

2.4 Status of Cooperative Banks in the State

Since 1987, Andhra Pradesh had an integrated three-tier cooperative credit structure, with short-term and long-term credit functions under one umbrella. The structure is helmed by The Andhra Pradesh State Cooperative Bank (APStCB) at the apex level and 13 District Cooperative Central Banks (DCCBs) operating at district level through 451 branches, with 2,037 PACS functioning at the village level. Eleven of the Thirteen DCCBs are complying with the CRAR

requirement of a minimum of 9.00% as on 31 March 2024. Eleven of the thirteen DCCBs posted a profit during the year financial year 2023-24. Two DCCBs reported accumulated losses as on 31.03.24.

2.4.1 Financial position of APStCB

The total deposits of APStCB as on 31 March 2024 were ₹10306.96 crore, while the total borrowings were ₹22658.81 crore. The total loans and advances extended by APStCB were ₹27793.27 crore and total investments stood at 2041.40 crore. The CRAR of the APStCB stood at 9.60% and the Gross NPA was at 0.53%. The CD ratio of APStCB was 326.63% (As per Audit Report 2024).

2.4.2 Suggestions to improve performance of cooperative Banks

- The cooperative banks need to put in place a system of identifying the constraints in augmenting the flow of ground-level credit, particularly to agricultural and allied sectors and initiate measures to improve the position.
- 02 banks viz., Eluru and Kakinada DCCBs, were classified as weak as on 31 March 2024. These banks were advised to prepare Monitorable Action Plan (MAP) which is being monitored by a Sub-Committee of the High-Level Committee (HLC). Senior officers of NABARD are also monitoring the implementation of the plans to enable these DCCBs to come out of weak status.
- The implementation of Development Action Plans for 2024-25 prepared by all DCCBs are to be monitored by the District Level Monitoring and Review Committees (DLMRCs) at quarterly intervals to take timely remedial measures for achieving the targets.
- The StCB and the DCCBs have to extend the banking services through alternate delivery channels like internet banking. Mobile banking etc. With the entry of differentiated banks backed by technology, especially mobile technology, will be largely influencing the banking system. To retain existing clientele, enlist new clients and to improve the business levels, the DCCBs need to upgrade the facilities offered to their clients.
- Timely audit of PACS and issue of audit reports to be ensured by the banks.

2.4.3 Status of CBS in Cooperative Banks

APStCB and all the DCCBs have migrated to the Core Banking Solution (CBS) platform. The APStCB is providing other services like RTGS/NEFT, ATM facility and the issue of RuPay debit cards to its customers. The DCCBs are also providing RTGS and NEFT under sub-route through StCB. ATMs are also installed in DCCBs and RuPay debit cards are issued on a small scale. SMS facility is also extended by all the banks. GST, APY, CKYC and Inventory (Fixed Assets) modules have not been undertaken by DCCBs yet.

2.4.4 Strengthening of PACS in the State (DoR)

The viability of PACS depends on their capability to transform themselves into one-stop shops, providing all the services that are required by their members. This will also induce more members to borrow from the PACS. Under PACS as MSC, various projects have been approved i.e. Warehouses (Scientific Godowns) of different capacities, cold rooms, procurement centres, assaying units, collection centres, drying yards and processing equipment like threshers, dryers, boilers and cleaners. Under the Special Refinance Scheme – PACS as MSC, in synergy with Agriculture Infrastructure Fund (AIF) of GoI, NABARD, Andhra Pradesh Regional Office revised the refinance sanctioned to ₹416.24 crore in respect of 975 PACS for establishing various agri-infrastructure facilities in convergence with Rythu Seva Kendra scheme of GoAP. for FY 2023-24, ₹140.74 Crore were released to APStCB against PACS as MSC based on the claims submitted by them.

2.4.5 Centrally Sponsored Project on Computerisation of PACS

The computerization of PACS is expected to enhance the quality of lending, promote, good accounting practices, and strengthen governance and financial discipline. Government of India is also focussing on the overall development of PACS through various initiatives, such as establishing new Multipurpose Cooperative Societies and promoting projects under PACS as Multi Service Centres, introduce model bylaws, promote FPOs through PACS, promoting PACS as Common Service Centre etc.

NABARD has setup a State Project Monitoring Unit at Andhra Pradesh Regional Office. In Andhra Pradesh, a total of 2037 PACS are identified for computerization, with hardware procurement and data migration in progress. It has now become the anchor programme pertinent for business diversification.

2.5 Performance under various Social Security schemes

Pradhan Mantri Jan Dhan Yojana (PMJDY)

The scheme intended to include the marginalised section of the society in the formal banking fold. The Plan envisages universal access of banking facilities with at least one Basic Savings Bank Deposit Account for every household, financial literacy, access to credit, insurance and pension facility. Total number of enrolments under PMJDY as on 31 March 2024 is 162.94 lakh in the State.

Pradhan Mantri Suraksha Bima Yojana (PMSBY)

The scheme is available to people in the age group 18 to 70 years with a bank account who give their consent to join / enable auto-debit on or before 31 May for the coverage period 1st June to 31 May on an annual renewal basis. Aadhaar would be the primary KYC for the bank account. The risk coverage under the scheme is ₹2 lakh for accidental death and full disability and ₹1 lakh for partial disability. The premium of ₹20 per annum is to be deducted from the account holder's bank account through 'auto-debit' facility in one instalment. Total number of enrolments under PMSBY as on 31 March 2024 is 251.15 lakh in the State.

Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY)

The PMJJBY is available to people in the age group of 18 to 50 years having a bank account who give their consent to join / enable auto-debit. Aadhaar would be the primary KYC for the bank account. The life cover of ₹2 lakhs shall be for the one-year period stretching from 1 June to 31 May and will be renewable. Risk coverage under this scheme is for ₹2 Lakh in case of death of the insured, due to any reason. The premium is ₹436 per annum, which is to be auto-debited in one instalment from the subscriber's bank account as per the option given by him on or before 31 May of each annual coverage period under the scheme. Total number of enrolments under PMJJBY as on 31 March 2024 is 108.98 lakh in the State.

Atal Pension Yojana (APY)

APY offers choice of minimum monthly pension guaranteed by GoI of ₹1000, ₹2000, ₹3000, ₹4000 and ₹5000 per month after 60 years of age. The subscriber should be a citizen of India. The Subscriber's age should be between 18 -40 years for joining APY. The subscriber can join APY through a bank branch/post-office (through Online/ Offline modes). It is mandatory to provide nomination and spouse details in APY account. Contributions can be made on Monthly, Quarterly, or Half-yearly basis through auto debit facility from savings Bank account. Total number of enrolments under APY as on 31 March 2024 is 29.62 lakh

Table 2.2 Enrolments in PMJDY, PMSBY, PMJJBY and APY in Andhra Pradesh

Schemes	No. of Enrolments (As on 31 March 2024)
PMJDY	1,62,94,451
PMSBY	2,51,15,040
PMJJBY	1,08,98,943
APY	29,62,169

Source: SLBC

The penetration of social security schemes and Financial Literacy has led to the significant progress in Banking the Unbanked and Securing the Unsecured.

2.6 Financial Literacy

Achieving meaningful and widespread financial inclusion for the vast segment of the population living in poverty necessitates a harmonious relationship between the supply and demand of financial products and services. The key to unlocking this lies in fostering financial literacy across various stakeholders. Recognizing this, a differentiated strategy has been formulated under the Financial Inclusion Fund (FIF) schemes. This strategy places heightened emphasis on addressing the needs of economically disadvantaged districts and technologically weaker banks. The objective is to intensify efforts towards financial inclusion, catering to the previously marginalized population and aligning with regional aspirations.

NABARD has also sanctioned 10,875 Financial Literacy Programmes to be conducted by the FLCs and Rural Branches of Commercial banks, Payments banks, RRBs and DCCBs during the year 2023-24. In addition to these measures, every year NABARD propagates “Financial Literacy Messages” through All India Radio network across Andhra Pradesh on various themes.

RBI through Centres for Financial Literacy (CFL) is providing further fillip towards increasing financial literacy in the state. FLCs and CFLs are playing crucial role in imparting the Financial Literacy and widening the reach of Digital Transactions in Rural Andhra Pradesh.

2.7 Rural Self Employment Training Institutes (RSETI)/ Rural Development and Self Employment Training Institute (RUDSETI)

In Andhra Pradesh, there are a total of 14 Rural Self Employment Training Institutes (RSETIs) supported by different banks, including 09 by UBI, 02 by SBI, 02 by Canara Bank, and 01 by Indian Bank. Additionally, there are 2 Rural Development & Self Employment Training Institutes (RUDSETIs) operating in the state. These institutes play a crucial role in organizing training programs aimed at fostering sustainable micro-enterprises for rural youth. AP RO had sanctioned an amount of ₹72 lakh during FY 2023-24 to 14 RSETIs and 02 RUDSETIs for purchase of training equipment and maintenance thereof.

RSETIs have tailored their programmes to meet the specific needs of each district/block in Andhra Pradesh. This customization is based on a comprehensive skill mapping and an understanding of the region's potential for skill training and upgradation of rural youth. The institutes are actively engaged in enhancing the skill set of individuals in alignment with the demands and opportunities in their respective districts.

To ensure effective implementation and supervision of their activities, these institutes are closely monitored within the framework of the Lead Bank Scheme (LBS). The District Consultative Committee (DCC) serves as a pivotal forum for overseeing and coordinating the initiatives undertaken by the RSETIs. This approach facilitates a targeted and responsive

strategy, ensuring that the training and skill development efforts align with the unique needs and potential of each district in Andhra Pradesh.

RSETIs in Andhra Pradesh state are conducting various skill development training programmes for unemployed rural youth free of cost and supporting the trained candidates in getting a settlement. RSETIs in the State of Andhra Pradesh play a vital role in imparting training to the unemployed youth and promoting self-reliance among the people. The performance of these institutes is as under:

Table 2.3 Performance of RSETIs in Andhra Pradesh

S. No.	FY	No. of Training Programmes conducted	No. of candidates trained	No. of Candidates Settled	No. of Candidates covered under Bank Finance
1	2021-22	290	7817	6048	2973
2	2022-23	393	10790	7929	4247
3	2023-24	412	11431	8398	4577

Table 2.4 Outreach of Banking sector

Commercial Banks

Sr. No.	Particulars	As on 31 March 2022	As on 31 March 2023	As on 31 March 2024
1	No. of Branches	5769	5992	6128
2	CD Ratio	145.43	155.04	163
3	Deposits (₹ crore)	349250.23	384946.17	433285.39
4	Advances (₹ crore)	507912.76	596815.26	706065.87

Regional Rural Banks

Sr. No.	Particulars	As on 31 March 2022	As on 31 March 2023	As on 31 March 2024
1	No. of Branches	1289	1313	1339
2	CD Ratio	99.30	101.65	109
3	Deposits (₹ crore)	43217.27	48315.25	54055.42
4	Advances (₹ crore)	42913.83	49112.35	59087.32

Rural Cooperative Banks

Sr. No.	Particulars	As on 31 March 2022	As on 31 March 2023	As on 31 March 2024
1	No. of Branches	438	442	451
2	CD Ratio	140.71	160.38	172
3	Deposits (₹ crore)	20805.44	22219.89	24175.02
4	Advances (₹ crore)	29275.50	35636.76	41550.22

Source: SLBC

NABARD's Perception of Development for the State

Andhra Pradesh is embarking on a transformative path towards inclusive development and sustainable economic growth. The state stands ready to leverage its business-friendly environment, marked by ease of doing business policies and boasts robust social and physical infrastructure. Positioned with the potential to become one of the fastest-growing states in the country, Andhra Pradesh is primed for substantial progress.

The figures depicted below present the Gross State Domestic Product (GSDP) growth rate in comparison to the All-India Gross Domestic Product (GDP) and the sector-wise Gross Value Added (GVA) at constant prices illustrate the state's dynamic economic landscape. These indicators underscore Andhra Pradesh's commitment to achieving balanced and accelerated development across diverse sectors, paving the way for a prosperous and sustainable future.

Figure 3.1 - Broad Sector-wise GSDP Growth Rate (%) of Andhra Pradesh at Constant Prices (2011-12)

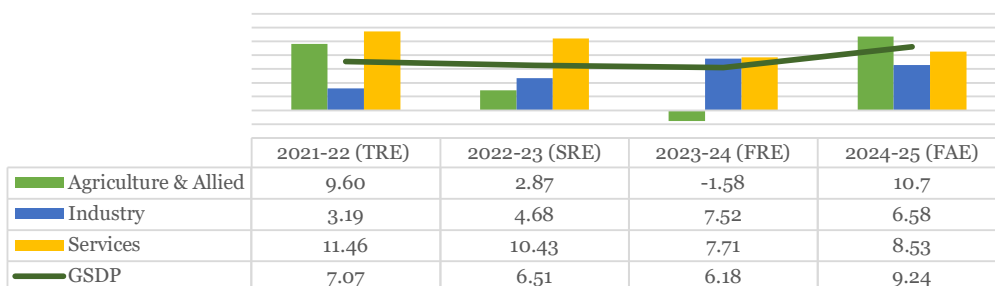
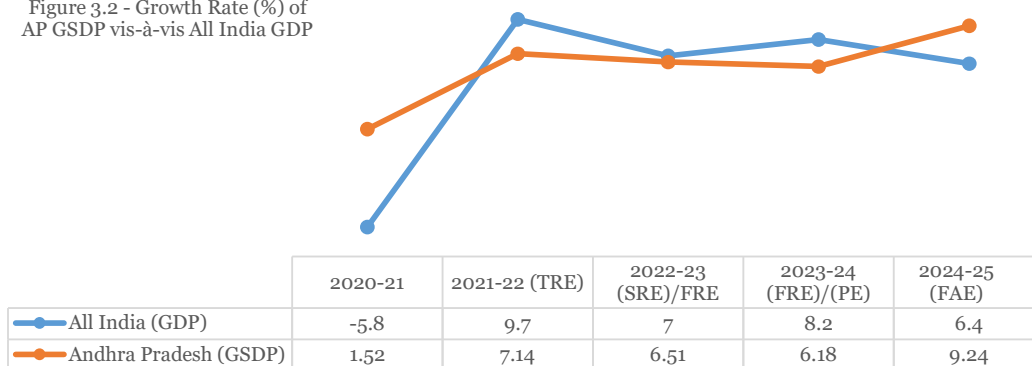
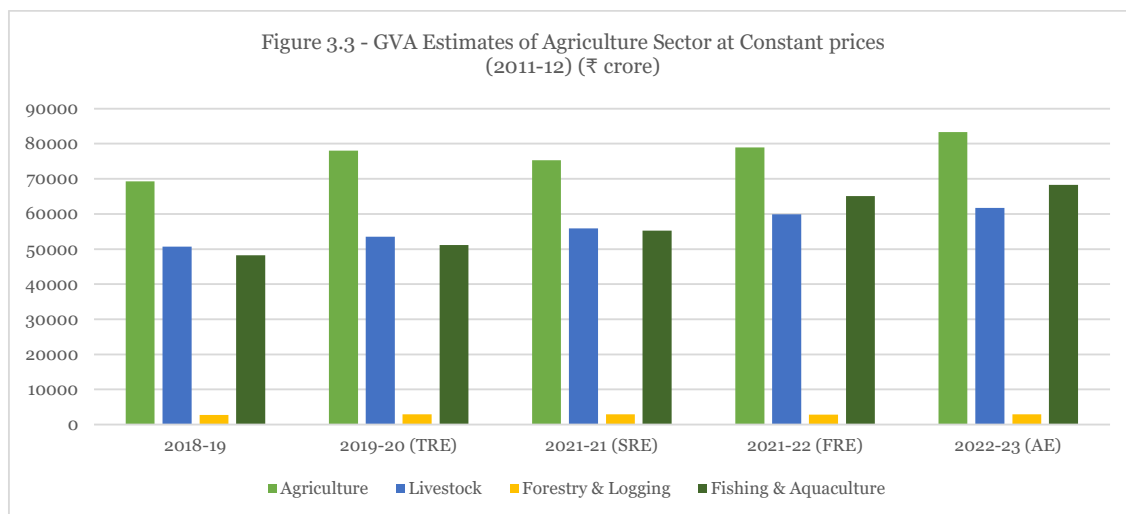


Figure 3.2 - Growth Rate (%) of AP GSDP vis-à-vis All India GDP





Source: Socio-Economic Survey of AP 2024-25

3.1 In discharging its role as a facilitator for rural prosperity, NABARD provides refinance to lending institutions in rural areas, promotes institutional development by evaluating, monitoring and inspecting the client banks. NABARD has effectively brought in a number of path breaking innovations in the rural credit domain, like formation and linkage of SHGs, Farmers Club, introduction of KCC/Rupay Kisan Smart Cards, promotion and credit linking of JLGs, taking initiatives on developing financial literacy etc. NABARD's support to state governments for creation of rural infrastructure through RIDF has made a visible and lasting impact on the rural economy. Besides, the social and livelihood interventions through Tribal Development Fund (TDF), Watershed Development Fund (WDF) and Umbrella Programme on Natural Resource Management (UPNRM) projects, piloting integrated farming systems etc. have brought a visible impact on the sustainable development of the target groups/areas. Thus, NABARD has been acting as a change agent for bringing rural transformation by partnering with all stake holders.

3.2 Capital Formation in Agriculture and Increase in Production and Productivity

Capital formation is a significant catalyst for driving productivity and growth in agriculture. By facilitating the acquisition of crucial resources, technology, and infrastructure, strategic investment in capital assets enhances efficiency and overall sectoral development which further helps in augmenting farmers' income. Irrigation accounts for almost 90 per cent of the gross public capital formation in agriculture. Private sector investment includes investments by (a) farm households and (b) private corporates. Investments made by farm households on farm equipment, machinery, irrigation, land reclamation and land improvement constitute around 90 per cent share in private investment. Higher government spending on infrastructure and other capital investments has a crowding-in effect on private investments by raising the marginal productivity of capital. Hence, public investment in agriculture needs to be increased to encourage private investments.

The factors governing capital formation in agriculture are institutional credit, public as well as private investment in irrigation, rural roads, electricity, agri-marketing and research and development on agriculture.

NABARD has always laid special emphasis on investment credit that leads to capital formation through asset creation and thereby sustainable development of rural areas. NABARD has been playing a catalytic role in augmenting capital formation in agriculture in the State through the following programmes:

- a) **Long Term Refinance:** NABARD's long-term (LT) refinance provides credit to a wide gamut of activities ranging from basic land development and irrigation structures to high-end, technologically developed farm and non-farm activities with tenure ranging from 18 months to 5 years. LT refinance of ₹7388.96 crore was released during 2023-24. The cumulative amount of refinance under LT from 2018-19 till 2023-24 is ₹38031.96 crore.
- b) Investment credit is a critical component in facilitating capital formation in agriculture. With a view to boost investment credit under agriculture and allied sector in the State and to ensure adequate financing, NABARD continued to convene the State Level Unit Cost Committee (SLUCC) meeting to fix the indicative Unit Costs for major activities through a consultative process.
- c) Channelling the subsidy schemes of Central Government like Agri-Clinic and Agri-Business Centres (ACABC) and New Agri Marketing Infrastructure (AMI) Sub-Scheme of ISAM.

The various initiatives announced under Atmanirbhar Bharat package including Agriculture Infrastructure Fund for ₹1 lakh crore from 2020-21 to 2029-30 are expected to create Post Harvest Management Infrastructure and reduce post-harvest losses, and it is also expected to give Agri Term Loans a boost. This would give impetus for development of farm gate infrastructure & aggregation points, affordable and financially viable Post Harvest Management infrastructure and doubling of Farmers Income.

- The GoAP can boost capital formation in agriculture and thus increase production and productivity through the following measures:
- Sectors like horticulture, livestock, fisheries and aquaculture to be given priority under public investment.
- Shift from production approach to value addition platform, orienting towards processing and thereby reduce post-harvest losses.
- Introduce reforms in the management and operational efficiency of existing irrigation projects for optimum water management.
- Promotion of solar and wind energy to tide over costly conventional sources, uncertainties in their supply and growing scarcity.
- Sensitise farmers about resource use efficiency, dynamic cropping patterns, climate-resilient agricultural practices, use of Drones, natural farming, integrated farming, agro-forestry, off farm practices and intensive use of Information and Communication Technology (ICT) for enhancing the productivity of smallholder farming and thus make agriculture a viable enterprise.

3.3 Financing of Small & Marginal Farmer, Oral Lessees/ Tenant Farmers/ Sharecroppers, etc.

The land holding pattern primarily decides the production and productivity of the agriculture. Agriculture in India has progressively become predominantly smallholder driven. As per Agricultural Census 2015-16, at All India Level, 86.12% farmers possess less than 2 ha of land and average size of land holding has declined from 1.15 ha (2010-11) to 1.08 ha.

As per Census of Land Holdings 2015-16, the average size of land holdings in the state has declined to 0.94 ha from 1.06 ha in 2010-11. Small and marginal farmers, who operate on 58.40% of the area have 88.60% of total land holding. Medium and large farmers, who operate on 41.60% of the area of the state account for 11.40% of land holdings. The number of holdings has increased from 76.21 lakh in 2010-11 to 85.24 lakh in 2015-16.

The Commission on Inclusive and Sustainable Agricultural Development of Andhra Pradesh, chaired by Prof. R. Radhakrishna, estimated based on the NSSO 70th Round survey of Land and Livestock Holdings that there are 24.25 lakh tenant farmers, out of whom 6.29 lakh are landless tenants and 18.03 lakh are mixed tenants who own some land. It was estimated that out of 60.73 lakh hectares of operational area, 27.15 lakh hectares, i.e. 44% was being cultivated by tenants.

To safeguard the tenant farmers, the GoAP has brought the “Andhra Pradesh Crop Cultivators Rights Act, 2019” to provide all facilities including banking, insurance and other Government benefits to the tenant farmers through the Crop Cultivators Rights Card (CCRC) without effecting the rights of the owner of the land. As of January 3, 2025, CCRCs were issued to 9,13,283 tenant farmers, with ₹2,848.77 crores disbursed to 2,00,409 farmers.

Other initiatives taken to improve tenant farmer financing include:

- Loan charge creation of tenant farmers is enabled in loan charge module for Bankers.
- Provision of Loan account of tenant farmers is being linked with e-Crop portal.
- Procurement amount will be credited by procurement agencies to bank account of tenant farmers directly

Kisan Credit Card & RuPay Kisan Credit Card

The Kisan Credit Card (KCC) scheme, introduced in 1998, aimed at providing adequate and timely hassle free crop loan to the farmers under a single window to meet all their overall working capital credit requirements – the cultivation of crops, post-harvest expenses, marketing, maintenance of farm assets and also for consumption expenses.

The GoI also launched Ghar Ghar KCC Abhiyan (GGKA) on 19.09.2023 to saturate the remaining PM KISAN Beneficiaries with Short Term Agriculture Loans through KCC. The Abhiyan began from 1st October 2023 and continued till 31st December 2023. The overall execution and monitoring responsibility for the Abhiyan has been given to NABARD. More than 1.37 lakh farmers in the state of Andhra Pradesh have been issued with KCC during the Abhiyan. As per PMFBY Portal data, there is a gap of 25.88% in KCC saturation with 1,15,353 PM Kisan beneficiaries pending for KCC saturation.

Total number of operative KCC Accounts in the State as on 31 March 2024 are 48.53 lakh with total outstanding amount of ₹65,455 crores (*source: Report on Trend & Progress of Banking in India 2023-24 by RBI*).

Working capital for Animal Husbandry and Fisheries: The facility under KCC is also extended for activities like Animal Husbandry and Fisheries for meeting working capital requirements. The scheme is being attached high priority by the Government of India to meet the short-term credit requirements of farmers involved in these activities. GoI launched the Nationwide AHDF KCC Campaign from 01-05-2023 to 31-03-2024 for providing Kisan Credit Card (KCC) facility to all eligible farmers engaged in Animal Husbandry & Fisheries. The objective is to cover 2.5 crore new farmers under the KCC Scheme, of which 1.5 crore were expected to be dairy farmers and the rest fishers. NABARD is promoting the product among farmers and bankers and other stakeholders in the State. KCC facility for working capital with Interest Subvention at 1.5% and Prompt Repayment Incentive (PRI) at 3% is extended to fisheries and animal husbandry farmers besides crop production.

To cover all the farmers with RuPay KCCs and for full coverage of KCC accounts and their activation, RRBs and RCBs were supported through 63 mobile ATM demonstration vans and 5442 micro-ATMs in the state as on 31 March 2024.

3.3.1 Land Records – Digitisation and Creation of Charge

Digitisation of land records has the potential to address various issues relating to agricultural credit, provided banks are given access to view land records online and/or they are given the facility to create charge online over land. This will help in reducing the instances of double or multiple financing on the same piece of land.

The GoAP had computerized the land records in a centralized web based portal viz., Webland portal. The portal is a web-based centralized land records management system to store and manage land holdings information. In Andhra Pradesh, banks have been provided with the facility of online viewing the digitised land records from their branches. Further, the loan charge creation module website was made operational to enable the banks to create a charge on the land.

Jan Samarth Portal

Jan Samarth Portal (<https://www.jansamarth.in/home>) is a digital portal linking twelve Credit Linked Government schemes (covering loans for education, KCC, Agri infrastructure, business activity and livelihood activities). Beneficiaries can digitally check their eligibility in a few simple steps, apply online under eligible scheme and receive digital approval.

3.3.2 Agriculture and Allied Activities – Prospects and Performance

Sustainable growth in agriculture sector is the major emphasis both for the state of Andhra Pradesh and for country as a whole. Agricultural yield, which is regarded as the most important element, is found to be lower in most of the crops. The state is prioritizing productivity enhancement and doubling farmers' income. Andhra Pradesh endeavours to provide agricultural extension services to farmers and to transfer the latest technical knowledge to the farming community.

The area under food grains in 2024-25 is 37.51 lakh hectares, up 12.85% from 33.24 lakh hectares in 2023-24. The total production of food grains is estimated at 161.86 lakh tonnes in 2024-25, a 12.94% increase from 143.31 lakh tonnes in 2023-24.

Horticulture sector: The State Government of Andhra Pradesh has identified Horticulture Sector as one of the growth engines with a focus to increase the production, productivity, and quality of various Horticulture Crops coupled with value chain development and marketing linkages for better price realization which help in increasing net returns.

Andhra Pradesh, the largest fruit producer in India, has 18.23 lakh hectares under horticulture, producing 365.92 lakh MT, contributing 15.6% of the national output. The state excels in oil palm, papaya, lime, cocoa, tomato, and chillies productivity, and ranks 2nd in mango, sweet orange, and turmeric. In 2024-25, 1,43,329 acres were converted to remunerative horticulture crops, and micro-irrigation covered 2.05 lakh acres, benefiting 75,035 farmers with a ₹793.67 crore subsidy. Micro-irrigation was implemented across 1,89,000 acres, and the oil palm area was expanded by 39,502 acres.

Sericulture: Andhra Pradesh is the second-largest producer of raw silk in India, after Karnataka, and was awarded the "Best Bivoltine Practicing State in India" by the Ministry of Textiles. In 2024-25, sericulture farmers produced 61,394 MT of quality cocoons worth ₹2,701 crores and 8,458 MT of quality raw silk worth ₹2,960 crores. To extend sericulture activities, 621 new silkworm rearing sheds were constructed in 2024-25. Mulberry is grown in Sri Satya Sai, Anantapur, Chittoor, Annamayya, Prakasam, Kadapa and Kakinada districts of the state.

Livestock sector: Inclusive growth through livestock in Andhra Pradesh significantly benefits poor communities by providing high returns, job creation, asset building, and a safety net against crop failure. The state boasts some of the richest livestock resources in the country, with notable increases in milk and meat production.

In 2023-24, Andhra Pradesh achieved the following rankings:

- 1st in egg production with 2548.74 lakh eggs.
- 5th in meat production with 10.68 lakh metric tons.
- 7th in milk production with 139.94 lakh metric tons.

According to the 2019 Livestock Census, Andhra Pradesh has 340.60 lakh livestock and 1078.63 lakh poultry, reflecting a 15.79% increase over the 2012 census. The state is the native of world-famous draught breed known as “Ongole” and the poorman’s cattle breed known as ‘Punganur’.

Fisheries sector: Andhra Pradesh plays a pivotal role in India's fisheries sector, contributing approximately 30% of the national fish production and 31% of the country's shrimp exports. In 2024-25, the state's fish production reached 41.38 lakh metric tons, achieving 73.1% of the target of 56.62 lakh metric tons.

Key initiatives in Fisheries sector include:

- A 61-day marine fishing ban to conserve fish stocks.
- Diesel oil subsidies to support fishermen.
- Ex-gratia payments to families of deceased fishermen.
- Construction of fishing harbors and fish landing centers.

Additionally, the state offers a power tariff concession for aqua service connections and promotes sustainable aquaculture through various projects and schemes. These efforts collectively enhance the livelihoods of fishing communities and ensure the sustainability of aquatic resources.

For inclusive and sustainable development in agriculture and allied sectors, the following measures are required:

- Integrated post-harvest management infrastructure including cold chain infrastructure and processing units.
- Promoting value chain & brand building for natural farming/organic farm produce of the district
- Improvement of local breeds through Artificial Insemination and other breeding activities
- Sensitization of Bankers on issuance of KCC to AH Sector
- Take R&D benefits to the farmers and fish farmers.
- Setting up of crop specific value chain and banks may channelize credit to value chain financing.
- Creation of organized marketing facilities for fish and shrimp

3.4 Climate Change – Adaptation and Mitigation

While climate change is a global challenge, effective solutions necessitate localized actions. Broadly, addressing climate change involves two strategies: mitigating future warming through measures to reduce emissions, and adapting to the changed scenario by implementing strategies to manage its impacts.

Climate Change and Vulnerability in Andhra Pradesh

Andhra Pradesh is predominantly an agrarian state where substantial area is under rain-fed farming. Major climate change issues for the state arise in agriculture, forestry and fisheries sectors and the factors contributing to vulnerability primarily include:

- Periodic occurrence of drought / erratic monsoon – Anantapur, Chittoor, Kadapa, Kurnool and Prakasam (high vulnerability)
- Coastal Disasters like rising sea-levels, floods and cyclones – Visakhapatnam, Bapatla, East and West Godavari, Krishna and Nellore (high vulnerability)

NABARD's Initiatives under Climate Change

Table 3.1 Adaptation Story in Numbers

35,000 ha of agriculture land in coastal villages at high risk of becoming saline due to sea-level rise	50 ha developed into integrated mangrove fish farms with 600 mangroves per ha
200 community members trained in mangrove restoration and 50 farmers (40% women) trained in fish farming	At least 60% of people (nearly 50% women) living in project villages directly benefiting from reduced vulnerability to climate change
3,50,000 mangrove saplings planted across 200 ha area to restore the degraded mangroves	10 cages established for culturing sea bass in the backwaters of river Krishna for livelihood enhancement

NABARD has been making concerted efforts for accessing resources through national and international funding mechanisms for financing climate change initiatives. NABARD is the National Implementing Entity (NIE) for three important funding arrangements viz., Adaptation Fund (AF), National Adaptation Fund for Climate Change (NAFCC) and Direct Access Entity to Green Climate Fund (GCF). 40 projects involving the assistance of ₹1,821 crore are at different stages of implementation. Further, to promote and support activities aimed towards addressing climate change impacts, adaptation and mitigation measures, the “Climate Change Fund-ID” was created during 2023-24 for facilitating attempts to address impacts of climate change especially towards fostering sustainable development.

In Andhra Pradesh, NABARD has implemented a climate change adaptation project for development/restoration of mangrove plantation in coastal areas and livelihood for fishermen in 3 villages of Krishna District, with a project outlay of ₹4.14 crore supported under Adaptation Fund. M S Swaminathan Research Foundation has executed the project. Another project titled “Climate Resilient Interventions in Dairy Sector in Coastal and Arid Areas in Andhra Pradesh” is being executed in 3 districts with a project outlay of ₹19.83 crore under NAFCC.

Four district level Climate Change workshops were supported under the CCF during 2023-24. Strategy and Way forward: The risks associated with climate change have a direct bearing on farm and farmers' income. Agriculture needs to move away from a production-centric approach to an ecosystem-centric approach and work towards introducing a resilient farming system. In this scenario, Zero Budget Natural Farming (ZBNF) and concept of climate smart villages need prioritisation and support of the agricultural extension agencies.

Box 1: Conserving Mangroves: Nature's climate guardians



In Nagayalanka and Koduru Mandals, Krishna District, a vital project backed by the Adaptation Fund has transformed vulnerable coastal communities. Facing threats from cyclones, erosion, and soil salinization, the initiative planted 4 lakh mangrove saplings and established an Integrated Mangrove Fishery Farming System (IMFFS) over 50 hectares. Results were impactful – heightened climate change awareness, restoration of 200 hectares of degraded mangroves, and the introduction of Fin-fish culture earning farmers ₹50,000 annually without external inputs. This sustainable approach not only mitigated unsustainable fishing but fortified the region against climate change impacts. The mangroves now stand as guardians, ensuring resilience and prosperity for Krishna District's coastal communities.

3.5 Farmers' Producer Organizations

Small and marginal farmers face numerous challenges in the form of lack of access to quality inputs, modern technologies and affordable credit, low size of the marketable surplus, poor access to markets. Besides, subsistence agriculture has gradually become unviable for the rising cost of cultivation, limited access of farmers to public resources, increasing risks due to climate change and frequent crop failures. Collectivisation of farmers into Farmer Producers Organization (FPOs) has been considered as one of the ways to address the above-mentioned challenges.

Considering the above, NABARD has been forming, nurturing FPOs and enabling the farmers' aggregates to transform as sustainable business entities, taking care of the diverse needs of the farmers. Over a period of 8-10 years around 10196 FPOs (as on 31 March 2024) have been promoted in the country by various agencies like NABARD, SFAC, State Government departments and Civil Society Organizations. Out of these, NABARD has promoted around 7355 FPOs under its various promotional initiatives and more than 1995 FPOs have been credit linked.

In addition to nurturing the new producers' organisations in terms of capacity building/handholding, credit facilitation and market linkages, NABARD is committed to provide an appropriate ecosystem for sustainable growth of FPOs resolving various issues in consultation with the Government, banks, development institutions and other stakeholders.

FPOs promoted under the PRODUCE, PODF-ID Fund of NABARD

NABARD's FPO journey commenced with the establishment of Producers Organization Development Fund (PODF) in 2011-12 to provide financial assistance to Producer Organizations (POs), enabling them to collectively manage primary produce, enhance value, and increase income for small producers. In the 2014-15 Union Budget, the Indian Government created the "PRODUCE Fund" within NABARD, contributing ₹200 crore for the promotion and establishment of 2000 Farmer Producer Organizations (FPOs) nationwide.

Further, in the Union Budget for 2019-20, Govt. of India has announced formation of 10,000 FPOs over the period of next 5 years to enhance the income of small and marginal farmers. NABARD, NCDC, SFAC, and NAFED among others have been identified as the Implementing Agencies for the scheme. Cluster-Based Business Organisations (CBBOs) would extend handholding and capacity-building support to the FPOs in the identified product clusters.

NABKISAN Finance Ltd, a subsidiary of NABARD, has introduced several innovative loan and grant products for directly supporting FPOs besides creating a digital platform for on-line submission of loan applications.

To further provide lending comforts to its subsidiaries, NABARD has introduced a Credit Guarantee Scheme on a pilot basis to provide guarantee cover to its lending subsidiaries. The NABSanrakshan Trustee Private Limited, a wholly owned subsidiary of NABARD, has been established to manage the Credit Guarantee Scheme of GoI. NABARD has onboarded 93 eligible lending institutions with NABSanrakshan under Credit Guarantee Fund Trust for Farmer Producer Organisations and sanctioned credit guarantee cover of ₹278.2 crore to 1,195 FPOs (1,561 guarantees).

NABARD has conducted FPOs melas (Tarang: Celebrating Collectivisation) in partnership with Small Farmers Agribusiness Consortium and Open Network for Digital Commerce (ONDC) at 24 locations across 24 states/UTs to demonstrate the products of FPOs and OFPOs to enable the marketing and branding of FPO products and increase sales through e-commerce.

Status of promotion of FPOs in Andhra Pradesh

As on 31 December 2024, 438 FPOs have been promoted in the State by engaging the services of 94 implementing agencies involving grant assistance of more than ₹12 crore. These FPOs cover farmers producing diverse agriculture produce including cereals, millets, pulses & horticulture produce, practicing ZBNF, organic, integrated farming among other good agricultural practices and also animal husbandry-based Dairy & Fisheries FPOs.

Many of the FPOs have achieved reasonable progress during the last five years and have emerged as viable farmers' aggregates, undertaking a host of activities including commercial and good agriculture practices. The achievements of the FPO intervention in critical areas including membership, mobilization of equity, credit and market linkages are provided in Table 3.2.

The FPOs have contributed substantially in terms of reduction in the cost of production by bulk procurement of quality inputs at wholesale price and increased production through adoption of modern agricultural practices, crop diversification and cultivation of high-value commercial agriculture crops and creating common infrastructure. FPOs are increasingly taking up the aggregation of produce and bulk transport to reduce marketing cost with improved bargaining power, processing/value addition, better quality control and participating in value chain/ supply chain. Contract-based production and marketing have been increasingly observed among the FPOs in the last few years. The assured market and

committed benchmark prices have benefitted the farmers of the FPOs, encouraging FPOs for investments in grading, primary processing, and other value addition activities.

Table 3.2: FPOs in Andhra Pradesh - Key Statistics

Particulars	No./Amt. (₹ lakh)
Total No. of FPOs sanctioned (Nos.)	448
Total No. of FPOs Registered(Nos.)	438
Aggregate Grant Sanctioned	9442.58
Aggregate Grant Released	4,810.15
No. of Shareholding Members (Nos.)	2,13,653
Women Members(Nos.)	65,065
Equity Mobilized	₹2172
No. of FPOs credit-linked(Nos.)	157
No. of FPOs market linked(Nos.)	327

3.6 Micro, Small and Medium Enterprises (MSME)

The Micro Small and Medium enterprises (MSMEs) have been accepted as the engine of economic growth and for promoting equitable development. The labour intensity of the MSME sector is much higher than that of the large enterprises. The MSMEs play a vital role in the overall growth of industrial economy of the country.

The scope and coverage of MSME sector was broadened significantly under Micro, Small and Medium Enterprises (MSME) Act, 2006 which recognized the concept of enterprise to include both manufacturing and services sectors. MSME sector is considered important because of its significant contribution to employment generation, GDP of the country (38%) and export basket. The sector has the potential to market “Made in India” vision brand globally. Bank loans to MSME are eligible to be classified under priority sector.

As per the NSS 73rd round survey (2015-16), Andhra Pradesh occupies 7th position, with 33.87 Lakh MSMEs and it is 5% of total MSMEs in the country. The MSME sector in Andhra Pradesh, identified as a catalyst for job creation and balanced regional development, manufactures a variety of products with a high concentration of Micro and Small units belonging to the Section of food, mineral and building materials, drugs and pharmaceuticals fabricated materials, trading, and service sector.

MSME Policy 2024-30

The MSME policy of GoAP aims to foster innovation, employment, and sustainable growth, enabling MSMEs to integrate into global supply chains. It prioritizes regional development, infrastructure upgrades, and competitiveness.

Financial Support

- Capital Subsidies: ₹500 crore allocated for modernization and equipment upgrades.
- Power Subsidies: ₹200 crore set aside to reduce operational costs.
- Export Promotion: ₹150 crore for trade fair participation and export certifications.

SGST Reimbursements:

- 100% SGST reimbursement for micro enterprises for a period of five years.
- 75% SGST reimbursement for small enterprises.
- 50% SGST reimbursement for medium enterprises.

Other Incentives:

- Reimbursement of up to ₹1 crore for patent registrations.
- Support for market access and branding activities, capped at ₹50 lakh per enterprise.
- Infrastructure and Development
 - Creation of 15 industrial clusters and 10 MSME parks with plug-and-play facilities to reduce startup challenges and costs.
 - ₹300 crore dedicated to R&D and innovation hubs, with 30 academic partnerships established.
- Ease of Doing Business:
 - Single-window clearance system to halve approval timelines.
 - Comprehensive digitization for registrations and compliance processes.
- Sustainability Focus: ₹120 crore allocated for energy-efficient technologies and green initiatives like water recycling and solar energy adoption.

This policy framework, supported by substantial SGST reimbursements and additional financial incentives, positions MSMEs as critical drivers of economic growth and global competitiveness.

As regards the Ground Level Credit flow to MSME sector, an amount of ₹87428 crore was disbursed during the year 2024-25 as against the target of ₹69,000 crore under MSME sector. A target of ₹87000 crore has been fixed for the year 2024-25 under ACP, against which the achievement stands at ₹79905 (91.84%) as on 31 December 2024.

3.7 Micro Credit**3.7.1 SHG Bank Linkage Programme**

The SHG Bank Linkage Programme has completed more than 30 years towards empowering the rural poor women and has emerged as a powerful intervention for poverty alleviation and financial inclusion in the state. Group mode of financing through SHGs and JLGs has been established as a cost effective and viable means to link this financially excluded segment to formal credit system and provide them capital for livelihood planning. Further, the launching of Deendayal Antyodaya Yojana National Rural Livelihood Mission (DAY NRLM) has put women at the epicentre of the development chain.

Andhra Pradesh has been a trailblazer in the Self-Help Group – Bank Linkage Program (SHG-BLP). As on 31st March 2024, a commendable total of 673378 SHGs have been credit-linked, securing a substantial loan amount of ₹59777.14 crore, with an outstanding loan balance of ₹82364.57 crore. As on 31st March 2024, the NPA as percentage to SHG loan outstanding has been 0.34% demonstrating a notable decline from 0.42% as on 31st March 2023.

In the State, the loan is also extended to SHG women for various livelihood interventions through Streenidhi Credit Cooperative Federation Limited. The establishment of Small Finance Banks (SFBs) and the Payment Banks has given a further fillip to the microfinance sector. The convergence of SHG BLP with other government programmes, financial inclusion initiatives of GoI, group insurance products and enhanced quantum of loans will promote the entrepreneurial talents of the rural poor women. Further, the potential SHGs may be encouraged to graduate as members of Producers' Organisations of farm and non-farm sector activities.

Joint liability Groups: JLG scheme was initiated by NABARD in 2006 with the expectation of enhancing credit flow to sharecroppers/ tenant farmers who do not have land rights. NABARD provides 100% refinance support to banks for JLG financing and extends financial assistance for awareness creation and capacity building of all stakeholders of the programme.

Banks and JLG promoting institutions are also given incentives for promotion and nurturing of JLGs.

As on 31st March 2024, promotional grant support of ₹334.00 lakh was released against a total sanction of ₹914.00 lakh with 40968 JLGs credit linked as on 31st March 2024. Total of 719861 JLGs were financed in Andhra Pradesh and an amount of ₹5717.38 crore was cumulative disbursement towards the same as on 31.03.2024. During the FY 2023-24, the number of JLGs promoted stood at 189983 and loan disbursed during FY 2023-24 was ₹1294.63 Cr. The constraints in graduating the SHG members into entrepreneurs are lack of marketable skills, mentoring services, limited technology adoption necessary for increasing productivity and poor access to markets.

3.7.2 Enterprise Development Programmes

To facilitate matured SHG members to graduate into rural micro-enterprises, NABARD initiated the MEDP from 2005 onwards. Buoyed by the impact of MEDP an advanced Enterprise Development Programme viz. LEDP was conceptualised and launched by NABARD in 2015 for a holistic intervention in livelihood promotion and sustainable development of rural women.

In the state of Andhra Pradesh, NABARD has conducted several MEDPs and LEDPs on farm sector as well as non-farm sector activities viz., tailoring, fashion designing, beautician course, handicraft items, Maggam work, manufacturing of low-cost sanitary napkins, millets processing and value addition, jute bag making, leaf plate making, manufacturing of organic inputs, training on zero-based natural farming, etc. Under LEDP, trainees are extended handholding support for credit and marketing linkage.

The settlement rate of the trainees is on an average 70% and average monthly incremental income post-MEDP/LEDP training is ₹5000 to ₹8000 on an average, depending on the activity. During FY 2021-22, 2022-23 & 2023-24, Andhra Pradesh had sanctioned 70 LEDPs and 135 MEDPs to develop entrepreneurial skills among these workers.

3.8 Credit support for Infrastructure development

NABARD is providing support to GoAP under various schemes like Rural Infrastructure Development Fund(RIDF), Long Term Irrigation Fund(LTIF), Micro Irrigation Fund(MIF), NABARD Infrastructure Development Fund(NIDA) and Warehouse Infrastructure Fund(WIF) towards the development of rural infrastructure viz, Augmentation of Infrastructure in schools and colleges, Anganwadi Centres, Multi-Specialty Hospital in ITDA area, veterinary clinics, lift irrigation systems, roads and bridges, agriculture and aquaculture labs, etc. These infrastructure supports are in line with the vision of the State towards the sustainable development and providing linkages support to the rural population. NABARD has also been promoting integrated rural development by providing credit to agriculture, small-scale industries, village industries, and cottage, handicrafts. Further, the GoI has also set up a special fund of ₹2,000 crore in NABARD to make available affordable credit for establishing mega-food parks and for setting up individual food processing units in the designated food parks.

3.9 Financial Inclusion

Financial Inclusion is the process of ensuring access to financial services and timely and adequate credit to vulnerable groups such as weaker sections and low-income groups at an affordable cost. NABARD is facilitating financial inclusion both on-demand and supply side by creating demand for financial products and services through financial literacy & awareness programmes and at the same time supporting the digital infrastructure for supplying these

financial products and services through Rural Co-operative Banks and Regional Rural Banks. Under the Financial Inclusion Fund, total grant assistance of ₹109.23 crore has been disbursed in Andhra Pradesh till date.

23073 Financial Digital Literacy Camps were sanctioned during last 02 years to Commercial Banks, RRBs and RCBs. The objective of these camps is to provide hands-on experience on the adoption of digital payment methods such as micro-ATMs, Mobile Banking, UPI, etc. to the rural community, apart from imparting financial literacy. The broad activities for which support was extended include for distribution of RuPay Kisan Cards (25.27 lakh), purchase of Micro ATMs (1096 nos.), establishment of VSATs (36 nos.), Solar Power UPS Deployment (226 units), RSETI for purchase of training equipment's and maintenance thereof etc. and on boarding BHIM UPI platform etc.

Support is also extended to comply with the regulatory requirement by banks such as on boarding on Public Financial Management System (PFMS) portal, Positive Payment Systems, the establishment of Central KYC Registry, the acquisition of AUA/KUA license from UIDAI, operationalization of Aadhaar Enrolments and Update Centres in the bank branches etc. which will help in spreading the benefits of DBT to the far-off locations.

Concerted efforts of all stakeholders have brought notable progress in both spheres – creating financial awareness and delivery of financial services. However, there still exist regions which are financially excluded and banks where technology adoption is inadequate, thus preventing the equitable spread of financial services. To address these disparities, a differentiated strategy has been put in place for support from the FIF from the financial year 2019-20 onwards.

3.9.1 Financial Inclusion Fund (FIF)

The strategy involves more thrust on backward districts that are constrained by various physical, economic and sociological characteristics, now termed as the Special Focus Districts (SFDs). Alluri Sitaramraju, Parvathipuram Manayam and Kadapa are the SFDs in Andhra Pradesh. The SFDs are eligible for grant support up to 90% of the eligible expenditure incurred by implementing bank.

The grant support for projects in other districts would be limited to 60%, 80% and 90% of eligible expenditure for Scheduled Commercial Banks (SCBs) (including scheduled Small Finance Banks (SFBs) and Payment Banks (PBs)), Regional Rural Banks (RRBs) and Rural Cooperative Banks (RCBs) respectively.

3.10 Credit Planning

Credit has always been considered as a critical input for development of agriculture and allied sectors and NABARD has been making concerted efforts to enhance credit flow to the Priority Sector in general and Agriculture Sector in particular. NABARD's role in credit planning under Priority Sector is enumerated hereunder.

- Preparation of Potential Linked Credit Plans (PLPs) for each district and State Focus Paper for the State as a whole.
- Liaising with stakeholders on policy matters, resolution of operational problems to facilitate smooth flow of agricultural credit and initiatives required to step up agricultural credit.
- Monitoring and collation of data on ground level credit disbursed by various financial institutions, particularly Rural Financial Institutions (RFIs).
- Coordinating the functioning of various agencies at district level.

NABARD has been undertaking the exercise of assessing potential for absorption of credit in respect of agriculture, allied sectors, MSME, Housing, Export Credit, Education, Renewable

Energy and others in each district. The credit potential for 2025-26 has been assessed at ₹4,24,332.95 crore for the State recording a growth of 19.47% over the previous year 2024-25 (assessed at ₹3,55,161 crore)

3.11 Past Trends in Credit Flow

Table 3.3: Performance under Annual Credit Plan (ACP) during last 3 years

(Amt in ₹Crore)

Particulars	2021-22		2022-23		2023-24	
	Target	Ach.	Target	Ach.	Target	Ach.
Priority sector	213560	231873 (109%)	235680	305328 (130%)	323000	368760 (114.17%)
Non-priority sector	69820	145563 (208%)	83800	214992 (257%)	120000	241576 (201.31%)
Total Credit plan	283380	377436 (133%)	319480	520320 (163%)	443000	610336 (137.77%)

Source: State Level Bankers Committee (SLBC)

Table 3.4 Priority Sector advances

Segment	2021-22		2022-23		2023-24	
	Target	Ach.	Target	Ach.	Target	Ach.
Short term production loans	110422	115459	121580	141032	148000	160748
Agri Term loans (+Agri Infra & ancillaries)	38078	61494	43160	83965	83,000	107506
Total Agriculture	148500	176954	164740	224997	231000	268254
MSME	44500	44815	50100	67822	69000	87428
Other Priority sector (export credit, education, housing, others)	20560	10104	20840	12509	23000	13079
Total Priority sector	213560	231873	235680	305328	323000	368760

Ground Level Credit under Priority Sector have surpassed the targets consecutively for the last three years. The trends in ground-level credit (GLC) flow in total agriculture lending has shown substantial increase over the years. The agriculture credit has registered a growth of 19.22% over previous year and there was a growth of 29% in the credit flow towards MSME sector during 2023-24. The share of ATL (including Agri Infrastructure & Ancillaries) in total agriculture loan was 40% during FY 2023-24. There is a need to further step-up Agriculture Term Lending which would boost capital formation in agricultural and allied sectors leveraging on government initiatives, including the Agriculture Infrastructure Fund (AIF) & AMI schemes. Banks have to step up their efforts to finance identified investment projects and area-based investment activities, viz., dairy, poultry, Agro Processing, fisheries, Horticulture etc. as outlined in PLPs for 2025-26 for various districts.

3.12 Doubling of Farmers' Income

The Hon'ble Union Finance Minister, while presenting the budget for 2020-21 announced the 'One- District One Product' initiative 'for better marketing and export of horticulture crops' and to foster coordinated development for enhancement of income of farmers. In order to enhance mobility and access to market, special rail and flight services for transportation of farm produce will also be initiated. These initiatives are expected to contribute towards doubling of farmers' income. Adoption of situation specific integrated farming system covering an assortment of activities like crop production, horticulture, dairy, poultry, sheep, fishery and agro forestry, will lead to reduction in cost, doubling of farmer's income and capital formation in Agriculture.

Some of the institutional reforms taken by GoI in order to improve the farmers income status are Pradhan Mantri Krishi Sinchai Yojana, Soil Health card, Paramparagat Krishi Vikas Yojana, Pradhan Mantri Fasal Bhima Yojana, Operation greens, PM Kisan Sampada Yojana. Similarly technological reforms include e-NAM, technology mission on Cotton, Technology mission on Oilseeds, Pulses and Maize, Mission on Integrated Development of Horticulture, National Mission on Sustainable Agriculture etc. and Adoption of new technologies and practices, expansion of area under irrigation, comprehensive reforms, improvement in livestock management, promotion of small farm business etc. will help in doubling farmers' income.

3.13 Sustainable Agriculture Practices

Sustainable agriculture refers to the set of practices that aims to meet the present needs of farmers and consumers without compromising the ability of future generations to meet their own needs. Andhra Pradesh is a predominantly agrarian economy, with agriculture being a significant contributor to its GDP and employment. However, traditional agricultural practices have often led to environmental degradation, resource depletion, and socio-economic inequalities. By promoting environmentally friendly methods, maximizing resource efficiency, and ensuring economic viability, the state has embraced sustainable agriculture to improve food security, conserve natural resources, and support rural livelihoods.

Sustainable agriculture offers a much-needed alternative to conventional input-intensive agriculture, the long-term impacts of which include degrading top soil, declining groundwater levels and reduced biodiversity. It is vital to ensure India's nutrition security in a climate-constrained world.

Some of the major practices under Sustainable Agriculture Practices are as below:

- Integrated Pest Management
- Hydroponics and aquaponics
- Polyculture farming
- Permaculture
- Crop rotation
- Agroforestry
- Organic farming & natural farming
- Rainwater harvesting
- Integrated Farming System

3.14 Agro Forestry

Agroforestry is a traditional practice where trees are grown on farms to benefit the farm family. It's a sustainable land-use system that boosts overall yields by combining annual food crops with perennial tree crops and/or livestock on the same land. This integration, whether in alternating cycles or simultaneously, is guided by practices tailored to the local community and the economic and ecological conditions of the area.

According to the Indian State Forest Report 2023, Andhra Pradesh's forest area is 38,436.58 sq. km, covering 23.59% of the state's geographical area. This includes 1,995.71 sq. km of very dense forest, 13,725.75 sq. km of moderately dense forest, 14,363.50 sq. km of open forest, and 8,351.62 sq. km of scrub forest.

3.15 Watershed Development Initiatives the State – Banking Plan and Increase in Credit Flow

NABARD is implementing watershed development projects since the inception of the Indo-German Watershed Development Programme (IGWDP) in India during the 1990s. The participatory watershed development concept and methodology have proved to be a successful initiative in enhancing the productivity, production, and improving livelihood security of the rural community. In the watershed approach, the problems of rain-fed agriculture are scientifically addressed with a major focus on the conservation of natural resources, i.e., soil and water. Watershed development refers to the conservation, regeneration, and the judicious use of human and natural resources within a particular watershed.

In the State of Andhra Pradesh, NABARD is implementing watershed projects in ten districts. As on 31 December 2024, 231 watershed projects have been sanctioned with total grant support of ₹25,693 Lakh and 1.39 lakh ha area treated.

NABARD sanctioned four new watershed projects and one non-watershed basis project in the Rayalaseema region of Andhra Pradesh in 2023-24. NABARD is providing support for intensive soil and water conservation measures, promotion of dry-land horticulture, climate-proofing measures, and awareness generation among the farmers. These measures are expected to rejuvenate groundwater level, reduce soil erosion and runoff, and promote climate-resilient agriculture.

Box 2: Vegetable Vanguard: Empowering Farmers



In the Bathinavandlapalli watershed project area of Annamayya district, farmers were practising traditional cropping pattern which were not suiting the market needs. They had to be mobilised to shift from the current cropping pattern to demand-driven vegetable production. Shri Subba Reddy, a small farmer was motivated to take vegetable production to earn the better livelihood. With available water in the Check wall due to implementation of watershed activities, farmers are inclined to new cropping pattern and agricultural diversification the farmers to shift present cropping pattern to demand driven vegetable production. Vegetables are in high demand, driving market opportunities for farmers. The project has led to increased crop productivity in the region. Farmers are experiencing higher profitability

3.16 Tribal Development

To provide sustainable livelihood to the tribal families in interior/ remote habitations, NABARD has been implementing tribal development projects popularly known as Maa Thota projects supported under Tribal Development Fund (TDF). The Tribal Development Programme of NABARD has been rechristened as the Tribal Resilience Initiative for Building Environmentally Sustainable Livelihoods (TRIBES), reflecting a renewed focus on promoting resilience and sustainability of tribal livelihoods. It also gives a clear signal of a deeper commitment to both economic and ecological sustainability. By emphasizing resilience, it suggests that the initiative is not only addressing immediate livelihood needs but also preparing communities to adapt to changing environmental and economic conditions in the long run.

NABARD has sanctioned 65 tribal development projects in Andhra Pradesh so far, which is spread over 39,796 acres benefitting around 43,511 tribal families. These projects will not only benefit tribal families by creating sustainable livelihood opportunities but also provide ecological benefits to the nearby regions by transforming barren lands into cultivable areas and help restore the ecosystems.

Box 3: NABARD's TDF Project: Farmer's Journey to Prosperity



Bharothu Nagaraju, a struggling farmer from Krishanaraopalem village, A.Konduru mandal, NTR District found hope in NABARD's TDF project. He planted mango and guava in his one-acre plot with proper irrigation and transformed his barren land into a high-yielding farm. Nagaraju is now a proud owner of mango/guava orchard generating ₹1 Lakh net income per year. His children are attending school in Vissannapeta. He dreams of clearing past debts, and envisions a bright future for his family, showcasing the impactful success of NABARD's intervention.



3.17 JIVA

JIVA – a program based on agro-ecology to address problems like Land degradation, Climate change, Loss of biodiversity, Poor productivity in Wadi project areas, Food and nutrition security concerns, Economic distress of farmers due to input intensive mono-cropping pattern and Declining net returns and to ensure long-term sustainability of watershed & TDF projects. JIVA envisions transforming about 200 ha arable area per watershed and 200-500 acre per

Wadi project and envisages to create multiplier effect to cover the balance cultivated area in the project areas.

04 JIVA pilot phase projects (01 in watershed area and 03 in tribal development project area) have been implemented in the state, which have now transformed to upscaling & consolidation phase for a period of 04 years up to the year 2028.

Box 4

"JIVA: Cultivating Joy and Prosperity in 'Maa Thota' – A Transformative Tale of Sustainable Farming."

Mrs. Puvvala Savitri, from Rayagada Jammu village, Gummalakshmipuram Mandal, Vizianagaram district revitalized her 8-acre land with the NABARD-JIVA project. Previously cultivating paddy and millets using Natural Farming methods, she transformed "Maa Thota" into a 7-layer model. Embracing Natural farming practices, the family reaped the rewards of crop rotation, bio-pesticides, and jivamrutham, yielding a combined income of ₹93,060 per acre. The once ordinary orchard now stands as a thriving source of joy and prosperity.



3.18 Special Refinance Scheme for PACS as Multi-Service Centres

NABARD also formulated special refinance schemes at a concessional rate of interest for various purposes which include conversion of PACS as Multi Service Centres (MSCs), promotion of WASH (Water, Sanitation & Hygiene) activities and support for micro food processing units.

The major activity sanctioned under the scheme is construction of Rural Godowns for creation of additional storage capacity of 7.66 Lakh MT at PACS level. Other activities sanctioned include drying yards, cold rooms, procurement centres, assaying units, horticulture collection centres, cleaners & de-stoners, paddy driers and threshers.

The Department of Agriculture Marketing, GoAP is the Nodal Agency for implementation of all the projects. While DCCBs would provide finance for the activities, the land has been identified and allocated by GoAP. A Tripartite MoU has been executed between Commissioner for Cooperation & Registrar of Cooperative Societies, Commissioner & Director of Agri., Marketing and Andhra Pradesh State Cooperative Bank Limited (APStCB). GoAP has provided guarantee and approved margin money.

While more than 1001 out of 1262 godowns sanctioned have been grounded and the construction work is in progress, identification and allocation of sites for remaining godowns is being done by the Agri. Marketing Dept.

3.19 Off Farm Development Department

NABARD has been working on development of the rural Off-Farm Sector and making constant efforts to broad base and refine them in response to field level needs. The focus has been on greater institutional credit flow to the unreached sections, provision of market linkages for small, cottage and village industries including handloom, handicrafts and other rural crafts and services, developing entrepreneurial culture among rural populace and promotion of rural innovations.

NABARD has been supporting the formation and nurturing of Off Farm Producer Organisations (OFPOs) since 2016. Most of the OFPOs have come-up in the traditional MSME clusters. They help in preserving the rich heritage of the country through their crafts. The OFPOs proved to be an important tool to aggregate the artisans, weavers and other rural producers living in small clusters for coming together for improving their produce, expand their market reach and improve their income levels. OFPOs can play a major role in providing gainful, productive, sustainable, and inclusive employment opportunities to large rural populace. In Andhra Pradesh, NABARD has promoted 03 OFPOs, out of which 02 OFPOs are in handloom clusters and 01 OFPO in wood carving cluster.

Skill Development

Development of skills as per industrial requirement is required to provide employment to local people in industries. Central and State Governments are implementing programmes to identify skill requirement and train people in required skills.

Andhra Pradesh has several initiatives aimed at enhancing the skills of its youth. Here are a few key programs:

- **SEEDAP** (Society for Employment Generation and Enterprise Development in Andhra Pradesh): This organization is one of the largest skilling bodies in the country. It implements various central and state government skilling programs to facilitate employment, self-employment, and entrepreneurship among rural youth.
- **Skill Census 2024:** The Andhra Pradesh government has launched a comprehensive assessment initiative to understand the skills and competencies of individuals and identify the skillsets demanded by various industries. This census aims to inform policy decisions and empower individuals by aligning their skills with market needs.
- **APSSDC** (Andhra Pradesh State Skill Development Corporation) offers registration for skill training and placement services, helping individuals gain the necessary skills for employment.

3.19.1 NABARD Skill Development Programmes

NABARD supports Skill Development Programmes (SDPs) for facilitating the generation of wage employment and self-employment opportunities for the rural women and youth. To take forward the skill initiatives in a structured way, NABARD has partnered with corporates under their CSR activity, NGOs, NSDC affiliated training institutes, government agencies in addition to Rural Development and Self-Employment Training Institutes (RUDSETIs/RSETIs). Skill initiatives of NABARD are gender agnostic but are sensitive to address the unique skilling needs of the economically disadvantaged and socially backward sections of society. Reskilling, upskilling and multi-skilling are focus areas for skill development.

14 Skill Development Programmes (SDPs) aimed at enhancing the capabilities of rural youth across diverse sectors such as IT and Telecom, Air Conditioning, Mechanisation of Handlooms, and Automobiles were sanctioned during FY 2023-24. These programmes are strategically designed to bolster youth employability and address the prevailing "Skill Gap" by imparting essential skill set. A total allocation of ₹64.89 lakh has been sanctioned by the Regional Office towards SDPs. This initiative aligns with and reinforces the objectives of the Government of India's "Skill India" programme, furthering its mandate to empower and upskill the nation's workforce.

Marketing support:

Producers in rural India face numerous multifaceted problems of which marketing is perhaps the most important and difficult to address. Realizing the importance of effective marketing infrastructure for both farm and non-farm sector, NABARD has been extending support for

setting up Rural Haats, Rural Marts and enabling artisans and craftsmen to reach the customers through participation in exhibitions and melas.

NABARD is also extending support to the SHGs, JLGs, Producer Organisations, Micro-enterprises in the state to enable them on boarding their products on ONDC and other e-commerce sites. Similarly, for physical marketing of their products, NABARD is providing assistance to SHGs and JLGs to hold exhibitions and sales outlet at various platforms.

The Regional Office organized a state level exhibition, hitherto named Crafts Mela which was rechristened as Grameen Bharat Mahotsav in 2024-25, district level exhibitions in YSR Kadapa, Annamayya, and Guntur districts. Cumulative grant assistance of ₹85.00 lakh was extended for these exhibitions.

The Stall in Mall initiative was also conducted at CMR Central, Visakhapatnam, and PVP Mall, Vijayawada for 90 days, providing rural artisans a platform to showcase their products in urban centres. These exhibitions collectively generated sales amounting to ₹300.00 lakh, including bulk orders. Furthermore, the RO sponsored 30 artisans from Andhra Pradesh to participate in renowned exhibitions such as Mahalaxmi Mela, Deccan Haat, Surajkund Mela, Kolkata Shilpotsav & Guwahati Exhibition, aimed at enhancing their market outreach and understanding market demands.

3.20 Potential for Cultivation of Millets in the State

Millets, also referred to as ‘nutri-cereals’ and ‘Shree Anna’ are a powerhouse of nutrients, owing to their higher protein levels, more balanced amino acid profile and contain phytochemicals which exert anti-inflammatory and anti-oxidative properties. Millets are also climate resilient crops and grown under water-scarce conditions, making them future-ready crops for ensuring food security under the current climate crisis.

Millets are celebrated for their high nutritional value and minimal resource requirements. Rich in **protein, fibre, minerals, iron, and calcium**, they also have a low glycaemic index. As a major producer, India contributes **80% to Asia’s** and **20% to global** millet production. The National Bank for Agriculture and Rural Development (NABARD) recognizes the developmental potential in embracing millets, aligning with goals in sustainable agriculture, food security, and climate resilience.

Table 3.5 Area and production of millet crops in Andhra Pradesh

S No	Crops	Total area covered in 2023-24 (‘000 ha)	Production in lakhs (‘000MTs)
1	Jowar (Sorghum)	103	328
2	Bajra (Pearl millet)	26	54
3	Ragi (Finger millet)	27	34
4	Other Millets	13	14
	Total	169	430

(Source: Socio Economic Survey of Andhra Pradesh 2024-25)

"Celebrating Millets: NABARD's Sustained Efforts for Awareness, Collaboration, and Empowerment in Andhra Pradesh."

NABARD has promoted 22 Millet-based FPOs, facilitated exposure visits for 275 farmers, supported IIMR in sorghum cultivation, and provided skills development training to 1440 SHG women beneficiaries, all contributing to the promotion of millets in Andhra Pradesh.

NABARD's Andhra Pradesh Regional Office took proactive steps to raise awareness about millets and showcase collaborative efforts in promoting the millet ecosystem. Organized Walkathon creating Millet Awareness, millet-based product exhibition, and a Millet Value Chain RAG meeting in Hyderabad.

3.21 Scope for Promotion of Organic Farming

The Government of Andhra Pradesh (GoAP) has embraced farming practices aligned with nature, rooted in ecological science rather than input economics. This shift focuses on enhancing ecological conditions at every site, demonstrating that Natural Farming diminishes reliance on synthetic inputs. Natural Farming's positive influence extends to farmers' livelihoods, fostering the careers of young individuals in agriculture, bolstering citizens' food and nutrition security, contributing to environmental restoration, and mitigating the impacts of climate change, among other benefits.

3.21.1 Bhartiya Prakritik Krishi Paddhati (BPKP): The Bhartiya Prakritik Krishi Paddhati (BPKP), introduced during the 2020-21 period as part of the Paramparagat Krishi Vikas Yojana (PKVY), aims to promote traditional indigenous agricultural practices, particularly Natural Farming. This program provides financial assistance of ₹12,200 per hectare over three years, supporting activities such as cluster formation, capacity building, continuous guidance by trained personnel, certification processes, and residue analysis. By backing these components, BPKP seeks to enhance environmentally friendly and sustainable farming practices across the agricultural sector.

Introduced during the 2020-21 period as a subsidiary initiative of the Paramparagat Krishi Vikas Yojana (PKVY), the Bhartiya Prakritik Krishi Paddhati (BPKP) aims to foster traditional indigenous agricultural practices, particularly Natural Farming. This program offers financial aid amounting to ₹12,200 per hectare over a three-year duration. The funds are allocated for activities such as cluster formation, capacity building, and sustained guidance by trained personnel, certification processes, and residue analysis. By supporting these components, BPKP endeavours to promote and strengthen environmentally friendly and sustainable farming practices across the agricultural landscape.

3.21.2 AP Community managed Natural Farming (APCNF)

The Andhra Pradesh Community Managed Natural Farming (APCNF) program, launched in 2016 by the Government of Andhra Pradesh and managed by Rythu Sadhikara Samstha (RySS), promotes sustainable and eco-friendly farming practices. It focuses on Natural Farming, which mimics natural ecosystems by maintaining year-round green cover, using biological stimulants, minimizing soil tillage, and avoiding synthetic fertilizers. The program has grown from 40,000 farmers in 2016 to over a million smallholder farmers by 2024, covering 500,000 hectares. It leverages Women Self Help Groups (SHGs) for farmer-to-farmer learning and capacity building, resulting in increased biodiversity, climate resilience, reduced greenhouse gas emissions, water savings, and improved farmer incomes.

The APCNF agricultural schemes for 2024-25 include support for 25,000 acres under natural farming, with 1,000 acres per Parliamentary constituency. Local consumption will be promoted to improve community health and nutrition.

3.22 Promotion of Digital Technological Innovations in Agriculture in the State

GoI has taken the following initiatives /steps to enable the digitalisation of the agricultural sector in the country:

- a) IDEA (India Digital Ecosystem of Agriculture): It is a framework, which would lay down the architecture for the federated farmers' database being built by taking the publicly available data as existing in various schemes and linking them with the digitized land records. The IDEA would serve as a foundation to build innovative agri-focused solutions leveraging emerging technologies to contribute effectively to create a better Ecosystem for Agriculture in India.
- b) National e-Governance Plan in Agriculture (NeGP-A): Funds are released to the State(s)/UT(s) for a project involving the use of modern technologies viz., Artificial Intelligence (AI), Machine Learning (ML), Robotics, Drones, Data Analytics, Block Chain etc.
- c) National Agriculture Market (e-NAM): It creates an online transparent competitive bidding system to facilitate farmers with remunerative prices for their produce. As of 31 December 2024, 1389 Mandis from 23 states and 04 UTs have been integrated on e-NAM. A total of 33 Mandis from Andhra Pradesh have been integrated on eNAM.
- d) To make provisions of subsidy for farm machinery more transparent, the Government has developed Centralized Farm Machinery Performance Testing Portal and FARMS Mobile App.

3.23 NBFCs/MFIs in the State

03 Small Finance Banks - Equitas Small Finance Bank Ltd, Fincare Small Finance Bank and ESAF bank and 10 MFIs - Asirvad, Avanti, Belstar, IIFL Samasta, Magalir, NABFINS, RASS, Satya, SIF, Spandana are operating in the state. During 2023-24, loans amounting to ₹524.03 Crore have been disbursed by MFIs in the state.

3.24 Initiatives of the Government of Andhra Pradesh

Many farmers lack knowledge of modern farming practices and often spend substantial amounts on inputs based on local demand. Consequently, they face high cultivation costs, low yields, exploitation by middlemen, and mounting debts, which have driven some to take extreme measures.

To address these challenges, 10,778 Rythu Seva Kendras have been established adjacent to village secretariats. These centres integrate Agri Input Shops and Farmer Knowledge Centers, aiming to ensure the availability of quality inputs at competitive prices at the village level. Additionally, they disseminate knowledge on the latest technologies to empower farmers and enhance their productivity.

Crop Insurance

In collaboration with the Government of India, the State Government has been implementing the Pradhan Mantri Fasal Bima Yojana (PMFBY) and the Restructured Weather Based Crop Insurance Scheme (RWBCIS) to safeguard farmers against unforeseen crop losses. To enhance transparency and accountability while empowering farmers, the State has reintroduced voluntary enrolment in crop insurance starting from the Rabi season of 2024-25.

Under this model, farmers contribute a nominal, pre-defined percentage of the Actuarial Premium Rate (APR), with the remaining cost subsidized equally by the State and Central Governments. This farmer-centric approach has restored the confidence of the farming community, including tenant farmers, enabling all cultivators of notified crops in designated areas to access crop insurance coverage. In 2024, insurance coverage was extended to 34.93 lakh farmers, encompassing an area of 28.67 lakh hectares.

Swarna Andhra @2047 Vision

In alignment with the national vision, Andhra Pradesh has articulated its own vision under Swarna Andhra @2047, aiming for an annual growth rate exceeding 15% through ten guiding principles. The Department of Agriculture has identified 17 growth engines to achieve this ambitious goal, focusing on:

- Increasing productivity of 11 key crops: paddy, maize, jowar, bajra, ragi, red gram, black gram, Bengal gram, groundnut, sunflower, and sesamum.
- Expanding the cultivation area for three crops: sunflower, sesamum, and millets.
- Diversifying crop cultivation to enhance the area under diversified crops.
- Promoting natural farming to increase the number of farmers practicing natural farming and the area under such practices.

This comprehensive approach aims to boost agricultural productivity and sustainability in the state.

3.25 State specific relevant Issues / sectors

Banks to take up SHG and JLG financing as a corporate agenda and closely monitor its implementation at various levels. Much needed focus to be given on converting the SHGs/ JLGs into Agripreneurs/ entrepreneurs thereby increasing their income level. In districts where MEDP/ LEDP projects are being implemented, banks may consider credit deepening for up scaling the existing interventions.

The large number of tenant/ landless farmers or oral lessees and inadequate institutional credit availability hampers productivity levels. Banks need to explore the Joint Liability Group (JLGs) mode of financing to tenant farmers. The state can frame a policy to allow the tenant/landless farmers or oral lessees to become eligible for institutional finance by covering all tenants under CCRC cards and improve access to Institutional Finance.

The quantum of post-harvest losses due to inefficient storage or supply chain management in the State is a concern. Such huge losses are attributed to lack of scientific storage facilities and improper transportation, poor front-end infrastructure, like inadequate warehousing facilities, redundant food processing technology, and inaccessibility to value-added services. Mechanization of most of the agricultural operations through custom hiring of high capacity equipment is required so that marginal, small and medium categories of farmers can also take the advantage of mechanization.

Promote investments in green hydrogen/ammonia production facilities and green hydrogen-based products manufacturing units.

As per the operational guidelines of Animal Husbandry Infrastructure Development Fund (AHIDF) scheme the scheduled banks may provide financial assistance to individuals/ FPOs for establishment of infrastructure for dairy processing and value addition infrastructure and establishment of animal feed plant in the private sector.

Crop Production, Maintenance and Marketing

4.1 Farm Credit

4.1.1 Crop Production

4.1.1.1 Introduction

Agriculture forms the bedrock of India's livelihood, civilization, culture, and heritage. As one of the world's oldest agricultural systems, Indian agriculture is diverse, heterogeneous, and unorganized, often facing challenges at various stages "from seed to market." It is a crucial sector for the country's long-term and inclusive economic growth. According to the Periodic Labour Force Survey (PLFS) 2023-24 conducted by the National Sample Survey Office (NSSO), the sector employs 46.10% of the workforce, which is frequently seasonal, under-employed, and underpaid.

Andhra Pradesh State, popularly known as the "rice bowl of India" has huge potential to develop agriculture and allied sectors. Plays an important role in the livelihood of people as 70.53% of the population in Andhra Pradesh (*source: 2011 Census*) live in rural areas and depend on agriculture and related livelihood opportunities. Contributing 26.60% share in state GVA at current prices with a growth rate of 10.70% at current prices and of 4.54% at constant prices (2024-25 FAE) (*source: Socio-Economic Survey of Andhra Pradesh 2024-25*), agriculture and allied sector play an important role not only in the economy but also for achieving food security.

However, over the years, new challenges have emerged before the sector, viz., fragmentation of agricultural holdings, excessive use of chemical inputs, depletion of water resources and decline in productivity, making farming non-viable. Adoption of resource-efficient, ICT based climate-smart agriculture, integrated farming system and usage of advanced farm mechanization technologies like usage of drones can enhance agricultural productivity and sustainability. Further, greater emphasis should be given to allied sectors with a focus on dairy, poultry, fisheries and rearing of small ruminants to transform the rural economy.

Rice is the major food crop and staple food of people in the state. Other important crops grown are Cotton, Groundnut, Maize, Sugarcane, Pulses, Sunflower, Tobacco, etc. Agriculture sector was the least impacted by the pandemic related disruptions. It has registered a growth rate of 4.54% in 2022-23 (AE) at Constant (2011-12) prices.

Table 4.1: Area Irrigated, Gross Cropped Area and Cropping Intensity for Last 05 Years

Particulars	2019-20	2020-21	2021-22	2022-23	2023-24
Gross irrigated area (in lakh ha)	38.13	39.85	38.44	36.56	32.71
Net irrigated area (in lakh ha)	28.78	29.36	29.52	28.56	26.03
Gross Cropped Area (in lakh ha)	75.00	76.10	75.47	67.44	57.44
Net Sown area (in lakh ha)	60.49	60.88	60.38	55.37	47.47
Cropping intensity	124%	125%	125%	121.7%	121%

(Source: SECC 2022-23, GoAP)

Table 4.2: Area, Production and Productivity of Major Crops during Last 02 Years

Crop	2022-23			2023-24		
	Area (lakh ha)	Prod. (lakh MT)	Productivity (kg/ha)	Area (lakh ha)	Prod. (lakh MT)	Productivity (kg/ha)
Paddy	21.29	126.30	5932	19.21	112.57	5861
Maize	3.85	27.51	7138	2.92	18.19	6225
Jowar	0.70	2.83	4047	1.03	3.28	3191
Pulses	10.33	10.87	-	9.42	8.22	-
Total Food grains	36.80	168.41	-	33.24	143.31	-
Groundnut	5.94	6.00	1011	3.12	3.23	1038
Total Oil seeds	8.11	29.03	-	5.25	26.03	-

(Source: Agricultural Statistics at a Glance 2023-24; Directorate of Statistics & Economics, GoAP)

4.1.1.2 Major Government Schemes/ Interventions

‘Hon’ble Prime Minister launched PM-JANMAN Yojana focusing on 11 critical interventions through 9 line Ministries to improve the socio economic conditions of 75 identified Particularly Vulnerable Tribal Groups (PVTG) to whom the benefits of various schemes have not yet reached out.

The scheme aims to saturate Particularly Vulnerable Tribal Groups (PVTG) households and habitations with basic facilities such as safe housing, clean drinking water and sanitation, improved access to education, health and nutrition, road and telecom connectivity, and sustainable Livelihood opportunities. It also aims to saturate them with other schemes including the Kisan Credit Card.

Around 22,000 PVTGs majority tribal habitations and PVTG families in 200 districts across the country are being covered in the campaign. The campaign initially started in 100 districts (8 districts from Andhra Pradesh viz. ASR, Eluru, Kurnool, Manyam, Nandyal, Prakasam, Srikakulam, Vizianagaram) covering approximately 500 blocks and 15,000 PVTG habitations across 18 states and the UT of Andaman and Nicobar Islands.

The remaining districts will be covered in Phase II.

A total of 3656 PVTG habitations exist with a population of about 4.6 lakh in the identified 8 districts of Andhra Pradesh.

- **GoI Scheme of Subvention of Interest on Crop Loans:** Government of India has announced continuation of Modified Interest subvention scheme of 1.5% Interest Subvention on Crop Loans during FY 2023-24. Farmers also will continue to get 3.0% interest incentive for prompt repayment of crop loans during FY 2023-24.
- **GoI Interest Subvention for First Year on Crop Loans converted due to Natural Calamities:** To provide relief to farmers affected by natural calamities, the interest subvention of 1.5% will continue to be available to Banks till FY 2023-24 for the first year on the restructured amount. Such restructured loans may attract normal rate of interest from the second year onwards as per the policy laid down by the RBI.
- **Financing under Negotiable Warehouse Receipts (NWRs):** In order to discourage distress sale and to facilitate better price realization, Government of India is continuing to provide 1.5% interest subvention to all public sector Commercial Banks, Regional Rural Banks and Cooperative Banks till FY2023-24 for financing post-harvest

loans against NWRs to small and marginal farmers (having KCC) at 7% p.a. rate of interest. Such loans are available up to ₹3.00 lakh for a period of six months. Refinance from NABARD is available to Cooperative Banks and Regional Rural Banks at interest rate of 4.5% p.a.

- **ST Refinance Scheme for financing working capital for allied activities & NFS:** As a part of achieving doubling of farmer's income, adequate institutional credit flow for meeting working capital needs for allied activities like dairy, poultry, bee-keeping and fisheries, and also for MSME in manufacturing & service sector, bonafide commercial trade transactions and social infrastructure projects is being emphasized by GoI and State Government. To ensure adequate credit support for these activities, 90% refinance support from NABARD is available for Cooperative Banks and Regional Rural Banks.
- **GoAP is implementing National Missions such as:**
 - National Mission for Sustainable Agriculture including Micro Irrigation (NMSA)
 - National Food Security Mission (NFSM)
 - National Mission on Agriculture Extension Technology (NMAET)
 - National e-Governance Plan in Agriculture (NeGP-A)
 - National Mission on Oilseeds and Oil Palm (NMOOP)
 - Mission for Integrated Development of Horticulture (MIDH)
- **Refinance support from NABARD for Seasonal Agricultural Operation**
- NABARD is continuing its normal short-term refinance support @ 4.5% rate of interest per annum to Cooperative Banks and Regional Rural Banks during 2024-25 to enable them to finance crop loans @ 7% rate of interest per annum to farmers. NABARD is also providing refinance support @ 4.5% to Public Sector Commercial Banks for financing crop loans through Primary Agricultural Societies (PACS) ceded to them.
- Taking into account the financial crunch being faced by some of the RRBs and Cooperative Banks, NABARD has launched a separate line of refinance called "Additional Short Term (SAO) Refinance" for financing crop loans by them, effective from 2016-17. The line of refinance is being continued in 2024-25 also. Under this line of credit, additional refinance support to the extent of 60% of ground level credit (GLC) will be provided to Cooperative Banks in addition to 40% of GLC support under normal ST-SAO. For RRBs, 50% of crop loans will be available as additional refinance support under this line of credit in addition to 20% of GLC support under ST-SAO. The amount of refinance support availed under this Additional ST (SAO) will be reckoned towards own funds of bank for the purpose of claiming interest subvention from GoI.
- **Agriculture Marketing**
 - Agriculture marketing infrastructure plays a pivotal role in fostering and sustaining the tempo of rural economic development and is critical for better performance of the agriculture sector. Effective marketing infrastructure is essential for cost effective marketing to minimize post-harvest losses.
 - National Agriculture Market (e-NAM): It creates an online transparent competitive bidding system to facilitate farmers with remunerative prices for their produce. As of 31 December 2024, 1389 Mandis from 23 states and 04 UTs have been integrated on e-NAM. A total of 33 Mandis from Andhra Pradesh have been integrated on eNAM. Major traded commodities in e-NAM are Dry Chillies, Cotton, Turmeric, Lemon, Tomato, Jaggery, Castor seed, Ajwain and Fruits & Vegetables. Further, 1,452 farmers, 69 traders, 9 commission agents, and 52 Farmer Producer Organizations (FPOs), with a total transaction value of ₹5,954.96 crores have been registered on e-NAM.

- **Agriculture Storage**

- Scientific storage can provide farmers with an opportunity to stagger the sale of their produce and avoid distress sales to realise better prices. Farmers can also obtain post production credit pending sale of their produce against negotiable warehouse receipts.
- The Agriculture Marketing sector in Andhra Pradesh is robust, with 1,052 godowns providing a total storage capacity of 9,65,492 MTs, of which 626 godowns (capacity: 5,65,508 MTs) are operational. During 2024-25 (up to December 2024), Market Committees collected ₹433.39 crores in market fees.
- The AMI scheme, a sub-scheme of ISAM is extended up to 31 March 2026 by Government of India. Under the Scheme, subsidy @25%/33.33% of the TFO is available for construction of agriculture marketing infrastructure including rural godowns and cold rooms. In order to improve agriculture infrastructure, financing facility for investment in viable projects for post-harvest management infrastructure and community farming assets through incentives and financial support is available under Agriculture Infrastructure Fund. The AIF scheme is operational from 2020-21 to 2032-33. Under the Scheme, Interest Subvention of 3% for Loans up to limit of ₹2 crore is available for a period of 7 years. Further, Credit Guarantee coverage will be available for eligible borrowers under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) Scheme for loan up to ₹2 crore.

Suggested Action Points

Banks:

- Increasing Individual Maximum Borrowing Power (IMBP) by Cooperative banks to ensure adequate credit support to the farmers with due regard to the Scale of Finance.
- Financing Post-Harvest Loans by banks to SF/MF.
- Banks to disburse at least 10% of their total crop loans to tenant farmers/sharecroppers/oral lessees.

Government:

- To treat agriculture as a 'Business' and come out with policies in this regard.
- Mitigating the impact of drought through completion of planned irrigation projects, micro irrigation, water conservation and rejuvenation of existing irrigation structures - desilting of tanks, etc.
- Adequate arrangements for making available the certified seeds of recommended crops and other extension services.
- Promotion of intercropping, poly cropping and mixed cropping.
- Encouraging Organic farming / Zero budget natural farming.
- Contingency crop planning for mitigating the risk on account of natural calamity.
- Quickening the process of issue/renewal of Crop Cultivators Right Cards (CCRC) to tenant farmers.
- Ensuring coverage of all farmers under PMFBY and reducing time lag in settlement of crop insurance claims.
- Usage of ICT in agriculture (Identification of pest and disease Attack through Drones) and adoption of climate resilient agriculture.

The potential for credit support for Crop Production, Maintenance and Marketing for the year 2025-26 has been assessed at ₹114364.98 crore. The potential has been estimated for major crops viz. Paddy, Maize, Jowar, Ragi, Pulses, oilseeds like Groundnut, and vegetables among other crop produce.

4.1.2 Water Resources

4.1.2.1 Introduction:

Water is the 'elixir of life'. Water availability is a key and a limiting factor influencing the production and productivity in the agriculture sector. It is essential to provide timely irrigation for effective utilization of agriculture land. Judicious utilization of water resources through appropriate conservation and management measures ensures critical importance in sustaining agriculture.

There are major, medium and minor rivers in Andhra Pradesh of which Godavari, Krishna, Pennar, Vamsadhara and Nagavali are prominent rivers in peninsular India.

4.1.2.2 Important physical characteristics of Andhra Pradesh

The climate of Andhra Pradesh is typical of India's semi-arid tropics, characterized by a rainy Southwest monsoon during June to October and a short spell of winter and the Northeast monsoon characterized by intense spells of rainfall due to cyclones. The cyclonic spells that generally occur during NE monsoons bring heavy downpours and often leave a trail of destruction.

Rainfall:

The rainfall during 2023-24 was recorded as 802.6 mm against a normal rainfall of 975.3 mm i.e., with a deviation of -17.70%. (Source: <https://apwrims.ap.gov.in/>)

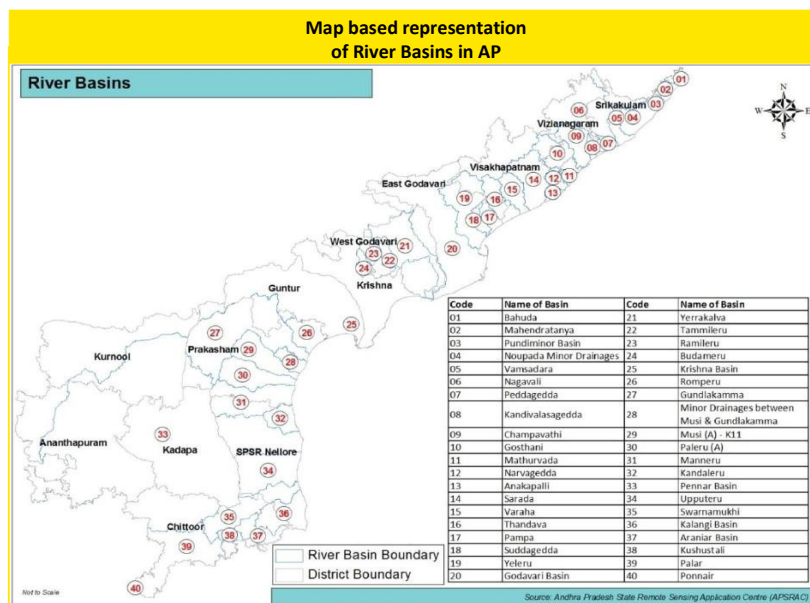
Table 4.3 District wise rainfall status of Andhra Pradesh

S No.	Status	Districts
1	Normal	Vizianagaram, Parvathipuram Manyam, Anakapalli, East Godavari, Alluri Sitharama Raju, Eluru, Krishna, Guntur, Bapatla, NTR, Palnadu, Chittoor & Tirupati
2	Deficient	Srikakulam, Visakhapatnam, Kakinada, Konaseema, West Godavari, Prakasam, Kurnool, Nandyal, Ananthapuramu, Sri Satya Sai, YSR Kadapa, Annamayya & Nellore

Surface Water resources of the state

Andhra Pradesh is a riverine state with 40 major, medium and minor rivers, of which 12 of them are inter-state rivers. Andhra Pradesh is blessed with major rivers such as Godavari, Krishna, Vamsadhara, Pennar and Tungabhadra. However, it is the lowest riparian state even for these major rivers. Roughly 6 percent of the land area in the state is occupied by water bodies. In terms of hydrology, the state is divided into the 40 river basins as illustrated in the map (below). (courtesy: <http://www.aphrdi.ap.gov.in.pdf>)

The total surface water availability at 75 percent dependability for all river basins is 56.37 BCM (1991 TMC), including flood waters, out of which the major contributors are 24.35 BCM (860 TMC) from Godavari, 15.06 BCM (532 TMC), 4.26 BCM (150.5TMC) (flood/surplus water) from Krishna and 2.76 BCM (97.6 TMC) from Pennar; accounting for 82 percent of the total surface water availability. A robust infrastructure and sustainable measures can counter the impacts of unreliable and inequitable rainfall distribution and mitigate the effect of natural calamities such as droughts and floods.



Ground Water Resources in the state:

The overall groundwater utilization is around 45 percent of the available resources which comes up to 14.88 BCM, thus utilisable balance is 18 BCM, about 55 percent of the total available quantity. An estimate by the State Groundwater Department suggested that 13.2 BCM of the 18 BCM is in command areas of major projects. 1.3 BCM could be in forest areas or other non-cultivable areas. Hence, actual balance resource available for further utilization in the state of AP (unified state) is just 3.5 BCM, which is only 10 percent of the available potential (Source: *Water Resources of AP published in association with IWMI, 2011*).

There are 736 groundwater basins in Andhra Pradesh, of which 614 basins across 576 mandals fall under the “safe” category. The assessment of the groundwater status at a regional level suggests that there is further potential for groundwater development in the Coastal Andhra and Rayalaseema regions. By increased development of groundwater in these regions, surface water can be conserved and transferred to regions with water stress.

Minor Irrigation Projects in the state

Minor Irrigation plays an important role in the development of agriculture and livelihoods particularly in drought prone areas and areas outside command of major irrigation sector by creating new ayacut and providing drinking water to villages during summer season. It is observed that benefits in agriculture through micro-irrigation shall be attained early by taking up repairs to minor irrigation sources. Minor irrigation caters to around 28 percent of the total ayacut area (66 percent coverage of ayacut in Major irrigation and 6 percent in Medium irrigation). The total capacity of 41,478 minor irrigation projects (tanks, open head channels and anicuts) or the ayacut irrigated area by minor irrigation projects in the state is 10.36 Lakh

Ha (25.60 lakh acres) which includes 35,376 panchayati raj tanks having ayacut of 324,290 ha (8.01 lakh acres). There is a gap ayacut of nearly about 55 percent of irrigation potential created. Irrigation through Anicuts and open head channels covers an ayacut of 143,320 ha (3.54 lakh acres). The total capacity of MI tanks is 142.59 TMC and the total capacity of PR tanks is 84.99 TMC.

The district wise distribution of minor irrigation tanks in Andhra Pradesh is as under:

District wise distribution of minor irrigation sources in Andhra Pradesh (2020)									
S. No	District	Tanks having Anicuts			Tanks having Open head channels			TOTAL	
		Ayacut > 100 Ac.		> 40 ha	Ayacut > 100 Ac.		> 40 ha	No.	Ayacut (acre)
		No.	Ayacut (acre)	Ayacut (ha)	No.	Ayacut (acre)	Ayacut (Ha)		
1	Srikakulam	915	96,431	39,041	7,639	178,955	72,451	8,554	275,38
2	Vizianagaram	944	110,943	44,916	8,318	157,376	63,715	6,262	268,31
3	Visakhapatnam	232	157,798	63,886	3,111	72,867	29,501	3,343	230,66
4	East Godavari	263	91,012	36,847	1,253	39,403	15,953	1,516	130,41
5	West Godavari	335	81,246	32,893	1,054	31,409	12,716	1,389	112,65
6	Krishna	248	78,790	31,899	663	24,903	10,082	911	103,69
7	Guntur	81	22,478	9,100	213	9,230	3,737	294	31,70
8	Prakasam	339	121,949	49,372	551	18,293	7,406	890	140,24
9	SPSR Nellore	722	246,524	99,807	984	36,328	14,708	1,706	282,85
10	YSR Kadapa	234	75,593	30,604	1,542	32,279	13,068	1,776	107,87
11	Kurnool	157	68,342	27,669	454	11,818	4,785	611	80,16
12	Anantapur	303	89,897	36,396	2,199	52,039	21,068	2,502	141,93
13	Chittoor	668	163,753	66,297	7,395	136,554	55,285	8,063	300,30
	Sub total	5,441	1404756	568,727	35,376	801,454	324,475	40,817	2,206,21
	Anicuts & open head channels	661	354,234	143,415			0	661	354,23
	Grand total	6,102	1,758,990	712,142	35,376	801,454	324,475	41,478	2,560,44

Source: Water Resources Department, Government of AP, 2020

Lift Irrigation:

Andhra Pradesh State Irrigation Development Corporation (APSIDC) was established in 1974 as a State Government undertaking for implementation of Lift Irrigation Schemes to provide irrigation facility to upland areas of small and marginal farmers and other weaker sections of the society with the funds provided by Government under various programmes either directly or through District administration and handing over the same to beneficiaries/agencies for operation and maintenance.

- All Lift Irrigation Schemes up to 2,500 ha (10,000 acres) to be with APSIDC
- Free power supply to all L I Schemes
- 16 hours power supply to HT supply L I Schemes with dedicated power lines
- Revival of defunct L I Schemes
- Schemes to be handed over to farmers committees for operation and maintenance
- Social Engineering implementation for improved participation of farmers.

It is found that crop productivity is higher in LI schemes. However, there are a few constraints which need to be addressed. Maintenance of LI schemes, paying the power supply bills and soil fertility issues (eg. salinity) are major issues. Other constraints are collection of water tax,

pumps and motor maintenance, cooperation from departments, cooperation amongst farmers and water availability.

AP Water Resources Development Corporation (APWRDC)

The Andhra Pradesh Water Resources Development Corporation was set up in 1997 for promotion and operation of irrigation projects, command area development and schemes for drinking water and industrial water supply to harness the water of rivers of the state of Andhra Pradesh and for matters connected therewith or incidental thereto including flood control.

The Andhra Pradesh Water Resources Development Corporation Act primarily seeks:

- To promote and operate irrigation projects and command area development including flood control.
- To plan, investigate, design, construct and manage the irrigation projects and do command area development
- To plan, investigate, design, construct and manage drinking water supply schemes.
- To plan, investigate, design, construct and manage industrial water supply schemes;
- To promote irrigation related activities such as fisheries, pisciculture, floriculture, horticulture, sericulture, tissue culture etc; and
- To promote tourism, water sports and other related activities around the irrigation projects.

Institutional Set up for Supply & Demand Management Water Resources in Andhra Pradesh

Considering the limited availability of storage capacity and fast depleting resources, GoAP has taken initiatives to strengthen demand management of water to inculcate a sense of ownership among users to preserve and conserve water resources. Strengthening of demand management institutions is critical for achieving water efficiency and ensuring water availability for all sectors.

The GoAP has set reforms into motion in institutional setup for its water resource management. At present, it is concentrated at the state and the community level in putting together a policy and administrative structure. Some of the initiatives undertaken are: passing of an act for establishment of a Water Resources Regulator, Water Management Committee, restructuring of the I&CAD Department (renamed as Water Resources Department), strengthening farmers' organizations such as Water User Associations (WUAs), Distributary Committees and Project Committees.

Broadly, the institutions can be categorized under State level, District level and Panchayati level. Further classification can be done on the basis of functionality of the institutions. The institutional and regulatory framework for water resources management in the state is discussed below.

At the state level, several institutions are functioning, which carry out regulatory, monitoring, implementation/support for management of water resources. There are several Departments which are tasked with differing functionality based on the type of water usage and demand/supply needs in the state. The demand side management in the state is done through several committees which are implementing or monitoring programmes and schemes. The state also has several supporting institutions such as corporations and institutions.

Water Resources Department

The Water Resources Department is the custodian of all the water resources in the State. It is the overarching department for water resource management in the state, mandated with regulating and monitoring all matters related to water resources such as flow measurement,

regulation, storage, flood control, irrigation, construction of dams and canals, and drought management. In the past, the Department had undertaken massive infrastructure projects such as the Nagarjunasagar dam, Srisailem dam, Sir Arthur Cotton Barrage, and Prakasam Barrage. It is also responsible for vast areas of irrigated ayacut in the state under various projects through a vast network of canals and channels.

Considering the challenges before the department, it needs to develop a broader outlook for managing all the water resources, the policy on allocation, and convergence with other water departments such as Urban Development, Rural Development, and Ground Water, and APSIDC and the Andhra Pradesh Pollution Control Board as opposed to its current orientation which only focuses on surface water while quality control does not fall into its purview.

Rural Water Supply and Sanitation Department

The Rural Water Supply and Sanitation (RWSS) Department is the nodal agency in the State for providing drinking water and sanitation facilities in rural areas under RWS sector. The basic functionality of the RWSS Department is the following:

- Spot sources (Borewells fitted with Hand Pumps)
- Protected Water Supply Schemes (for one habitation/village)
- Comprehensive Protected Water Supply Schemes

The projects undertaken by the RWSS are implemented through the following institutional structure which reaches out to the village level. The institutional arrangement supports a progressive decentralization and devolution to the PRIs, with increased community participation, financial sustainability and enhanced accountability at all the levels.

► **State Level:** The Executive Committee of the State Water and Sanitation Mission (SWSM) steers the implementation at the state level. The Executive Committee of SWSM, headed by Secretary RWSSD is responsible for planning and policy formulation; capacity building; fund flow; approval of annual plan and budget allocation; review, monitoring and evaluation of the Sector and District Programs. The State Project Support Unit assists SWSM in monitoring and implementing policy decisions regarding relating to all aspects including Community Participation, Communications and Capacity Building.

► **District Level:** At the district level, the District Water Sanitation Committee is set up to govern the project implementation at the districts through ensuring decentralization at the Panchayati levels. At the district level the Multi Village Scheme – Water Supply Committee is formed to planning, designing, procurement and implementation of Single Village Schemes and Multi Village Scheme.

► **Village Level:** The Gram Panchayat Water & Sanitation Committee formed at the Gram Panchayat level takes care of all intra-village facilities in terms of designing and implementing the projects. The Self Help Groups at the village level are responsible for closely interacting with the GPs/ GP-WSCs for executing their responsibilities.

Ground Water Department

The Ground Water Department in Andhra Pradesh is a state level institution involved in: (i) Systematic and scientific development of groundwater, and (ii) Assessment and Management in different Agro-climatic Zones and Hydrogeological formations for sustainability. It functions as a monitoring agency and carries out the following functions.

- Periodical estimation of basin (watershed) wise groundwater resources
- Delineation of potential groundwater zones
- Investigation and identification of feasible sites for wells, artificial recharge structures

- Groundwater levels and water quality monitoring through observation wells network (more than 3000 Observation wells, including Piezometers fixed with Digital Water Level Recorders with Telemetry system)
- Exploratory and Production wells drilling
- Environmental clearances for Industries and Sand mining
- Special Groundwater studies using Remote Sensing and GIS tools
- Studies for Conjunctive use in Major Command Areas

The department is well equipped with knowledge of groundwater assessment, estimation, well site investigations and lithology and an established network of observation wells to monitor ground water. It has competent manpower to manage the various professional tasks. The challenge facing the department is the rapidly declining groundwater table due to overexploitation of groundwater.

Urban Water Supply Department

Urban Water Supply falls under the purview of Public Health and Municipal Engineering Department, and is responsible for the comprehensive design and execution of Water Supply and Sewerage Schemes in all the 97 Municipalities, 12 Municipal Corporations and 1 Grater Municipal Corporation in the state. The main function of the department is to supply water to all the ULBs, provide scientific disposal and treatment of waste water in all ULBs and industries. The department also has Technical Control over all the Engineering works in these Municipal Towns and Corporations. After completion, the Water Supply and Sewerage Schemes are being handed over to the concerned Municipal Corporations and Municipalities for operation and maintenance.

Integrated Watershed Management Programme (IWMP)

Being run under the Rural Water Supply and Sanitation Department, the Integrated Watershed Management Programme (IWMP) was launched to restore the ecological balance by harnessing, conserving and developing degraded natural resources such as soil, vegetative cover and water and to create sustainable livelihoods for asset less farmers. The institutional structure for implementing IWMP has dedicated institutions with professional teams at state level and DWMA with financial assistance to dedicated institutions. Currently, 431 projects covering an area of 18.08 lakh ha., are covered under the programme

- ▶ **State Level:** For Implementation of the IWMP watersheds, State Level Nodal Agency (SLNA) has been constituted by the State Government. The SLNA consists of representatives from NRAA, Central Nodal Ministry and facilitates in routing funds from the Centre.
- ▶ **District Level:** The District Water Management Agency (DWMA) implements 75 percent of the sanctioned watershed projects through Project Officers of the line departments and 25 percent of the projects are implemented through by the Village Watershed Committees.
- ▶ **Village Level:** At the Village level, the Project Implementing Agencies would carry out the watershed projects through the Village Organizations and Watershed Committees formed by the representatives of the SHGs notified. There is also a need to establish this independent regulator with necessary key functionaries such as water management, economics, finance, design, research & training, irrigation, power, infrastructure experts, a representation from all stakeholder segments for effective functioning of the commission.

AP State Irrigation Development Corporation (APSIDC)

APSIDC was established in 1974 as an autonomous corporation with the objective of providing irrigation facilities to upland areas to uplift small and marginal farmers including SCs and STs with the funds provided by the State Government. APSIDC was responsible for implementing

Lift Irrigation Schemes, borewells, tubewells and infiltration wells to provide irrigation facilities. Since 2004, APSIDC is responsible to manage only lift irrigation schemes covering up to 4,000 ha ayacut.

Some of the key initiatives currently being undertaken by APSIDC are:

- Development of a website along with mobile application for monitoring the Demand-Collection-Balance of water rate at commissioned schemes linked to details of beneficiaries, such as Aadhaar card number, crops raised. `
- Proposal for Implementation of Micro Irrigation System at all Lift Irrigation Schemes.

4.1.2.3 NABARD Interventions in the Conservation of Water Resources of the State:

NABARD has pioneered work in the development of both surface and groundwater resources through various schemes like watershed development and climate change projects, addressing solutions for water scarcity in arid and semi-arid regions. NABARD's efforts have promoted the creation of numerous conservation structures throughout the nation using a watershed development approach.

NABARD has been identified as the National Implementing Entity for the formulation and routing of climate change projects to avail national and international funds under climate change initiatives. NABARD has been implementing watershed development projects since the inception of the Indo-German Watershed Development Programme (IGWDP) in India during the 1990s. The participatory watershed development concept and methodology have proven to be successful initiatives in enhancing productivity, production, and improving the livelihood security of rural communities.

To further replicate these initiatives in the drought-prone areas of the country, the Union Finance Minister, in his budget speech for 1999-2000, announced the creation of a Watershed Development Fund (WDF) in NABARD. The broad objectives of WDF include unifying multiple watershed development programs into a single national initiative through the involvement of village-level institutions and Project Facilitating Agencies (PFAs). Consequently, WDF was created in NABARD with a contribution of ₹100 crore each by the Ministry of Agriculture (MoA), Government of India (GoI), and NABARD.

NABARD supports many projects that can be classified under climate finance. Over 28% of NABARD's cumulative disbursements are linked to climate change adaptation and mitigation. Specifically, NABARD's thematic areas of forestry, agriculture, animal husbandry, land development, minor irrigation, etc., have projects or components with emission reduction potential. Additionally, areas like farm mechanization, Self Help Groups, Storage & Market Yards, etc., have some linkages with climate change adaptation.

Potential Programmes for conserving and bringing up Minor Irrigation structures of NABARD programs:

NABARD's 'five' programmes for Natural Resources Management – An Integrated Initiative of Climate Change Adaptation Measures:

- Rural Infrastructure Development Fund (RIDF)
- Tribal Development Fund (TDF)
- Integrated Watershed Development Programme (IWDP)
- Umbrella Programme on Natural Resource Management (UPNRM)
- NABARD Infrastructure Development Assistance (NIDA)

These programmes have supported projects with emission reduction potential including forestry, biogas digesters, rural energy management (pump replacement, HVDS, etc.), renewable energy and improving energy efficiency.

4.1.2.4 Critical Issues and Challenges in Irrigation Sector

Gap in Potential Created and Utilized

There is a large gap between the potential created and utilized due to several factors. Some of the reasons for increasing gap in irrigation potential created and potential utilized include incomplete coverage of command area works, poor operation and maintenance of irrigation structures due to fund constraint, non-availability of adequate water at outlets resulting in lower supply at the tail ends, large scale deviations from designed cropping pattern to water intensive crops, deteriorating conveyance systems, non-enforcement of warabandi (water rotation system), etc. This suggests that operation and maintenance are extremely important and need a high priority. Also, appropriate pricing of water on volumetric basis can incentivize farmers to select socially desirable and sustainable cropping patterns. In this context, the community participation in planning and management of irrigation structures assumes significance.

PIM/ WUAs may be promoted and made active in all command areas as per Farmers Management of Irrigation Systems Act, 1997. The water cess collection by the Revenue Dept. is irregular and low and hence WUAs are not receiving enough funds for O&M works. The collection system may be spruced up preferably by making WUAs responsible for the same. Water rates may also be rationalized further. WUAs may also be encouraged to collect additional fees from members for specific O & M works. Enhanced revenue collection is necessary for effective plough-back of the same. Budgetary support for O&M may also be increased. Improper O&M of projects is significantly responsible for the gap in potential created and utilized and ultimately all the deferred maintenance leads to a need for costly renovation projects. Further, the CAD Dept. may plan and ensure command area development for the full benefit of any irrigation scheme to be realized. Advocacy campaigns may be undertaken to make the farming community realize the economic value of water and the need for increasing water use efficiency. DWMAs may be strengthened for undertaking comprehensive district level management of water resources.

Declining Water Table

Public investments in irrigation has been largely focused on surface water irrigation making groundwater a common pool resource for utilization by private players, including farmers. It is estimated that over the last four decades, more than 84% of the total addition to net irrigated area in the country has come from groundwater. This points towards deleterious nature of over dependency and utilization of ground water for irrigation purposes as also for meeting the growing urban needs. Such a scenario coupled with reducing rainfall-recharge and deforestation has led to faster decline in water table in many parts of the country.

The well levels go below 100m in some places in the State. Therefore, unless appropriate policy regulations are put in place with regard to pricing of water and power, sustainable usage of ground water, recharging aquifers and promoting conjunctive use of surface and groundwater, the long term sustainability of ground water for different uses cannot be ensured. Besides, lower well levels lead to higher requirements of pumping energy also which is another precious resource.

The Water, Land and Tree Act (WALTA) may be more strictly adhered to specially in the ground water stressed areas to prevent indiscriminate digging of wells. The Act also has a provision of insurance for failure of wells which may be made use of. State ground water dept.

needs to be strengthened for future ground water development planning, including advice to reduce incidence of well failures and ground water quality for better well sitting.

Energy Demand for Irrigation (Water Energy Nexus)

The challenge of providing enough water and energy to grow enough food for the growing population becomes very important. The issues and challenges in the food, water and energy sectors are interwoven in many complex ways and cannot be managed effectively without cross-sectoral integration. There is also a high degree of dependency of downstream communities on upstream ecosystem services for dry-season water for irrigation and hydropower, drinking water and soil fertility and nutrients. Inadequate and erratic power supply in some places and large number of inefficient pump sets have caused not only fast decline in water table in many areas but also high energy usage. It is estimated that the agriculture sector consumes around 26% of the total energy consumption in the State. Therefore, promoting energy efficient water pumping devices, replacing low energy efficient pumps with high efficiency pumping system, greater use of solar pumping systems particularly in off-grid areas and optimizing agricultural water demand through appropriate crop planning, efficient use of water, ground water recharging and rainwater harvesting, etc. are some of the measures which need to be adopted by way of policy interventions. Reliability of electric power supply for irrigation pumpsets, specially with respect to duration of power supply and quality of power also needs to be improved, by grid separation, among other methods.

Deteriorating Water Quality

India's huge and growing population is putting a severe strain on the natural resources particularly on land and water. Increasing ground water over-exploitation, large scale use of chemical fertilisers/ pesticides in agriculture and unsafe disposal of industrial wastes into fresh water, poses severe water quality problems. The water sources are contaminated mainly by sewage and agricultural runoff. It is estimated that almost 70% of surface water and growing percentage of ground water are contaminated. Contamination of ground water with fluoride, nitrates, iron, and salinity is noticed affecting its potability in some parts of the State. The problem is set to worsen with climate change which will further reduce water availability as also water quality. Therefore, the management of water quality both, surface and groundwater becomes extremely important in the context of meeting the emerging water demand for economic development and providing safe and affordable drinking water to the underserved communities. Effluent treatment plants (ETPs) and recycle and reuse need to be promoted wherever feasible. Increased ground water recharge also may help in ameliorating the problems.

Climate Change Impact on Water Resources and Related Interventions

Climate change can affect significantly in the quantum of flow as snow and glacial melt is the major contributor of the rivers' flow in India. The serious challenge which may emerge due to climate change is related to frequency and magnitude of extreme weather events like rainfall which may lead to flash floods, landslides, etc. There will be both short- and long-term implications due to climate change in this region.

NABARD has been accredited as National Implementation Entity (NIE) for Adaptation Fund (AF) and Green Climate Fund (GCF) mechanisms under UNFCCC. Moreover, NABARD is acting as NIE under National Adaptation Fund for Climate Change (NAFCC). Many projects sanctioned under NAFCC and AF are aimed at development of water sector resilience. Two projects are currently underway in the State of AP under the AF and NAFCC. Financing under these Funds may be further explored in the State.

The National Action Plan for Climate Change (NAPCC) has laid significant emphasis on the water sector by including National Water Mission as one of the 8 missions under the Plan. National Bureau of Water Use Efficiency (NBWUE) is also proposed for promotion, regulation and control of efficient use of water. The State Action Plan for Climate Change (SAPCC) for Andhra Pradesh lists agriculture as one of the 11 identified sectors seriously impacted by climate change and increasing water use efficiency is one of the key adaptation interventions proposed under the sector. The major areas of prioritization and concern under the irrigation and water supply summarized in the document are as below:

- Water conservation and proper drainage facilities
- Promoting rainwater harvesting and ground water recharge
- Check on industrial discharge into municipal drainage system
- Measures to prevent ground water pollution and contamination
- Promoting better irrigation techniques like drip irrigation and sprinklers etc
- Regular de-silting of canals and other water retaining bodies like dams, check dams etc.

The SAPCC contains district wise adaptive capacities and vulnerability maps which may form the basis of climate resilient planning. The CRIDA district contingency documents also list measures to be adopted in times of water stress/dry spells which may become more frequent as climate change effects deepen.

Promotion of micro irrigation in command areas as well as on paddy needs to be undertaken through demonstrative pilots (e.g. drip on paddy in Chittoor), analysis of the results and upscaling, to bring about the next stage in climate adaptation interventions related to water resources.

Adoption of solar pump sets as well as replacement of inefficient pumpsets with BEE 5 star rated smart pump sets are important mitigation strategies in the irrigation sector where required credit support may be planned as per need.

4.1.2.4 Suggested Action Points

- There is a large gap between the potential created and utilized due to incomplete coverage of command area works, poor operation and maintenance of irrigation structures due to fund constraint, non-availability of adequate water, etc. There is a need for community participation in planning and management of these irrigation structures for successful utilization.
- Intensive rainwater harvesting measures and efficient use of water is suggested for over exploited and critical i.e., water stressed mandals.
- Desilting of minor irrigation tanks and maintenance of supply channels.

A credit potential of ₹5308.07 crore has been projected for the year 2025-26 under water resources. The district-wise estimates have been indicated in the Annexure-I.

4.1.3 Farm Mechanization

4.1.3.1 Introduction

The word mechanization means use of machines, either wholly or in part, to replace human or animal labour. Mechanization requires human participation to provide information or

instruction, unlike automation. Mechanized agriculture or agricultural mechanization is the use of machinery and equipment, ranging from simple and basic hand tools to more sophisticated, motorized equipment and machinery, to perform agricultural operations.

Current mechanized agriculture includes the use of tractors, trucks, combine harvesters, many types of farm implements, helicopters and drones (for aerial application), and other vehicles. Precision agriculture even uses computers in conjunction with satellite imagery and satellite navigation (GPS guidance) to increase yields. New digital equipment is increasingly complementing, or even superseding, motorized machines to make diagnosis and decision-making automatic.

The main objectives of farm mechanization are the increase in efficiency and timeliness of farm operations, reduction in cost of cultivation, improvement in the quality of produce for better marketability, efficient utilization of inputs etc.

Besides improving production efficiency, mechanization encourages large scale production and can improve the quality of farm produce. Mechanization will help in increasing productivity and enable the farmers to complete farming operations in time.

Both the global and domestic market of agricultural produce demands proper technology and precision in farming which ensures quality of the farm produce. The farmers in Andhra Pradesh have been using various farm equipment and machineries in their field, however, the mechanization of agriculture activities to be upgraded to next generation like Precision Technologies, Nanotechnology Inventions, Internet of Things (IoT) and Artificial Intelligence based Farm Automation and drone technology.

4.1.3.2 Current Status of Mechanization in Andhra Pradesh

Farm mechanization in Andhra Pradesh is improving steadily despite several hurdles such as small and scattered size of farm holdings, financially challenged farmers and increase in fuel prices, etc. The average supply of farm power in Andhra Pradesh (2.14 kW/ha) is more than the national average (2.03 kW/ ha) and it has to be increased to 4kW/ha in order to achieve the desired crop production and productivity levels. Districts like Kurnool and Vizianagaram has available farm power less than 1 kW/ ha and Anantapur, Guntur & Prakasam have available farm power less than 2 kW/ ha. The farmers in the State have to adopt the mechanisation of entire farming activities to achieve the target of 4kW/ha.

Farming activities like planting, crop management, harvesting, post-harvest management, etc. are to be carried out to achieve the desired level of farm mechanisation in the State. This additional power has to be supplied mostly by tractors, power tillers, self-propelled multi-crop threshers, power weeders and sprayers and other self-propelled machines.

The farmers may also upgrade to Smart Agriculture Mechanization such as Precision Agriculture and Digital Agriculture based on technologies such as Big-Data, Internet of Things (IoT) and Artificial Intelligence (AI) to overcome the future challenges like climate change, depleting natural resources, etc.

Depending on the types of crops grown, soil conditions, local situations and requirements in the Districts, the Agriculture Department of Andhra Pradesh is promoting farm mechanization with the support of financing banks and with provision of subsidy.

4.1.3.3 Major schemes implemented by GoAP

The government is providing subsidy for farm mechanization under Rashtriya Krishi Vikas Yojana (RKVY) and Sub-Mission on Agricultural Mechanization (SMAM). GoAP has

established 10778 Rythu Seva Kendras (RSK) as one stop shop for farmers. Farmers can order farming equipment & machinery through RSKs, which are networked in a hub-and-spoke model with major towns connected for all the supplies required by farmers in small villages. GoAP is also providing financial assistance to groups of small & marginal farmers for establishing Farm Machinery Banks (FMBs) where RSKs are located.

Due to increased labour cost and scarcity of labour during peak period of farming (sowing, weeding and harvesting, etc.), farm mechanization is getting importance in the districts. Because of timeliness of farm operations and reduction in drudgery, farmers are showing keen interest towards farm mechanization. A lot of potential exists for financing of Tractors (large, medium and small/ mini horsepower), Power Tillers, Rotavators, Paddy Transplanters, Threshers, Combine Harvesters, Sugarcane Harvesters, Seed Drills and other equipment like MB Ploughs, Disc Ploughs, Cultivators, Harrows, Post-harvest Equipment and Horticulture tools, crop based custom hiring service centres, etc.

As the capital investment is high, subsidy is available under Rashtriya Krushi Vikas Yojana (RKVY), Sub-Mission on Agricultural Mechanization, etc. Further, under Agri Clinic & Agri Business Centre (AC&ABC) Scheme, custom hiring centres can also be set up by the eligible agri-preneurs. The AC&ABC scheme is operational in FY 2024-25.

4.1.3.4 Suggested Action points

The credit potential assessed under Farm Mechanization for 2025-26 for Andhra Pradesh is ₹5409.72 crore.

- Catering to the farm machinery services through Custom Hiring Centers at RSKs, PACS, FPOs etc.
- Creation of awareness about latest technology/ machinery and its usage among farmers through demonstrations and training.
- Use of drones would help in optimal use of fertilisers/pesticides, reduction in labour cost, reduction in drudgery and reduction in health hazard to farmer, thereby improves productivity.

4.1.4 Plantation & Horticulture Sector including Sericulture in Andhra Pradesh

4.1.4.1 Introduction

Andhra Pradesh, India's largest fruit producer, boasts 18.23 lakh hectares dedicated to horticulture, yielding 365.92 lakh metric tons and contributing 15.6% to the national output. The state excels in the productivity of oil palm, papaya, lime, cocoa, tomato, and chillies, and ranks second in the production of mango, sweet orange, and turmeric.

In the 2024-25 period, 1,43,329 acres were converted to more profitable horticulture crops. Additionally, micro-irrigation systems were implemented over 2.05 lakh acres, benefiting 75,035 farmers with a subsidy of ₹793.67 crore. Overall, micro-irrigation was applied to 1,89,000 acres, and the area under oil palm cultivation was expanded by 39,502 acres. (Source: Socio Economic Survey of Andhra Pradesh 2024-25).

During the 2024-25 fiscal year (FAE), the horticulture sector in Andhra Pradesh contributed 10% to the Gross Value Added (GVA), amounting to ₹60,527 crore.

Andhra Pradesh has a total horticulture crop area of 18.23 lakh hectares, producing 365.92 lakh metric tons. As the largest fruit producer in India, the state contributes 15.60% to the nation's total fruit production. The crop-wise area and production details at table 4.5.

Table 4.5
Area & Production under
Horticulture Sector in Andhra
Pradesh

Sl. No	Horticulture Crops	Area (Lakh Ha)	Production (Lakh MT)
1	Fruits	7.95	200.66
2	Vegetables	1.88	77.04
3	Flowers	0.41	9.23
4	Plantation	4.73	58.83
5	Spices	3.24	20.15
	Total	18.23	365.92

Rayalaseema Region as a Horticulture Hub

- The Government of Andhra Pradesh is dedicated to transforming Rayalaseema into a horticulture hub.
- The state has 45.59 lakh acres (18.23 lakh acres) under horticulture plantations, producing 365.92 lakh metric tons. Rayalaseema contributes 19.50 lakh acres (45% of the area) and 189.69 lakh metric tons (52% of the production).
- Andhra Pradesh has 37.90 lakh acres under micro-irrigation, benefiting 13.49 lakh farmers. Rayalaseema accounts for 26.85 lakh acres (71%).
- In the last three months, 32,000 metric tons of bananas were exported to Gulf countries, with eight banana trains (refrigerated wagons) operating from Tadipatri Railway Station.
- Due to quality interventions and banana exports, prices increased from ₹4-6 per kg to ₹18-21 per kg.
- For FY 2024-25, banana exports are expected to reach 1 lakh metric tons.

Schemes Implemented by the Department of Horticulture

Andhra Pradesh Micro Irrigation Project (APMIP) - RKVY-PDMC

- Implemented since 2003 to enhance crop productivity and quality through micro irrigation.
- Aims to cover 3 lakh hectares under micro irrigation in 2024-25.

Mission for Integrated Development of Horticulture (MIDH)

- Centrally Sponsored Scheme promoting holistic growth of horticulture, including research, technology, post-harvest management, and marketing.
- Funded 60% by the Government of India and 40% by the state.

National Mission on Edible Oils (NMEO-OP) - Oil Palm

- Andhra Pradesh leads in oil palm area, production, and productivity.
- Covers 2.27 lakh hectares with 1.74 lakh farmers, producing 17.63 lakh metric tons of FFBs and 3.10 lakh metric tons of CPO in 2023-24.

Rashtriya Krishi Vikas Yojana (RKVY)

- Centrally Assisted State Plan scheme for horticulture activities in non-MIDH districts.
- Promotes crop diversification, quality improvement, and post-harvest management with a budget of ₹24.07 crore for 2024-25.

Promotion of Horticulture Activities (State Development Plan)

- Aims to improve production, productivity, and quality of horticulture crops.
- Covered 4.77 lakh beneficiaries with ₹342.10 crore from 2014-15 to 2018-19.

Externally Aided Projects

- APIIATP: Enhances productivity and quality with a 75% subsidy.
- APILIP: Improves value addition of strategic crops in six districts.

National Bamboo Mission (Andhra Pradesh)

- Increases bamboo plantation area and improves post-harvest management.
- Supports R&D, entrepreneurship, and skill development.

Coconut Development Board (CDB)

- Andhra Pradesh ranks 4th in coconut cultivation with 1.06 lakh hectares and 1709 million nuts.
- Provides financial assistance for expansion, demonstration plots, and rejuvenation of coconut gardens.

Sericulture in Andhra Pradesh

Sericulture, the art and science of silk production, is a systematic agri-based cottage industry that provides employment and regular income to rural communities, especially women. It is estimated that one acre of mulberry cultivation can create direct employment for six people throughout the year, spanning activities from mulberry cultivation to silk fabric manufacturing.

Status of Sericulture in Andhra Pradesh: Andhra Pradesh ranks second in India for practicing mulberry sericulture. The rearing of Eri silkworms for spun silk production has also gained momentum recently. Sericulture involves both agricultural (on-farm) and industrial (non-farm) activities:

On-Farm Activities: Raising mulberry gardens, rearing silkworms, producing cocoons, and marketing them in government cocoon markets.

Non-Farm Activities: Reeling cocoons to produce raw silk, twisting and dyeing silk yarn, and weaving silk yarn into silk fabric.

Performance During 2024-25 (up to December 2024)

- Sericulture farmers produced 61,394 metric tons of quality cocoons worth ₹2,701 crore.
- Silk reelers produced 8,458 metric tons of quality raw silk worth ₹2,960 crore.
- Sericulture contributed ₹1,095 crore in GVA to the state economy.

To empower Scheduled Tribe (ST) and Scheduled Caste (SC) families:

- ₹252.30 lakh under the Scheduled Tribe Component (STC) with 90% assistance.
- ₹11.43 lakh under the Scheduled Caste Component (SCC).
- 1,049 farmers received a total of ₹4.93 crore under the Silk Samagra Scheme for activities such as mulberry plantation, rearing sheds, and capacity building. Additionally, ₹42.08 crore (central share) and ₹5.76 crore (state share) were sanctioned for the scheme's implementation.

Achievements and Initiatives

- Andhra Pradesh has been awarded “Best Bivoltine Practicing State in India” by the Ministry of Textiles, Government of India.
- The state uniquely produces both mulberry and tasar silk.
- Mulberry has a low gestation period of 2–3 months and can yield 5–6 harvests annually, ensuring periodic returns.
- Sericulture generates foreign exchange through the export of silk and silk products.
- Sericulture activities like mulberry cultivation, silkworm rearing, reeling, twisting, and weaving are often household-based, with 60% participation by women due to the delicate handling required.
- Currently, 81,450 farmers practice sericulture across 1,51,000 acres of mulberry, while 705 silk reeler families produce raw silk.
- Nine Automatic Reeling Machinery Units established in the state produce 3A and above international-grade raw silk, yielding high returns.
- The government ensures fair and remunerative cocoon prices through e-marketing in government cocoon markets.
- The state implements Silk Samagra and Rashtriya Krishi Vikas Yojana (RKVY-RAFTAAR), both centrally sponsored schemes, alongside MG-NREGS in a convergence program.

Schemes Implemented

On-Farm Sector

Silk Samagra: Supported by the Central Silk Board, this scheme aims to improve technology, quality, productivity, and employment in the silk industry, targeting women, SC/ST, and below-poverty-line farmers. Major components include assistance for nurseries and mulberry plantations, construction of silkworm rearing sheds, and setting up reeling and twisting units.

State Development Schemes: Financial Incentives and Sericulture Schemes

Financial Incentives for Raw Silk Production

Filature BV Raw Silk: ₹130 per kg

Filature CB Raw Silk: ₹85 per kg

Charka Raw Silk: ₹35 per kg

Sericulture Schemes

- SC & ST farmers receive 90% financial assistance for mulberry and Tasar sericulture.
- General farmers receive 75% assistance under all sericulture schemes.

Silk Fabric Clusters in Andhra Pradesh

- Dharmavaram (Anantapuramu district)
- Mudireddipalli (Anantapuramu district)
- Uppada (East Godavari district)
- Peddapuram (East Godavari district)
- Neerugattavaripalli (Chittoor district)

Tasar Culture in Andhra Pradesh

Tasar culture is a forest-based industry involving the rearing of Tasar cocoons from Nalla Maddi and Thella Maddi trees in the forests of East Godavari and ASR Districts.

- **Farmers Involved:** 1,660 tribal farmers in 45 villages.
- **Area:** 2,000 hectares of forest area.
- **Crops:** Potential for three crops per year.
- **Income:** Annual income of ₹50,000 to ₹60,000 per tribal family.
- **Processing:** Tasar cocoons are converted into Tasar silk using Buniyad reeling machines and spinning machines.
- **Units:** 128 Buniyad and 105 spinning units currently operating in Chinturu and Kunavaram Mandals of ASR District. Subsidy Pattern

Silk Samagra: A Central Sector Scheme funded by the Central Silk Board, Ministry of Textiles, Government of India. The central share is released through the PFMS platform, and the corresponding MSS is released through BROs.

MG-NREGS: Implemented by the Sericulture Department in convergence with the Department of Rural Development to support mulberry plantation with three years of maintenance and the construction of rearing sheds (Type I and Type II). The scheme also utilizes the MG-NREGS labor pool for sericulture activities, helping to address labor shortages in the sector.

Sericulture Development through Rythu Seva Kendaralu (RSKs)

Village Sericulture Assistants are actively involved in the expansion of mulberry cultivation. RSKs provide technology to farmers, organize Pattu Badi programs in collaboration with progressive sericulture farmers, and hold demonstrations and meetings to promote new technologies.

Table 4.7 Status of Sericulture in AP during 2022-23

Sl. No	Item	Unit	Status of sericulture during the year 2024-25 (Upto Dec 2024)
1	Mulberry Plantations	Acres	5268
2	Total Cocoon Production	MTs	61393.93
3	Total Raw Silk Production	MTs	8458.80

(Source: AP socio economic survey 2024-25)

4.1.4.2 Strategies for development of the sector

- Bringing more area under Horticulture with new crops & new varieties. Encouraging additional area under Area Expansion programme in convergence with MGNREGS, Watershed Programmes and Dryland Horticulture.
- Saturation of potential area under Micro Irrigation by supply of Micro Irrigation equipment on subsidy to save water, power and labour. Encouraging efficient and effective utilization of water and fertilizers through Micro Irrigation.
- Under National Mission on Edible Oils – Oil Palm (NMEO-OP) it is proposed to cover an additional area of 1.12 lakh hectares under Oil Palm by the year 2025-26 in Andhra Pradesh.
- Increasing production, productivity & quality of Horticulture produce by adoption of Good Agriculture Practices, intercropping and two-three-tier cropping systems etc.
- Focus on Post-Harvest Infrastructure like Collection Centres, Pre-Cooling units, Solar Cold Rooms, Cold Storages, Ripening Chambers, Refer Vans, Farm Fresh Vegetables, Vending Vans etc.,
- Encouraging Primary Processing, Value Addition and Marketing to improve export of Horticulture produce.

- Mobilization of farmers into Farmers Producers Organizations (FPOs) for creating forward and backward linkages for better returns and doubling farmer's income.
- Encouraging Horticulture crops in new areas like Tribal areas
- Shifting of cropping pattern from Agriculture to Horticulture crops on a promising and remunerative mode by creating awareness, Training programmes and exposure visits through RBKs.
- Bringing Micro Irrigation as a mandatory under the Ayacut area wherever major and medium irrigation projects were taken up.
- By taking up Micro Irrigation on saturation mode in Rayalaseema region and also by considering Aspirational districts on priority.
- Encouraging farmers in taking up Fertigation practices to Horticulture crops and conducting periodic on-field training programmes regarding Maintenance of the units.
- Encouraging farmers in construction of Individual and Community Farm Pond and creating water resources there by bringing additional area under Drip Irrigation.
- Adopting modern technologies such as Protected Cultivation (poly houses & shadenet houses) for cultivation of high value flowers and vegetables for higher returns.
- To develop sea protocols for exportable Horticulture crops.
- More focus on export of fresh and processed Horticulture produce.

4.1.4.3 Assessment of Credit potential

The credit potential available for plantation and horticulture including sericulture is assessed as ₹6080.87 crore for the year 2025-26.

4.1.5 Forestry and Waste Land Development

4.1.5.1 Introduction

Andhra Pradesh is enriched with diverse vegetation types and a variety of flora and fauna, supported by the Krishna and Godavari River systems. The state's topography ranges from the Eastern Ghats and Nallamala hills to the Bay of Bengal shores, supporting varied ecotypes and rich biodiversity. The forests in Andhra Pradesh offer numerous benefits, including timber, bamboo, fuel wood, fodder, and non-timber forest products. They also provide intangible benefits like ecological balance, soil and moisture conservation, water flow regulation, and carbon sequestration. Forest cover is critical for air and water quality, acting as carbon sinks and making them vital for environmental health.

According to the Indian State Forest Report 2023, Andhra Pradesh's forest area is 38,436.58 sq. km, covering 23.59% of the state's geographical area. This includes 1,995.71 sq. km of very dense forest, 13,725.75 sq. km of moderately dense forest, 14,363.50 sq. km of open forest, and 8,351.62 sq. km of scrub forest. The state is also rich in biodiversity, with unique flora like Red Sanders and fauna including tigers, Indian Bison, Great Indian Bustard, and Golden Gecko. It has the second-largest mangrove ecosystem in India, located in the Godavari and Krishna estuaries.

4.1.5.2 Important Schemes and Policies of the Government

State Forest Development Agency (SFDA)

The SFDA is a federation of FDAs in the state, implementing the National Afforestation Programme (NAP) and other schemes like the National Mission for a Green India (GIM) and

the National Medicinal Plants Board (NMPB). These schemes are funded 60:40 between the Centre and State since 2015-16. Activities include plantation, soil and moisture conservation (SMC) works, and capacity-building awareness camps through Vana Samrakshna Samithies (VSS).

Nagaravanam (SDP)

The main goal of Nagaravanams (City Forests) is to provide a healthy living environment for urban citizens and contribute to the development of smart, clean, green, and healthy cities. So far, 37 Nagaravanams/Nagar Vans have been completed and are open to the public. Additionally, 7 Temple Eco-parks are being developed to raise environmental awareness and enhance the aesthetic environment for pilgrims.

Nagar Van Yojana (NVY)

Nagar Vans aim to provide a pollution-free, healthy environment and develop smart, clean, green, and healthy cities for future generations. The GoI has sanctioned 61 Nagar Vans from 2021-22 to 2024-25, releasing ₹9913.926 lakh, with ₹5248.641 lakh spent by 31.12.2024.

Social Forestry

The State Government has launched a massive movement involving the public and farmers to increase tree cover outside reserve forests, improve the environment, and provide employment. Activities include distributing seedlings, raising community land plantations, avenue/shelter belt plantations, and institutional plantations.

Vanamahotsavam

A massive afforestation program was carried out in 2024-25, involving all departments and people from all walks of life, using funds from CAMPA, State, and Central schemes. So far, 5.29 crore seedlings, focusing on indigenous species, have been planted.

Afforestation

To improve green cover, APFD has been raising various plantations under CAMPA, Centrally Sponsored Schemes, and State Development schemes. The Government aims to improve green cover outside Reserve Forests through the Vanam-Manam program, involving all departments and the public. Main species planted include Teak, Red Sandal, Bamboo, Amla, Seethaphal, Casuarina, Eucalyptus, Tamarind, and Jamun. 5.29 crore seedlings have been planted in 2024-25 (up to December 2024).

Mixed Plantation Scheme

To improve green cover under the 09-Mixed Plantation Scheme in 2024-25, 87 km of avenue plantations will be taken up, and Vana Mahotsavam will be celebrated at District and Mandal levels. Avenue plantations from previous years will be maintained with a financial outlay of ₹450.86 lakh, with ₹41.479 lakh spent during the year.

Forest Revenue

The income from the forestry sector in the state during 2024-25 (up to Dec 2024) is ₹19.63 crore. Details of forest production extraction during 2024-25 (up to December 2024) include timber, fuel, poles, and bamboo.

Wildlife in Andhra Pradesh

Andhra Pradesh, located in East Central Peninsular India, is part of the Deccan Bio-Geographic Zone. The state has a notified forest area of 37,221.11 sq.km, which is 22.84% of its geographical area. Protected forests cover 8139.88 sq.km, 21.87% of the notified forest area. The state boasts one Tiger Reserve (FDPT Srisailem Circle), one Elephant Reserve (Koundinya

Sanctuary and Rayala Elephant Reserve, Anantapuramu Circle), one Biosphere Reserve (Seshachalam in Tirupati and Kurnool Circles), three National Parks, and thirteen Wildlife Sanctuaries.

NABARD has prepared and circulated model bankable projects on Neem, Casuarina, Teak, Kadam, Jatropha, Pongamia, Forest Nursery, Eucalyptus & Subabul etc. in order to help the entrepreneurs, farmers & bankers.

4.1.5.3 Suggested Action points.

- **Setting up Commercial Nurseries:** Establishment of small but viable nurseries with special emphasis on development of wasteland is required and is a major area requiring credit from banking sector.
- Promotion of FPOs based on Forestry Products such as Bamboo.
- There is a huge potential for collection and marketing of minor forest produce especially wild honey. Infrastructure such as beehive boxes can be provided to wild honey collectors through bank credit, which can be placed at the foothills of the forest laded hills.
- The bankers need to be sensitized about forestry schemes so as to create awareness for financing the activity. Banks may extend financial assistance for cultivation of commercially important tree species like Bamboo, Teak, Subabul, Clonal Eucalyptus and Casuarina under Agro Forestry.

NABARD has estimated a potential of ₹599.04 crore under Forestry and wasteland Development sector for the FY 2025-26. The district-wise estimates have been indicated in the Annexure-I.

4.1.6 Animal Husbandry – Dairy, Poultry, Sheep, Goat, Piggery, etc.

4.1.6.1 Introduction

Andhra Pradesh has some of the richest livestock resources in the country and is one of the most advanced states in Livestock sector. Animal Husbandry sector played a crucial role in the improvement of the farm income of the state by contributing 30.38% of the agricultural GVA (at constant prices) and 4.66% of total GVA (at constant prices) for FY **2022-23**.

As per the Basic Animal Husbandry Statistics 2024, for 2023-24, AP stands seventh in milk production contributing to 5.85% of the total milk production in the country, first in egg production contributing to 17.85% of the total egg production in the country and 5th in meat production with 10.42% share in total meat production.

4.1.6.2 Animal Husbandry sector status in the State of Andhra Pradesh

- AP is endowed rich livestock resources and is home to famous livestock breeds like Ongole and Punganoor in cattle, Godavari buffaloes, Nellore sheep and Aseel in Poultry.
- About 42 lakh families are engaged in livestock rearing activities for their livelihood or getting supplementary income from this sector.
- The total milk production in Andhra Pradesh is 42.4 LLPD of which the marketable surplus is 14.3 LLPD and only 6.1 LLPD (24%) is procured by organized sector.
- During 2023-24, Andhra Pradesh stood 1st in Egg Production (2548.74 Corers), 5th in Meat production (10.68 Lakh MTs) and 7th in Milk production (139.94 Lakh MTs).

- Of the total milk production, 49.27 lakh MTs (35.21%) are contributed by Exotic/ crossbred cows, 11.51 lakh MTs (8.22%) are from Non-descript/Indigenous cows and 79.12 Lakh MTs are produced by Buffaloes (56.54%). The average milk yield per animal per day is 9.35 Kg for Exotic/crossbred cows, 3.58 Kg for Non-descript/Indigenous cows and 6.70 Kg for buffaloes.
- Compared to 2022-23, the milk production has reduced by 9.41%. Hence, the state has moved to 7th position from 5th position among the top milk producing states in the country. The decrease may be attributed to the decline in production and productivity of buffalo population, which contributed majority share of the States milk production. The drop could also be due to fodder inflation and feed shortage which discourages the dairy farmers of the state.
- The state recorded per capita availability of 719 g of milk per day for 2023-24 compared to the national average of 471 g/day.
- Andhra Pradesh is first in sheep population and 7th in goat population and has a population of around 4 lakh shepherd families rearing 176.27 lakh sheep and 55.2 lakh of goats. Anantapur and Sri Satya Sai are the topmost districts in small ruminant, followed by Prakasam, Kurnool and Nellore. The popular sheep breeds preferred by the farmers are Nellore and Macherla brown.
- ICAR-NBAGR has registered Macherela sheep breed in June 2024, which became the second sheep breed to be registered after Nellore. The breed's name is derived from Macherela town in Palnadu district.
- Targets of Major Livestock Products for the year 2024-25 is to achieve Milk production of 140.00 LMTs, Egg Production of 2756 Crore Nos, Meat production of 11.00 LMTs. (Basic Animal Husbandry Statistics, 2024).
- As per the 20th Livestock census of 2019. Andhra Pradesh stands second in poultry population of 107.90 million birds. With total egg production of 2548.74 crore the state is the top most egg producer in the country, contributing to 17.85% of the total egg production in India. The per capita availability of eggs stood at 479 eggs per annum against the All-India figure of 103 eggs/annum. The meat production from poultry for 2023-24 stood at 3.81 lakh tonnes, which constituted 35.70% of the total meat production of the state. However, compared to 2022-23, the poultry meat production has recorded a drop of 35.50%.

Table 4.8 Total egg production, poultry & meat production in Andhra Pradesh

Production	Unit/ Year	2019-20	2020-21	2021-22	2022-23	2023-24
Total Meat	Lakh MTs	8.5	9.54	10.25	10.94	10.68
Growth	%	-	12.24%	7.44%	6.73%	-2.38%
Poultry Meat	Lakh MTs	4.78	5.06	5.42	5.92	3.82
Growth	%	-	5.86%	7.11%	9.23%	-35.47%
Egg	Crore Nos	2170.8	2496.39	2645.03	2784.98	2548.74
Growth	%	-	15.00%	5.95%	5.29%	-8.48%

- Andhra Pradesh has a pig population of 0.91 lakhs. The pork production for 2023-24 was 1530 tonnes. The major breeds preferred by local farmers is SVVU T-17, a cross breed developed by Sri Venkateswara Veterinary University (SVVU), with 75% exotic inheritance. Establishment of piggery units are taken up under NLM. ICAR-AICRP on Pigs at SVVU, Tirupati is working in the field of breed development and development of economic rations for pigs so that piggery can be taken up as a profitable activity. Farmers are also provided training on management of pig farms.

Table 4.9 District wise Production estimates of Milk, Meat and Eggs during 2023-24

SN	District	Milk (ooo MTs)	Meat (ooo MTs)	Eggs (Lakh Nos)
1	Alluri Sitarama Raju	147.877	19.773	737.409
2	Anakapalli	1223.839	31.797	4962.562
3	Ananthapuramu	353.802	46.148	651.879
4	Annamayya	626.997	51.141	2297.896
5	Bapatla	580.845	20.976	933.484
6	Chittoor	1291.460	70.241	10896.945
7	East Godavari	399.061	101.539	73597.935
8	Eluru	737.255	52.999	27428.031
9	Guntur	313.579	23.966	9607.318
10	Kakinada	857.811	44.776	26981.115
11	Konaseema	300.779	26.338	16869.114
12	Krishna	307.986	38.023	16736.477
13	Kurnool	214.080	44.190	1480.410
14	Nandyal	425.247	45.146	373.210
15	NTR	273.181	34.204	11253.543
18	Palnadu	543.885	47.220	5798.046
17	Parvathipuram Manyam	464.259	11.414	389.318
18	Prakasam	531.047	66.508	400.812
19	SPSR Nellore	886.010	54.596	2470.231
20	Sri Satyasai	425.213	70.078	789.283
21	Srikakulam	415.403	19.669	2887.753
22	Tirupati	694.593	35.865	7702.803
23	Visakhapatnam	581.794	10.910	2176.970
24	Vizianagaram	592.374	37.252	8982.613
25	West Godavari	356.016	31.913	17014.959
26	YSR Kadapa	450.005	31.199	1454.366
	TOTAL	13994.398	1067.880	254874.480
<i>Dept of Animal Husbandry, GoAP</i>				

4.1.6.3 Infrastructure available in the state

The following institutions under the Animal Husbandry Department, GoAP is catering to the needs of livestock farmers in the state –

S. No	Type of Institutions	Number
ADMINISTRATIVE OFFICES		
i.	Directorate of Animal Husbandry	1
ii.	Publicity & Extension Office (State level)	1
iii.	District Offices (DAHOs)	26
iv.	Deputy Director Offices (Divisional level)	45

S. No	Type of Institutions	Number
STATE LEVEL INSTITUTIONS		
i.	State Management Institute of Livestock Entrepreneurship (SMILE), Vizag	1
ii.	Veterinary Biological Research Institute (VBRI), Vijayawada	1
iii.	State Animal Husbandry Training Centre (SAHTC), Mandapeta	1
iv.	Shepherd Training Centre, Peapully, Kurnool	1
v.	Quality Analytical Laboratory (QAL), Visakhapatnam	1
ZONAL LEVEL INSTITUTIONS		
i.	Veterinary Biological Research Institute (VBRI), Samalkota	1
ii.	Super Speciality Veterinary Hospitals (Vijayawada & Pulivendula) (SSVH)	2
iii.	Veterinary Poly Clinics (VPC's)	12
iv.	Area Veterinary Hospitals (AVH's)	323
v.	Veterinary Dispensaries (VD's)	1577
vi.	Regional Animal Disease Diagnostic Laboratories (RADDL)	4
vii.	Animal Disease Diagnostic Laboratories (ADDL)	10
viii.	Regional Animal Husbandry Training Centre (RAHTC)	5
DISTRICT LEVEL INSTITUTIONS		
i.	Rural Livestock Units (RLU's)	1218
ii.	Constituency level Animal Disease Diagnostic Laboratories (CADDL's)	175
iii.	Rythu Seva Kendralu (RSK's)	10606
iv.	Rythu Seva Kendralu Clusters (RSK Clusters)	6176

Source: Department of Animal Husbandry, GoAP

State also has 02 Sheep breeding centers under Animal Husbandry Department and 13 number of Intensive Sheep Development Projects.

Sri Venkateswara Veterinary University, Tirupati

The University has 40 institutions functioning under it to serve the state in activities related to education, research and extension activities under Animal Husbandry sector.

Andhra Pradesh Center for Advanced Research on Livestock (APCARL), Pulivendula

APCARL was established with a vision to be a world class center of excellence for advanced research on livestock. GoAP has issued order to establish Punganur Cattle Breeding Center, Murrah Buffalo Breeding Center and also relocate Veterinary Biological Research Institute of AP State to APCARL, Pulivendula to better serve the farmers and livestock health.

Veterinary Biological & Research Institute, Vijayawada

Veterinary Biological & Research Institute, Vijayawada provides prophylactic and diagnostic services to livestock farmers. VBRI plays a pivotal role in monitoring and surveillance of various livestock diseases and in preventing infectious and contagious diseases through the effective implementation of mass vaccination programs following the scheduled vaccination regimen designed to suit the seasonal incidence of livestock diseases. The institute also does

feed and fodder analysis for proximate principles and also for detecting various toxins and poisoning agents.

VBRI, Samalkota is involved in production and distribution of poultry vaccines for Ranikhet Disease – F, Ranikhet disease – K, Fowlpox, and Duck plague.

4.1.6.4 Activities of AHD, Government of Andhra Pradesh:

Animal Husbandry activities are encouraged through schemes like -

- **Rythu Seva Kendrams (RSKs):** Acts as One Stop shops for livestock owners for primary health care services, knowledge dissemination and supply of quality inputs at each Gram Panchayath level.

10606 RSKs are operational in the state permitted to recruit 9844 Animal Husbandry Assistants, out of which 6542 AHAs were recruited till date. AHA deliver basic services like first aid and treatment to sick animals, deworming, prophylactic vaccinations etc under the guidance of veterinarians.

- **Pasu Kisan Credit Card (PKCC):** The GOI has communicated the revised state wide targets for the KCC campaign and 4,00,000 KCC target is given to Andhra Pradesh.

PKCC district wise targets and achievement is given below –

Table 4.10 Progress Report of PKCC's as on 01.12.2024

S. No	District Name	Target	Cum No of App Rcvd	Applications Submitted to Banks	Cum No App Sanc
1	Vizianagaram	17460	8561	8561	4531
2	Visakhapatnam	4060	6047	6047	1082
3	Anakapalli	17460	13412	13412	4683
4	East Godavari	17621	15689	15689	5251
5	Srikakulam	18814	19140	19140	6478
6	Sri Sathya Sai	18933	11207	11207	6685
7	Anantapur	17516	12870	12870	6417
8	Parvathipuram Manyam	1000	881	881	373
9	Kakinada	17234	13730	13730	6643
10	Konaseema	17375	11434	11434	6731
11	Eluru	18689	16506	15911	7592
12	Guntur	16989	8396	8396	7552
13	Annamayya	17884	12123	12123	9686
14	Sri Potti Sriramulu Nellore	17203	14573	14573	9668
15	Kurnool	17460	22364	22364	10477
16	NTR	17782	10928	10928	10928
17	Alluri Sitarama Raju	1000	630	630	624
18	Nandyal	17460	18525	18525	11331

S. No	District Name	Target	Cum No of App Rcvd	Applications Submitted to Banks	Cum No App Sanc
19	Palnadu	18110	16929	16929	12924
20	Chittoor	18579	19532	19532	15013
21	Y.S.R. Kadapa	17712	16614	16614	15912
22	West Godavari	16351	23076	23076	14777
23	Tirupati	15754	16706	16706	16706
24	Bapatla	7508	9214	9214	8734
25	Krishna	16263	21413	21413	21413
26	Prakasam	17783	27122	27122	24227
Total		400000	367622	367027	246438

Source: Department of Animal Husbandry, GoAP

- **Gokulam - Construction of Cattle/Sheep/Goat/Poultry shelters:** In order to promote the Agri allied activities and also to improve the livelihoods of rural poor, the Government has permitted “Construction of Cattle/Sheep/Goat/Poultry shelters” under MGNREGS.

The Gokulam is implemented in three different models of cattle shelter (2,4,6 animal shelter) with Sharing pattern of 10% unit cost from the beneficiary and the remaining 90% from MGNREGS Scheme.

Sheep/Goat/Poultry shelters with 30% of unit cost from the beneficiary and the remaining 70% of unit cost from MGNREGS Scheme

- **Fodder development activities:** “Raising of perennial fodder” work is under MGNREGS is in progress in districts. A target of 25,000 acres (@1000acres/district) is fixed for development of fodder and to meet the demand of fodder in the state.
- **Pasu Bhima Padhakam (Livestock Insurance Scheme)** - Government has approved the “Pasu Bhima Padhakam-(Livestock Insurance Scheme)” under NLM to provide Livestock insurance to the farmers duly replacing the existing “Livestock Loss Compensation Scheme-Pasu Nashta Parihara Padhakam” vide G.O.Ms.No.03 of AHDD&F(AH.I)Dept., Dated:12.01.2023.

The objective of the Livestock Insurance scheme is to settle the livestock death claims within 15 days after submission of documents and to reduce financial burden on farmers. Subsidy for insurance premium will be paid as following:

Category	Central Share	State Share	Beneficiary Share
BPL/ SC/ ST	40%	40%	20%
APL	25%	25%	50%

As on 20.12.2024, accumulative compensation of ₹98.53 crore had been paid to 1.06 lakh livestock farmers under the scheme (As per the website of Dept. of Animal Husbandry, Govt of Andhra Pradesh).

- **Generic Veterinary Stores/Pasu Aasara Kendras** – affordable and high-quality drugs to livestock farmers

- **Sanchara Pasu Aarogya Seva** – Veterinary services at the door step of the farmers through Mobile ambulatory veterinary clinics. Currently 340 MVUs are operational in the state.

Local Breed Conservation Cow Farms(LBCCF)

Government has established 58 LBCCFs to conserve indigenous breeds like Gir, Sahiwal, Ongole, Punagur etc. and for breed multiplication with project cost of ₹ 17.40 Cr.

It involves supplying of 20 indigenous cows and 01 bull with a cost of ₹ 30.00 lakh to the interested farmers on subsidy i.e. ₹15.00 Lakh from RKVY, ₹9.00 Lakh by APStCB loan component/ Self finance and ₹6.00 Lakh JLG contribution.

In the First Phase - (58) Local Breed Conservation Cow Farms have been established by the Government to conserve indigenous breeds like Gir, Sahiwal, Ongole, Punganur etc. and for breed multiplication with a project cost of ₹17.40 Crore.

In the Second phase of 55 new units are being sanctioned for the year 2021-22. Selection of beneficiaries for 55 units completed and in the First spell of second Phase a letter addressed to APCOB to release loan amount for (29) units.

Andhra Go-Pushti Farmers Producers Company has been formed for collective production and marketing of APEDA-NPOP certified organic A2 milk and by-products with brand name of “Andhra Go-Pushti”. Opened Andhra Go-Pushti retail outlet by the FPC in Vijayawada in 18.10.2022 and will be scaled up to major cities viz., Visakhapatnam, Guntur, Tirupathi, Rajahmundry, Kurnool, Nellore etc.

Andhra Pradesh Animal Feed Act 2020 (Regulation of Manufacture, Quality Control, Sale and Distribution) and Rules, 2021

Total 1751 animal feed business operators were issued licenses under A.P Animal Feed Act 2020 & Rules 2021 and amount collected towards fees is ₹ 5.34 Cr.

Livestock Health and Disease Control Program

Consists of two components –

- Assistance to States for Control of Animal Diseases (ASCAD) with 60 % Central share & 40 % State share.
- National Animal Disease Control Program (NADCP) for FMD, Brucellosis and PPR-EP and CSF-CP with 100% Central Assistance.

4.1.6.5 Schemes of Govt of India

- **NLM and Subsidy schemes of Government of India:**

Under the National Livestock Mission, the following activities are focused by Animal Husbandry Department:

- Sub mission of Breed Development of Livestock and Poultry
- Sub mission on feed and fodder development
- Sub mission on innovation and extension



In FY 2022-23, ₹101.10 lakh was released to Govt of Andhra Pradesh for the establishment of 02 sheep semen production laboratories at FSBS, Banavasi, Kurnool and FSBS, Visakhapatnam.

Other activities like assistance for quality fodder seed production, innovation and extension activities are also taken up under NLM.

- **Animal Husbandry Infrastructure Development Fund**

- Incentivizing investments by individual entrepreneurs, private companies, MSME, Farmers Producers Organizations (FPOs) and Section 8 companies to establish (i) the dairy processing and value addition infrastructure, (ii) meat processing and value addition infrastructure and (iii) Animal Feed Plant. (iv) Breed improvement Technology and Breed Multiplications farms for Cattle/ Buffalo/ Sheep/Goat/ Pig and technologically assisted Poultry farms.
- The project under AHIDF shall be eligible for loan up to 90% of the estimated/actual project cost from the Scheduled Banks based on submission of viable projects by eligible beneficiaries.
- The Central Government is providing 3% interest subvention for all eligible entities.

In Andhra Pradesh, 493 applications with an outlay of ₹13436.93 crore and loan amount of ₹9163.40 crore have been sanctioned. Interest subvention of ₹389.70 crore has been approved. ([AHIDF Dashboard](#) | [AHIDF](#)).

In 2024, the existing Dairy Infrastructure Development Fund (DIDF) was subsumed into AHIDF, allowing dairy cooperatives to benefit from interest subvention and credit guarantee support.

- **National Programme for Dairy Development**

The scheme has been restructured and realigned for implementation from 2021-22 to 2025-26. The scheme has 02 components –

Component A - creating/strengthening of infrastructure for quality milk testing equipment as well as primary chilling facilities for State Cooperative Dairy Federations/ District Cooperative Milk Producers' Union/SHGs/Milk Producer Companies/Farmer Producer Organizations.

Component B - "Dairying through Cooperatives" aims to increase sale of milk and dairy products by increasing farmer's access to organized market, upgrading dairy processing facilities and marketing infrastructure and enhancing the capacity of producer owned institutions.

Details of dairy cooperatives organized (milk collection centres), Bulk Milk Cooler (BMC) established and processing capacity created under Component A of NPDD scheme (As on 24.11.2024)

<p>No. of dairy cooperatives organised – 2315</p> <p>31 BMCs with capacity of 155 KL</p>
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4.1.6.6 Activities taken up by AP Livestock Development Agency (APLDA), Guntur

- Nationwide Artificial Insemination Program (NAIP)
- National Kamadhenu Breeding Centre

- Accelerated Breed Improvement Programme using sex sorted semen for getting assured pregnancy
- Strengthening of semen stations

4.1.6.7 Activities taken up by AP Sheep and Goat Federation, Guntur

There are 2935 Primary Sheep Breeders Cooperative Societies functioning at village level with 176446 members in Andhra Pradesh and 13 District Sheep Breeders Co-op. Unions functioning at district level covering 176.27 Lakh Sheep and 55.22 Lakh Goats in the state.

The federation is implementing Integrated Development of Small Ruminants Scheme with an outlay ₹35.12 crores for Prakasam and Chittoor districts during 3rd Phase.

4.1.6.8 AP Dairy Development Cooperative Federation (APDDCF)

The APDDCFL is organizing Mahila Dairy Associations and Mahila Dairy Sahakara Sangam at village level and providing required infrastructure to these newly formed societies to become sustainable.

The activities are being done in 4798 milk potential villages and 3.75 lakh liters of milk is procured per day.

UHT Milk fortified with Vitamin A&D per month is being supplied directly to Anganwadi Centres through Women & Child welfare Department. Dairy Development activities including trainings to dairying farmers in the milk potential villages are being undertaken with an outlay of ₹ 202.62 Crores under the National Project for Dairy Development (NPDD).

(Source: AP socio economic survey 2023-24)

4.1.6.9 Challenges and solutions

- Lack of focus on quality and hygienic meat production. Interventions are needed from the State Govt for establishment and support of rural slaughter houses.
- Fodder scarcity - Govt may focus on popularization of simple and cost-effective technologies like a chaffing of green straw, and strategic supplementation of macro and micronutrients could help in further efficient utilization of feed.
- Increase in input cost in poultry sector due to sharp increase in the price of bird feed especially maize and soya bean. This has an adverse impact on both layer and broiler industry. Diversification of feed ingredients by exploring alternate sources or unconventional feed sources (black soldier fly larvae, algal feed etc.), adequate storage facilities to procure and store the feed ingredients during low price seasons etc. will help in controlling the feed cost.
- Lack of state government schemes and policies in the sector is the major constraint faced by the pig farmers of Andhra Pradesh. Other constraints are lack of organized markets, less popularity for pork among non- vegetarians, poor export status etc.
- Fluctuation in raw milk prices remain the biggest challenge faced by dairy farmers in the state. Focus may be shifted on diversification and innovation. The portfolio of the sector may be expanded from the traditional liquid milk, ghee, curd etc., the portfolio may be expanded to premium products catering urban consumers like whey protein, artisanal dairy products for gourmet market, dairy snacks etc.
- The extreme temperatures cause a host of issues in livestock, from mastitis (inflammation of the udder) and dehydration, to fever and heat stroke, all of which reduce milk production, especially in the Rayalseema region – In Chittoor dist., an example has been provided by

the Women led cooperative, Shreeja Mahila Milk Producer Company Limited (SMMPCCL), by conducting regular health camps, educating the dairy farmers on summer management, supplying fodder seeds to its members at subsidised cost etc.

4.1.6.10 Suggested action points.

- Self Help Groups may be encouraged to take up Broiler Farming under contract farming with hatcheries as well as to take up marketing of broiler meat in their areas.
- Promoting silages on cluster basis through farmers so as to overcome the shortage of fodder/feed.
- Awareness creation about KCC for animal husbandry activities which will help the farmers to meet the working capital requirement.
- Availability of good quality calves/animals is a big problem in the district. Therefore, promotion of calf rearing scheme by Government is very much required besides promotion of fodder cultivation.

4.1.7 Fisheries –Inland, Marine, brackish etc.

4.1.7.1 Introduction

The Fisheries sector occupies an important place in the socio-economic development of the State. As per the socio-economic survey 2022-23, GVA rates at current prices for fisheries sector is 19.41% and 4.87% at constant prices.

1 st in total aquaculture area and production in the country	70% of country's cultured shrimp produced in the state	30.00% of the national fish production	36.21% of total value of seafood exports	Direct/indirect employment to 16.50 lakh persons
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The State is endowed with bountiful and diverse water resources under inland, marine and brackish water sectors for development of fisheries and aquaculture.

The fish production in the State has grown from 39.92 lakh MT in 2018-19 to 51.06 lakh MT in 2022-23, (Table 4.11).

Table 4.11 Fish Production in Andhra Pradesh for the last five years (lakh MT)	
2018-19	39.92
2019-20	41.75
2020-21	46.23
2021-22	48.13
2022-23	51.06

4.1.7.2 Fisheries potential in Andhra Pradesh

Inland capture fisheries:

The state has abundant inland water resources in the form tanks, ponds, canals, reservoirs and lakes. The state has 1.44 lakh ha of inland licenced reservoirs, 0.46 lakh ha area of reservoir under lease. The state also has 3204 MI tanks and 24494 GP tanks with the spread area of 4.54 lakh hac.

The important rivers flowing in the state are Krishna, Tungabhadra, Godavari and Pennar. The total length of rivers and canals in the state is 11514 km. The Kolleru lake and Pulicat are the important lakes with the effective spread area of 0.90 lakh ha and 400 sq.km respectively.

Aquaculture potential:

The total area under aquaculture in the state is about 2.26 lakh ha i.e, the area under freshwater aquaculture is 1.71 lakh ha and the area under brackish water culture is 0.55 lakh ha. The total no.of aquafarmer in the state is 2.30 lakh farmers. In addition to the existing potential, the state government has also identified 48775 ha for expansion.

Marine fisheries potential:

The state has a large coastline of 974 km spread over 12 coastal districts and continental shelf area of 33,227 sq.km. As far as fisheries villages and fisher folks are concerned, there are 555 fishermen villages in Andhra Pradesh. The marine fishermen population is 8.50 lakh. Out of that, sea going active fishermen are 1.60 lakh. 29051 fishing vessels (Mechanised – 1536, Motorised – 21435, Non-motorised - 6080) are engaged in marine fishing in AP. The state has constructed 350 fish landing centres for marine fish landing across the coastal districts.

Brackish Water Fisheries:

The total area available for brackish water aquaculture in the State is 1.74 lakh ha, out of which 0.83 lakh ha is developed for shrimp culture. The State is having a mangrove area of 352 sq. km. There is a potential of 64,000 ha of both fresh and brackish water area for aquaculture as per the remote sensing-based resource survey. The Pulicat Lake covering an area of 46,100 ha is a brackish water lake, offering scope for brackish water capture fisheries development. Brackish water shrimp of 5.92 lakh tonnes was produced during 2020-21. Krishna district occupied the first rank in brackish water shrimp production followed by SPSR Nellore and East Godavari districts. *L. vannamei* contributes more than 70% of brackish water shrimp production. For regulation and promotion of sustainable aquaculture, declaration of Aqua zones has been taken up by the State Government as an innovative model.

Seaweed potential:

There are 78 seaweed species reported to be present in the Andhra Pradesh coast. The coast offers an ideal environment for marine algal communities by the influx of two major rivers, Godavari and Krishna, opening into the Bay of Bengal, where the release of nutrients forms highly productive mangrove habitats in the river deltas. The four erstwhile northern districts (East Godavari, Visakhapatnam, Vizianagaram and Srikakulam) are abundant in algal resources than the southern counterparts. According to the survey carried out by CSIR-Central Salt and Marine Chemical Research Institute (CSMCRI) in collaboration with Dept. of fisheries, AP, the seaweed potential in the coast of AP estimated to be 7500 tonnes. There are also studies, wherein the seaweed culture production potential from the coastal waters of the state was estimated at 100,000 tonnes per year. (Source: Aqua spectrum, CMFRI, 2020)

Infrastructure:

The state has well developed fisheries infrastructure for the augmentation of fisheries production. The state has 111 cold storages with capacity of 2.43 lakh MT, 106 processing plants with the capacity of 5891 MT/day, 258 ice plants with the ice production of 5729 MT/day. The state also has 429 shrimp hatcheries with capacity of producing 60,000 million fries/year. To meet the feed requirement in the state, the state has established 42 feed mills with the effective production of 9750 MT/day. There are 1104 aqua shops and 237 aqua labs (Govt – 35 and pvt - 202) in the state.

Table 4.12 Fisheries Infrastructure in Andhra Pradesh

Fishing Harbours	4
Fish landing Centres	350
Fish Drying Platforms	782
HSD Outlets	9
Fish Seed Hatcheries (Govt.)	43 (34,904 million nos. PL annual capacity)
Shrimp (L. vannamei) Hatcheries	429 (60,000 million nos. PL annual capacity)
Fish Seed Farms	167 (Public: 54, Private: 113)
Feed Mills	42 (9750 MT/day)
Aqua Shops	1104
Aqua Labs	237
Cold storages	111 (2.43 MT capacity)
Processing Plants	106 (5891 MT/day capacity)
Ice plants	258 (5729 lakh MT/day capacity)
Packaging Units	32
(Source: Commissionerate of Fisheries, GoAP)	

4.1.7.3 Schemes/ programmes/ plans for fisheries development Government of India/NABARD

Pradhan Mantri Matsya Sampada Yojana (PMMSY):

A scheme to bring about Blue Revolution through sustainable and responsible development of fisheries sector in India with highest ever investment of ₹20,050 crores in the fisheries sector, comprising of Central share of ₹9,407 crore, the State share of ₹4,880 crore and beneficiary's contribution of ₹5,763 crore. PMMSY will be implemented for 5 years from FY 2020-21 to FY 2024-25 in all States/Union Territories. The scheme intends to address critical gaps in fish production and productivity, quality, technology, post-harvest infrastructure and management, modernization and strengthening of the value chain, traceability, establishing a robust fisheries management framework and fishers' welfare. Collectivization of fishers and fish farmers through Fish Farmer Producer Organizations (FFPOs) to increase the bargaining power of fishers and fish farmers is a key feature of PMMSY.

Fisheries and Aquaculture Infrastructure Development Fund (FIDF):

For infrastructure development in the fisheries sector, GoI has set up a dedicated Fisheries and Aquaculture Infrastructure Development Fund (FIDF) with a corpus of ₹7,522.48 crore comprising of ₹5,266.40 crore to be raised by the Nodal Loaning Entities (NLEs), ₹1,316.60 crore beneficiaries' contribution and ₹939.48 crore budgetary support from GoI. NABARD is one of the Nodal Loaning Entities (NLE). The State Government has proposed to develop 3 fishing harbours with a TFO of ₹1,015 crore by availing concessional funds of ₹450 crore under FIDF and the balance under NIDA. A Tripartite Agreement has been signed between Central Government, State Government and NABARD under FIDF.

KCC for Fisheries:

The scheme would be helpful to a large number of fish farmers taking up farming including seed production and the interest on short term bank loan would be less at par with agriculture. Further, in the interest subvention would be applicable up to a limit of ₹2.00 lakh. KCC sanctions to Fishery activities for the FY 2024-25 as on 30 Sep 2024 is 8023 accounts with an amount of ₹163773 lakhs. (Source: SLBC, Andhra Pradesh)

Government of Andhra Pradesh:

For the welfare of fishermen, the government is implementing a number of schemes. Some of the important state specific initiatives are as follows:

- Matsyakara Bharosa scheme: Under the scheme, the relief during the fishing ban period has been enhanced from ₹4000 to ₹10000. During 2021-22, under the scheme the relief of ₹10000/- per fishermen family was transferred to 97619 fishermen families. During the year 2023-24, a total amount of ₹116.226 crore is going to be transferred to 116226 beneficiaries through DBT.
- The government has enhanced the subsidy on diesel for fishing boats.
- Enhanced ex-gratia from ₹5.00 lakhs to ₹10.00 lakhs to the families of the fishermen who dies while fishing. As of date, ₹580.00 lakhs were disbursed to 116 claims across the state.
- Power tariff concession was also provided to aquaculture units.
- 738 village fisheries technicians were recruited and positioned at village secretariats to render better extension services.
- E-crop (e-fish) booking for aqua farmers to facilitate remunerative prices for their produce, access to insurance, credit support etc. introduced by Government.
- To promote sustainable aquaculture in the state and regulate unauthorized conversion in all coastal districts, the state has constituted District Level Committees to identify and notify existing potential areas for aquaculture as aqua zones.
- To ensure the successful crop, a Farmer's Field School at village level providing extension services and crop advisories to aqua farmers has been introduced.
- Rythu Seva Kendras at Village level will promote innovative and advanced technologies in fisheries sector and also to supply certified and quality inputs through aqua inputs shops to aqua farmers and fishers.
- An amount of ₹50.30 crores was sanctioned for fisheries sector in the state for equipment/instruments for establishing 35 Integrated labs (27 new + 8 Dept. labs).
- Development of marine infrastructure through construction of Fish Landing centres (Jetties and Harbours).
- Stocking advanced fish seed fingerlings in all potential inland water bodies.
- Promotion of deep-sea fisheries, open sea cage culture and Mari culture, supply of nets, boats and other inputs on subsidy basis
- Promotion of alternative species for brackish water aquaculture
- Establishment of aquatic quarantine facility for *L.vannamei* for production and supply of SPF brood stock to hatcheries to supply quality seed
- Promotion of innovative technologies like nursery management and grow out pond management, innovative technologies like RAS and Bio-floc technologies.
- Cage culture in suitable reservoirs
- Promotion of value addition and cold storage facility
- Promotion of Domestic Consumption through Aqua Hubs, which will be established at Constituency level in the State with facility of storing of live fish, fresh fish and other marine fish species. These facilities will supply fish to the retail outlets and kiosks. These retail outlets in the coming days will be expanded and developed as Janatha bazars to ensure availability of quality fish to common man at affordable prices.
- Promotion of better management practices, capacity building and skilling activities.

Statutory measures taken by Government for promotion of Aquaculture:

Though the state stands in first in fish and shrimp production, sustainability of the sector remains the core issue. Hence for the sustainability of the sector and to protect the interests

of small and marginal aquafarmers, the Government has taken up the following statutory measures:

- **AP state Aquaculture Development Authority (APSADA) Act, 2020:** AP State Aquaculture Development Authority (APSADA) Act, 2020 was enacted to bring all the aquaculture activities / products / services under one umbrella to have an integrated delivery mechanism. Hence the new institutional setup, the Andhra Pradesh State Aquaculture Development Authority (APSADA) has been established as per “Andhra Pradesh State Aquaculture Development Authority Act 2020 (Act 29 of 2020) under the Chairmanship of Hon’ble Chief Minister.
- **AP Feed (Quality control) Act, 2020:** 60% of the operational cost in Aquaculture is accounted to Feed. At present no regulatory mechanism is available for Quality Control in Fish Feed in the state as well as in the entire country. In order to prevent unethical and illegal practices in the Fish Feed industry and to implement Quality Control measures in the Fish Feed Business in the state, “The Andhra Pradesh Fish Feed (Quality Control) Act 2020” first of its kind in the country is enacted to protect the interests of the aqua farmer.
- **A.P. Aquaculture Seed (Quality Control) (Amendment) Act, 2020:** In order to prevent unethical and illegal practices on production of spurious aquaculture seed and to implement Quality Control measures in Aquaculture Seed Business in the state, the enactment and implementation of “Andhra Pradesh Aquaculture Seed (Quality Control) (Amendment) Act 2020” has done to protect the interests of the aqua farmers.
- **Establishment of AP Fisheries University:** The State has initiated steps for establishment of Fisheries University in West Godavari district to give focused attention to education in different branches of Fisheries Science and to meet the technical manpower demand in aquaculture sector in the state.

Infrastructure for fisheries development:

- **Shrimp/Scampi Hatcheries and Feed Mill:** The State Government with technical support of MPEDA has planned for construction of Aquatic Quarantine Facility (AQF) and Brooder Multiplication Centre (BMC) in Visakhapatnam district, sea bass and mud crab hatcheries at Suryalanka in Bapatla district.
- **Shore Infrastructure:** There are four fishing harbours in the State located at Visakhapatnam, Kakinada, Nizampatnam and Machilipatnam. Visakhapatnam is the biggest fishing harbour in the State as a large number of fishing vessels operate from the place. The State Government has started constructing nine fishing harbours at Juvvaladinne of Nellore District, Kothapatnam of Prakasam District, Nizampatnam of Guntur District, Voderevu in Bapatla district, Machilipatnam of Krishna District, Biyyaputippa of West Godavari District, Uppada of East Godavari District, Pudimadaka of Visakhapatnam district and Budagatlapalem of Srikakulam District in two phases. Further, one more fishing harbour has been proposed to construct at Nuvvalarevu of Srikakulam district.
- The government has also taken up construction of 06 Fishing Landing Centres with total outlay of Rs.126.91 crores at Chintapalli, Bheemili, Rajayyapeta, Rayadaruvu, Dhondawaka, and Uppalanka.
- Andhra Pradesh Marine Board (APMB) is taking necessary measures to develop integrated seafood parks in and around the upcoming 9 fishing harbors. Integrated Seafood Park with facilities like Cold storages, pre-processing and post-processing facilities, ice-plant, packaging unit etc will reduce the post-harvest losses and harness the fisheries production of the state.
- Under Fish Andhra, GoAP is encouraging marketing of fish and fish products.

Budget Announcement for shrimp farming sector:

In order India to be self-reliant in shrimp seed production and to reduce the cost burden of shrimp hatcheries, GoI has taken many initiatives. During budget session for FY 2024-25, Hon'ble Finance Minister announced financial support for setting up a network of Nucleus Breeding Centre (NBC) for shrimp brood stocks to ensure availability of quality brood for quality seed. Further, to increase the flow of formal finance to shrimp aquaculture industry, GoI announces financing for shrimp farming, processing, and export, which will be facilitated through NABARD.

As Andhra Pradesh is National Hub for shrimp farming in India, the state government and other stakeholder make use of the fund available for setting up of NBCs and BMCs in Andhra Pradesh.

The potential for credit support for Fisheries sector for the year 2024-25 has been assessed at ₹16943.93 crore.

4.1.7.4 Suggested action points.**(a) Inland Fisheries**

- Seed stocking in all potential water bodies.
- Fish seed stocking in potential MI Tanks.
- Captive seed nurseries for quality seed supply.
- Fish landing centres at reservoirs to reduce post-harvest losses.
- Enhancing production and productivity through selective breeding and quality seed supply.
- Cage culture in reservoirs for enhancing the productivity through diversification.
- Capacity building to fishers and aqua farmers on Best Management Practices (BMPs)
- Deploy the IoT and drone technologies in aquaculture activities.

(b) Marine Fisheries

- Arrangement of digital display boards in landing centres for dissemination of weather and potential fishing zone information.
- Providing marine infrastructure in landing centres to avoid post-harvest losses.
- Sea - weed culture for enhanced livelihoods.
- Open sea cage culture for boosting the production from coastal waters.
- Promotion of deep-sea fishing for exploitation of Tuna fishery.
- Capacity building to coastal fishers on Code of Conduct for Responsible Fisheries and Post-harvest technology.

(c) Aquaculture

- Geo tagging of all aquaculture ponds.
- Promotion of hatcheries for high value species like Sea bass, Cobia and Mud crab, etc.
- Disease monitoring and surveillance - mobile lab services.
- Demand driven research & development and extension services.
- Toll free advisory services to aqua farmers.
- Promotion of cage culture, bio-floc and Recirculating Aquaculture System.

(d) Marketing

- Domestic market promotion through retail outlets, modern fish markets and kiosks.
- ICT based marketing intelligence.

- Promoting per capita fish consumption through promotion of fish value added products.
- Promoting MUDRA loans tie up for fishers.
- Electronic and print media campaigns, fish melas & exhibitions.
- Promotion of hygienic handling at landing points and on-board vessels.

4.1.8 Sustainable Agriculture Practices

4.1.8.1 Introduction

Sustainable agriculture is a critical approach to farming that aims to meet the present needs of farmers and consumers without compromising the ability of future generations to meet their own needs. Andhra Pradesh has a predominantly agrarian economy, with agriculture being a significant contributor to its GDP and employment. However, traditional agricultural practices have often led to environmental degradation, resource depletion, and socio-economic inequalities. By promoting environmentally friendly methods, maximizing resource efficiency, and ensuring economic viability, the state has embraced sustainable agriculture to improve food security, conserve natural resources, and support rural livelihoods.

Some of the major practices under Sustainable Agriculture Practices are as below:

- i. Organic Farming
- ii. Minimum/Zero Tillage
- iii. Zero Budget Natural Farming (ZBNF)
- iv. Integrated Farming Systems (IFS)
- v. Multilayer farming
- vi. Agro Forestry

- **Promotion of Organic Farming:**

Andhra Pradesh has emerged as a frontrunner in promoting organic farming practices. The state government has implemented several programs and initiatives to encourage farmers to adopt organic agriculture methods. The Zero Budget Natural Farming (ZBNF) program, introduced in 2015, promotes chemical-free and organic farming practices. This program emphasizes the use of natural fertilizers, bio-pesticides, and crop diversification, reducing farmers' dependence on synthetic inputs. Through training programs, financial support, and certification processes, the government has successfully encouraged farmers to shift to organic farming methods.

- **Conservation of Water Resources:**

Water scarcity is a significant challenge in agriculture, particularly in a state like Andhra Pradesh, which experiences frequent droughts. To address this issue, the state has implemented various water conservation measures. The Jalayagnam program, launched in 2004, focuses on the construction of check dams, farm ponds, and reservoirs to enhance water storage and recharge groundwater. Additionally, the adoption of micro-irrigation techniques such as drip irrigation and sprinklers has helped reduce water wastage and increase irrigation efficiency. These initiatives not only conserve water but also contribute to sustainable agricultural practices.

- **Crop Diversification and Integrated Farming Systems:**

To ensure the long-term viability of agriculture, Andhra Pradesh has prioritized crop diversification and integrated farming systems. The state encourages farmers to diversify their crop choices, moving away from mono-cropping towards mixed cropping or intercropping. This practice helps reduce the risk of crop failure and improves soil fertility. Additionally, integrated farming systems, combining crop cultivation with livestock rearing or fish farming,

provide additional income sources for farmers while enhancing nutrient cycling and reducing pest problems. These sustainable farming systems contribute to the overall resilience of agricultural communities.

- **Agroforestry and Afforestation:**

Andhra Pradesh recognizes the importance of forests in sustaining agricultural ecosystems. The state has undertaken significant efforts in agroforestry and afforestation initiatives. Agroforestry involves integrating trees with crops or livestock, providing shade, windbreaks, and additional income sources through timber or fruit production. Afforestation programs aim to increase forest cover, prevent soil erosion, and enhance biodiversity. These practices not only mitigate climate change but also contribute to sustainable agricultural practices by improving soil health, water retention, and microclimate regulation.

- **Technology and Innovation:**

Farmers have to embrace technology and innovation to enhance sustainable agriculture practices. Use of modern agricultural techniques, such as precision farming, remote sensing, and weather forecasting, should be encouraged to optimize resource utilization and minimize environmental impacts. The government promotes the adoption of advanced machinery and equipment for efficient land preparation, seed treatment, and crop management. By leveraging technology and innovation, Andhra Pradesh ensures the sustainable use of resources and supports farmers in making informed decisions.

4.1.8.2 State Government Schemes available

Andhra Pradesh Community Managed Natural Farming (APCNF) Programme

The APCNF programme, led by Rythu Sadhikara Samstha, aims to enhance farmers' livelihoods and support climate change adaptation. As of December 2024, the programme has reached 14% of farmers and 28% of villages in Andhra Pradesh. It is funded by the Ministry of Agriculture, KfW Development Bank, Azim Premji Foundation, and Co-Impact.

Key Achievements:

- 9.53 lakh farmers practising Natural Farming on 3.58 lakh hectares
- 7.76 lakh farmers adopted PMDS on 3.28 lakh hectares
- 3.65 lakh NF Kitchen gardens, including 0.77 lakh 365-day Kitchen gardens
- 7857 compact blocks, 11573 A-grade models, and 6600 ATM models
- Third-party studies have confirmed that the programme has led to reduced cultivation costs, increased net income, and no significant yield differences between Natural Farming (NF) and non-NF crops.

4.1.8.3 Challenges and solutions:

- **Knowledge and Awareness** – A Significant challenge is faced in adopting sustainable agriculture practices is the lack of awareness and knowledge among farmers. Educating farmers about the benefits of the sustainable agriculture practices and providing them with training and extension services can help overcome this challenge.
- **Access to resources** – Small and Marginal farmers often face challenges in accessing resources required for sustainable agriculture, such as organic inputs and advances irrigation technologies. Strengthening rural credit systems and promoting farmer producer organisations can enhance access to resources.

- Market linkages – Connecting sustainable agriculture produce with the market can be a challenge. Developing robust market linkages and promoting sustainable branding can incentivize farmers to adopt such practices.

4.1.8.4 Suggested action points:

- Strengthening Extension Services in the state for enhancing knowledge dissemination on sustainable agriculture practices
- Promoting research and development in sustainable agriculture technologies and practices tailored to Andhra Pradesh's agro-climatic conditions.
- Introducing financial incentives and subsidies for farmers adopting sustainable practices to encourage wider adoption.
- Developing exclusive Package of practices for the crops grown under Sustainable methods, which can be used for working out of Scale of Finances separately for these crops.

4.1.9 Farm Credit – Others, including Two Wheelers for Farmers

4.1.9.1 Introduction

The use of two-wheelers in the agriculture is increasing at a rapid pace particularly by the Small and Marginal farmers. Most of the banks are extending to the farmers for purchase of two-wheelers as 'Kisan Bikes' upto a maximum amount of ₹1.00 lakh. The same are being used for transport of agriculture inputs and labour to the fields and agriculture produce to the market. Many new innovations by farmers are using the engine power of the two-wheeler for various farm operations viz., spray of pesticides, inter-cultivation, winnowing etc., as they are easily available in the rural areas and are very cost effective. The use of two-wheelers is more prevalent with Dairy farmers and vegetable farmers, as they are required to supply the milk and vegetables to the collection center/market on a daily basis and within very less time owing to the high perishability nature of the produce.

Small and Marginal farmers are still dependent on animal power for their agricultural operations. The details of number of land holdings as per Socio-economic survey 2022-23 of Govt. of Andhra Pradesh is 85.24 lakh. Out of which, 75.50 lakh (89%) of the land holdings in the State belong to small and marginal farmers. There is still a good demand for bullocks and bullock carts for the purpose of agricultural operations like ploughing, sowing and intercultural operations apart from transportation of agricultural inputs and farm produce. Farmers are depending on wooden ploughs and metal ploughs. Though the use of tractors and power tillers is steadily increasing, the demand for bullock driven ploughs is still persisting among the small and marginal farmers.

4.1.9.2 Suggested Action Points

- The interest rate charged for the purchase of two-wheelers by the farmers is still on a high side (>10.5%). The same may be reduced.
- Training of youth for maintenance of the Bullock carts may be encouraged.
- Banks may finance low-cost Bullock carts in remote villages for transportation of agriculture produce from villages /farms to markets at the Mandal level.

4.2 Agriculture Infrastructure Construction of Storage Facilities

4.2.1 Warehouses, Market Yards Including Cold Storage Units / Cold Storage Chain

4.2.1.1 Introduction

India is the second largest producer of wheat and rice, the world's major food staples. India also holds the first position in production, consumption and export of pulses in the world. India is also at Second position in production of Horticultural crops. However, 85% of the farmers in our country are small farmers and contribute significantly to the food grain and horticulture production. These small farmers do not have the economic strength to retain the produce with them till the market prices are favorable. There has been a felt need in the country to provide the farming community with facilities for scientific storage so that wastage and produce deterioration are avoided and to enable it to meet its credit requirement without being compelled to sell the produce at a time when the prices are low. Various farm level infrastructure like warehouses & silos, cold storages, pre-cooling chambers, ripening chambers, logistic facilities like reefer van and insulated vehicles, primary processing infrastructures like threshing, shelling, milling, de-corticating, splitting, cleaning, grading, sorting, drying, packing, etc. would enable the farmers to improve the quality of the produce and motivate them to increase the primary processing and domestic as well as foreign exports. A network of warehouses, processing units and logistics would help the farmers to increase the income of the farmers.

Table 4.13 Agriculture Infrastructure availability in the state:

S No.	Infrastructure available	Capacity
1.	Cold storages-373	20.60 Lakhs MTs
2	Ripening chambers-247	54315 MTs
3	Packhouses-4762	142860 MTs
4	Integrated Packhouse-16	256MTs
5	Market yards including sub yards-324.	
6	Godowns-1052	9.65 Lakh MT
(Source: Agriculture marketing Dept, GoAP, AP Socio-economic survey 2023-24)		

4.2.1.2 Major Interventions/ Policy Initiatives

Government of India supports the farmers to establish the storage and logistics facilities and provides financial assistance in the form of capital subsidy, interest subvention, credit guarantee and other incentives. The following schemes are operational in FY 2024-25 for supporting the farmers.

- **Agriculture Infrastructure Fund (AIF)**

The Agriculture Infrastructure Fund is a medium-long term debt financing facility for investment in viable projects for post-harvest management infrastructure and community farming assets through interest subvention and credit guarantee. The duration of the scheme is from FY 2020-21 to FY 2032-33. Loan disbursement is to be completed by 2025-26. Under the scheme, ₹1.00 lakh crore will be provided by banks and financial institutions as loans with interest subvention of 3% per annum and credit guarantee coverage under CGTMSE for loans up to ₹2.00 crore. Eligible beneficiaries include farmers, FPOs, Primary Agricultural Cooperative Credit Societies (PACS), Marketing Cooperative Societies, SHGs, Joint Liability Groups (JLG), Multipurpose Cooperative Societies, Agri-entrepreneurs, Start-ups, and Central/ State agency or Local Body sponsored Public-Private Partnership Projects.

The details of the scheme and eligible infrastructure projects for assistance under AIF scheme is available in <https://agriinfra.dac.gov.in>.

The Andhra Pradesh State Government with an objective to develop farm gate infrastructure across the state at Rythu Seva Kendra level and to develop PACS as multi-purpose facility centres proposed to avail the Central Government Agriculture Infrastructure Fund scheme through PACS in the State, for which refinance has been sanctioned by NABARD.

- **Agricultural Marketing Infrastructure (AMI)**

The Agricultural Marketing Infrastructure (AMI), a subscheme of Integrated Scheme for Agricultural Marketing (ISAM) is meant for holistic development of agricultural value chain critically focusing each linkage of post-harvest value chain including storage, promotion of value addition and processing at farmers level so as to enhance their income by selling more marketable and processed produce in the market. The sub-scheme AMI lays special focus on construction of storage and primary processing infrastructure at farmers' level and developing and upgrading Gramin Haats as GrAMs through strengthening of infrastructure. This infrastructure may function as farmer-consumer market (retails market) and collection/aggregation points (spokes) with linkage to secondary market (hub) and also to processing/exporting and retail chain with participation of FPOs, other farmers' groups and private sector eligible promoters. Farmer consumer markets for agricultural and allied produce (livestock, fishery, poultry and such other allied produce) devoid of intermediaries and developed elsewhere also by eligible promoters are focused and eligible activity under this sub-scheme. Capital subsidy @25% of eligible project cost for general category and 33.33% for women/ SC/ ST/ FPOs is available under the scheme for setting up of Warehouses and primary processing infrastructure.

The AMI scheme is operational from October 2018 and will be operational till March 2026. • NABARD vide Circular dated 29.12.2023, has issued the Addendum to Operational Guidelines of AMI sub-scheme of ISAM. The details of the scheme are available in <https://www.nabard.org/content1.aspx?id=702&catid=23&mid=530>

- **World's Largest Grain Storage Plan in Cooperative Sector**

Ministry of Cooperation, GoI is implementing "World's Largest Grain Storage Plan in Cooperative Sector" by convergence of various schemes of the Ministry of Agriculture and Farmers Welfare, Ministry of Consumer Affairs, Food and Public Distribution and Ministry of Food Processing Industries. In view of the important role played by PACS at the grass root level in transforming the agricultural and rural landscape of Indian economy and to leverage their deep reach up to the last mile, this initiative has been undertaken to set up decentralized storage capacity at the level of PACS along with other agri infrastructure, which would not only strengthen the food security of the country, but would also enable PACS to transform themselves into vibrant economic entities.

M/s Mritunjaya Sahkari Samiti Achanta PACS, West Godavari District is identified by the GoAP for construction of warehouse and setting up of rice processing unit under Phase I of the Plan.

- **Pradhan Mantri Kisan SAMPADA Yojana (PMKSY)**

Pradhan Mantri Kisan SAMPADA Yojana (SAMPADA- Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) with an allocation of ₹ 6,000 crore for the period 2016-20 coterminous with the 14th Finance Commission cycle. The scheme is implemented by Ministry of Food Processing Industries (MoFPI).

PM Kisan SAMPADA Yojana is a comprehensive package for creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet. It aims to provide a boost to the growth of food processing sector in the country and help in providing better returns to farmers and is a big step towards doubling of farmers income, creating huge employment opportunities especially in the rural areas, reducing wastage of agricultural

produce, increasing the processing level and enhancing the export of the processed foods. A few schemes implemented under PMKSY are available in <https://www.mofpi.gov.in/Schemes/pradhan-mantri-kisan-sampada-uyojana>.

- **Scheme for Integrated Cold Chain and Value Addition Infrastructure**

The objective of the Scheme of ‘Integrated Cold Chain and Value Addition Infrastructure’ is to provide integrated cold chain and preservation infrastructure facilities, without any break, from the farm gate to the consumer. It covers creation of infrastructure facility along the entire supply chain viz. pre-cooling, weighing, sorting, grading, waxing facilities at farm level, multi-product/ multi temperature cold storage, CA storage, packing facility, IQF, blast freezing in the distribution hub and reefer vans, mobile cooling units for facilitating distribution of non-horticulture, horticulture, fish/ marine (except shrimp), dairy, meat and poultry. The scheme allows flexibility in project planning with special emphasis on the creation of cold chain infrastructure at farm level.

Integrated cold chain and value addition infrastructure projects can be set up by Partnership/ Proprietorship Firms, Companies, Corporations, Cooperatives, Self Help Groups (SHGs), Farmer Producer Organizations (FPOs), NGOs, Central/State PSUs, etc. with business interest in cold chain solutions and also by those who manage the supply chain.

Financial assistance (grant-in-aid) under the scheme is limited to a maximum of ₹10.00 crore per project in relation to technical civil works and eligible plant & machinery subject to the following:

- For storage infrastructure including Pack House and precooling unit, ripening chamber and transport infrastructure, grant-in-aid @ 35% for General Areas and @ 50% for North East States, Himalayan States, ITDP Areas & Islands, of the total cost of plant & machinery and technical civil works will be provided.
- For value addition and processing infrastructure including frozen storage/ deep freezers associated and integral to the processing, grant-in-aid @ 50% for General Areas and @ 75% for North East States, Himalayan States, ITDP Areas & Islands, will be provided.
- For irradiation facilities grant-in-aid will be provided @ 50% for General Areas and @ 75% for North East States, Himalayan States, ITDP Areas & Islands.

i. Rashtriya Krishi Vikas Yojana (RKVY – RAFTAAR)

The Rashtriya Krishi Vikas Yojana – Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY - RAFTAAR) is a flagship programme of the Government of India with 60% grant by the Central Government and 40% grants by the State Plan Scheme for construction of various agriculture related infrastructure for agriculture and horticulture by the promoters like farmers, FPOs and the Primary Agricultural Cooperative Society under supervision of Cooperation Department.

The details of the scheme are available in <https://rkvy.nic.in/#>.

ii. Mission for Integrated Development of Horticulture (MIDH)

Mission for Integrated Development of Horticulture (MIDH) is a Centrally Sponsored Scheme for the holistic growth of the horticulture sector covering fruits, vegetables, root & tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, cocoa and bamboo. Under MIDH, Government of India (GOI) contributes 60% of total outlay for developmental programmes in all the states except states in Northeast and Himalayas, 40% share is contributed by State Governments. In the case of North-eastern States and Himalayan States, GOI contributes 90%.

To facilitate proper handling, storage and packaging of seeds, assistance is provided for creating infrastructure like drying platforms, storage bins, packaging units and related equipment. The Public sector will receive 100% assistance, while assistance to the Private sector will be credit linked back ended subsidy @ 50% of cost norms.

MIDH would include projects relating to establishment of pre-cooling units, 'on-farm' pack houses, mobile pre-cooling units, staging cold rooms, cold storage units with and without controlled atmosphere capability, integrated cold chain system, supply of refrigerated vans, refrigerated containers, primary/ mobile processing units, ripening chambers, evaporative/low energy cool chambers, preservation units, onion storage units and zero energy cool chambers. These projects will be entrepreneur driven and provided credit linked back-ended subsidy.

PSUs/Government agencies/ Cooperatives/ Growers' association recognized/registered by the DMCs, having at least 25 members, will also be entitled to avail assistance for such activities. They may avail back ended subsidy without credit link, subject to condition that they are able to meet their share of the project cost.

Assistance for setting up of new multi-chamber cold storage units with technologies which are energy efficient with provision for thermal insulation, humidity control, advanced cooling systems, automation, etc., having specifications and standards approved by the Ministry cold storage infrastructure is available under the MIDH scheme. While Cold storages (Long term storage and distribution hubs) upto 5000 MT capacity is promoted under NHM/HMNEH sub-schemes, capacity above 5000 MT upto 10000 MT is promoted under NHB sub-scheme. Assistance for pre-cooling unit will be linked to pack-houses and cold rooms (staging).

The details of the scheme are available in <https://www.midh.gov.in/midhSchemes.html#>.

4.2.1.3 Suggested Action points

- Private warehouses are required to be encouraged to get accredited and registered with WDRA.
- Construction of cold storages with latest technology.

4.2.2 Land Development, Soil Conservation, Watershed Development

4.2.2.1 Introduction

About 30.86 lakh ha out of net sown area (60.38 lakh ha.) in Andhra Pradesh is rainfed, characterized by low productivity, low income, low employment with high incidence of poverty and a bulk of fragile and marginal land. Rayalaseema region, Prakasam and Nellore districts of the State experience severe and frequent droughts coupled with erratic rainfall, land degradation, low water holding capacity, poor soil health, high temperatures and high evapotranspiration. As per Composite Index (by National Rainfed Area Authority), erstwhile districts of Anantapur, Kurnool, Kadapa, Prakasam, Chittoor and Nellore are found to be most critical in the state and ranked 1 to 6 respectively for prioritisation for development of natural resources.

Land resources– soil, water, livestock, forest– are considered as integral part of the natural capital, which forms the foundation for the wealth of our societies and economies. India's dependence on Land resources can be gauged from the fact that 54.6 % of the total workforce is engaged in Agriculture and allied sectors contributing 18.6% to the countries total Gross Value Added (GVA) (source: Ministry of Agriculture & Farmers Welfare- Annual Report 2022-23) at current prices. Various types of Ecosystem Services are being provided by Land

resources including Provisioning Services (e.g. food, fodder), Regulating and maintenance Services (e.g. soil quality regulation, pollination) and Cultural Services (festivals, arts) (source: [https://unstats.un.org/unsd/statcom/52nd-session/documents/BG-3f-SEEA-](https://unstats.un.org/unsd/statcom/52nd-session/documents/BG-3f-SEEA-EA_Final_draft-E.pdf)

EA_Final_draft-E.pdf) With structural changes in economy, we are observing distinct changes in the Land Use / Land Cover (LULC), visible in the form of a gradual shift of land from agricultural uses to non-agricultural uses. Anthropogenic activities have given rise to various challenges- like land degradation, severe water crisis, soil productivity decline- to the harmony of ecosystem. As a result, the land quality restoration, sustainable and scientific soil & water management have become primary concerns of the policy makers to ensure sustainable, equitable and inclusive growth.

The status of land utilisation in Andhra Pradesh:

As per the Socio-economic survey, report of Andhra Pradesh (2022-23), the percent share of the different segments of land use of the total geographical area 162.97-lakh hectares of the state is as follows:

Table 4.14 Status of Land Utilization in Andhra Pradesh

Land Use Category	Net area sown	Current fallow lands	Barren and Uncultivable land	Other fallow land	Cultivable waste land	Forest	Land put non-agricultural uses	Remaining land
Area (lakh hectares)	60.38	15.00	13.35	8.94	4.02	36.88	20.82	3.56
% of total Land Use	37.05 %	8.96%	9.20 %	5.49 %	2.47%	22.63 %	12.78%	2.20%

4.2.2.2. Major policy interventions/ schemes

Andhra Pradesh Drought Mitigation Project (APDMP): The main objective of APDMP is to improve the income and strengthen the drought resilience of 90,000 farm households in 105 mandals in the rainfed areas of five erstwhile districts in southern AP i.e., Ananthapuramu, Chittoor, Kurnool, Kadapa & Prakasam districts. It aims to address the problem of repeated drought, low productivity and aims to increase their income. (source: <https://apagrisnet.gov.in/>)

National Mission for Sustainable Agriculture (NMSA)- Rain-fed Area Development: Rain-fed Area Development (RAD) aims to adopt an area based approach for development and conservation of natural resources along with farming systems. This component has been formulated in a 'watershed plus framework', i.e., to explore potential utilization of natural resources base/assets available/created through watershed development and soil conservation activities / interventions. (Source: <https://nmsa.dac.gov.in/frmComponents.aspx>). The scheme is being implemented in 9 districts (viz., districts Kurnool, Nandyal, Anantapuram, Sri Satya Sai, Kadapa, Annamayya, Chittoor, Tirupati and Prakasam). Activities under RAD include promotion of Integrated Farming System, Value Addition and Resource Conservation. Creation and development of common property resources/assets/utilities like grain bank, biomass shredders, fodder bank, group marketing etc. is being encouraged under this scheme.

Watershed Development Programmes: Recognising the importance of watershed based approach for the management of soil and water resources, NABARD has constituted Watershed Development Fund. The primary objective of Watershed Development Programme is enhancing land productivity, crop production, and livestock resources through extension of grant assistance to the sanctioned projects. The participative approach of the programme helps create awareness among the community for adopting sustainable cropping practices. So far NABARD has implemented 231 watershed projects (including 38 KfW Soil projects) in AP covering 11 districts (Kurnool, Nandyal, Anantapur, Sri Satya Sai, Kadapa, Annamayya, Prakasam, Nellore, Palnadu, Tirupati and Chittoor districts) and 2.00 lakh Ha of degraded area has been treated so far. There are 23 ongoing watershed development projects covering 9 districts.

PMKSY- Watersheds projects Andhra Pradesh: In Andhra Pradesh, the Drought Prone Area Programme (DPAP) and Desert Development Programme (DDP) are being implemented since 1995 in 6 districts. Watershed programmes are implemented in Srikakulam, Prakasam, Chittoor, Cuddapah and Kurnool districts under DPAP and in Anantapur district under DDP Programme. Under DPAP/DDP programme so far 2210 watersheds were implemented in 296 mandals of 12 districts with treated areas of 13.89 Lakh hectares (Source: <http://iwmp.ap.gov.in/WebReports/UI/Miscellaneous/NewVersionGlance.aspx>).

Under PMKSY the state is implementing Command Area Development and Water Management Programme (CADWMP) which aims to bridge the gap between potential created and their utilization through micro level infrastructure development and efficient farm water management practices. The programme includes components like On-farm Development works, construction of field, intermediate and link drains, reclamation of waterlogged area etc. Under the Accelerated Irrigation Benefit Programme (AIBP), eight projects are covered in Prioritized projects in Andhra Pradesh State.

Soil Health Card Scheme (SHC): Soil Health & Fertility (Soil Health Card) and Soil Health Management (SHM) schemes are merged with Rashtriya Krishi Vikas Yojana (RKVY) w.e.f. financial year 2022-23 and scheme was indicated as Soil Health component of RKVY Scheme. SHC is a printed report that contain an advisory based on the soil nutrient status of a farmer's holding. It shows recommendations on dosage of different nutrients needed and advise the farmer on the application of fertilizers and their quantities, the soil amendments measures to realize optimal yields. The soil testing labs will help farmers to identify the problems (Alkalinity/Salinity) and deficiency of nutrients if any. There are 16 district level Soil Testing Labs, 1 Regional Soil Testing Lab at Bapatla, 13 Mobile Soil Testing Labs in all the districts and 30 Soil Testing Labs in AMCs in the state.

Rythu Seva Kendralu: 10,778 Rythu Seva Kendras have been established across states serving the farmers by supplying pretested quality inputs, as well as functioning as procurement centres at the village level.

Polambadi (Farmer Field School): The excessive use of chemical pesticides has led to increased cultivation costs, reduced crop productivity, pest resistance, environmental pollution, and lowered food safety standards. To address these issues, the Department of Agriculture promotes Farmers Field Schools (FFS), locally known as Polambadi, to help farmers improve their livelihoods and make agriculture more sustainable.

Integration with Ind.GAP Certification

Polambadi (FFS) is integrated with Ind.GAP Certification to promote Good Agricultural Practices (GAPs). This initiative aims to bring sustainability to agriculture by adopting GAPs recommended by the State Agricultural University (SAU) and ensuring food safety standards. It also helps farmers get better market prices for their products in both open and digital markets.

Paramparagat Krishi Vikas Yojana- The scheme aims to promote organic production through certified organic farming. The scheme encourages adoption of Participatory Guarantee System (PGS) certification through cluster approach (cluster of 50 acre). The scheme extends assistance for PGS Certification and Quality control, establishment of Botanical extracts production units, Transportation of organic produce, Organic Fairs etc.

AP Community managed Natural Farming (APCNF)- Government of Andhra Pradesh has been implementing, AP Community managed Natural Farming (APCNF) in 10,300 clusters bringing 5,92,089 farmers in 2,68,263 ha area under Natural Farming. APCNF programme is implemented under Paramparagat Krishi Vikas Yojana (PKVY), Bharatiya Prakritik Krishi Padhati (BPKP) CSS Schemes of GOI in 3011 Gram Panchayats. For expansion of Natural farming in the State, Govt. of AP/RySS have secured a Results-Based Lending (RBL) mode loan of 90 million Euro from KfW, for the APCNF-KfW Project for the period of 2020-25 in 719 Gram Panchayats. During 2023-24, programme targets to cover 10.5 lakh farmers under APCNF with area coverage of 4.58 lakh ha. Programme plans to establish 5.0 lakh Kitchen Gardens by the Women Self Help Groups and to cover 8.61 lakh farmers to practice PMDS method during 2023-24.

JIVA Programme: The programme will promote natural farming in completed watershed and tribal development projects of NABARD in 11 states covering five agro-ecological zones, which are in ecologically fragile and rain-fed areas. JIVA aims to ensure using the principles of agro-ecology, long-term sustainability and transform the pre-existing social and natural capital and nudge the farming community towards natural farming. For the year 2023-24, pilot phase has been sanctioned for 4 projects in Prakasam (Watershed-1), Parvatipuram Manyam (TDF-2) and Srikakulam (TDF-1) districts with total grant support of ₹120.00 lakh from NABARD covering around 140 acres. Programme aims to cover 500 acres in each project during next phase.

Suggestions:

- Capacity building and awareness generation for climate resilient agronomy exercises need to be undertaken for farmers.
- Incentivise formation of social Institutes like Village Watershed Committees (VWCs)/ Water Users Association (WAUs) for comprehensive and inclusive management of water resources
- Banks and other financial institutions (like MFIs) need to be galvanized to finance NRM activities.
- Credit outreach programmes for VWCs, SHGs, and JLGs for NRM activities.
- Realigning the public expenditure towards ecologically sensitive green and blue infrastructure
- Need of Innovative Finance instruments for Land Restoration on the lines of Land Degradation Neutrality (LDN) Fund of UNCCD (Source: Global Land Outlook- UNCCD)
- Use of IoT, machine learning and other emerging technologies may be incentivized, promoted and popularized for promotion of precision farming which will ensure optimum use of natural resources.

It is evident that the efforts and investments undertaken for Land Development, Soil Conservation and Watershed Development leads to significant return on investment (RoI) in the form of Crop yields increase, improved food security, restoration of ecological balance, optimal utilization of natural resources, and generating inclusive growth. Reorienting policy apparatus towards sustainable and green public expenditure and creating incentives for lenders to finance these activities should be high on agenda.

4.2.3. Agri-Infrastructure: Others (Tissue culture, Agri biotechnology, Seed Production, Bio-Pesticides/ fertilizers, Vermicomposting, and e-NAM)

4.2.3.1 Introduction

The availability of quality inputs – seed material, bio-fertilizers, and bio-pesticides - is critical for enhancing the productivity of crops, which also calls for increasing the flow of credit for bankable activities identified under Agri infrastructure – others viz., Plant tissue culture and agri-biotechnology, seed production, production of bio-pesticides, bio-fertilizer, vermicomposting and e-NAM

4.2.3.2 Infrastructure, policy support Available

Tissue Culture & Agri Bio-technology

Currently 78 commercial tissue culture production units have been recognized by the Department of Biotechnology (DBT), Govt. of India under the National Certification System for Tissue Culture Raised Plants (NCS-TCP). Out of this ABT Tissue Culture Lab., Ananthapur. Micro Laboratories Pvt Ltd, Chittoor and Sri Soma Biotech, Guntur are in the State of Andhra Pradesh.

Seed Production & processing:

Seed is a critical determinant in increasing Agricultural production. The performance and efficiency of other inputs depends on the quality of seed. Certified/quality seed plays an important role in achieving higher yields. Hence, supply of quality seed to the farmers is one of the most important interventions to increase the production and productivity of any crop. To bring more area under cultivation certified or quality seed must be supplied at affordable prices and in adequate quantities to the farmers. The area under cultivation is not going to increase significantly; the thrust will have to be on rising productivity per unit of cultivated land.

Seed Farms: The 27 State Seed Farms are taking up of Seed production programme utilizing the Breeder seed from the ANGRAU and Foundation seed from Seed farms. The quality Foundation seed produced in the Farms is being utilized under Seed Village Scheme implemented by the Department.

Seed Village Programme: introduced in Rabi 2004-05 in the state by state Govt. of A.P. and from Rabi 2005-06 onwards the Scheme is being implemented as per the norms of GOI. The Seed Village scheme ensures supply of quality certified seed of notified varieties to the farmers in time at their places at affordable prices besides ensuring quick multiplication of new seed varieties in a shorter time in that Mandal /district based on the crop situation.

Bio-pesticides and Fertilizer

The Government of Andhra Pradesh is providing quality and certified fertilizers to the farmers at Rythu Seva Kendras through the existing Fertilizer Quality Control Laboratories (FQCLs) and one Biofertilizer testing lab in the State was strengthened under SHM Scheme during 2020-21.

Vermi-composting/ NADEP Composting

1 ton of vermicompost contains N (0.75%), P (0.6%) and K (1.0%) which is equal to 16.3 Kg of Urea, 37.5 Kg SSP, 16.7Kg MOP

Under the RKVY project, vermicomposting is promoted with a 50% subsidy. The unit cost of the vermicomposting unit is ₹50000 (64- 71 kg earthworms with 150 kg filler material @ ₹8000; 4 composting pits@ ₹14000; and semi-permanent shed@ Rs 28000) out of which ₹25000 is provided as subsidy. Also, for vermin-hatcheries 75% subsidy (max ₹75000 per unit) is provided.

e-NAM

e-NAM (National Agriculture Market electronic trading portal) is a reformed linked scheme and States are required to carry out pre-requisite reforms to enable (i) a single license to be valid across the State, (ii) a single point levy of market fee, and (iii) Provision for electronic auction as a mode of price discovery. SFAC will operate and maintain the e-NAM platform with the help of a Strategic Partner, presently NFCL. As of 31 December 2024, 1389 Mandis from 23 states and 04 UTs have been integrated on e-NAM. A total of 33 Mandis from Andhra Pradesh have been integrated on eNAM.

4.2.3.3 Suggested Action Points

- Since 2015, APSMD has initiated the e-NAM and e- Permit system 2018.
- Developing Andhra Pradesh as a global seed hub, Mega Seed Park in Kurnool district.
- Promotion of ZBNF throughout the state.
- Promotion of Tissue culture banana cultivation in the state. Tissue culture banana is supported under Mission for Integrated Development of Horticulture and Normal State Plan of Horticulture Department.
- Similarly, Vermicompost is supported by Agriculture Department under RKVY.
- Exclusive state-level Bio-Control Laboratory at Nidadovola, West Godavari.
- Encouraging IPM and INM management in crops.
- Andhra Pradesh Seeds Development Corporation is producing seed varieties for the crops like rice (BPT-5204), black gram (LBG623, 645 and 752), Bengal gram (KAK-2 and JG-11), red gram (LRG-41 and PRG-158), groundnut (TMV-2 and TAG-24), green gram (LGG-460), jute (JRO-524) and pillipesara (*Phaseolus trilobus*) in Prakasam district with the help of farmers.
- Subsidized seed supply through various schemes like NFSM, RKVY, NMOOP through various agencies like APSSDC, APOILFED, and APMARKFED.
- Seed Village Programme supplies quality certified seeds to the farmers at an affordable price.

4.3. Agriculture Ancillary Activities

4.3.1 Food and Agro Processing

4.3.1.1. Introduction

The food processing industry has emerged as a key sector of the economy, playing a crucial role in bridging the gap between agriculture and industry. This sector not only adds value to agricultural produce but also enhances the shelf life of products, fortifies their nutritional value, and reduces wastage of raw materials. These advancements are essential for ensuring that farmers receive fair prices for their produce while also making nutritious food products available to consumers at affordable rates.

In the context of Andhra Pradesh, an agrarian state where over 60% of the population is engaged in agriculture and allied activities, the potential for food processing is vast. Recognizing this, the Government of Andhra Pradesh has established the Andhra Pradesh Food Processing Society (APFPS) under the Andhra Pradesh Societies Act in November 2012.

The APFPS is entrusted with promoting the food processing industry in the state, creating infrastructure, and facilitating investments to boost value addition in agriculture. The Society also aims to minimize post-harvest losses and maximize the income of farmers by linking them with markets and enhancing the overall efficiency of the food supply chain.

With its rich agricultural base and proactive policy environment, Andhra Pradesh is poised to become a leading hub for food processing in India, thereby contributing significantly to both the state's economic growth and the well-being of its population.

4.3.1.2. Government of India Policy Initiatives

The food processing industry in India has been identified as a priority sector by the Government of India due to its potential to link agriculture to manufacturing, enhance farm incomes, reduce wastage, and generate employment. Over the years, the government has introduced a series of policies and programmes aimed at facilitating the growth of this sector, improving infrastructure, and promoting value addition. Below are some of the most significant policy initiatives, along with recent developments from the latest Union Budget:

a. Exemption from Licensing under the Industries (Development and Regulation) Act, 1951

To simplify the regulatory framework and encourage the establishment of new enterprises, the Government of India has exempted processed food items from the licensing requirements under the Industries (Development and Regulation) Act, 1951. This policy change has been instrumental in reducing bureaucratic hurdles and enabling entrepreneurs to focus on innovation and business expansion without the burden of cumbersome regulatory processes. The exemption also aligns with the government's broader goal of promoting ease of doing business in India, particularly in sectors that contribute to agricultural value addition and rural development.

b. 100% Foreign Direct Investment (FDI)

The Government of India has liberalized its FDI policy for the food processing sector, allowing 100% FDI under the automatic route in food processing industries. This policy covers most processed food items, except for those related to alcohol, which are subject to specific conditions. Additionally, 100% FDI is permitted under the government approval route for trading, including e-commerce, in respect of food products manufactured or produced in India.

This policy is designed to attract global capital, technology, and expertise to the Indian food-processing sector. The influx of FDI is also expected to lead to the creation of new jobs, the development of infrastructure, and the introduction of innovative products in the Indian market.

c. Pradhan Mantri Kisan SAMPADA Yojana (PMKSY)

The Pradhan Mantri Kisan SAMPADA Yojana (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) is one of the flagship programmes of the Ministry of Food Processing Industries (MoFPI). Launched in 2016 with an initial outlay of ₹6,000 crore, PMKSY is designed to create modern infrastructure, with efficient supply chain management from farm gate to retail outlet.

The key objectives of PMKSY include:

- **Doubling Farmers' Income:** By providing farmers with better access to markets and value-added processing, the scheme aims to enhance their income.
- **Reducing Post-Harvest Losses:** The scheme focuses on creating cold chain infrastructure, storage facilities, and processing units to reduce wastage of perishable agricultural produce.

- **Promoting Agro-Processing Clusters:** PMKSY supports the development of agro-processing clusters that can serve as hubs for processing activities, fostering the growth of small and medium enterprises (SMEs) in rural areas.

Key sub-schemes under PMKSY include:

- **Mega Food Parks:** These parks provide state-of-the-art infrastructure for food processing, with facilities such as cold storage, warehousing, and quality testing. The scheme also encourages backward and forward linkages with farmers and the retail market.
- **Integrated Cold Chain and Value Addition Infrastructure:** This component focuses on the creation of integrated cold chains to ensure that perishable goods are transported and stored under optimal conditions, minimizing losses and maintaining quality.
- **Creation/Expansion of Food Processing & Preservation Capacities:** This sub-scheme aims to encourage the establishment of new processing units and the expansion of existing ones, particularly in areas where there is a surplus of raw materials.
- **Food Safety and Quality Assurance Infrastructure:** To ensure that processed food products meet national and international quality standards, this scheme supports the creation of food testing laboratories and quality assurance facilities.

The continuation of PMKSY till 31st March 2026 with an allocation of ₹4,600 crore is expected to leverage private investment of ₹11,095.93 crore, benefit over 28 lakh farmers, and generate over 5 lakh direct and indirect jobs.

d. Production Linked Incentive Scheme for Food Processing Industry (PLISFPI)

The Production Linked Incentive Scheme for Food Processing Industry (PLISFPI), an initiative launched in 2021 under the broader Aatma Nirbhar Bharat Abhiyaan. With an outlay of ₹10,900 crore, the scheme is designed to support the creation of global food manufacturing champions and promote Indian food brands in international markets.

Key objectives of the PLISFPI include:

- **Supporting Large-Scale Manufacturing:** The scheme incentivizes food manufacturing entities that are willing to make significant investments to expand their processing capacities and enhance product quality.
- **Promoting Indian Brands:** PLISFPI encourages the development and promotion of strong Indian food brands that can compete in global markets. The scheme provides financial incentives for branding and marketing activities abroad.
- **Enhancing Export Competitiveness:** By supporting the creation of world-class Food Processing infrastructure and promoting Indian food products internationally, the scheme aims to boost exports and reduce the trade deficit in the Food Processing sector.
- **Job Creation and Farm Income Enhancement:** The scheme is expected to create new jobs in the Food Processing sector and related industries, while also ensuring remunerative prices for farmers' produce.

e. Operation Greens

Announced in the Union Budget 2018-19, Operation Greens is a scheme modelled on the success of Operation Flood. With an initial outlay of ₹500 crore, the scheme aims to stabilize the supply and prices of tomato, onion, and potato (TOP) crops by promoting Farmer Producer Organizations (FPOs), Agri-logistics, processing facilities, and professional management.

Key components of Operation Greens include:

- **Price Stabilization Measures:** The scheme provides for the creation of a price stabilization fund to ensure that farmers receive fair prices for their produce, even during periods of market volatility.
- **Development of TOP Value Chains:** Operation Greens supports the development of integrated value chains for TOP crops, including infrastructure for sorting, grading, packing, processing, and marketing.
- **Expansion to TOTAL Crops:** In June 2020, as part of the Aatmanirbhar Bharat Abhiyan, the scheme was extended to cover all fruits and vegetables (TOTAL). This extension aims to provide a 50% subsidy on transportation and storage of fruits and vegetables, thereby reducing wastage and improving farmers' income.

In Andhra Pradesh, the state government has appointed the Andhra Pradesh Food Processing Society (APFPS) as the nodal agency for implementing Operation Greens. The scheme is being implemented in the clusters of Chittoor and Anantapur districts, which are major producers of tomatoes.

f. PM Formalisation of Micro Food Processing Enterprises Scheme (PM FME Scheme)

Launched under the Aatmanirbhar Bharat Abhiyan, the PM Formalisation of Micro Food Processing Enterprises Scheme (PM FME Scheme) is a centrally sponsored scheme with an outlay of ₹10,000 crore. The scheme aims to provide financial, technical, and business support for the upgradation of existing micro food processing enterprises.

Key features of the PM FME Scheme include:

- **Support for Upgradation and Formalization:** The scheme provides capital investment support for the upgradation and formalization of micro food processing enterprises. This includes assistance for registration under GST, FSSAI, hygiene standards, and Udyog Aadhaar.
- **Capacity Building and Skill Training:** The scheme focuses on capacity building through skill training and imparting technical knowledge on food safety, standards, hygiene, and quality improvement.
- **Handholding Support:** Enterprises are provided with handholding support for the preparation of Detailed Project Reports (DPRs), availing bank loans, and upgradation of facilities.
- **Support for FPOs, SHGs, and Cooperatives:** The scheme also supports Farmer Producer Organizations (FPOs), Self-Help Groups (SHGs), and producer cooperatives for capital investment, common infrastructure, and branding and marketing initiatives.

In Andhra Pradesh, the Andhra Pradesh Food Processing Society (APFPS) is the nodal agency responsible for the implementation of the PM FME Scheme. The scheme is expected to formalize and upgrade over 02 lakh micro food enterprises across the country, contributing to the Prime Minister's vision of "Vocal for Local with Global Outreach."

g. Scheme of Funds for Regeneration of Traditional Industries (SFURTI)

The Scheme of Funds for Regeneration of Traditional Industries (SFURTI) is an initiative of the Ministry of Micro, Small and Medium Enterprises (MSME) aimed at promoting the development of traditional industries and artisans. Under this scheme, clusters of traditional industries are provided with infrastructure support, technology upgradation, and marketing assistance.

Key features of the SFURTI scheme include:

- **Cluster Development:** The scheme supports the development of traditional industry clusters, providing them with common facilities, training centres, and marketing infrastructure.
- **Financial Assistance:** The scheme provides financial assistance for the creation of common facility centres (CFCs), technology upgradation, and product diversification.
- **Market Linkages:** SFURTI facilitates market linkages for traditional industry products through participation in trade fairs, exhibitions, and online marketplaces.

In Andhra Pradesh, the SFURTI scheme has been extended to support Food Processing enterprises in the districts of Vizianagaram and YSR Kadapa, where traditional food processing activities are prevalent.

4.3.1.3 State Government Initiatives

The Government of Andhra Pradesh has been proactive in creating a conducive environment for the food processing industry. The state's policies are designed to attract investment, promote innovation, and support the growth of food processing enterprises across the state.

a. Andhra Pradesh Food Processing Policy 2024-29

The Andhra Pradesh Food Processing Policy 2024-29 outlines the state's strategic vision for the Food Processing sector.

Key Objectives:

- Attract ₹30,000 crore in investments
- Secure USD 1 billion in Foreign Direct Investment (FDI).
- Create 3 lakh employment opportunities.
- Develop 10 commodity-based food clusters and specialized Food Export Hubs.
- Promote organic production and sustainable practices.

Focus Areas

- **Agriculture:** Strengthen value addition in major crops like paddy, maize, pulses, and millets.
- **Horticulture:** Boost processing of mango, banana, papaya, chili, turmeric, etc.
- **Livestock:** Expand dairy and meat processing industries (AP ranks 1st in egg production).
- **Fisheries:** Enhance seafood processing (AP leads in shrimp exports).

Strategic Approach

- **Cluster Development:** Establish commodity-based processing clusters aligned with raw material hubs.
- **Value Addition:** Focus on secondary and tertiary processing to move beyond primary agriculture.
- **Technology and Innovation:** Encourage adoption of advanced technologies and research partnerships.
- **Sustainability:** Promote waste-to-value initiatives, organic processing, and circular economy models.
- **Skill Development:** Train local youth and entrepreneurs in food processing technologies and management.
- **Export Promotion:** Strengthen Andhra Pradesh's position as a major food export hub.

Infrastructure Initiatives

- **Dedicated State Corpus:** ₹250 crore fund for R&D, certifications, and organic farming support.
- **Food Parks:** Develop Mega, Focused, and Nano Food Parks across the state with common facilities.
- **Cold Chain:** Expand cold storage, refrigerated transport, and packhouses to minimize post-harvest losses.
- **Irradiation Facilities:** Ensure food safety and longer shelf-life for exports.
- **Testing Labs:** Set up NABL-accredited food testing laboratories.
- **Modern Abattoirs:** Upgrade meat processing facilities to international standards.

Incentive Framework

Capital Subsidies:

- **New units:** 15–35% subsidy based on project size.
- **Technology upgrades:** 20–35% subsidy
- **Waste processing units:** Up to 50% subsidy.
- **Meat processing and animal feed units:** Up to 50% subsidy.

Additional Benefits:

- **Power Tariff Reimbursement:** ₹1/unit for MSMEs (up to 6 years).
- **Net SGST Reimbursement:** 100% reimbursement for 5–6 years.
- **Skill Development Support:** Training cost subsidies and EPF reimbursement.
- **Quality Certification Reimbursement:** Full support for certifications like ISO, HACCP.
- **Local Procurement Subsidy:** Incentives for using locally sourced raw materials.
- **Top-up Incentives:** Additional support for projects sanctioned under Government of India schemes like PMKSY, AIF, and AHIDF.
- **Stamp Duty and Land Conversion Fee:** 100% reimbursement.

Ease of Doing Business

Andhra Pradesh consistently ranks first in the Ease of Doing Business index, reflecting the state's commitment to creating a business-friendly environment. The state has implemented the Industrial Single Window Clearance mechanism for food-processing units, which has significantly reduced the time and cost associated with setting up new enterprises. This system provides a single point of contact for all regulatory approvals, streamlining the process and making it easier for businesses to start operations in the state.

b. Investment Potential

The potential for lending to the food and agro-processing sector in Andhra Pradesh during 2025-26 is estimated to be ₹5176.51 crore. This reflects the state's growing focus on expanding its food processing capacities, particularly in the areas of cold chain infrastructure, value-added processing, and export-oriented production.

c. Export Potential

Andhra Pradesh is a leading exporter of processed foods, particularly seafood, rice, and fruits. The state's proximity to major ports, such as Visakhapatnam and Kakinada, provides a strategic advantage for exporters, enabling them to access global markets efficiently. The state's food processing policy and infrastructure development initiatives are expected to

further enhance its export potential, contributing to the overall growth of India's food processing exports.

d. Major Institutions related to Food Processing in Andhra Pradesh

- Spices Board, Guntur
- Coconut Development Board, Vijayawada
- Indian Institute of Oil Palm Research, Pedavegi, West Godavari
- National Horticultural Research & Development Foundation, Kurnool
- Acharya NG Ranga Agricultural University (ANGRAU), Guntur
- Dr. YSR Horticultural University (YSRHU), West Godavari
- Sri Venkateswara Veterinary University (SVVU), Tirupati

4.3.1.4 Current Infrastructure and Development Projects

Andhra Pradesh has made substantial progress in developing the infrastructure needed to support the growth of its food processing industry. Key projects include the establishment of Mega Food Parks, Integrated Cold Chains, and Agro-Processing Clusters.

a. Mega Food Parks

Andhra Pradesh is home to three operational Mega Food Parks:

- **M/s Srini Food Park Pvt. Ltd., Chittoor:** This Park has attracted numerous food processing units, creating significant employment opportunities and enhancing the processing capacity in the region. The park provides modern infrastructure, including cold storage facilities, quality-testing laboratories, and logistics support, making it a model for integrated food processing.
- **M/s Godavari Mega Aqua Food Park Pvt. Ltd., West Godavari:** Specializing in aquaculture processing, this facility has become a key player in the state's seafood industry. The park integrates production, processing, and export activities, ensuring value addition and compliance with international quality standards.
- **M/s Andhra Pradesh Industrial Infrastructure Corporation (APIIC), Krishna:** This Mega Food Park focuses on the processing of fruits, vegetables, and other perishable products. The park provides infrastructure for processing, packaging, and storage, supporting the growth of agro-based industries in the region.

Other Designated Food Parks

Food Park promoted by Andhra Pradesh Industrial Infrastructure Corporation Ltd., Kuppam, Chittoor

MFP Approved by States

- Spices Park, Guntur
- Nekkanti Mega Food Park Pvt. Ltd SPSR Nellore
- SH Food Processing Pvt Ltd, Prakasam
- Patanjali Food & Herbal Park Pvt. Ltd., Vizianagaram
- Vyshnavi Mega Food Park, Chittoor
- Aveena Andhra Food Park Pvt. Ltd., Anantapur
- North Andhra Food Park Pvt Ltd., Srikakulam

Integrated Food Parks (IFP)

- North Coastal Integrated Food Park Pvt. Ltd., Vizianagaram

- Sri Varsha Integrated Food Park Pvt. Ltd., YSR Kadapa
- Sri Chandana Food Park Ltd., Vizianagaram
- Specialized SRK Foods Pvt. Ltd., Chittoor
- Safe n Fresh Integrated Food Park Pvt. Ltd., SPSR Nellore

b. Integrated Cold Chains

To reduce post-harvest losses and improve the quality of processed foods, Andhra Pradesh has invested in the development of integrated cold chains. These cold chains include refrigerated storage facilities, transport vehicles, and ripening chambers, ensuring that perishable products such as fruits, vegetables, and seafood are preserved from the point of harvest to the final consumer.

The state has strategically chosen Visakhapatnam, East Godavari, and West Godavari districts for the expansion of cold chain facilities, given their significant production of perishable goods. These districts are part of the proposed Vizag – Chennai Industrial Corridor (VCIC), which aims to enhance industrial connectivity and create a hub for food processing and export-oriented activities.

c. Agro-Processing Clusters

The state is developing agro-processing clusters to promote the establishment of food processing units near the source of raw materials. These clusters are designed to improve the efficiency of the food processing value chain by reducing transportation costs, minimizing wastage, and providing access to modern processing infrastructure. The clusters also facilitate the growth of small and medium enterprises (SMEs) in the food-processing sector, creating employment opportunities and driving rural development. They are listed as under:

- M/s Aalamandha Food Park, Vizianagaram
- M/s Charan Biotech Private Ltd., Obulapuram, Anantapur
- M/s KPS Agro And Ind Private Limited, Kurnool
- M/s Gama Biotech Farms, NTR District
- M/s Ramansinghs Global Food Park, Eluru
- M/s MR Agrotech Industries, SPSR Nellore
- M/s Sri Lalitha Enterprises Industries Private Limited, East Godavari

4.3.1.5 Challenges and Opportunities

The food processing industry in Andhra Pradesh, while growing rapidly, faces several challenges that need to be addressed to fully realize its potential.

a. Infrastructure Bottlenecks

Despite the progress made in developing food-processing infrastructure, there are still gaps that need to be addressed. These include the need for more cold storage facilities, better connectivity between production areas and processing units, and the modernization of existing processing infrastructure. Addressing these bottlenecks will be crucial to improving the efficiency and competitiveness of the state's food processing industry.

b. Supply Chain Inefficiencies

The food processing value chain in Andhra Pradesh is often hampered by inefficiencies in the supply chain, including delays in transportation, inadequate storage facilities, and high levels of wastage. To overcome these challenges, the state needs to invest in modern logistics infrastructure, streamline supply chain processes, and adopt technology-driven solutions for better inventory management and demand forecasting.

c. Need for Skilled Labour

The food processing industry requires a skilled workforce to operate modern processing equipment, maintain quality standards, and ensure compliance with safety regulations. However, there is a shortage of skilled labour in the state, particularly in rural areas. To address this issue, the state is focusing on skill development initiatives, including the establishment of training centres and partnerships with industry players to provide hands-on training to workers.

d. Opportunities for Growth

Despite these challenges, the food processing industry in Andhra Pradesh offers significant opportunities for growth. These include:

- **Expansion of Cold Chain Infrastructure:** There is a growing demand for cold chain facilities, particularly in the seafood and horticulture sectors. Investing in cold chain infrastructure can help reduce post-harvest losses, improve product quality, and enhance the competitiveness of the state's food processing industry.
- **Development of Value-Added Products:** There is significant potential for the development of value-added products, particularly in the dairy, meat, and seafood sectors. By investing in modern processing technologies and creating new product lines, the state can tap into new markets and increase the value of its agricultural output.
- **Export Market Expansion:** Andhra Pradesh's strategic location, coupled with its strong agricultural base, provides significant opportunities for expanding its export market. The state's food processing industry can leverage its proximity to major ports and its growing infrastructure to increase exports of processed foods, particularly to markets in Southeast Asia, the Middle East, and Europe.

Food processing Sector serves as a vital link between the agriculture and industrial segments of the economy. Strengthening this link is of critical importance to reduce wastage of agricultural raw materials, improve the value of agricultural produce by increasing shelf life, fortify the nutritive capacity of the food products and ensure remunerative prices to farmers as well as affordable prices to consumers and boost exports. Food processing sector has also emerged as an important segment of the Indian economy in terms of its contribution to GDP, employment and investment. Post-harvest technology and management plays a crucial role in value addition to agriculture. The post-harvest loss in the country is estimated to be in the range of 30 to 40 percent. This is due to lack of Post-Harvest Management (PHM) and the paucity of processing facilities.

Andhra Pradesh has a strong raw material base due to its diverse agro climatic conditions and it can tap the potential for processing and value addition in perishables like fruits and vegetables by making investment in Food Processing Infrastructure. The 06 agro-climatic zones favoring cultivation of a multitude of crops, vegetables and fruits round the year opens up vast scope for post-harvest management, processing and value addition. With abundant raw material supply and a huge domestic market for processed food, the sector offers immense potential for growth.

Under Food Processing Fund, NABARD provides affordable credit for infrastructure works in food parks and food processing units in designated food parks. State Government, State Govt. entities and corporations are eligible for availing loan under Food Processing Fund at the rate of interest prevailing under RIDF for setting up of such food processing projects. State Government may therefore like to collaborate with NABARD in financing projects in food processing sector, fisheries development and other infrastructure.

4.3.1.6 Suggested Action Points

- To arrest post-harvest losses of produce, considerable investments are required in rural infrastructure and components of the supply chain by way of grading and packing centers, controlled atmosphere storage facilities, reefer vans, testing laboratories, etc., which may not come from private sources at this stage of the development of the food processing industry. It is therefore essential that public investment is significantly increased to fund these components of rural infrastructure to enable private enterprises to take up the remaining commercially viable components of the supply chain.
- The sector offers immense potential for export of processed food by adhering to the quality standards. Initiatives for strengthening quality standards through creation and provision of services like R&D, testing, quality improvement, marketing will enhance competitiveness of the sector. Promotion of innovations in products and processes creating adequate infrastructure for food testing and training manpower for food safety will provide impetus to the sector.
- Capacity Building of micro-entrepreneurs especially SHGs on emerging technologies, food safety, quality management etc through greater participation of Skill Development Centres, RSETI and NGOs with support from line departments.
- Banks may tap the potential available in the unorganized sector. Matured SHGs may be trained, and credit linked for setting up of small agro processing unit in potential rural areas.
- Banks may support unorganized units to modernize and upscale with the support under PMFME and NABARD's Special Refinance Scheme.
- Banks may closely liaison with DIC to leverage on the benefits of various subsidy schemes implemented by the centre for financing activities in the Sector.
- FPOs to be encouraged and incentivised to take up primary processing and grading facilities for enhancing the income of farmers.
- Banks to Provide timely hassle free and adequate working capital to food processing units as the commodities are seasonal.
- Availing of funds under food processing fund maintained by NABARD.

4.3.2 Agri Ancillary Activities & Others- Miscellaneous

4.3.2.1 Introduction

As per the latest RBI Master Directions on Priority Sector Lending Targets and Classifications), the activities like setting up of Agri-Clinics and Agri-Business Centres, Custom Service Units, Primary Agricultural Credit Societies (PACS), Farmers' Service Societies (FSS) and Large-sized Adivasi Multi-Purpose Societies (LAMPS) for on-lending to agriculture, loans to MFIs for on-lending to agriculture and loans to NBFCs for on-lending to agriculture and MSMEs are included under **Agriculture – Ancillary Activities**. Loans to distressed persons to prepay their debt to non-institutional lenders, Overdraft limit to PMJDY account holders and Loans sanctioned to State Sponsored Organisations for Scheduled Castes/ Scheduled Tribes for the specific purpose of purchase and supply of inputs and/or the marketing of the outputs of the beneficiaries of these organisations, SHGs/JLGs are included under

Others- Miscellaneous

4.3.2.2 Major Policy Interventions/ Schemes

Agri-Clinic and Agri-Business Centres Scheme (ACABC)

Agri-Clinics provide expert advice and services to farmers on various technologies, which would enhance productivity of crops / animals. Agri-Business Centres are commercial units of agri-ventures which provide agri-extension services.

ACABC Scheme is being implemented by GoI through National Institute of Agricultural Extension Management (MANAGE) and NABARD since 2002. The Scheme is continued for FY 2024-25.

This Scheme aims to tap the expertise available in the large pool of Agriculture Graduates to own Agri-Clinic or Agri-Business Centre and offer professional extension services to innumerable farmers.

Specialised training is provided to Agriculture Graduates interested in setting up such a centre. Being provided free of cost, 45 days training course is offered by Nodal Training Institutes (NTIs). Initiated by SFAC, and co-ordinated by MANAGE, the course comprises Entrepreneurship and Business Management, as well as skill improvement modules in your chosen areas of activity. As on date, there are 03 NTIs in Andhra Pradesh –one each in Annamayya, Guntur, and Krishna. (Source: [http://www. https://www.agriclinics.net/Nti-Contacts.aspx](http://www.https://www.agriclinics.net/Nti-Contacts.aspx)):

- Syamala Krishna Educational Society, Madanapalle
- M.A.M Memorial Service Society, Guntur
- Centre For Entrepreneurship Development (CED), Krishna district

The trained candidates are eligible for availing a composite loan from Commercial banks, Regional Rural Banks, State Cooperative Banks and other institutions eligible for refinance from NABARD for establishing Agri-clinics and Agri-Business Centres.

Subsidy

The Scheme is a credit-linked subsidy scheme. The subsidy will be back-ended with minimum 3 years lock in period. Eligible subsidy is 44% of project cost for women, SC/ST & all categories of candidates from NE and Hill states and 36% of project cost for all others. The financing bank has to submit the claim form through its controlling office to NABARD.

Delivery of extension services shall be the main component of ACABC projects for availing of the benefit of subsidy under the Scheme.

Project Cost Ceiling

Ceiling of project cost for subsidy is ₹20 lakh for an individual project (₹25 lakh in case of extremely successful individual projects) and up to ₹100 lakh for a group project (established by a group comprising at least 5 trained persons under the scheme).

In order to provide extension services using web-enabled resources of DAC&FW and other agencies, computer, printer and broadband connection should be an integral part of TFO. To attract more women candidates to the scheme parents/husbands/in-laws of the trained women candidate can be made co-borrowers with the eligibility for subsidy.

Term Loan

The term loan would be composite in nature and participating bank(s) would extend bank loan as per TFO, which would include fixed capital cost and working capital for one operating cycle. The loan sanctioned will be the differential amount between TFO and margin money.

Composite subsidy will be provided even for low capital investment cases as it is possible that some agri-preneurs already have capital (e.g. a building) to start a venture, thereby requiring minimal capital investment. At least 10% value of the TFO of the project should be in capital form.

The repayment schedule will be drawn on the total amount of the loan (including subsidy) in such a way that the subsidy amount is adjusted after liquidation of net bank loan (excluding subsidy). The Repayment Period will depend on nature of activity and will vary between 5 to 10 years. The Repayment Period may include a grace period of maximum 2 years (to be decided by financing banks as per the needs of individual projects).

The Rate of Interest on term loan will be as per the RBI guidelines and declared policy of the financing bank in this regard.

Margin Money

The stipulations on margin money shall be in accordance with the guidelines of RBI. In case of loans up to ₹5 lakh, no margin money is required as per present norms.

The margin money to be contributed by the general category entrepreneur will be as per prevailing norms. However, concessions would be made in respect of SC/STs, women and beneficiaries of North-Eastern States, Hill areas. In such cases, a maximum of 50% of the margin money prescribed by banks could be given by NABARD to meet the shortfall in borrower's contribution, if the bank is satisfied that the borrower is unable to meet the margin money requirements. Such assistance to banks by NABARD will be without any interest. The banks may, however, levy a service charge up to 2% per annum from the borrowers.

Security

As most of the eligible activities pertain to agricultural input supply and services and the cost of investment will be less than ₹25 lakh in most cases, the security norms applicable to tiny industries as prescribed in RBI circular No.RPCD.PLNFS.BC.65/06.02.31/99-2000 dated 31.03.2000 would be made applicable to these units. In terms of RBI/2009-10/449 RPCD.SME & NFS. BC. No. 79 /06.02.31/2009-10, dated May 6, 2010, Banks are mandated NOT to accept collateral security in the case of loans up to ₹10 lakh extended to units in the MSE Sector. Banks, in turn, can take cover for the collateral free credit facilities under CGS. In terms of Para 4.4 of Chapter IV of RBI Circular No. RBI/FIDD/2017-2018/56 Master Direction FIDD.MSME & NFS.12/06.02.31/2017-18 July 24, 2017- Master Circular - Banks are mandated not to accept collateral security in the case of loans up to Rs.10 lakh extended to units in the MSE sector. The provisions of these Directions are applicable to every Scheduled Commercial Bank {excluding Regional Rural Banks (RRBs)}.

Coverage under Credit Guarantee Scheme

In terms of Circular No.29/2005-06- CGTSI(44)/862 dated 14.11.2005 of Dy. General Manager-CGTSI coverage for some categories under AC&ABC, credit facilities extended by the Member Banks to following activities under ACABC can be covered under CGS provided the finance is extended as per the terms and conditions of the Credit Guarantee Scheme for Small Industries:

- a) Project Maintenance and Repairs of Agriculture Implements and machinery including Micro Irrigation Systems*

- b) Project Agri Service Centres*
 - c) Project Seed Processing Units**
 - d) Project Tissue Culture**
 - e) Project Production of Bio-fertilizers, Bio-pesticides, Bio-control agents**
 - f) Project honeybee product Processing Units**
 - g) Project Feed Processing and Testing Units**
 - h) Project Setting up of Information Technology Kiosks in rural areas for access to various agricultural related portals**
 - i) Project Setting up of Cool Chain from the farm level onwards**
- * Providing that the total investment in fixed assets (other than that of land and building) does not exceed ₹10 lakh
- ** Provided that the total investment in plant and machinery does not exceed ₹100 lakh and the process involves use of machinery and equipment.

Refinance Assistance from NABARD

NABARD will provide refinance assistance to commercial banks, RRBs, StCBs and other such eligible institutions at the rate of 100% of the amount financed by the banks as term loan. Rate of interest on refinance will be as decided by NABARD from time to time.

Present Status

Between 01.04.2002 and 22.08.2024, 1763 candidates have been trained through MANAGE and 510 Agri-ventures have been established in the State of Andhra Pradesh (<https://www.agriclinics.net/OtherDocuments/state-wise.pdf>).

Loans to PACS/FSS/LAMPS

Primary Agricultural Credit Societies (PACS) and Farmers' Service Societies (FSS) are integral to the cooperative credit structure. It serves as the final conduit between the financial institutions and ultimate beneficiaries. PACS and FSS undertake activities under credit and non-credit businesses. The Large-sized Adivasi Multi-Purpose Co-operative Societies, shortly called LAMPS cater to the developmental requirements of tribals. There are 2037 functional PACS in Andhra Pradesh

(Source: <https://pib.gov.in/PressReleaseDetailm.aspx?PRID=1907177>).

PACS as Multi Service Centres (PACS as MSC)

NABARD took up the initiative for transforming PACS into Multi Service Centres (MSCs) to diversify the business model of the PACS and make them self-sustainable entities in the long run. The ultimate objective is to convert the PACS and to make the PACS into "One Stop Shop" so that it can cater to all the needs of its members and increase its profit margin. NABARD has introduced a Special Long Term Refinance Scheme for transformation of PACS to MSCs at a concessional rate of interest. The scheme intends to develop all the potential PACS as MSC by Providing Concessional Refinance to StCBs at 3% to support PACS to create quality infrastructure (capital assets) and increase their business portfolio in tune with needs of members.

The Scheme has been extended till 31.03.2026 or till allocated fund of ₹5000.00 crore is fully sanctioned whichever is earlier. Under the Special Refinance Scheme – PACS as MSC, in synergy with Agriculture Infrastructure Fund (AIF) of GoI, NABARD has sanctioned TFO of ₹778.93 crore and refinance assistance of ₹701.04 crore in respect of 1,293 PACS for establishing various agri-infrastructure facilities in convergence with Rythu Seva Kendra (RSK) scheme of GoAP.

Loans to MFI for on lending of Agriculture

MFIs are those organizations, other than banks, providing micro financial services to the poor in rural, semi urban or urban areas, to enable them to raise their income levels and improve their livelihood.

The lending by commercial banks to NBFCs and lending by Small Finance Banks (SFBs) to NBFC-MFIs, for the purpose of on-lending is continued by RBI on on-going basis. Bank credit to MFIs extended for on-lending to individuals and also to members of SHGs / JLGs will be eligible for categorisation as priority sector advance under respective categories viz., Agriculture, Micro, Small and Medium Enterprises, Social Infrastructure and Others, provided not less than 85 percent of total assets of MFI (other than cash, balances with banks and financial institutions, government securities and money market instruments) are in the nature of “qualifying assets”.

Further, the banks have to ensure that MFIs comply with the caps on margin and interest rate as also other ‘pricing guidelines’, as prescribed by RBI to be eligible to classify these loans as priority sector loans.

Others

- i. Loans to distressed persons to prepay non-institutional lenders: Loans to distressed farmers indebted to non-institutional lenders and distressed persons other than farmers, with loan amount not exceeding ₹1 lakh per borrower to prepay their debt to non-institutional lenders qualify for priority sector lending.
- ii. **PMJDY:** Pradhan Mantri Jan-Dhan Yojana (PMJDY) is National Mission for Financial Inclusion to ensure access to financial services, namely, a basic savings & deposit accounts, remittance, credit, insurance, pension in an affordable manner. Benefits under PMJDY include:
 - Rupay Debit card is provided to PMJDY account holder.
 - Accident Insurance Cover of ₹1 lakh (enhanced to ₹2 lakh to new PMJDY accounts opened after 28.8.2018) is available with RuPay card issued to the PMJDY account holders.
 - An overdraft (OD) facility up to ₹10,000 to eligible account holders is available.
 - PMJDY accounts are eligible for Direct Benefit Transfer (DBT), Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY), Pradhan Mantri Suraksha Bima Yojana (PMSBY), Atal Pension Yojana (APY), Micro Units Development & Refinance Agency Bank (MUDRA) scheme.
- iii. Loans to State Sponsored Organisations for SC/ST for the specific purpose of purchase and supply of inputs and/or the marketing of the outputs of the beneficiaries of these organisations are eligible for classification under Priority Sector Lending.
- iv. SHGs/JLGs: Following loans are eligible to be classified under priority sector lending:
 - Loans not exceeding ₹1.00 lakh per borrower provided directly by banks to individuals and individual members of SHG/JLG, provided the individual borrower’s household annual income in rural areas does not exceed ₹1.00 lakh and for non-rural areas it does not exceed ₹1.60 lakh
 - Loans not exceeding ₹2.00 lakh provided directly by banks to SHG/JLG for activities other than agriculture or MSME, viz., loans for meeting social needs, construction or repair of house, construction of toilets or any viable common activity started by the SHGs.
 - Loans to Start Ups up to ₹50 crore

4.3.2.3. Suggested action points.

- The Government should encourage FPOs with interest subvention and working capital based on the grading and business.
- There is a need to sensitize banks, including RRBs and Cooperative Banks, as there are potential FPOs for absorbing credit for their short term and long-term credit needs. Branch managers/staff are required to be apprised of the FPO concept and the modalities of their financing.
- There is good scope for private extension services which will supplement the already existing public extension services and thus there is good potential for establishment of Agri clinics and Agribusiness Centres.

4.4 Micro, Small & Medium Enterprises (MSME) – Working Capital and Investment Credit

4.4.1 Introduction

In accordance with the provision of Micro, Small & Medium Enterprises Development (MSMED) Act, 2006 the Micro, Small and Medium Enterprises (MSME) are classified as below:

- Micro: Investment \leq ₹1 crore, Turnover \leq ₹5 crore.
- Small: Investment \leq ₹10 crore, Turnover \leq ₹50 crore.
- Medium: Investment \leq ₹50 crore, Turnover \leq ₹250 crore.

4.4.2 Government Initiatives for MSME:

PMEGP: A central scheme implemented by KVIC, targeting various social categories, offering subsidies and loans with a repayment period of 3-7 years.

Andhra Pradesh MSME & Entrepreneur Development Policy (4.0) 2024-29

The Andhra Pradesh MSME & Entrepreneur Development Policy (4.0) 2024-29 has been introduced to spur the growth of MSMEs, strengthen entrepreneurship, and transform Andhra Pradesh into a globally competitive MSME hub. The policy aims to foster innovation, enhance productivity, provide financial and infrastructural support, and promote sustainability. The government's vision is to make the state a Champion State for MSMEs, ensuring that every family in the state has an entrepreneur by 2030.

Objectives of the Policy: The AP MSME & Entrepreneur Development Policy (4.0) 2024-29 is structured around key strategic objectives, including:

- One Family, One Entrepreneur Initiative: Creating a robust entrepreneurship-driven ecosystem to achieve self-reliance in MSMEs by 2030.
- MSME Formalization and Competitiveness: Encouraging unregistered micro-enterprises to join the organized sector for better market outreach.
- Integration with Global Value Chains: Enhancing export competitiveness by facilitating 500+ MSME Champions in global trade.
- Technology and Digital Transformation: Promoting Industry 4.0 adoption, AI-driven manufacturing, and e-commerce support.
- Cluster-Based Infrastructure Development: Establishing MSME parks, sector-specific technology centers, and private industrial clusters.
- Inclusive and Equitable Growth: Ensuring women, SC/ST, and differently-abled entrepreneurs receive preferential access to resources and financial support.

The AP MSME & Entrepreneur Development Policy (4.0) 2024-29 provides a structured roadmap for industrial transformation, fostering sustainable, inclusive, and innovation-driven MSME growth.

Agencies working for the development of MSME Sector:

MSME Ministry has five statutory bodies namely, Khadi and Village Industries Commission (KVIC) which is responsible for promoting and developing khadi and village industries for providing employment opportunities in rural areas, thereby strengthening the rural economy, Coir Board in charge of promoting overall development of the coir industry and improving living conditions of workers in this industry, National Small Industries Corporation Limited (NSIC) responsible for promoting, aiding and fostering growth of micro and small enterprises in the country, generally on commercial basis, National Institute for Micro, Small and Medium Enterprises, (NI-MSME) in-charge of enterprise promotion and entrepreneurship development, enabling enterprise creation, performing diagnostic development studies for policy formulation, etc. and lastly, Mahatma Gandhi Institute for Rural Industrialisation (MGIRI) responsible for accelerating rural industrialisation for sustainable village economy, attract professionals and experts to Gram Swaraj, empower traditional artisans, encourage innovation through pilot study/ field trials and R&D for alternative technology using local resources.

- In addition to institutions under Ministry of MSME and State Government, like KVIC, KVIB, NSIC, NIMSME, MGIRI, Coir Board etc, the following agencies also mandated for the development of MSME sector:
- Pradhan Mantri MUDRA Yojana (PMMY): Micro Units Development and Refinance Agency (MUDRA) Ltd., has been launched on 8 April 2015 to extend finance and credit support to Microfinance Institutions (MFI) and agencies that lend money to small businesses, retailers, self-help groups and individuals.
- Small Industries Development Bank of India (SIDBI): Principal Financial Institution for Promotion, Financing and Development of the Micro, Small and Medium Enterprise (MSME) sector as well as for co-ordination of functions of institutions engaged in similar activities.
- National Bank for Agriculture and Rural Development (NABARD) also mandated for development for Rural areas and has various schemes to impart employable skills to rural youth, support marketing of MSME products etc. Various schemes of NABARD for the development of Off-farm sector are SDPs, promotion and nurturing of OFPOs, supporting Rural Mart, construction of Rural Haat, and supporting marketing initiatives like Exhibitions, stall in mall etc.

The potential assessed for lending to MSME sector for 2025-26 is ₹128387 crore District-wise estimates have been indicated in Annexure-I.

4.4.3 Challenges and road ahead

Challenges include inadequate finance, lack of technical and entrepreneurial skills, slow technology adoption, and low R&D investment. The goal is to enhance MSME's contributions to exports and GDP, requiring investment in backend services, technology, and R&D collaboration with academic institutions.

4.4.4 Suggested Action Points:

- Establish artisan parks and production-cum-sales outlets.
- Launch an information-cum-sales portal for weavers.
- Promote technology-driven e-commerce for small town communities.
- Develop the tourism sector for employment generation.
- Organize clusters/mega clusters into producer companies with comprehensive support.

4.5 Export Credit

4.5.1 Introduction

Export credit, vital for exports, has been in Priority Sector since 2015-16, with interest subvention programmes. NABARD offers 100% refinance to eligible institutions (SCBs, RRBs, StCBs) with NPAs under 5%. Special refinance packages are available for all contract farming in AEZs.

4.5.2 Export Scenario of Andhra Pradesh

Andhra Pradesh is the sixth largest exporting state in India for FY 2023-24. The state contributes significantly to India's exports in various sectors:

Table 4.15 Export statistics of Andhra Pradesh for the Year 2023-24

Sr. No.	Sector	Contribution to India's Exports
1	Tobacco	88.05%
2	Silver	75.71%
3	Fertilizers	47.85%
4	Marine Products	40%
5	Ship, Boat & Floating Structures	36.84%
6	Bulk Drugs	10.32%
7	Drug Formulations	7.85%

Andhra Pradesh is emphasizing coast-led industrial development, leveraging its extensive coastline. The state has adopted a long-term growth strategy with a strong focus on globally competitive exports. The sector-wise export data for FY2023-24 is detailed below:

Table 4.16 Sector wise Exports for 2023-24

Sr. No.	Products	Value (₹ Crore)
1	Animal & Animal Products	25515
2	Vegetable Products	16082
3	Food Stuff	17199
4	Mineral Products	12400
5	Chemical & Allied Products	37320
6	Plastic/Rubber	1525
7	Raw Hides, Skin, Leather & Fur	156
8	Wood & Wood products	849
9	Textiles	3917
10	Footwear/ Headgear	1600

Sr. No.	Products	Value (₹ Crore)
11	Stone/Glass	3270
12	Metals	10790
13	Machinery/Electrical	9400
14	Transportation	22382
15	Miscellaneous	1158
	Total	163563

(Source: Socio Economic Survey of Andhra Pradesh 2024-25)

The Andhra Pradesh Export Promotion Policy (APEX 2022-27) aims to establish the state as a leading export hub by developing world-class logistics and export infrastructure, promoting high-quality products, enabling robust export-oriented institutions, and creating integrated export ecosystems from districts to ports.

The District as Export Hubs (DEH), a GoI initiative seeks to attract investments in districts to boost manufacturing and exports, foster innovation and technology use, and enhance exporter competitiveness. This initiative aims to reduce transaction costs for exporters, generate employment, and provide global reach for district products and services through e-commerce and digital marketing. In the first phase, the Government of India has identified three districts in Andhra Pradesh for implementation:

- Visakhapatnam: Marine Products, Engineering Works, and Health Services
- East Godavari: Coir & Coir Products, Cashew, and Nursery Plants
- Guntur: Chillies, Turmeric, and Cotton Yarn

The district-wise products with export potential under the DEH scheme are listed below:

Sr. No.	Name of the District	Products
1	Srikakulam	Granite , Cashew, Pharmaceutical Marine food Products
2	Vizianagaram	Mango, Mango Jelly, Cashew Kernel
3	Parvathipuram Manyam	Rice
4	Alluri Sitarama Raju	Coffee
5	Visakhapatnam	Sea/Marine Food Products, Engineering Goods, Health services
6	Anakapalli	Jaggery, Coir Products, Etikoppaka wooden toys
7	Kakinada	Frozen shrimp, cashew kernels, Rice (non-basmati)
8	Dr. B R Ambedkar Konaseema	Coir Products, Frozen shrimp
9	East Godavari	Food Products, Nursery Plants, Coir/coir based products
10	West Godavari	Processed shrimp, Crochet Lace Products, Coir & Allied Products
11	Eluru	Shrimp, Aqua Feed, Human Hair Products
12	Krishna	Imitation Jewellery, Frozen shrimp, Textiles & Bedsheets, Kalamkari Products
13	NTR	Pharmaceuticals & API, Casting (auto components, textiles, mango)
14	Guntur	Cotton yarn, Chillies, Turmeric
15	Bapatla	Processed shrimp, Granite, Cotton yarn, oleoresins
16	Palnadu	Spices, Textiles
17	Prakasam	Granite, Marine Food products

Sr. No.	Name of the District	Products
18	SPSR Nellore	Processed Sea Foods, Rice, Lemon Based Products, Mineral Based Products, Wooden Cutlery
19	Kurnool	Cotton, Chilies, Caustic Soda Flakes, Hydrogenated Castor Oil
20	Nandyal	Stone Idols, Slab polishing
21	Anantapuramu	Fresh Fruits & Vegetables, Readymade Garments, Groundnut Products, Millet products
22	Sri Satya Sai	Silk Saris & Silk Fabrics, Leather Puppets, Wall Hangings & Lamp shades, Ready Made Garments & Apparels
23	YSR Kadapa	Silk Saris & Silk Fabrics, Leather Puppets, Wall Hangings & Lamp shades, Ready Made Garments & Apparels
24	Annamayya	Barites Lumps & Powder, Fresh Fruits & Vegetables, Granite Blocks & Polished Slabs, Hand Loom Silk Sarees
25	Chittoor	Mango pulp polished granite & Raw granite blocks
26	Tirupati	Automobile Components, Textile Products, Electronic Products, Pharma Products

Source: Socio Economic Survey of Andhra Pradesh 2024-25

APEDA- The Agricultural and Processed Food Products Export Development Authority (APEDA) is mandated with the responsibility of export promotion and development of products such as Fruits, Vegetables and their products, meat and meat products, poultry & poultry products, dairy products, confectionary, biscuits and bakery products, honey, jaggery and sugar products, cocoa and its products, chocolates of all kinds, alcoholic and non-alcoholic beverages, cereals and cereal products, groundnut, Peanuts and walnuts, Pickles, chutneys and papads, guar gum, Floriculture and Floriculture products, Herbal and Medicinal Plants, Green pepper in brine, basmati rice etc. The potential clusters identified by APEDA in Andhra Pradesh have been presented below:

Table 4.17 Potential clusters identified by APEDA in AP

S N	Products	Potential cluster
1	Banana	Kadapa, Anantapur
2	Pomegranate	Anantapur, Kurnool
3	Mango	Krishna, Chittoor, Kurnool

Promotion of Millet export

APEDA has been entrusted with the task of promoting Indian millets in the international market. APEDA has identified three knowledge partners - Indian Institute of Millet Research (IIMR); Centre of Excellence on Millets – University of Agriculture Sciences, Bengaluru; and Yes Bank. These knowledge partners collaborate for preparation of content for publication of millet promotion material; identification of participants for the millet-promotion events to be organized by Indian Missions abroad; and millets value chain development.

MPEDA- The Marine Products Export Development Authority (MPEDA) was set up with the mandate to promote the marine products industry with special reference to exports from the country like “all varieties of fishery products known commercially as shrimp, prawn, lobster, crab, fish, shellfish, other aquatic animals or plants or part thereof and any other products.

The quantity and value of exports of marine products through Visakhapatnam port (2023-24) are as given below:

Name of the port	Qty	₹ in Crore	US \$ Million	% share
Visakhapatnam	3,14,199	17,983.99	2,193.99	29.72

(Source: <https://mpeda.gov.in/>)

4.5.3 Major Initiatives taken by government:

- **Central Government:** The Financial Assistance Scheme (FAS) by APEDA, part of the Finance Commission Cycle 2021-22 to 2025-26, supports businesses in export infrastructure, quality, and market development, offering assistance from ₹5 lakh to ₹5 crore.
- **State Government:** Andhra Pradesh's Export Promotion Policy 2022-27 aims to double exports by 2030, requiring an 8% annual growth rate. A State Level Facilitation Cell and District Level Cells guide exporters throughout the project cycle.
- **RBI Initiatives:** RBI has implemented measures to facilitate export credit, including rationalization of interest rates, pre-shipment credit flexibility, special packages for large value exporters, and inclusion of export credit under the Priority Sector for loans up to ₹40 crores.

The bankable credit potential of ₹4028.15 crore has been assessed for the Export sector for 2025-26 and the district-wise potential is furnished in Annexure I.

4.5.4. Critical gaps & Actions Required

The critical gaps, interventions required and issues to be addressed in the sector are:

- Facilities and dedicated services may be extended by qualified centres to guide producers in introducing themselves on the e-commerce front keeping in view the Pandemic-related restrictions.
- Micro, Small and Medium Exporters should be properly trained by MSME / export organizations with technical assistance from banks.
- International demand and supply situation, price competitiveness for exportable and related domestic factors may be announced/projected in public portals continuously.
- Exporters may be encouraged to avail themselves of the export credit insurance facilities extended by ECGC.
- Forex branches may be opened in the district exclusively to cater services to exporters.
- The banks should put in place a control and reporting mechanism for export credit.

4.6 Education

4.6.1 Introduction

Andhra Pradesh is the 10th largest state in the country as per population, it is containing 4.09 % of population of India. As per 2011 census, the population of the state is 4.96 Cr out of which 2.48 Cr are males and 2.47 Cr are females. The sex ratio in the state is 997 in 2011, up from 983 in 2001 and is higher than all India figure of 943 in 2011. The density of population of AP is 382 / km² against all India figure of 304 persons per square km.

The literacy rate of the state is 67.35 percent in 2011 as against 62.07 percent in 2001. However, the literacy of the state is lower than all India figures of 72.98 percent. Male literacy

rate is 74.77 percent compared to female literacy rate of 59.96 in 2011 showing a significant gap in female literacy.

Population & Literacy – 2011 Census

Particulars	Population (Lakh)			Literacy %
	Rural	Urban	Total	
All India	8330.88	3771.06	12101.93	74.0
Andhra Pradesh	347.76	146.10	493.86	67.4 (population > 6 years being 297.72 lakh)
Districts				Literacy %
Srikakulam				61.74
Vizianagaram				58.89
Visakhapatnam				66.91
East Godavari				70.99
West Godavari				74.63
Krishna				73.74
Guntur				67.40
Prakasam				63.08
Nellore				68.90
Chittoor				71.53
Kadapa				67.30
Anantapur				63.57
Kurnool				59.97

School Education: There are 59,109 schools in AP with an enrolment of 72,35,077 children and 2,94,504 teachers, out of which 45,971 schools are government aided and 13,138 are private schools. (Source: Educational Statistics, Commissioner of School Education, 21-22)

Intermediate Education: The plus two state (Intermediate) education was introduced in AP under 10+2+3 pattern from 1969-70. The Directorate of Higher Education has been bifurcated into two parts, Directorate of Intermediate Education and Directorate of Collegiate Education from 1989. There are 476 Govt. and Vocational Junior Colleges and 45 aided junior colleges functioning under the administrative control of the Board of Intermediate Education.

State Institute of Vocational Education: To develop vocational studies in the state, State Institute of Vocational Education was set up as apex body in the Directorate of Intermediate Education. At present 23 Vocational courses with two years duration are being offered. The Government has sanctioned 1680 Vocational sections. There are 224 Government Junior Colleges with vocational courses and 8 exclusive Government vocational junior colleges functioning in the state and around 92,858 students are pursuing their 2 year intermediate vocational courses.

Higher Education / Collegiate Education:

Andhra Pradesh has ambitions to transform itself into a knowledge hub and preferred centre for higher education for students from all over India. APSCHE (Andhra Pradesh State Council of Higher Education) is the nodal department looking after the higher education sector in the state. It is catering to the education needs of 1.45 lakh students in UG & PG courses which are being met by a network of 224 Degree colleges out of which 169 are Government colleges and 55 Private aided colleges in the state.

Important schemes/programmes implemented by the State government in education Sector

The Government of AP has initiated several schemes for bringing out both quantitative and qualitative improvement in the education system in the state. The government has earmarked ₹29,909 crore for school education in FY 2023-24. According to NITI Aayog's Multi-Dimensional Poverty Index Report of 2021, less than 2% of the population in Andhra Pradesh is deprived of school education.

The impact of AP government's pioneering programs in the education sector is reflected in the impressive progress achieved under Quality Education. The Adjusted Net Enrolment Ratio in elementary education (class 1-8) has increased from 80.48 % in 2019-20 to 91.72 % in 2021-22. The average annual dropout rate at the secondary level (class 9-10) has reduced from 15.71 in 2019-20 to 2.84 in 2021-22. The gross enrolment ratio (GER) in higher secondary (class 11-12) has increased from 69 in 2014-15 to 75.46 in 2021-22. Furthermore, 94.56% of schools have basic infrastructure including electricity, drinking water. 100% of teachers at the secondary level are trained.

Welfare Schemes being implemented in the State for Children:

- Talliki Vandanam: To provide aid of ₹15,000/- directly in the beneficiaries' savings bank accounts in January every year until the child completes class 12.
- Mana Badi Mana Bhavishyattu: To take up the basic infrastructure works with nine (9) components i.e, i. Toilets with running water, ii. Electrification with fans and tube lights, iii. Drinking water supply, iv. Furniture for students and staff, v. Painting to school, vi. Major and minor repairs, vii. Green chalk boards, viii. English labs, ix. Compound walls in all Government Schools.
- Dokka Seethamma Madhyahana Badi Bojanam: To provide free food in schools to the eligible students.
- Sarvepalli Radhakrishnan Vidya Mitra: To provide three pairs of uniforms, set of notebooks, textbooks, a pair of shoes and two pairs of socks, a belt, school bag to all students.
- Post Matric Scholarships: To provide all students who are willing to study and gain higher education but unable to pay their fees because of the financial burden of their family. It also provides provide hostel and mess charges of BPL students, Industrial Training Institute Courses (ITI) students will receive ₹10,000 every year, polytechnic students get ₹15,000, and degree students get ₹20,000 as fee reimbursement, Full fee reimbursement is provided for SC/ST students irrespective of courses.
- Balika Raksha: a free sanitary napkin distribution programme for girl students
- Abdul Kalam Prathiba Puraskaram : scheme to financially reward government school students who topped their examinations

Also, the State government has signed a pact with education and tech company Byju's to impart quality education to students at government schools. Students studying in Class 8 now and would write their Class 10 examinations in Central Board of Secondary Education (CBSE) syllabus in 2025, would be given tabs, emphasizing the need to make digital learning tools accessible to students and imparting training on teachers.

CBSE has set up 16 Regional Offices and 16 Centers of Excellence to meet the, administrative, academic, training and exam related requirements of stakeholders across the country. The growing demand for CBSE affiliation, has necessitated that more Regional Offices are set up in the country. 17th Regional Office of CBSE was opened at Vijayawada, Andhra Pradesh. The jurisdiction of Regional Office, Vijayawada will be for the affiliated schools in the state of Andhra Pradesh and Telangana. Govt of AP has taken a historical decision to affiliate all the Government schools with CBSE in a phased manner and decided to implement the CBSE pattern of exams in 1308 schools in the state.

Need for financial support for Education Sector

The development of higher education depends on various factors, among which finance plays a major role. Bank credit has an important role in promoting the education and development of skilled professionals required by an emerging market economy such as India.

According to revised RBI guidelines, Priority Sector Lending includes educational loans up to ₹20 lakh, including vocational courses.

As per RBI data, demand for Education loans in India has seen steady rise and currently stands at around ₹90,000 Cr. However, as per a report by the Ministry of Human Resources Development, only about 4% of total higher education student benefited from education loans. Stringent eligibility criteria to varying interest rates and information gap among students are among various reasons for this low spread of education loans in India.

Vidya Lakshmi Portal for Education Loans from Banks

A fully IT based Student Financial Aid Authority has been proposed through the 'Pradhan Mantri Vidya Lakshmi Karyakram', to administer and monitor Scholarship as well Educational Loan Schemes, with a view to enable all poor and middle class students to pursue higher education of their choice without any constraint of funds.

Vidya Lakshmi Portal is a first of its kind portal for students seeking Education Loan. It provides single window electronic platform for students to access information and prepares applications for Educational Loans and Government Scholarships

This initiative aims to bring on board all Banks providing Educational Loans. It is expected that students throughout the country will be benefited by this initiative of the Government, by making available a single window for access to various Educational Loan Schemes of all Banks. The portal has been developed and being maintained by NSDL e-Governance Infrastructure Limited.

39 Banks have registered 70 Educational Loan Schemes on the Vidya Lakshmi Portal and integrated their system with the Portal for providing loan processing status to students.

Initiatives of NABARD

Under RIDF XXV (2019-20), XXVI (2020-21) and XXVII (2021-22), NABARD has sanctioned ₹3092.19 crore to GoAP for the augmentation of the infrastructure of 23,313 schools including 23 Tribal welfare schools under Nadu Nedu scheme

Critical gaps and interventions required, Suggested Action Points

Government

- There is a need to improve the literacy rates in the state particularly female literacy since the same is below the national average. The expenditure on Education as a percentage to GSDP is lower than the national level (4.64%) in Andhra Pradesh.
- There is a need to set up new degree colleges, Vocational Institutes, Polytechnics, and Professional Colleges by the Government in mandals which have only Junior Colleges.
- Government may come up with a scheme for Student Credit Card as is prevalent in many states.
- Government may support the banks for the mounting over dues, in education loans and as a result, the banks are finding it difficult to provide credit to this sector.
- Under the Credit Guarantee Fund Scheme for Education Loans (CGFSEL) notified in 16.09.2015, Central Government gives guarantee for the education loans availed by

students without any collateral security and third-party guarantee for a maximum loan limit of ₹7.5 Lakh. The limit for the education loans under the scheme may be revised keeping in view the rapid increase in cost of higher and vocational education.

Banks

- Banks may implement Central Scheme to provide Interest Subsidy (CSIS) which is applicable to all eligible students who pursue technical and professional education studies in India.
- Banks may simplify eligibility criteria including stringent norms e.g. high credit scores and streamline paperwork to make the availing of education loan more hassle free and predictable.
- Banks may tie up with educational institutes to raise awareness among students and parents on different benefits of education loan scheme and to raise number of proposals.

4.7 Housing**4.7.1 Introduction**

Housing is a basic human need and plays a crucial role in the well-being of individuals, families, and communities. In India, the public housing program began after independence, initially focused on rehabilitating refugees. Over time, it has become a key government priority aimed at poverty alleviation and improving living conditions for the disadvantaged. Both the central and state governments have played a significant role in implementing housing initiatives, addressing the challenges of affordability, access, and infrastructure, with the goal of ensuring that all citizens have access to adequate and affordable housing.

Housing Finance under Priority Sector lending

Bank loans to the Housing sector as per limits prescribed below are eligible for priority sector classification:

- Loans to individuals up to ₹35 lakh in metropolitan centres (with a population of ten lakh and above) and up to ₹25 lakh in other centres for the purchase/construction of a dwelling unit per family provided the overall cost of the dwelling unit in the metropolitan centre and at other centres does not exceed ₹45 lakh and ₹30 lakh respectively. Existing individual housing loans of UCBs presently classified under PSL will continue as PSL till maturity or repayment.
- Loans up to ₹10 lakh in metropolitan centres and up to ₹6 lakh in other centres for repairs to damaged dwelling units conforming to the overall cost of the dwelling unit as prescribed in para 12.1 of RBI Master Circular on Priority Sector Lending.
- Bank loans to any governmental agency for the construction of dwelling units or slum clearance and rehabilitation of slum dwellers subject to dwelling units with a carpet area of not more than 60 sq.m.
- Bank loans for affordable housing projects using at least 50% of FAR/FSI for dwelling units with a carpet area of not more than 60 sqm.
- Bank loans to HFCs (approved by NHB for their refinance) for on-lending, up to ₹20 lakh for individual borrowers, for purchase/construction/ reconstruction of individual dwelling units or for slum clearance and rehabilitation of slum dwellers, subject to conditions specified in para 23 and 24.
- Outstanding deposits with NHB on account of priority sector shortfall.

(Source: Master Directions on PSL, RBI dated June, 2024)

4.7.2 Initiatives by the Government of India

Pradhan Mantri Awas Yojana- Urban (PMAY-U)

In pursuance of Government's vision of facilitating Housing for All, Ministry of Housing and Urban Affairs (MoHUA), Government of India is implementing Pradhan Mantri Awas Yojana-Urban (PMAY-U) – 'Housing for All' Mission since 25.06.2015. The original mission period was up to 31.03.2022 which has been extended till 31.12.2024 for completion of houses sanctioned up to 31.03.2022, without changing funding pattern and implementation methodology of the scheme. Under the Mission, Ministry has been providing Central assistance to States/ UTs for addressing the housing requirement of the slum dwellers and other people belonging to Economically Weaker Sections (EWS), Low Income Group (LIG) and Middle Income Group (MIG) categories in the urban areas.

Union Budget 2024-2025: Announcement of PM Awas Yojana – 2.0

Needs of 1 crore urban poor and middle-class families will be addressed with an investment of ₹10 lakh crore through States/Union Territories (UTs)/PLIs to construct, purchase or rent a house at an affordable cost in urban areas in the next 5 years. The Government Assistance of ₹ 2.30 lakh crore will be provided under the Scheme.

In addition, the corpus fund of Credit Risk Guarantee Fund Trust (CRGFT) has been increased from ₹1,000 crore to ₹3,000 crore to provide benefit of credit risk guarantee on affordable housing loans from Banks/Housing Finance Companies (HFCs)/Primary Lending Institutions (PLIs) to Economically Weaker Section (EWS)/Low Income Group(LIG) segments for construction/purchase of their first home. Further Management of Credit Risk Guarantee Fund will be transferred to National Credit Guarantee Company (NCGTC) from National Housing Bank (NHB).

PMAY-U is one of the major flagship programmes being implemented by Government of India to provide all-weather pucca houses to all eligible beneficiaries in the urban areas. Under PMAY-U, 1.18 crore houses have been sanctioned while more than 85.5 lakh houses have already been constructed and delivered to the beneficiaries.

PMAY-U- 2.0 offers affordable housing through:

- Beneficiary-Led Construction (BLC): Financial aid for EWS families to build on their own land; land rights may be provided to landless beneficiaries.
- Affordable Housing in Partnership (AHP): Financial support for EWS beneficiaries to buy homes through public/private partnerships, with redeemable vouchers for private projects and an additional grant for innovative construction technologies.
- Affordable Rental Housing (ARH): Provides rental housing for working women, migrants, homeless, and others needing temporary or affordable living spaces.
- Interest Subsidy Scheme (ISS): Benefit: 4% interest subsidy on home loans up to ₹8 lakh.
- Eligibility: For loans up to ₹25 lakh, with house value up to ₹35 lakh.
- Maximum Subsidy: ₹1.80 lakh, disbursed in 5-yearly installments.
- Access: Available via website, OTP, or smart cards.

Credit Linked Subsidy Scheme

This scheme under PMAY-U aims to enhance institutional credit flow to address the housing needs of the urban poor. This scheme provides interest subsidies on housing loans for both new construction and incremental improvements, such as adding rooms, kitchens, or toilets to existing homes. To qualify for the subsidy, the carpet area of the newly constructed houses must be up to 30 square meters for Economically Weaker Sections (EWS) and up to 60 square meters for the Low-Income Group (LIG).

(Reference: <https://pmay-urban.gov.in> and indiabudget.gov.in)

Pradhan Mantri Awas Yojana – Gramin (PMAY-G)

To address the gaps in the erstwhile rural housing schemes and in view of Government's commitment for providing "Housing for All" by 2022, Indira Awaas Yojana was re-structured into Pradhan Mantri Awaas Yojana –Gramin (PMAY-G) and was launched by Prime Minister on 20th November 2016. It is addressed to the rural poor under which it will provide pucca houses with all the basic facilities including a hygienic kitchen to those living in kutcha houses.

Objectives of PMAY-G: This social welfare scheme is intended to provide financial assistance to people from the economically marginalized section to have access to housing infrastructure providers. All beneficiaries of this PMAYG will have not only permanent housing but also additional amenities like electricity, LPG, and road connectivity. A 25-square meters pucca (permanent) house will be built, and the accompanying comforts will be provided under this ambitious 'Housing for All' program.

Features of PMAY-G:

The total costs incurred when providing housing benefits to the rural poor will be distributed between the Central and State Governments. Currently, the ratio is set at 60:40 in all states & 90:10 in North Eastern states. All Union Territories will have 100% funding from the Central Government.

There will also be extra financial assistance of ₹12,000 per beneficiary for constructing permanent toilets to accompany each house. This additional assistance will be covered under the Swachh Bharat Mission-Gramin or SBM-G. It will ensure that maximum rural inhabitants have access to hygienic living conditions. Incidentally, this uplifting for access to sanitized living conditions is also a flagship programme of the Government.

All beneficiaries of this scheme will also receive ₹90.95 per day of unskilled labour under the auspices of the MGNREGS.

The beneficiaries will be determined based on their social indicators as determined by the Socio-Economic and Caste Census or SECC. The respective gram sabhas will then determine data verification and will pass that information to the administration.

All payments will be transferred directly to the bank accounts of beneficiaries, and Aadhaar data will also be verified to ensure that payments are received only by those who need them.

Benefits under PMAY-G:

- All beneficiaries of this scheme can avail of loans of up to Rs. 70,000 from pre-determined financial institutions. This sum will then be used to build a permanent dwelling.
- There are some benefits available when repaying this amount. For one, interest rates will be lower by 3% when compared to ordinary, non-subsidized loans.
- The maximum principal amount for which subsidy can be sought is Rs. 2 Lakh.
- Added benefits like LPG connections covered under the Ujjwala Yojana and other essential facilities also exist.
- Houses constructed in hilly terrains will have increased financial assistance.

(Reference: <https://pmayg.nic.in>)

Important Announcements in Union Budget 2024-25.

Union Cabinet has approved the proposal of the Department of Rural Development for "Implementation of the Pradhan Mantri Awaas Yojana – Gramin (PMAY-G) during FY 2024-25 to 2028-29".

The details are as below.

- Continuation of the Pradhan Mantri Awaas Yojana–Gramin (PMAY-G) for saturating the Awaas+ (2018) list (after updating) and balance eligible households in Socio Economic Caste Census (SECC) 2011 Permanent Wait List (PWL) by providing assistance within overall ceiling of 2 crore pucca houses with basic amenities from April, 2024 to March, 2029.
- Total outlay of ₹3,06,137 crore for FY 2024-25 to 2028-29 including Central Share of ₹2,05,856 crore and State Matching Share of ₹1,00,281 crore.
- Continuation of the scheme beyond March, 2026 after evaluation of the PMAY-G by the NITI Aayog and re-appraisal of the scheme by EFC.
- Updating Awaas+ list for identifying eligible rural households using modified exclusion criteria.
- Unit cost of assistance to beneficiaries to continue at existing rates of ₹1.20 lakh in plain areas and ₹1.30 lakh in North Eastern Region/ Hill States.
- Administrative funds at 2% of the programme funds with bifurcation of the administrative funds as 1.70% to be released to the States/UTs and 0.30% to be retained at Central Level.
- Completion of the incomplete houses of previous phase of the PMAY-G as on 31.03.2024 during the FY 2024-25 as per the existing rates.

Benefits:

- The remaining 35 lakh houses not completed till 31.03.2024 would be completed to achieve the cumulative target of 2.95 crore houses of previous phase.
- Now, two crore more houses will be constructed under the PMAY-G during next five years from FY 2024-2029 to address housing need arisen over the years. Construction of houses for two crore more households is expected to benefit nearly 10 crore individuals.

The approval would facilitate all the houseless and people living in dilapidated and kutchra houses to build safe and secure house of good quality with all the basic amenities. This will ensure safety, hygiene and social inclusiveness of the beneficiaries.

4.7.3 Initiatives by the State Government

The Andhra Pradesh State Housing Corporation (APHCL) has been a pioneer in implementing the Weaker Section Housing Programme, aiming to provide adequate amenities under the motto "Housing for All." A detailed survey is being conducted to identify all eligible households to provide house sites and houses by 2029. The government is committed to providing house sites with an extent of 3 cents in rural areas and 2 cents in urban areas to eligible beneficiaries who have no house or house site. The government has decided to complete all 7.60 lakh houses in progress by March 2026 under PMAY (U) BLC, PMAY (G), and PMJANMAN.

4.7.4 Suggested Action Points / Issues to be addressed.

- Policy Alignment: Ensure that State affordable housing policies are in sync with Government of India (GoI) policies to simplify access to central incentives and meet State-level compliance requirements for approvals.
- Capacity Building: Strengthen the capabilities of implementing agencies by providing in-depth training on the entire project lifecycle, especially for new development models like Public-Private Partnerships (PPPs), which are central to PMAY's Affordable Housing in Partnership.
- CSR Contributions: Include guarantee fee payments for the Credit Risk Guarantee Fund Trust as part of mandatory Corporate Social Responsibility (CSR) contributions to ease the financial burden on affordable housing beneficiaries.
- Financial Literacy: Dedicate a portion of project funds to enhancing beneficiaries' financial literacy and increasing awareness about GoI schemes and financing options from formal financial institutions.

- Resident Welfare Associations (RWAs): Make it mandatory for project developers to establish RWAs to manage the external maintenance of affordable housing units.
- Maintenance Firms: Consider outsourcing maintenance responsibilities to specialized firms, with costs covered by the relevant authority.
- Developer Rating System: Create a rating system for developers, including smaller and regional ones, based on their track record with similar projects to reduce perceived risks and lower construction finance costs.

Financial Products and Guarantees: Develop financial products that offer credit guarantees or enhancements for small developers and affordable housing projects, and broaden the implementation of credit guarantee schemes.

Training and Skill Development: Invest in training construction workers in emerging and cost-effective technologies and build a skilled workforce.

4.7.5 Critical gaps

- Location Issues: Many affordable housing projects are located on the outskirts of cities, with inadequate access to essential services like transportation, healthcare, and education.
- Regulatory Delays: The need for multiple approvals from various authorities extends project timelines and complicates implementation.
- Policy Inconsistencies: Differences between Central and State government policies create obstacles in accessing benefits from Government of India schemes.
- Maintenance Challenges: Poor maintenance of affordable housing units is partly due to insufficient funds and a lack of institutional frameworks for upkeep.
- High Financing Costs: The high cost of construction finance renders many affordable housing projects financially unviable.
- Awareness Gaps: Many beneficiaries lack knowledge about financing options and government schemes, such as the Credit Linked Subsidy Scheme.
- Loan Recovery Difficulties: Repaying loans can be challenging as residential housing does not generate direct income, despite being secured.
- Technology Use: There is a lack of adoption of low-cost technologies, which prevents achieving economies of scale.
- Private Sector Disengagement: Restrictive Floor Area Ratio (FAR) and density regulations, along with limited capacity of implementing agencies, deter private sector involvement in affordable housing projects.

4.8 Social Infrastructure Involving Bank Credit

4.8.1 Introduction

Social infrastructure refers to the physical assets and facilities that are essential for the social well-being and development of a society, including areas such as education, healthcare, housing, and community services. With increased focus on human resource development and for attainment of Sustainable Development Goals 2030, the social sectors, viz., education, health, sanitation etc. have gained greater focus in the overall development process. Bank credit plays a significant role in supporting the development and maintenance of social infrastructure.

Government of India has been giving thrust on social infrastructure projects. The schemes like “Swachh Bharat Mission”, ‘Har Ghar Jal’ are the examples of GoI’s scheme to promote social infrastructure in the country. Financial institutions play an essential role in these initiatives, particularly in financing the development of schools, healthcare facilities, housing, and sanitation projects. In 2024-25, the GoI allocated over ₹2 lakh crore to social infrastructure

projects (Union Budget 2024-25). Moreover, the Reserve Bank of India's priority sector lending guidelines encourage financial institutions to extend credit for social infrastructure projects, enabling essential services to reach underserved communities and contributing to the achievement of the SDGs.

4.8.2 Need for private investments

Though investments for this sector have been the prerogative of the Government, the gap between the demand and supply of this infrastructure requirement has been widening over the years. As the social Infrastructure sector has to be developed on a priority basis, Governments have given specific thrust to these sectors and to attract investments from the banking sector.

- In this context, RBI has included the development of Social Infrastructure as Priority Sector Lending for the banks. Bank loans up to a limit of ₹5 crore per borrower for building social infrastructure for activities, namely schools, drinking water facilities and sanitation facilities (including loans for construction/ refurbishment of toilets and improvement in water facilities in the household) in Tier II to Tier VI centers are eligible for classification under priority sector.
- Loans upto a limit of ₹10.00 crore per borrower for building healthcare facilities including under Ayushman Bharat in Tier II to Tier VI centres and Bank credit to Micro Finance Institutions (MFIs) extended for on-lending to individuals and also to members of SHGs/JLGs for water and sanitation facilities will be eligible for categorization as priority sector under 'Social Infrastructure'.
- Recent data underscores the growing importance of private sector participation in social infrastructure development. For example, as of 2024, the GoI has allocated over ₹3.5 lakh crore for water supply and sanitation projects under the Jal Jeevan Mission, with a significant portion of this funding expected to be supplemented by private investments. Similarly, under the Pradhan Mantri Awas Yojana (PMAY), which aims to provide affordable housing for all, private developers have been invited to invest in large-scale housing projects, particularly in urban areas.

4.8.3 Status

- **Literacy rates:** As per the 2011 census data, literacy rate of India is 72.98%, whereas for Andhra Pradesh, literacy rate is 67.35%. Among the districts, West Godavari is having high literate rate of 74.32% and the lowest in Vizianagaram (58.89%).
- **Education:** As per article 21A and 93rd constitutional amendment 2009, Education has become a fundamental right. During the 2023-24 academic year, total enrollment in all types of schools in the state, excluding Kendriya Vidyalayas and Navodaya Schools, stands at 70.82 lakh students. Of this total, 20.16 lakh (28.47%) are enrolled in primary schools, 9.67 lakh (13.65%) in upper primary schools, and 40.99 lakh (57.88%) in high schools. Regarding dropout rates for the academic year 2023-24, the data reveals no dropout in classes I-V (Primary Level), 0.01% in classes VI-VIII (Upper Primary Level), and 2.39% in classes IX-X (Secondary Level).

To address and mitigate dropouts, several strategies are being implemented, aimed at achieving 100% access to education. Key initiatives include strengthening existing schools, the implementation of the *Ammavodi* program to support financially disadvantaged families, provision of student kits under the *Vidya Kanuka* program, and improving educational infrastructure in small and underserved communities.

- **Health:** Ensuring access to healthcare facilities remains a top priority for the state government, which is committed to providing essential health services, including maternal healthcare, child healthcare, and family welfare services. These services are administered through the Family Welfare Department and are delivered across the state via a robust network of healthcare facilities. This network includes 11,092 subcenters (of which 10,032

are village health clinics), 1,144 rural primary health centers, 547 urban primary health centers, 174 community health centers, 54 area hospitals, 9 district hospitals, 2 maternal and child health centers, and 32 teaching and allied hospitals. These facilities collectively ensure that healthcare services are accessible to communities across both rural and urban areas of the state.

- **Housing:** Andhra Pradesh State Housing Corporation (APHCL) has been at the forefront of implementing the Weaker Section Housing Programme, ensuring the provision of essential amenities in both rural and urban areas. As a Techno-Financing Nodal Agency, APHCL facilitates the delivery of housing through self-help and mutual help models, while overseeing the implementation of both Central and State-sponsored housing schemes. During the 2023-24 period, key initiatives such as PMAY-Urban, PMAY-Gramin, and PMAY-JANMAN were executed, targeting housing provisions across urban, rural, and Particularly Vulnerable Tribal Groups (PVTGs) areas. The government assists beneficiaries by supplying affordable building materials, offering low-interest loans, and maintaining a transparent online platform for progress monitoring. Additionally, quality control measures and testing laboratories are in place to ensure high standards. The state's Vision Plan aims to complete the construction of 8,04,709 houses by 2029.
- **Drinking water:** The Rural Water Supply and Sanitation Department serves as the nodal agency in the state for the provision of drinking water and sanitation facilities in rural areas. It implements various schemes, including single-village, multi-village, and hand pump installations. The infrastructure includes 200,101 hand pumps and 549 Combined Piped Water Supply (CPWS) schemes, collectively serving 54.98% and 45.02% of the population, respectively. Additionally, 116 water testing laboratories are operational as of April 2024. Under the Jal Jeevan Mission (JJM), the government has committed to providing Functional Household Tap Connections (FHTCs) with a minimum supply of 55 liters per capita per day to all rural households by 2026, with a total allocation of ₹27,248.86 crores for project implementation. The State Government is placing high priority on providing protected drinking water to all urban local bodies (ULBs) by strengthening existing infrastructure and improving service standards. Various water supply improvement schemes are being implemented across ULBs to align with national standards for per capita water supply. In the current year, 2040 MLD of drinking water is being supplied across 123 ULBs, with supply frequencies varying by area. The Government of Andhra Pradesh has been allocated ₹8,517.69 crores under the AMRUT 2.0 scheme for projects in water supply, sewerage, and water body rejuvenation. A total of 552 projects, with an estimated outlay of ₹10,517.69 crores, will be completed by March 2026.

4.9 Renewable Energy

4.9.1 Introduction

Renewable energy is rapidly becoming a dominant player in the global energy landscape, and India is at the forefront of this transformation. The cost of renewable energy has plummeted in recent years, with solar and wind power experiencing a remarkable 90% reduction in costs over the past decade, making them more economically viable than ever before. As a result, investment in renewable energy projects is soaring across the world, as the clean energy revolution gains momentum.

4.9.2. Potential of Renewable Energy in India and Andhra Pradesh

Out of the total installed power capacity of 462.07 GW in India as of January 2025 (National Power portal), 217.62 GW is derived from renewable sources. India is targeting a \$7 trillion economy and decarbonisation target by achieving 500 GW of fossil-fuel free generating capacity by 2030. Moreover, India has committed the goal of achieving 50 percent of its total installed power generation capacity from non-fossil fuel sources by 2030.

Andhra Pradesh is a solar rich state with huge potential of 120 GW in variable renewable energy and reverse pumped hydropower. According to the Ministry of New & Renewable Energy, the cumulative Renewable Energy capacity installed in the State is 11174.62 MW as on 31st December 2024.

Table 4.18 Sector-wise cumulative achievements (as on 31.12.2024)

	Andhra Pradesh
Solar Power	4.73
Wind Power	4.1
Bio Energy	0.57
Small Hydro	0.16
Large Hydro	1.61
Total	9.40

• (Source: Ministry of new and renewable energy website)

4.9.3 Major policy interventions/ schemes by the Government

- **Production Linked Incentive Scheme** - In November 2020, the government announced PLI scheme worth ₹4,500 crore for high-efficiency solar PV modules manufacturing over a five-year period.
- To encourage domestic production, customs duty on solar inverters has been increased from 5% to 20%, and on solar lanterns from 5% to 15%.
- **Green Energy Corridor:** In the Union Budget 2021-22, MNRE was allocated ₹6,053 crore for the 'Green Energy Corridor' scheme for synchronizing the electricity produced from renewable sources, such as solar and wind, with conventional power stations in the grid.
- **Convergence Project:** India's **first convergence project** to generate green energy for rural and agriculture consumption is set to come up in **Goa in a JV with Ministry of Power and Goa state government. Energy Efficiency Services Ltd. is offering convergent interventions under Gram Ujala scheme providing LED bulbs @ ₹10 per household, solarized agriculture feeders and LED Street lights.**
- In February 2024, the PM launched PM Surya Ghar: Muft Bijli Yojana to provide free electricity to households in India through which Govt. intends to add 30 GW of roof top solar capacity.

The details of schemes under implementation by Government of India are available on the link (i) <https://mnre.gov.in/bio-energy/> (ii) <https://mnre.gov.in/energy-storage-systems>; (iii) <https://mnre.gov.in/green-energy-corridors> (iv) <https://mnre.gov.in/hydrogen/> (v) <https://mnre.gov.in/small-hydro/> (vi) <https://mnre.gov.in/solar/> (vii) <https://mnre.gov.in/wind>

4.9.4 Policy initiatives by the State Government

The Andhra Pradesh government issued the A.P. Integrated Clean Energy Policy-2024 on October 30, aiming to promote renewable energy (RE), Pumped Storage Power (PSP), green hydrogen, and its derivatives. The policy is aimed at generating 78.5 Gigawatt (GW) of solar and 35 GW of wind power, 25 GWh of battery energy storage, 1.50 MTPA of green hydrogen, 1,500 kilolitres per day of ethanol and 10,000 tonnes per day of bio Compressed Natural Gas (CNG), Compressed Biogas, and create 22 GW pumped storage hydropower capacity. The main objectives are to transform the power sector through four 'D's—de carbonisation, democratisation, decentralisation, and dynamic/digitised grid.

Andhra Pradesh Renewable Energy Export Policy (2020-2025), launched in 2020, aims to position Andhra Pradesh as a key exporter of renewable energy to other states and countries. It encourages the development of large-scale renewable energy projects, particularly in solar and wind, with a focus on export-oriented infrastructure.

The Andhra Pradesh Pumped Storage Power Promotion Policy – (2022-2032) targets to harness the potential of 33 GW PSP capacity available in the State, enhance grid stability, attract private investments, generate revenue to State Government, generate employment and improve State economy.

Institutional Interventions by the State Government

The State Government has established Andhra Pradesh Green Energy Corporation Ltd., to install 8GW to 10GW of dedicated solar power in order to provide free power to agriculture in the long run; New & Renewable Energy Development Corporation of AP Limited (NREDCAP), the nodal agency under the RE export policy to promote the projects and AP Solar Power corporation private limited a JV between the GoAP and GoI for promoting solar power projects.

4.9.5 Suggested Investments through Bank Finance

- As per the June 2024 revised Master directions of the RBI, under the priority sector lending, Bank loans up to a limit of ₹ 30 crores to borrowers for purposes like solar based power generators, biomass-based power generators, wind mills, micro-hydel plants and for non-conventional energy based public utilities, viz., street lighting systems and remote village electrification etc. are covered, and for individual households, the loan limit will be ₹10 lakhs per borrower.
- Other opportunities for financing includes
- Solar Mini Cold rooms / Stores
- Solar Aerators in Fishery projects
- Solar fencing and solar power based farm implements
- Wind Mills

Status and Prospects of Cooperatives

5. 1. Background

The practice of co-operation and co-operative activities are deeply ingrained in the Indian culture and ethos. The co-operatives reduce individual risk in economic activities and create a culture of shared productivity, decision-making and creative problem solving. Largely, cooperatives are “local institutions”, addressing “local needs”, employing “local talent” and led by “local leaders” and thereby have the unique ability to promote local economy.

‘Cooperatives’ as an institutional entity are defined as ‘an autonomous association of persons united voluntarily to meet their common social, economic and cultural needs as well as their aspirations through a jointly owned and democratically controlled enterprise’.

There are seven major principles that govern working of cooperatives i.e., voluntary and open membership; principle of democratic member control; principle of member economic participation; principle of autonomy and independence; principle of education, training and information; principle of concern for community and principle of cooperation among cooperatives.

Indian agriculture, especially the small & marginal farming community deeply needs an anchor to support all the farming related activities, be it arranging quality inputs like seeds, fertilizers, manure, timely crop advisory or remunerative price realisation. Cooperatives strengthen bargaining powers of their members; help them get access to competitive markets and to capitalise on new market opportunities. As such, they improve income opportunities, reduce costs and manage risks of the members. It has all the potential to emerge as the third pillar complementing the private and public sectors.

5. 2. Formation of Ministry of Cooperation (MoC) by GoI

Recognising the rich tapestry of democratic, people centric groups and the long history of cooperation in the Indian rural context, the GoI has set up a separate Ministry for Cooperation on 06 July 2021 with an objective of creating a separate administrative legal and policy framework for strengthening the cooperative movement in the country, to help deepen the presence of cooperatives, to streamline processes for ‘Ease of doing business’ for co - operatives. The formation of an exclusive Ministry of Co-operation is a watershed moment for the overall development of co-operatives in the country.

5. 3 Initiatives of Ministry of Cooperation (MoC), GoI

The Ministry, soon after its formation has taken a number of path-breaking initiatives as given hereunder:

a. Formulation and circulation of model bye-laws for PACS

Formulation and circulation of model bye-law for PACS, adopted by 31 states / Union Territories, will enable the PACS to undertake business activities like LPG distributorship, new petrol pump dealership, common service centres, Jan Aushadhi Kendra for accessing generic medicines, PACS as Kisan Samridhi Kendra, PACS as Pani Samiti, convergence of PM-KUSUM scheme at PACS level, etc.

b. Formulation of National Co-operative Policy

c. Computerization of Primary Agriculture Cooperative Societies: This scheme aims at computerization of 63,000 functional PACS leading to increase in efficiency, profitability, transparency, and accountability in the working of PACS.

d. Computerization of Agriculture and Rural Development Banks (ARDBs) – SCARDBs & PCARDBs

e. Inclusion of StCBs and DCCBs as Member Lending Institutions (MLIs) with CGTMSE

f. Launching of world's largest food grain storage scheme for cooperatives

g. Promotion of milk production and marketing through co-operatives and business affiliation with respective DCCBs

h. Formation of three new national level multi state co-operative societies for promotion of certified seed, agri exports and organic farming; and campaign for enrolment of PACS as members of these multi state co-operative societies.

All these initiatives will create immense business potential at grassroots and offers scope for financing by higher financing agencies at district level/ state level.

5.4 Status of Cooperatives in the State

- The cooperative sector in Andhra Pradesh comprises a total of 17,803 cooperatives covering about 14904 Non-Credit Cooperative Societies (like Milk/Fishery/Poultry/Housing/Labour/ Consumer/ Weavers/ Marketing/ Industrial societies etc.) and 2047 Rural credit co-operatives (PACS LAMPs FSS etc.). These primary societies have nearly 95.97 lakh members spread across more than 17000 villages. There is no long-term rural co-operative credit institution as AP State Co-operative bank takes care of both the ST and LT structure in the State.
- Further there are 11 MSCS having their registered office in the state. Besides there are about 02 district level federations 09 state level federations operating in the state.
- Computerization of Primary Agriculture Cooperative Societies: This scheme aims at computerization of 2037 functional PACS leading to increase in efficiency profitability transparency and accountability in the working of PACS.
- The PACS are also providing additional services such as Jan Aushadi Kendras Petrol Outlets/Bunks Consumer Outlets CSCs Fertiliser/Pesticide Business etc.
- 10 PACS have been identified for the World's Largest Grain Storage under Cooperatives scheme.
- PM Kisan Samriddhi Kendras by all PACS: No. of PACS functioning as PMKSK: 1224 PACS. 618 PACS are under the process of CCINM certification training to obtain Fertiliser licenses and 206 PACS who have already completed the training are in the process of obtaining licenses from Agriculture Dept. The PACS shall be providing the services of providing agri inputs like fertilises seeds pesticides at reasonable prices under one roof. The PACS will also create awareness regarding good agricultural practices and also provide information regarding various Govt. schemes.
- 147 PACS have applied for membership to National Cooperative Export Society while 133 PACS have already obtained membership of NCES. Further 1743 PACS have applied for membership to Bharatiya Beej Sahakari Samiti out of which 924 PACS have received membership.

Source: National Cooperative Database (NCD) of MoC, GoI

5.5 Recent developments/ latest initiatives by State Government in strengthening the outreach and activities of cooperatives

- The MoC has, in consultation, coordination and partnership with state governments, NABARD, national level federations, training establishments at state and national level and other stakeholders is working on the following initiatives:
- **Computerization of Primary Agriculture Cooperative Societies:** This scheme aims at computerization of 2037 functional PACS leading to increase in efficiency, profitability, transparency and accountability in the working of PACS.
- **Marketing Cooperative Societies:** The 13 District Cooperative Marketing Societies (DCMSs) play a crucial role in procuring agricultural produce to ensure farmers receive minimum administered prices. Additionally, they procure seeds for the A.P. Seeds Development Corporation and carry out procurement activities for MARKFED. The DCMSs also engage in local business activities, including the sale of fertilizers, seeds, consumable articles, and stationery items to various district departments.
- **A.P. MARKFED:** A.P. MARKFED is the apex organization for Cooperative Marketing Societies (CMS) in Andhra Pradesh. It supplies agricultural inputs, cattle feed, fertilizers, gypsum, and other necessities to private institutions and government hostels. MARKFED operates through RSKs and PACSs at the primary level and has played a significant role in establishing a Price Stabilization Fund of ₹3000 Crores to protect farmers' interests and ensure Minimum Support Prices (MSP) for crops like turmeric, minor millets, sweet oranges, bananas, and onions. Additionally, it undertakes the procurement of other commodities annually based on market conditions.
- **A.P. HOUSEFED:** Registered on 13 December 1966 under the Andhra Pradesh Cooperative Societies Act, 1964, A.P. HOUSEFED operates with two regional offices in Y.S.R. Kadapa and Vijayawada. It has 751 primary housing societies as members. As of 31 March 2024, the total share capital stands at ₹225.98 lakhs, including ₹31.37 lakhs from the state government. The total loans as of 31 March 2024 amount to ₹0.38 Crores, with member loans sanctioned totalling ₹101.52 Crores.
- **PACS as FPOs:** The Department of Agriculture & Farmers Welfare, Government of India, has approved the consideration of existing Primary Agricultural Credit Societies (PACS) as Farmer Producer Organizations (FPOs). PACS selected in 207 blocks/mandals are eligible for equity grants from NCDC, as well as coverage of registration and management costs. The Andhra Pradesh State Cooperative Bank (APCOB) serves as the Cluster Based Business Organization (CBBO) for these PACS.

Infrastructure Support – Public Investment

6.1 Introduction

Rural infrastructure investments help raising the socio-economic status of the rural people through increased income levels and quality of life. In rural areas, major infrastructure gaps identified are irrigation, roads and bridges, power supply, education, skilling etc., plugging these gaps will ignite rural activities and create ample economic and employment opportunities.

NABARD has been partnering with Government of Andhra Pradesh for meeting the above goals by extending support for creation of infrastructure in Agriculture, Social and Rural Connectivity Sectors.

6.2 Rural Infrastructure Development Fund

NABARD's credit assistance to GoAP for the creation of rural infrastructure under the RIDF is over ₹ 28,000 crore for 35,907 projects. An amount of approximately ₹ 22,321 crores has been disbursed as on 30 September 2024. Investments in Rural Infrastructure have helped in improving the credit absorption capacity, increased access to markets, enhanced incomes and better quality of life in Rural Andhra Pradesh.

6.2.1 Impact of RIDF

The sanctioned projects till Tranche XXIX, on completion, will provide the following benefits:

- Irrigation potential created - 17 lakh ha
- Road network - Over 25,416 km
- Rural bridges – 49,812 m
- Primary schools/secondary schools/high schools – 42,218
- Junior colleges – 691, polytechnic colleges- 79, Ashram schools - 245
- Anganwadi Centers – 2172
- Projects in ANGRAU, YSRHU, SVVU – 123
- Rural Water Supply - 13,368 Habitations
- Field Veterinary units – 1652

Currently, assistance from RIDF is available for supporting 39 eligible activities grouped under three distinct heads viz. Agriculture and related sectors, Social Sectors and Rural connectivity.

Table 6.1 Broad sector wise sanctions under RIDF to GoAP till Tranche XXIX

Activity	RIDF Loan Sanctioned (₹ crore)	% to the total sanctioned amount	RIDF loan disbursed (₹ crore)	% of utilization
Irrigation	4228.94	14.98%	3875.33	91.64%
Agri - Other than irrigation	1880.16	6.66%	1430.03	76.06%
Social sector -Drinking water	2558.33	9.07%	2412.69	94.31%

Activity	RIDF Loan Sanctioned (₹ crore)	% to the total sanctioned amount	RIDF loan disbursed (₹ crore)	% of utilization
Social Sector – Other than Drinking water	12089.00	42.84%	8533.30	70.59%
Rural Connectivity – Bridges	1337.60	4.74%	1014.12	75.82%
Rural Connectivity – Roads	6127.76	21.71%	5056.18	82.51%
Total	28221.79		22321.65	

6.2.2 Support under RIDF to Infrastructure Projects under Different Sectors

The status of major infrastructure sectors in the Andhra Pradesh and the support drawn from the RIDF is discussed in the ensuing paragraphs.

• Irrigation

NABARD extended support to AP to the extent of ₹3875 crore to 13 major, 21 medium, 1,369 minor and 273 lift irrigation projects with an irrigation potential of 17.20 lakh ha created/ to be created. NABARD also supported soil and moisture conservation and watershed development projects in community as well as forest lands with about 4,541 projects involving ₹567.95 crore.

• Road Network

492 bridge projects and 5087 road projects are supported in the State by NABARD under RIDF with an assistance of ₹6070.30 crore with the cumulative potential of 49,812 m bridge length and 25,416 Km. road length (new and upgradation of existing roads).

• Power

13 mini hydel power projects have been supported by NABARD in AP with an installed capacity of 7.8 MW whose operations and maintenance are being carried out with the active participation of SHG women members.

• Allied Agricultural Sector

The health care needs of the animal husbandry sector were supported by 12 Veterinary Poly Clinics, 323 Hospitals, 1,576 Dispensaries and 1,217 Rural Livestock Units. Artificial Insemination (AI) facility is available in 6,597 departmental institutions.

NABARD has provided support to 1,651 field veterinary institutions and 2 animal vaccine and diagnostic unit with an amount of ₹375.51 crore.

NABARD has also assisted ₹138.54 crore for construction of 162 Agri-labs for testing agriculture inputs (seed, fertilizer and pesticides) and 46 Aqua-labs.

• Social Sector

a. Health

The government is committed to ensure access for all to the government hospitals. Maternal health care, child health care and family welfare services are provided through 7458 Sub-centres, 1145 Primary Health Centres, 18 Community Health Centres, 28 Area Hospitals, 14 District Hospitals, 3 Mother and Child Health Centres..

During the year 2023-24, NABARD has sanctioned ₹471.68 crore for 23 Rural Health projects including establishment of 02 Medical colleges in the State.

b. Education

Government of Andhra Pradesh launched **Mana Badi Mana Bhavishyatu** Scheme to develop around 15000 schools with modern facilities. The scheme to be implemented in three years in a phased manner starting from 2019-20 with financial assistance to the tune of ₹6000 crore. The aim of the scheme is to bring about qualitative change in the education system in Andhra Pradesh in terms of infrastructure and amenities in Government schools. As on 31 December 2023, NABARD has extended assistance to 42,218 Schools, 691 Junior Colleges and 65 Polytechnic Colleges and ITIs, ANGRAU, Dr. YSR Horticulture University and SV Veterinary University to the tune of ₹6340.85 crore.

c. Anganwadi Centres

Women Development and Child Welfare department is implementing 257 ICDS projects in the State and provides maternal health care, child health care and family welfare services. About 5.15 Lakh children are attending pre-school education activities in Anganwadi Centres. There are 55,607 AWCs in the State catering to needs of women and children in Rural Areas. NABARD extended assistance in AP to the tune of ₹331.19 crore to for construction of 3886 Anganwadi Centres.

d. Rural Drinking Water Supply & Sanitation

Safe drinking water is unquestionably the primary need of life and it assumes greater significance in the context of a developing country like India. Provision of drinking water supply has been a primary consideration in all the successive Five year plans. NABARD has sanctioned an amount of ₹ 2558.33 (Including 839.2 crore during 2022-23) Crores to GoAP for creation of 13,368 drinking water projects benefitting more than 70% of the rural population in the covered areas.

6.3 Long Term Irrigation Fund

The Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched during 2015-16, for extending the coverage of irrigation 'Har Khet Ko Pani' (water to all farms) and improving water use efficiency 'per drop more crop' in a focused manner.

The Hon'ble Union Finance Minister, during his Budget speech 2016-17, announced the creation of a dedicated Long-Term Irrigation Fund (LTIF) in NABARD, for funding of Central and State shares for the identified projects under PMKSY. The fund is being used for financing and fast tracking of incomplete major and medium irrigation projects identified by Ministry of Jal Shakti (erstwhile Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD & GR)), Govt. of India on a mission mode.

6.3.1 LTIF Projects in Andhra Pradesh

Govt. of India has allowed Ministry of Water Resources to fund Polavaram Project under LTIF. Accordingly, NABARD sanctioned loan amount of ₹ 11218 crore under LTIF to National Water Development Agency on behalf of Ministry of Jal Shakti (erstwhile Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD & GR)) for funding Polavaram Project.

In Andhra Pradesh, NABARD has sanctioned a loan amount of ₹513.87 crore towards funding of state share for 4 projects under LTIF. As against the sanction, the State Government availed an amount of ₹489.34 crore as on 31 March 2023.

Presently, Government of India (GoI) has extended the LTIF funding arrangement through NABARD for the State Government's share in respect of all ongoing projects till 2025-26.

Table 6.2 : Projects sanctioned under LTIF and benefits created:

(Amt in Cr)

Sl. No.	Name of the Project	District	Total Sanction	Disbursed	Irrigation potential (Ha)	Population benefitted
1	Gundlakamma	Prakasam	148.59	148.59	32,400	2.50 lakhs in 43 villages
2	Tadipudi LIS	W. Godavari	79.53	55.00	83,609	5.40 lakhs in 130 villages
3	Tarakaram Teerta Sagaram	Vizianagaram	251.75	251.75	10,000	0.77 lakhs in 49 villages
4	Pushkara LIS	E. Godavari	34.00	34.00	75,375	4.0 lakhs in 104 villages
	Total		513.87	489.34	2,01,384	

6.4 Micro Irrigation Fund

A dedicated Micro Irrigation Fund (MIF) was instituted in NABARD with an initial corpus of ₹5000 crore. The fund operational for a period of 5 years (2017-18 to 2021-22) is expected to provide impetus to micro irrigation. The announcement made in the budget of 2017-18 was for facilitating the States to mobilize additional resources for expanding coverage of Micro Irrigation. The main objective of the fund is to facilitate the states in mobilising resources for expanding coverage of Micro Irrigation by taking up special and innovative projects and also for incentivising micro irrigation beyond the provisions available under PMKSY-PDMC to encourage farmers to install micro irrigation systems. An additional allocation of ₹ 5000 crore has been made in the union budget 2021-22. GoAP was sanctioned and released ₹616.13 crore during 2020-21 under MIF. Potential created under MIF in Andhra Pradesh covers an area of 1,83,230 Ha, benefitting more than 1.5 lakhs farmers, and covering various horticultural and agricultural crops.

6.5 Warehouse Infrastructure Fund (WIF)

As creation of quality Warehousing Infrastructure is a thrust area of GoI, an allocation of ₹ 5000 cr has been made under the WIF in the budget for 2014-15. The fund envisages extension of loans to Public and Private sectors for construction of warehouses, silos, cold storages and other cold chain infrastructure. WIF would be utilized for meeting the growing demand for creating scientific storage capacity for agricultural commodities in the State. Under WIF, a cumulative amount of ₹ 99.00 crore has been sanctioned to State Government and amount of ₹98.56 crore has been disbursed as on 31 March 2024, covering a total of 19 projects, creating a total storage capacity of 1,76,500 MT.

6.6 Rural Infrastructure Promotion Fund (RIPF)

RIPF has been created with an initial corpus ₹25 crore and operationalized from 1st September 2011 with an objective to promote capacity building initiatives, and also for the creation of innovative/experimental/promotional and replicable model of infrastructure in rural sector and rural areas.

Table 6.3- Major projects implemented in Andhra Pradesh under RIPF during last 03 years

Sl. no.	Name of the project	Amount sanctioned (₹ lakhs)
1	Establishment of Bio-flock inland aquaculture unit for entrepreneurship promotion at KVK, Banavasi, Kurnool	7.46
2	Procurement and Installation of Automatic weather station at Dr YSRHU-Horticulture Research Station, Kovvur, East Godavari District	4.47
3	Purchase and installation of solar dryer for marine products by Sahajamitra FPCL, Guntur District	5.00
4	Construction of slab culvert on the canal at Kanaka Durgamma temple at Pasarlapudi, Konaseema District	9.47

6.7 Food Processing Fund (FPF)

Food Processing Fund with a corpus of ₹ 2,000 crore was established by GoI to provide impetus to the development of the food processing sector on a cluster basis in the country, to reduce wastage of agricultural produce, and to create employment opportunities, especially in rural areas. Under the Fund, NABARD will provide term loans to the State Government, State Government entities, entities promoted by GoI, Joint ventures, SPVs, Cooperatives, Federations of Cooperatives, Farmers' Producer Organizations, corporations, Companies, Entrepreneurs, etc. to set up Food Parks, Infrastructure for Agro-processing clusters and individual processing units in the Designated Food Parks.

6.8 Suggested Action Points

Based on the sectoral priorities of the State Government and the existing gaps in rural infrastructure development, the following action points are suggested for bridging the gaps:

- Rehabilitation and strengthening of the existing rural road network, construction of new roads including link roads for establishing last mile connectivity, maintenance and quality control of rural roads, etc.
- Andhra Pradesh can accelerate its solar energy projects and integrate them with the National Solar Mission, especially given its large potential for solar power generation. The state can also improve grid infrastructure in rural areas, integrating with solar parks and wind energy solutions.
- To educate the farmers for using of scarce water resources judiciously by adopting micro irrigation techniques like drip and sprinkler in the state. Involvement of farmers in the management of irrigation projects. WUAs need to be strengthened and separate budget may be provided in the project cost for capacity building of the members of WUAs.
- Infrastructure funding for ensuring the supply of potable drinking water in all the far-flung habitations and other rural areas in the State.
- Creation of adequate storage and warehousing infrastructure for scientific storage and better marketing of both perishable and non-perishable commodities, particularly cold storage facilities enabling higher income generation for the producers.
- Additional infrastructure such as primary and secondary schools, hostels, etc., to enable effective implementation of Right to Education in the State.
- Infrastructure for rural health care services such as health care centers, sub-centres etc.

6.9 Potential Investments required to be made

Vision Andhra 2047 targets an ambitious growth rate of 15% and aims to increase the GSDP by 15 times. Achieving this kind of growth rates requires huge amount of investments. The investments are also required to be made considering the availability of resources at the ground level, the status of development of the area and such other factors.

Irrigation: Irrigation accounts for almost 90 per cent of the gross public capital formation in agriculture. Private sector investment includes investments by (a) farm households and (b) private corporates. Higher government spending on infrastructure and other capital investments has a crowding-in effect on private investments by raising the marginal productivity of capital. Hence, public investment in agriculture needs to be increased to encourage private investments. Creation of Irrigation Potential continued to be the most prioritized area.

Health: Under Viksit AP 2047 Action plan, Govt has proposed to establish 175 new CHCs, of which 25 CHCs will be established by 2030 and remaining 150 by 2047. Government permitted the APMSIDC to take up the works as regional wise packages for strengthening and upgradation of hospitals under the control of DSH under RIDF Tranche-XXIV/XXV. At present, AP has one CHC per Assembly Constituency and one AH per one Revenue Division.

Education: The literacy rate in AP is 67.35% as per the 2011 census compared to the all-India figure of 72.98%. Mana- badi Mana Bhavishyatu scheme of Govt of AP envisions to improve the educational infrastructure of the state in a phased manner by taking up infrastructural components like provision of additional classrooms, toilets, drinking water supply, etc.

Critical infrastructure gaps are required to be filled in sectors like last mile projects, rural connectivity, increasing the storage space for agricultural products and health & education needs. Huge benefits can accrue to the people if these gaps are plugged immediately.

Important Policies and Development

7.1 Policy Initiatives - GoI (including Cooperatives)

Cooperative Development

The Ministry of Cooperation, GoI, has taken 54 initiatives to strengthen and deepen the cooperative movement at the grassroots level. The ministry, in coordination with state governments, NABARD, national level federations, and other stakeholders, is working on the following initiatives:

- **World's Largest Grain Storage Plan in Cooperative Sector (WLGSP)** The Ministry of Cooperation (MoC), GoI, is implementing a Pilot Project for the World's Largest Grain Storage Plan in the Cooperative Sector. The Pilot Project entails setting up grain storage infrastructure, including warehouses and silos, along with other agri-infrastructure, including Procurement Centres, Custom Hiring Centers, Primary Processing Centers, Grameen Haats, etc.
- **Centrally Sponsored Scheme for Computerization of Primary Agricultural Credit Societies (PACS)** The Government has approved a scheme for Computerization of Primary Agricultural Credit Societies (PACS) with the objective of increasing efficiency of PACS, bringing transparency and accountability in their operations, facilitating PACS to diversify their business, and undertake multiple activities/services. A total of 63,000 PACS have been taken for computerization under the project.
- **Establishing Multi-purpose PACS/Dairy/Fisheries cooperatives** in every panchayat with support of NABARD, NDDB, NFDB, NCDC, and other National level Federations
- **PACS as Common Service Centers (CSCs)** for better access to e-services The Ministry of Cooperation has announced supporting more than 300 e-services through PACS in association with MeitY, NABARD, and CSC e-Governance Services India Limited.
- **Micro-ATMs to Bank Mitra Cooperative Societies** for providing doorstep financial services
- **Computerization of Agriculture and Rural Development Banks (ARDBs)** To strengthen the long-term cooperative credit structure, the project of computerization of 1,851 units of Agriculture and Rural Development Banks (ARDBs) spread across 13 States/Union Territories has been approved by the Government. NABARD is the implementing agency for the project and will develop national-level software for ARDBs.
- **Co-operative Education - Setting up of World's Largest Cooperative University** This aims at the introduction of cooperative education in independent degree/diploma courses in Schools and Universities.
- **World's Largest Cooperative Training Scheme** This aims at revamping the existing cooperative training structure in the country.
- **New Cooperative Policy** with a view to strengthen the cooperatives and make them vibrant with increased contribution to the economy.
- **Amendment to Multi State Cooperative Act 2002** and setting up of 3 new Multi State Cooperative Society (MSCS) in the areas of seed production and marketing; organic products and export from the cooperative sector.
- **To provide facilities at par with FPOs for existing PACS**
- **Establishment of National Cooperative Database**

Digital Agriculture Mission

The Digital Agriculture Mission (DAM) aims to revolutionize India's agriculture sector by leveraging digital technology inspired by the success of India's digital revolution in other sectors. With a substantial financial outlay of 2,817 crore, it focuses on creating a Digital Public Infrastructure (DPI) for agriculture.

- **Agri Stack:** Key components of the mission include the Agri Stack—a farmer-centric DPI to streamline services with the creation of a unique digital Farmer ID linked to important farmer data such as land records and crop details.
- **Vistaar (Virtually Integrated System to Access Agricultural Resources):** The Vistaar initiative of MoA & FW is an open, interoperable, and federated network dedicated to agricultural information and advisory services with a mission to empower farmers and enhance their farming practices for a better sustainable livelihood.
- **Jan Samarth Portal:** The Jan Samarth Portal, a GoI initiative, is a unique digital portal linking credit-linked schemes for ease of access to all the beneficiaries and related stakeholders. Schemes such as e-Kisan Upaj Nidhi, KCC, AIF, etc. are accessible through the portal.

Agriculture Infrastructure Fund (AIF) Scheme

The Agricultural Infrastructure Fund (AIF) has played a pivotal role in transforming India's agricultural landscape. In addition to existing activities, the purview of the AIF scheme has now been extended to the following:

- **Viable Farming Assets:** The scheme now includes the creation of infrastructure for viable projects for building community farming assets.
- **Integrated Processing Projects:** The list of eligible activities under AIF now includes integrated primary and secondary processing projects.
- **PM KUSUM Component:** The aim is to promote sustainable clean energy solutions alongside agricultural infrastructure development.
- **Enhanced Credit Guarantee Coverage:** The government proposes to extend AIF credit guarantee coverage for FPOs through the NABSanrakshan Trustee Company Pvt. Ltd.

Dairy Processing & Infrastructure Development Fund (DIDF)/Animal Husbandry Infrastructure Development Fund (AHIDF)

The government has approved the merger of DIDF with AHIDF and the extension of AHIDF for another three years till 31 March 2026. Further, NABARD is included as a loaning entity under the revamped AHIDF scheme.

Fisheries & Aquaculture Infrastructure Development Fund (FIDF)

The GoI has extended the scheme for a period of another 3 years from 01.04.2023 to 31.03.2026.

Framework for Voluntary Carbon Market (VCM) in Agriculture Sector:

The Ministry of Agriculture and Farmers Welfare GoI has launched a Framework for Voluntary Carbon Market in Agriculture Sector. Under the Framework the Ministry envisages creating long-term carbon credit benefits primarily for small and marginal farmers by developing a VCM Framework and setting guidelines. NABARD is the nodal agency to coordinate and implement the various pilot projects under the VCM.

PM JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan):

PM JANMAN is a recently launched initiative by the Government of India specifically designed to address the socio-economic challenges faced by the Particularly Vulnerable Tribal Groups (PVTGs) across the country. The program aims for the comprehensive development of 75 PVTGs in 18 states and 1 Union Territory with an allocation of 24104 crore.

7.2 Union Budget**7.2.1 Important Announcements**

- Digital Public Infrastructure for Agriculture: Issuance of Jan Samarth based Kisan Credit Cards.
- Release of new varieties: 109 varieties of 32 high-yielding and climate -friendly crops will be released for cultivation by farmers.
- Natural Farming: To increase productivity as well as reduce input costs one crore farmers will be linked to natural farming in the next two years. Further 10000 need-based bio-input resource centres will be established.
- Vegetable production & supply chain: To bolster vegetable supply chains the budget proposes the creation of large-scale production clusters near major consumption centres by promoting Farmer-Producer Organizations (FPOs) cooperatives and start-ups for vegetable supply chains including for collection storage and marketing.
- Budget focusses on development of Digital Public Infrastructure (DPI) a digital crop survey for Kharif crops will be conducted in 400 districts.
- A network of nucleus breeding centres for shrimp broodstocks will be established with funding for shrimp farming and exports facilitated through NABARD.
- Pradhan Mantri Janjati Unnat Gram Abhiyan will be launched to improve the socio-economic condition of tribal communities.
- Mudra Loans: The limit enhanced to 20 lakhs from the current 10 lakh under the Tarun category.
- Credit Guarantee Scheme for MSMEs in the Manufacturing Sector will be introduced for facilitating term loans for the purchase of machinery and equipment without collateral or third-party guarantee.
- Development of Twelve industrial parks under the National Industrial Corridor Development Programme.
- Phase IV of PMGSY will be launched to provide all-weather connectivity to 25,000 rural habitations.
- Assistance for flood management and related projects in Assam, Bihar, Sikkim & Uttarakhand. Assistance for reconstruction and rehabilitation in Himachal Pradesh.
- **Taxonomy for Climate Finance:** Government will develop a taxonomy for climate finance for enhancing the availability of capital for climate adaptation and mitigation-related investments.
- **Skilling the workforce to create employment opportunities:** For raising the participation of women in the workforce, the budget aims to organize women-specific skilling programmes and promote market access for women SHG enterprises. 1,000 Industrial Training Institutes are likely to be upgraded for this purpose.
- **MSME Units for Food Irradiation Quality & Safety Testing:** Financial support for setting up 50 multi-product food irradiation units in the MSME sector will be provided.

Setting up 100 food quality and safety testing labs with NABL accreditation will be facilitated.

- **Water Supply and Sanitation:** In partnership with the State Governments and Multilateral Development Banks, the Government will promote water supply, sewage treatment, and solid waste management projects and services for 100 large cities through bankable projects. These projects will also envisage the use of treated water for irrigation and filling up of tanks in nearby areas.

7.2.2. Highlights Related to Agriculture & Farm Sector

Priorities Identified for Agricultural Sector

- Transforming Agricultural Research
- Release of New Varieties
- Natural Farming
- Mission for Pulses and Oilseeds
- Vegetable Production and Supply Chains
- Digital Public Infrastructure (DPI) for Agriculture
- Shrimp **Production and Export**

Focus Areas

- Productivity and Resilience in Agriculture
- Employment & Skilling
- Inclusive Human Resource Development and Social Justice
- Manufacturing & Services
- Urban Development
- Energy Security
- Infrastructure
- Innovation Research & Development
- Next Generation Reforms

i. Policy Initiatives - RBI

- **Master Circular on Lead Bank Scheme: SHG-Bank Linkage Programme and Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) SHG - Bank Linkage consolidating the relevant guidelines/instructions issued by Reserve Bank of India.**
- **RBI's Green Deposit Framework:** The Green Deposit Framework by RBI is designed to encourage regulated entities (REs) in India such as scheduled commercial banks and deposit-taking non-banking financial companies to offer green deposits. These deposits are earmarked for financing projects that contribute to environmental sustainability, such as renewable energy, energy efficiency, and pollution control. REs must develop and publicly disclose a comprehensive policy and financing framework detailing how funds will be allocated and managed.
- **Unified Lending Interface (ULI):** The Reserve Bank of India (RBI), as part of its strategy to create digital public infrastructure in the country, has announced re-engineering of setting up a new technology platform called the Unified Lending Interface (ULI), which will enable frictionless credit to farmers and MSME borrowers to begin with. The eKCC Portal developed by NABARD has already been integrated with the ULI for fetching and validation of land records to facilitate the dispensation of crop loans to farmer members of cooperatives.

ii. Policy Initiatives - NABARD

- **Refinance Support:** NABARD provides Short Term refinance to Cooperatives, RRBs, and SFBs for their crop loan lending. To ensure increased and uninterrupted credit flow to farmers as also to give a boost to capital formation in the agriculture sector, NABARD provides refinance to the Commercial banks, cooperative banks, and RRBs.
- **Schematic Refinance for Water Sanitation and Hygiene (WASH):** To provide clean water, sanitation, and hygienic conditions to rural and semi-urban areas and thereby to protect human health during the outbreak of infectious disease, NABARD introduced a special refinance scheme on Water Sanitation and Hygiene (WASH).
- **Special Refinance Scheme (SRS) on PACS as MSCs:** NABARD introduced the Special Refinance Scheme to saturate all the potential PACS for conversion as Multi Service Centres over a period of three years commencing from the year 2020-21.
- **Credit-linked Subsidy Schemes of GoI**
 - **New Agriculture Marketing Infrastructure sub-scheme of Integrated Scheme for Agricultural Marketing (ISAM):** GoI had approved the continuation of the scheme till 31 March 2026. The scheme lays special focus on developing and upgrading Gramin Haats as GrAMs through strengthening of infrastructure.
 - **Agri Clinics and Agri Business Centres (ACABC):** The Central Sector Scheme of Agri-Clinics and Agri-Business Centres was launched in April 2002 by the Ministry of Agriculture, GoI. A composite subsidy of 44% of the project cost for women, SC/ST, and all categories of candidates from Northeast and Hill states and 36% of the project cost for all other beneficiaries is provided under the scheme.
- **Interest Subvention Schemes of GoI**
 - NABARD implements the crop loan interest subvention scheme of GoI for Cooperative Banks and RRBs under which interest subvention of 1.5% is provided to banks for extending crop loans up to 3 lakh at a concessional interest rate of 7% per annum. The scheme also provides an incentive of 3% subvention to the farmers making prompt repayment of loans thereby making credit available at an effective interest of 4% per annum.
 - **NRLM Interest Subvention:** NABARD also implements the interest subvention scheme under DAY-NRLM for Cooperative Banks and RRBs. NABARD has developed a web portal for NRLM Interest Subvention claims by RRBs and Cooperative Banks in respect of WSHGs financed by them under DAY-NRLM.
 - GoI introduced the Sugar Ethanol Interest Subvention scheme in 2018-19 with a view to increasing the production of ethanol and its supply under the Ethanol Blended Petrol (EBP). NABARD is the nodal agency responsible for managing the Sugar Ethanol Interest Subvention Scheme of the Department of Food and Public Distribution (DFPD), Government of India. NABARD has launched a sugar ethanol portal to speed up the claims settlement process.
- **Rural Infrastructure Development Fund (RIDF)**

RIDF instituted in NABARD during 1995-96 with the main objective of providing loans to State Governments for completing ongoing rural infrastructure projects. At present, it covers as many as 39 activities classified under three broad sectors viz. (i) Agriculture and Related sector (ii) Social Sector and (iii) Rural Connectivity.
- **Micro Credit Intervention**

NABARD has been extending grant support to partner agencies for the promotion and nurturing of SHGs, training, and capacity building of SHG members and other stakeholders,

besides initiating special programmes for backward regions. A few recent initiatives taken under micro credit are as under:

- Scheme for grant support to SHGs/JLGs/POs/Microentrepreneurs for training on onboarding onto E-Commerce platforms/ONDC/social media platforms.
- Scheme for Grant Support to SHGs/JLGs/POs for Physical Marketing of Products.
- NABARD in 2023-24 announced guidelines for a pilot project to be taken up by Regional Offices titled m-Suvidha (Microenterprises through Skill Upgradation for Women) to support need-based and location-specific developmental projects by strategizing end-to-end interventions.
- Pilot Project: Real-time banking solution for SHGs (Money Purse Application)
- **Pilot Project - Graduated Rural Income Generation Project (GRIP): A pilot project to build capacities and enable asset generation by ultra-poor rural women and graduating them to access formal financial services through the innovative concept of returnable grant was sanctioned during 2023-24.**
- **MoU with NRLM MoRD: Marking a strategic alliance to benefit rural women** SHGs, NABARD and the National Rural Livelihood Mission (DAY-NRLM) under the Ministry of Rural Development, GoI, inked a landmark MoU on 27 February 2024.

• Financial Inclusion

Major Policy interventions and launching of new Schemes under the fund during 2023-24 include:

- Support for the Deployment of micro-ATMs to two District Central Co-Operative **Banks** in Gujarat with a grant support of 3.67 crore for deploying 1,631 microATM devices at PACS (440) and cooperative milk societies (1,191).
- Financial Inclusion under Special Campaign 3.0: RRBs under the guidance of NABARD conducted Special Financial Literacy Camps during October 2023.
- Support under Financial Inclusion Fund (FIF) for Rural Connectivity-HTS-VSAT, Dual LTE, and SD WAN technologies.
- Incentive Scheme for BCs operating in NE States and hilly states.

• Farm Sector Development

- **Participatory Sustainable Groundwater Management in Overexploited Blocks/Watersheds:** A pilot project titled "Participatory Sustainable Groundwater Management in Overexploited Blocks/Watersheds" has been launched in five states: Punjab, Haryana, Rajasthan, Uttar Pradesh, and Tamil Nadu. This innovative pilot initiative by NABARD is the first of its kind aimed at demand-side management of water at the micro-watershed/village level.
- **Expansion of JIVA:** Based on the success of the pilot phase, JIVA is being expanded to 25 new projects in central, eastern, and north-eastern states to further widen and deepen the programme focusing on completed or near-completion watershed/springshed and tribal development projects with thrust on districts identified under aspirational/low priority sector lending districts.
- **Accelerator Approach for Growth of FPOs:** NABARD has come up with the FPO accelerator programme, which is a structured framework to empower FPOs by providing access to specialized training, mentorship, and resources, envisaging the

enhancement in FPOs' operational efficiency, adoption of modern agricultural techniques, and navigation of market complexities.

- **Saturation Drive Campaign:** The Government has launched the saturation drive to provide FPOs benefits of schemes of the Agriculture department in the form of licenses for inputs, seeds, fertilizer, etc. FPOs will also be linked to mandis and facilitated with registrations under GST, FSSAI, and onboarding on platforms like ONDC and other e-retailing platforms for the sale of their produce.
- **National FPO Policy:** MoA&FW, GoI, is working on the finalization of a National Policy on FPOs to create a supportive environment for the FPOs after ongoing deliberations and consultative meetings on the draft policy.

- **Climate Action and Sustainability**

NABARD is a Direct Access Entity (DAE) to the Green Climate Fund (GCF) and the National Implementing Entity (NIE) to the Adaptation Fund (AF) and National Adaptation Fund for Climate Change (NAFCC).

- **Off Farm Sector Development**

- **Capacity Building Fund Social Stock Exchange (CBF-SSE):** The Capacity Building Fund of Social Stock Exchange (CBF-SSE) was set up in NABARD with funding to be contributed by NABARD, SIDBI, BSE, NSE, and others. CBF is being used to improve the ability of all stakeholders to navigate through the operational dynamics of SSE, understand the nuances, processes, instruments, etc.
- **Gram Vihar New Scheme for Promotion of Rural Tourism:** A new scheme named "Gram Vihar" has been introduced to give a fillip to the rural tourism sector in the country by promoting "homestay," wherein tourists stay with the local families and experience rural lifestyle, as well as "away-day," i.e., one-day trips without night stay.

- **Agriculture Credit during 2023-24:**

Disbursement of agriculture credit during 2023-24 was 25.10 lakh crore as against a target of 20.00 lakh crore, indicating an achievement of 125%. Commercial Banks, RRBs, and Co-operatives accounted for 75%, 13%, and 12% of the total disbursement, respectively.

- **Technology Facilitation Fund (TFF):**

NABARD has set up a Technology Facilitation Fund (TFF) with a corpus of 50 crore. The fund is focused on providing support to tech start-ups working in the agriculture and rural development sector. The fund provides a range of flexible support mechanisms including grants, loans, equity, and convertible grants designed around the needs of each start-up.

Policy Initiatives - State Govt.

1. Important policies of State Government

The Government of Andhra Pradesh has set an ambitious vision for Swarna Andhra @2047, aiming to transform the state into a global leader in economic, social, and environmental spheres by 2047.

Padi Sutralu (Ten Guiding Principles): The ten guiding principles of Swarna Andhra @2047 form the foundation of the state's long-term policy framework and vision for development.

The principles focus on eliminating poverty by promoting inclusive growth and equitable resource distribution, while generating diverse employment opportunities and building a global skilling ecosystem. Ensuring sustainable water security and equitable access to water resources is a key priority, alongside leveraging advanced agricultural technologies to improve sustainability and farmer incomes. Establishing a world-class logistics network to enhance connectivity and economic growth is emphasized, along with optimizing energy and fuel costs through renewable energy for self-reliance.

Other objectives include ensuring stringent quality standards across all sectors to achieve product perfection, integrating sanitation and hygiene initiatives under Swachh Andhra with circular economy principles, and driving innovation by incorporating deep technologies into everyday life. These principles collectively aim to transform Andhra Pradesh into a globally competitive, inclusive, and sustainable state.

Food Processing policy: GoAP brought out the Andhra Pradesh Food Processing Policy 4.0 (2024-29) which aims to transform the state into a leading food processing hub by 2029, leveraging advanced technology, innovation, and entrepreneurship to reduce post-harvest losses, boost value addition, and integrate with global markets.

Emphasizing value addition across agriculture, horticulture, aqua, and animal husbandry sectors, the policy prioritizes secondary and tertiary processing to enhance profitability and export potential. Infrastructure development is central, with plans for 9 Mega Food Parks, 77 MSME Parks, 175 Nano Food Parks, and four export hubs, along with cold chain facilities, irradiation units, modern abattoirs, and NABL-accredited food testing labs.

The policy promotes sustainability through waste-to-energy practices, resource optimization, and eco-friendly processing, while supporting MSMEs and entrepreneurs with fiscal incentives, including capital subsidies, power tariff reimbursements, SGST reimbursements, and quality certification reimbursements.

It also emphasizes skill development, organic food processing, and circular economy practices to ensure sustainability. Implemented by the Andhra Pradesh Food Processing Society (APFPS) in coordination with state and central schemes, the policy targets ₹30,000 crore in investments, three lakh jobs, and \$1 billion in FDI, positioning Andhra Pradesh as a premier destination for food processing, driving economic growth, and enhancing global exports.

The MSME policy (2024-29) brought out by GoAP in October 2024 aims to foster innovation, employment, and sustainable growth while integrating MSMEs into global markets. Key objectives include reducing regional disparities, modernizing infrastructure, and enhancing competitiveness.

To support MSME growth, the policy offers a variety of financial incentives. A total of ₹500 crore is allocated for modernizing infrastructure and equipment, enabling businesses to

upgrade their facilities. Additionally, ₹200 crore is earmarked for subsidized electricity tariffs to reduce operational costs, while ₹150 crore is designated for export promotion, covering expenses for trade fair participation and export certifications.

Infrastructure development forms a key component of the policy. Plans include the creation of 15 industrial clusters to provide shared resources that minimize operational expenses and enhance productivity. Furthermore, 10 MSME parks are being developed with plug-and-play facilities, enabling businesses to focus on their core activities while reducing startup challenges.

Status of Cooperatives in the State: Andhra Pradesh has an integrated three-tier cooperative credit structure, with short-term and long-term credit functions under one umbrella. The APStCB is at the apex level with 18 branches and 13 DCCBs are operating at the district level through 451 branches. A total of 2037 PACS are functioning at the village level.

Financial position of APStCB: The total deposits of APStCB as on 31 March 2024 were ₹10306.96 crore, while the total borrowings were ₹22658.81 crore. The total loans and advances extended by APStCB were ₹27793.27 crore and total investments stood at 2041.40 crore. The CRAR of the APStCB stood at 9.60%

Status of CBS in cooperative banks: APStCB migrated to new CBS B@NCS24 of TCS w.e.f. 4th July 2021, as part of NABARD initiated CBS project. The process of migration to the new CBS has been completed in all DCCBs. The APStCB is providing other services like RTGS/NEFT, ATM facility and the issue of RuPay debit cards to its customers. The DCCBs are also providing RTGS and NEFT under sub-route through StCB. ATMs are also installed in DCCBs and RuPay debit cards are issued on a small scale. SMS facility is also extended by all the banks.

Business Development and Product Innovation Cell: With NABARD's assistance, APStCB constituted BDPI Cell at its Head Office to integrate new products into the existing product lines emphasising a focus on the development of new products for business improvement and re-engineering of the existing product basket.

Centrally Sponsored Project for PACS Computerisation (CSPCP): The computerization of PACS in Andhra Pradesh has seen significant progress. Out of the total 2040 PACS in the state, 2035 PACS have been sanctioned under the CSPCP for computerization, following necessary mergers and re-affiliations. Hardware delivery is complete for 2021 PACS, and installations have been finalized for 2019 PACS. Additionally, 1737 PACS have successfully completed the Digital Core Transformation (DCT) sign-off process.

To support the initiative, 27 centers, including a State Project Management Unit (SPMU) and 26 District Project Management Units (DPMUs), have been established for effective implementation and monitoring. APCOB has trained 24 Core Master Trainers, 74 Master Trainers, and 27 PACS auditors on the e-PACS audit module, with further training plans underway.

A state-specific dashboard has been developed for comprehensive monitoring and provided to district collectors and cooperative officials for enhanced oversight. The computerization initiative is progressing efficiently, ensuring streamlined operations and better service delivery at PACS.

2. State Budget

2.1. Important Announcements

- The budget for the financial year 2024-25 has been proposed with a total expenditure of ₹2.94 lakh crore. Of this, revenue expenditure is estimated at ₹2.35 lakh crore, and capital expenditure is set at ₹32,712.84 crore. The revenue deficit stands at ₹34,743.38 crore, which is 2.12% of GSDP, while the fiscal deficit is projected at ₹68,742.65 crore, accounting for 4.19% of GSDP.
- The Gross State Domestic Product (GSDP) of Andhra Pradesh for 2024-25 (at current prices) is estimated at ₹16.41 lakh crore, amounting to growth of 12.5% over 2023-24.
- The government has prioritized balancing welfare and development, emphasizing inclusive growth and sustainable economic recovery.
- The Andhra Pradesh Budget for 2024-25 has outlined significant allocations across key sectors to ensure inclusive growth and sustainable development. The Panchayat Raj and Rural Development sector received ₹16,739 crore, highlighting the government's commitment to grassroots development. School education continues to be a priority, with an allocation of ₹29,909 crore, while ₹18,421 crore has been set aside for healthcare and family welfare to enhance medical infrastructure and services. Welfare measures for marginalized communities feature prominently, with ₹39,007 crore allocated for Backward Classes, ₹18,497 crore for Scheduled Castes, and ₹7,557 crore for Scheduled Tribes. Urban development has also received a boost with ₹11,490 crore allocated to Municipal Administration and Urban Development, focusing on urban growth and the continued development of Amaravati as the capital city.
- The Water Resources Department has been allocated ₹16,705 crore, reflecting the government's focus on irrigation projects and the introduction of a new Water Policy. In line with sustainable energy goals, the Energy Department has received ₹8,207 crore under the AP Integrated Clean Energy Policy 2024. Agriculture and allied sectors remain a cornerstone of the state's development strategy, with a dedicated and full-fledged budget outlay of ₹43,402 crore.
- **Agriculture:** The 'Annadata Sukhibhava PMKISAN' scheme has been introduced to provide investment support to eligible farmers.
- Social security pensions under the NTR Bharosa Pension Scheme have been enhanced to ₹4,000 per month, benefiting 64.38 lakh pensioners. The Deepam 2 scheme has been launched to provide 3 free LPG cylinders annually to eligible households, with ₹895 crore allocated for the first phase. The Housing for All initiative aims to deliver 25 lakh houses/house site pattas by 2029 under PMAY, with 6.9 lakh urban and 1.79 lakh rural houses planned for completion in the current fiscal year.
- Revival of the Amaravati Outer Ring Road project has been announced, alongside securing ₹15,000 crore for Amaravati capital city development through multilateral agencies.
- Andhra Pradesh is undertaking a first-of-its-kind Skill Census to assess workforce competencies and match them to industry demands, creating 20 lakh employment opportunities.
- The announcements in Budget 2024-25 like 192 Skill Hubs, Skills University, and Skill International programmes aim to bridge skill gaps and tap into global job markets.
- Housing: Under Housing for All, 25 lakh houses/ house pattas will be provided to economically weaker sections by 2029. Around nine lakh houses will be completed under PMAY.

2.2 Budget - Highlights related to Agriculture & Farm Sector

- The Government of Andhra Pradesh presented the exclusive Agriculture and Allied Sectors Budget for the financial year 2024-25 with a total outlay of ₹43,402 crore.
- GoAP introduced the Annadata Sukhibhava Scheme under Budget 2024-25 to support and enhance the welfare of farmers in the state. It aims to provide financial assistance of ₹20,000 per year to farmers, disbursed in three equal instalments towards investment support. This support consists of ₹6,000 from the central government and ₹14,000 from the state government. An amount of ₹4500 crore has been allocated for FY2024-25 towards this scheme.
- Programmes like Polam Pilusthondi, Vaddi Leni Runalu (interest-free loans), Soil Health Cards, and Polambadi (field schools) aim to enhance productivity and ensure comprehensive support to farmers.
- **Vaddi Lenu Runalu:** The State Government provides interest relief/ subvention of 4% on loans upto ₹ 1 Lakh under Vaddi Leni Runalu Scheme.
- **Polam Pilusthondi Campaign:** A field-based initiative where officials and scientists visit agricultural fields twice a week during kharif and rabi seasons to identify and address issues. Problems that cannot be resolved on-site will be escalated to higher authorities for solutions.
- An amount of ₹39 crore has been allocated for collecting and testing 4.50 lakh soil samples across the State. Based on the analysis of these samples, Soil Health Cards will be issued to farmers, providing recommendations for the use of fertilizers and micronutrients to improve soil health and agricultural productivity.
- The Andhra Pradesh Government has announced the implementation of drone-based services in all villages over the next three years to enhance agricultural monitoring and operations. The initiative includes the establishment of 875 service centers to support these activities. Drones will be utilized for tasks such as pest and disease identification, crop health monitoring, and precise application of fertilizers and pesticides. An allocation of ₹87.50 crore has been made for this purpose.
- **Natural Farming:** GoAP has allocated ₹423 crore towards Natural Farming. This initiative aims to expand the area under natural farming from 4.86 lakh hectares to 6.64 lakh hectares, while increasing the number of practitioners from 10.30 lakh to 13 lakh, thereby fostering environmentally friendly and economically viable farming practices across the State.
- ₹14,637 crore is earmarked for the maintenance of irrigation projects to ensure water availability for agricultural activities.
- Free power scheme: ₹7,241 crore has been allocated to provide free power to farmers, enabling cost-effective agricultural practices.
- "₹1,023 crore is allocated for a Government-backed crop insurance scheme to safeguard farmers against crop losses.
- Crop insurance is being restructured into a voluntary enrollment model from Rabi 2024-25, allowing farmers greater flexibility to choose participation based on individual needs."
- Andhra Pradesh continues to lead in livestock production, ranking 1st in egg production, 4th in meat production, and 5th in milk production. Measures like the Livestock Insurance Scheme, along with provisions for fodder, shelter, and medical care, are expected to boost rural livelihoods and incomes for communities dependent on livestock.
- Subsidized diesel will benefit 23,000 fishing boats, providing cost relief and supporting the marine and inland fishing industries.

2.3 Budget - Highlights related to Rural Development & Non-Farm Sector

- The government's rural development strategy aims to empower local communities, strengthen rural infrastructure, and foster sustainable livelihoods. The Department of Panchayat Raj and Rural Development has been allocated ₹16,739 crore
- Special Gram Sabhas were conducted across all 13,326 Gram Panchayats for participatory planning of MGNREGS activities, setting a world record.
- Initiatives under the "Swarna Panchayats" program aim to revitalize the Panchayat Raj system and promote local self-governance.
- Over 1.2 million households have completed 100 days of wage employment under MGNREGS, which now integrates with 16 line departments for projects such as horticulture, water resource management, and livestock shelters.
- The government is actively supporting SHGs by aligning with national schemes like PM Employment Generation Program and PM Vishwakarma, promoting digital commerce through ONDC, and enabling SHG members to access broader markets. By December 2024, over 5 lakh SHG women were connected to digital platforms for expanding their businesses.
- MGNREGS is now integrated with 16 departments, supporting projects that include - Horticulture Development for expansion of sustainable farming practices, Livestock Shelters for extending Infrastructure support for cattle and poultry owners, Natural Resource Management for extending support for projects such as rooftop water harvesting, percolation tanks, and check dams to ensure water security in rural areas.
- Affordable housing for marginalized groups continues under PMAY, with 15,000 homes earmarked for Vulnerable Tribal Groups (VTGs) and 1.79 lakh rural homes targeted for completion under PMAY-Gramin.
- Over 192 Skill Hubs are being established, with programs to enhance the employability of rural youth in non-farm sectors.
- A Skill Census is underway, identifying gaps to align skilling efforts with market demands.
- Targeted capacity-building efforts are focused on providing sustainable incomes through training artisans and micro-entrepreneurs and facilitating access to government subsidies and financing.

3. Govt. Sponsored Programmes linked with Bank Credit

Vaddi Leni Runalu: The State Government provides interest relief/ subvention of 4% on loans upto ₹ 1 Lakh under Vaddi Leni Runalu Scheme.

Success Stories

Prakasam District

She Believed She Achieved: Celebrating Women in Business

1. **Scheme:** Livelihood and Enterprise Development Programme (LEDP)
2. **Project Implementing Agency:** SHARPS (Searching and Helping in All Rehabilitation Purpose Society)
3. **Duration of the Project** : 2 Years
4. **Beneficiary:**
 - No. of beneficiaries : 90
 - Community : Scheduled Caste
 - State : Andhra Pradesh
 - District : Prakasam
 - Block : Darsi
 - Village : Darsi

5. Support Provided

NABARD has sanctioned ₹7,15,500 to train matured SHG women beneficiaries in producing Millets-Based Instant Products. The support includes refresher training on social security, subsidy schemes, and e-marketing, along with an exposure visit to a successful business. Throughout the project, the implementing agency will provide handholding support until enterprise units are established. Training was conducted by KVK Darsi scientists, and NABARD is also assisting in marketing through melas, exhibitions, and e-commerce platforms.

6. Pre-implementation Status

The majority of beneficiaries belong to marginalized communities engaged in informal labor, earning ₹6,000–₹7,000 per month only. Through the NABARD-supported project, women received skills training, business awareness, and exposure, empowering them to establish enterprise units. Those who set up their businesses saw their monthly incomes rise to ₹10,000–₹12,000, enabling them to work from home and achieve financial independence.

7. Challenges Faced

The Implementing Agency initially faced challenges in identifying eligible beneficiaries. Other difficulties included ensuring regular attendance, arranging raw materials, and determining proper pricing. The major challenge was credit linkage as significant time was spent convincing bankers to sanction loans for women to establish their enterprise units.

8. Impact

A unit was established in Darsi by trained beneficiaries to sell Ready-to-Cook and Serve Millet-based products. Additionally, they introduced their own Millet-based snacks. The unit generates an estimated ₹97,500 monthly, with an average income of ₹10,500 per person per month.



*Beneficiaries operating the Ready to cook
& serve unit*



DDM felicitating the LEDP beneficiary

Success Stories

Annamayya District

Harvesting Hope: The Impact of “Maa Thota” Tribal Farmers

1. **Scheme:** Wadi - Tribal Development Fund (TDF)
2. **Project Implementing Agency:** Rashtriya Seva Samithi (RASS)
3. **Duration of the Project:** 2010-2019
4. **Beneficiary:**
 - No. of beneficiaries : 1000
 - Community : Tribal
 - State : Andhra Pradesh
 - District : Annamayya
 - Block : Kambhamvaripalle
 - Village : Jillellamanda
5. **Support Provided**
 - Sprouting from a vision to empower tribal families provided financial support for cultivating one-acre orchards cultivating not just increased income but also a fruitful decline in anti-social activities nurturing a flourishing landscape of prosperity in the region.
 - 1000 tribal families spread across 07 villages have been provided grant support of ₹3.92 crore for Wadi development of Mango and Sapota fruit crops in the tribal area. Long term assets in the form of a variety of border plantation of different varieties.
 - Support for livelihood and income-generation activities.
 - Various capacity-building programs for effective utilisation of available natural resources.
 - Drilling borewells and Installation of drip irrigation.
 - Convergence with the State Agriculture Department APSPDCL Micro irrigation Dept of Soil and water conservation NEDCAP Dept. of Horticulture etc.
 - Provided RO water plant to minimize the risks of drinking water.
6. **Pre-implementation Status**

The beneficiaries primarily engaged in subsistence farming, with a low average gross income per acre. The tribal communities either cultivated rainfed crops such as groundnut or left their lands fallow. Furthermore, these communities often did not fully utilize their available land for productive agricultural activities, largely due to a lack of knowledge and resources. The farming practices employed were predominantly traditional and not optimized for high yields. The absence of external inputs, combined with poor agronomic practices, further contributed to low agricultural productivity. Additionally, there was a high incidence of migration, particularly among the women workforces.
7. **Challenges Faced**
 - Non-availability of Water: Depletion of groundwater and struggle for drinking water.
 - In this region the tribal communities were vulnerable to anti-social activities including human trafficking due to the lack of stable and sufficient income from agriculture.
 - The lack of basic infrastructure such as roads and power further hindered agricultural productivity and market access.
8. **Impact**

- **Economic Upliftment:** Increased agricultural productivity and household incomes through sustainable practices and commercial cropping.
- **Social Empowerment:** Enhanced socio-economic conditions and quality of life especially for women and socially challenged sections.
- **Reduced Vulnerability and Anti-Social Activities:** Decreased susceptibility to anti-social activities by providing sustainable livelihoods.
- **Community Development:** Strengthened community ownership cooperation and local institutions through capacity building.
- **Beneficiaries Environmental Sustainability:** Promoted resource conservation and long-term agricultural productivity through sustainable practices.

Beneficiaries



Beneficiaries with Mango Tree



Success Stories

Chittoor District

Harvesting Hope: Palamaner Farmers Producer Company Limited (PFPCCL) a FPO formed by NABARD

1. **Scheme:** PODF (ID)
2. **Project Implementing Agency:** PMVRS (Palamaner Mandala Vyalaga Rythula Samakhya)
3. **Duration of the Project:** Five Years
4. **Beneficiary:**
 - No. of beneficiaries : 780
 - Community : Farmers
 - State : Andhra Pradesh
 - District : Chittoor
 - Block : Palamaner
 - Village : 17 villages in Palamaner & Gangavaram Mandals
5. **Support Provided**
 - The FPO was extended grant assistance of ₹14.76 lakh to support the activities including registration charges, farmer mobilisation/capacity building programs, BoD trainings, meetings, salaries of CEO & Accountant etc.,
 - An amount of ₹5.00 lakh was extended to FPO towards Matching grant as Share capital.
 - Financial assistance of ₹4.17 lakh was extended as 50% grant support towards purchase of Mobile Van (Rural Mart) for FPO operations.
6. **Pre-implementation Status:**

Before the project's intervention, the sector was largely unorganized, with farmers primarily engaged in mono-cropping, limiting diversification and resilience. The absence of proper post-harvest handling led to significant damage to vegetables, reducing market value and profitability. Farmers were heavily reliant on commission agents at market yards, resulting in lower earnings and limited bargaining power. Most produce was sold at farm gate, restricting access to broader markets. Further, there was no established mechanism to assess input quality, affecting overall productivity and output consistency.
7. **Challenges Faced:**

During the initial years, there was low participation and reluctance from farmers to engage actively. One of the primary challenges was their preference for immediate cash payments, making them hesitant to adopt bank transactions, which involved a waiting period of a week or fortnight. This resistance hindered smooth financial operations and acceptance of formalized banking processes.
8. **Impact**
 - Palamaner FPO now conducts regular Board of Directors (BoD) meetings, with the annual meeting drawing participation from over 500 farmers. Departments such as Horticulture, Sericulture, and Agriculture, along with banks, are keen on collaborating with the FPO.

- There has been a consistent supply of high-quality seeds, organic and inorganic fertilizers, cattle feed, pesticides, and insecticides. Additionally, demonstration plots and training programs on crop and water management have been introduced.
- Farmers have been organized into Farmer Interest Groups (FIGs) and Agriculture Finance Groups (AFGs), facilitating collective marketing of vegetables, fruits, and groundnut, while also ensuring access to credit through local banks.
- The FPO has successfully obtained business licenses under GST, e-NAM, and FSSAI, along with other essential certifications such as Seed and Drip licenses.
- To enhance agricultural efficiency, the FPO supplies 8 tons of livestock feed per month, tarpaulins for vegetable sorting, and mulching sheets to improve water efficiency, benefiting around 450 farmers per year.
- The FPO achieved an annual turnover of ₹4.25 crore (2023-24) through the sale of vegetables and agricultural inputs.
- The FPO has been selected by the Andhra Pradesh Food Processing Society to develop an Integrated Cold Storage Unit in Palamaner. The infrastructure is being set up with 100% grant support, with a project cost of ₹3.5 crore, and machinery installation is currently underway.



Palamaner FPO

Appendix I

Climate Action & Sustainability

1.1 Climate Action - Scenario at Global & National Level

Climate Change and its Impact

Climate change is affecting every region on the Earth in multiple ways. The IPCC AR6 highlights that human-induced climate change is intensifying weather and climate extremes, resulting in unprecedented heatwaves, heavy rainfall, and severe droughts. The frequency and intensity of these events are likely to increase, posing significant risks to ecosystems, biodiversity, and human societies.

India is exposed to a wide range of climate and weather-related hazards. With its diverse geographical regions, long coastline, biodiversity, and high dependence on natural resources, India is one of the most vulnerable countries to climate change risks worldwide. Further, more than half of India's population lives in rural areas and depends on agriculture and allied activities, which are highly sensitive to climate change, threatening the livelihoods of people dependent on them.

There is emerging evidence that the productivity of crops, livestock, and fish is likely to be affected, with implications for food security, livelihoods, and sustainability in agriculture. In India, several studies have projected declining crop yields in the absence of adaptation to climate change. As per the district-level risk and vulnerability assessment of Indian agriculture to climate change undertaken by ICAR-CRIDA, 109 districts out of 573 rural districts (19% of total districts) are 'very high-risk' districts, while 201 districts are high-risk districts.

References

- *Sixth Assessment Report (AR6) of the Intergovernmental Panel on Climate Change (IPCC), 2022*
- *ICAR-CRIDA (2019): Risk and Vulnerability Assessment of Indian Agriculture to Climate Change.*

1.2 Climate Finance and Challenges

India's climate finance requirements are enormous. While the preliminary financial estimates for meeting India's climate change actions as per its NDC were USD 2.5 trillion between 2015 and 2030, the estimated financial requirement for India to become net-zero by 2070, as per IFC, is US\$10.1 trillion. Various estimates of financial requirements vary greatly due to differing levels of detail, but they all point to the need for tens of trillions of US dollars. India's updated NDCs also indicate the need to better adapt to climate change by enhancing investments in development programs in sectors vulnerable to climate change. However, financial requirements for adaptation are very large and will increase in the future. To fully meet our NDCs in a timely manner, India requires enhanced new and additional financial, technological, and capacity-building support. However, financial, and technological commitments by developed countries under the Paris Agreement are yet to be fully realized.

1.3 Initiatives of the Government of India

India initiated the National Action Plan on Climate Change (NAPCC) in 2008, which introduced eight National Missions encompassing various efforts. In August 2022, the Government of India displayed greater determination in its efforts to address climate change by submitting its revised Nationally Determined Contribution (NDC) to the UNFCCC. Through Mission LiFE (Lifestyle for the Environment), India advocated for a global shift in

mindset and behaviour, moving away from thoughtless and harmful consumption towards purposeful and conscious utilization.

1.4 Initiatives of the RBI

Climate change is a rapidly emerging area of policy interest for the Reserve Bank of India (RBI). Back in 2007, the RBI advised banks to put in place Board-approved plans of action to help the cause of sustainable development. In 2015, the RBI included loans for the generation of renewable energy and public utilities run on non-conventional energy as part of its priority sector lending (PSL) policy to incentivize the development of green energy sources.

The RBI has also laid out guidance for voluntary initiatives by regulated entities (REs) on green finance, setting up green branches and green data centres, encouraging greater use of electronic communication instead of paper, and promoting renewable energy sources. In early 2023, the RBI issued sovereign green bonds to mobilize resources for the Government for green infrastructural investments. The RBI has also released the framework for mobilizing green deposits by REs.

In February 2024, the RBI issued draft guidelines on the 'Disclosure Framework on Climate-related Financial Risks, 2024.' The framework mandates disclosure by REs on four key areas: governance, strategy, risk management, and metrics and targets. This is a step towards bringing the climate risk assessment, measurement, and reporting requirements under the mainstream compliance framework for financial sector entities in India.

1.5 Initiatives of NABARD

The whole spectrum of NABARD's functions and initiatives focus on the attainment of sustainable development. NABARD's initiatives in the Agriculture, Natural Resources, and Rural Development (ANR) sector have integral components of climate action—both mitigation and adaptation—for vulnerable sectors and communities. NABARD has been playing a key role in channelizing climate finance to the nation as the Direct Access Entity (DAE) and the National Implementing Entity (NIE) for major climate funds such as the Green Climate Fund (GCF), Adaptation Fund (AF), and National Adaptation Fund for Climate Change (NAFCC). This role enables NABARD to access and deploy climate finance effectively, driving impactful initiatives that address the pressing challenges of climate change in the agricultural sector.

In a significant stride towards sustainable development, NABARD recently unveiled its Climate Strategy 2030. The strategy is structured around four key pillars:

- (i) Accelerating Green Lending across sectors
- (ii) Playing a broader Market Making Role
- (iii) Internal Green Transformation of NABARD
- (iv) Strategic Resource Mobilization.

This strategic initiative not only reinforces NABARD's commitment to environmental stewardship but also positions it as a pivotal player in India's transition towards a resilient and sustainable economy.

1.6 Way Forward

India has significantly high climate finance needs. NABARD is dedicated to playing its part in expanding climate financing in India through a range of financial and non-financial initiatives. Our goal is to promote the adoption of innovative and new techniques, and paradigm shifts to build climate-resilient agro-ecological livelihoods and sustainable agricultural systems that are resilient to climate change. The fight against climate change necessitates cooperation, innovation, and a collective commitment to effect change. Currently, it is a crucial time for communities worldwide to expedite climate action before it becomes too late.

2. Climate Change Scenario - At the State Level

2.1 State Action Plan for Climate Change

The Andhra Pradesh State Action Plan on Climate Change (SAPCC) identifies 11 key sectors for climate action:

- **Agriculture:** Climate-resilient crops, efficient water use, bio-fertilizers, and crop insurance.
- **Coastal Zone Management:** Building cyclone shelters, restoring mangroves, and enhancing disaster response to protect coastal areas.
- **Forestry & Biodiversity:** Afforestation, mangrove restoration, and biodiversity conservation through community-led forest management.
- **Energy:** To improve energy efficiency, promote renewable energy, and reduce fossil fuel use.
- **Industries:** Cleaner production, waste management, pollution control, and assessing industrial hubs for climate risks.
- **Transportation:** Public transport and fuel-efficient vehicles to lower emissions.
- **Health:** Focusing on climate-related diseases, strengthening disease surveillance, and public education.
- **Urban Development:** Urban planning with improved drainage, waste management, water conservation, and rooftop solar systems.
- **Tourism:** Promoting eco-tourism, energy-efficient practices, and low-emission transport in tourist locations.
- **Rural Development:** Water supply, sanitation, energy efficiency, and disaster preparedness in rural areas; promoting microcredit for livelihoods.
- **Research:** Climate vulnerability studies and establishing a Climate Change Knowledge Centre.

The plan aims to build a climate-resilient Andhra Pradesh by safeguarding vulnerable sectors and supporting sustainable development.

The state government has established a Climate Change Cell within the Environment, Forests, Science and Technology Department. This cell is responsible for implementing the state action plan and enhancing climate resilience through improved governance. The CCC focuses on mainstreaming climate action plans, developing greenhouse gas emissions inventories, and conducting vulnerability assessments.

The Andhra Pradesh Micro Irrigation Project (APMIP) and rainwater harvesting schemes support SAPCC's focus on water conservation.

The Andhra Pradesh Community Natural Farming (APCNF) program aligns with SAPCC by promoting sustainable, climate-resilient agricultural practices. APCNF emphasizes reducing chemical inputs and enhancing soil health through organic methods like mulching, poly-cropping, and local seed use, which reduce greenhouse gas emissions and improve water retention.

The restoration of mangrove ecosystems along the coast is a key component of the SAPCC's coastal zone management strategies. These efforts help protect against storm surges and coastal erosion.

The State Action Plan for Climate Change and Human Health addresses the health impacts of climate change, such as heat-related illnesses and vector-borne diseases. These programs are aligned with SAPCC objectives to reduce health vulnerabilities.

2.2 Specific Climate Change Initiatives in the State by Government of India

Under the National Action Plan for Climate Change (NAPCC), the Government of India's program launched in 2008 to mitigate and adapt to the adverse impacts of climate change, the Climate-Resilient Dairy Farming Project was implemented in Anantapur, Nellore, and Vizianagaram districts of Andhra Pradesh with an outlay of ₹19.83 Crore. The key achievements of the project include the distribution of climate-resilient cattle breeds like Sahiwal and Ongole to 2,500 families, construction of community-based livestock shelters, and the implementation of sustainable fodder and water security systems. The project improved livelihoods promoted sustainable practices, and empowered communities by fostering cooperation and resilience against extreme weather conditions.

ICAR Institutions

The ICAR's National Innovations in Climate-Resilient Agriculture (NICRA) project aims to enhance the resilience of Indian agriculture to climate change. In Andhra Pradesh, this includes initiatives like improved water productivity in irrigated and rainfed systems, rainwater harvesting, and groundwater recharge. The project also focuses on managing salinity and seawater intrusion in coastal regions.

State Government

A flagship program aligned with SAPCC is the Andhra Pradesh Community Natural Farming (APCNF), previously known as Zero Budget Natural Farming (ZBNF). APCNF is designed to make agriculture more climate-resilient by promoting chemical-free farming, improving soil fertility, enhancing water retention, and reducing greenhouse gas emissions. The program's focus on poly-cropping, use of organic inputs like cow dung, and local seed varieties helps farmers adapt to changing climatic conditions while also reducing input costs. This model focuses on natural farming practices that enhance food security, ecological sustainability, and socio-economic development. The initiative has won accolades for its potential to address global issues like biodiversity loss and environmental damage. The NITI Aayog team has recognized the success of this model and its potential for nationwide implementation. APCNF has also won the 'Gulbenkian Prize for Humanity 2024.'

NABARD

NABARD has implemented two key climate adaptation projects in Andhra Pradesh. The first project, with a ₹4.14 crore outlay under the Adaptation Fund, was aimed at restoring mangrove plantations and enhancing fishery-based livelihoods in three villages of Krishna District. It aims to combat salinization and the impacts of rising sea levels and cyclonic storms by restoring degraded mangroves and promoting mangrove-based fisheries. The second project, with a ₹19.83 crore outlay under the National Adaptation Fund for Climate Change, addresses climate resilience in the dairy sector in Anantapur, Nellore, and Vizianagaram districts. NABARD, in collaboration with KFW, implemented climate-proofing strategies in 38 watersheds across five districts (Anantapur, Chittoor, Kadapa, Kurnool, and Prakasam) with a grant of ₹18.57 crore for soil rehabilitation, enhancing crop resilience, and generating sustainable livelihoods for vulnerable communities, ensuring food and nutritional security.

Other Agencies

Under the National Action Plan for Climate Change (NAPCC), the Government of India's program launched in 2008 to mitigate and adapt to the adverse impacts of climate change, the Climate-Resilient Dairy Farming Project was implemented in Anantapur, Nellore, and Vizianagaram districts of Andhra Pradesh with an outlay of ₹19.83 Crore. The key achievements of the project include the distribution of climate-resilient cattle breeds like Sahiwal and Ongole to 2,500 families, construction of community-based livestock shelters, and the implementation of sustainable fodder and water security systems. The project improved livelihoods promoted sustainable practices, and empowered communities by fostering cooperation and resilience against extreme weather conditions.

Appendix II

Potential of Geographical Indication (GI)

Geographical Indications (GI) Scenario at national level and benefits of GI Geographical Indications (GI) are products which are linked to a place of origin and possess certain qualities, characteristics or reputation that are due to that place. GI are governed globally under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) at the World Trade Organization (WTO). In India, the GI framework is established through the enactment of the Geographical Indications of Goods (Registration and Protection) Act, 1999.

GI is a form of Intellectual Property Right that identifies goods originating from a specific geographical location and having distinct nature, quality and characteristics linked to that location. GI provides legal rights to its Authorised Users, to prevent its use by a third party whose product does not conform to the applicable standards. GI products can be broadly categorized as (i) Handicrafts, including handloom textiles; (ii) Food items, including sweets and ethnic cuisines; (iii) Wine and Drinks; (iv) Manufactured Products and (v) Agricultural Products. The broad Framework to identify potential GI products are as below:

- The product should have emanated from a particular geographical area;
- The products should possess certain features, characteristics that link it with the particular geographical area. In case of agricultural products, the linkage should be direct i.e. in terms of climate, topography, soil condition etc., whereas in case of non-agricultural products, the linkage can be direct or indirect;
- The product should have a history of production in that area;
- The product should have reputation in that area;
- The product should possess special quality or uniqueness and
- The product/ manufacturers of that product belong to a particular community or are concentrated in that geographical region.

India is bestowed with rich heritage of culture and traditions, that are flourishing here for past several centuries. In addition to this it has enormous biodiversity and has diverse agroclimatic conditions, which lead to many geographic specific IPR products in agriculture and other sectors.

The GI registration has high significance in the country like India as it has been proven in the case of Basmati rice, where foreign exports earning is about ₹38,443 crore. As on 31.10.2024, there are 651 registered GI products in India, highlighting the rich culture and heritage of the country.

The benefits of GI registration are briefed as under:

- **Economic Benefits:** A GI tag can help in improving the marketability of products and opens opportunities for international trade. They can boost local economies by adding value to traditional products and attracting premium prices in both domestic and global markets.
- **Cultural Preservation:** By protecting traditional products, India can ensure the survival of its unique skills and knowledge.
- **Preventing Misuse and Counterfeiting:** GI registration helps prevent unauthorized producers from exploiting the reputation and goodwill associated with a particular region or product.
- **Rural Development:** The increased demand for GI registered products can create new employment and/ or enhanced livelihood opportunities, leading to rural development and poverty alleviation in the region.

- **Assured Quality:** GI registration guarantees that the product is of a certain standard, quality and is authentic.

Initiatives of Government of India to promote Geographical Indications

- **Geographical Indications of Goods (Registration and Protection) Act, 1999:** The Act provides a legal framework for the registration, protection, and enforcement of GIs in India. It prevents the use of GI tags by non-Authorized Users and ensures that the benefits are shared by the actual producers by preventing infringement.
- **Establishment of Geographical Indications Registry:** The GI Registry has been set up under DPIIT, Ministry of Commerce & Industry for ensuring adherence to quality standards and regulations for GI products.
- **One District One Product Initiative:** This scheme was introduced by the Government of India to foster balanced regional development across all districts of the country by selecting, branding, and promoting at least One Product from each District of the country. 1102 products from 761 districts across India have been identified, many (around 400+) of them being GI products (*Source: KPMG & IBEF*).
- National IPR policy, 2016 provides strong emphasis on promotion of GIs across the country.
- Creating awareness about significance of GIs, promoting registered Indian GIs, identify potential GIs and encourage stakeholders towards registration.
- Buyer-Seller Meets (BSMs) and Creating Market Linkages.

Initiatives of NABARD in promotion of Geographical Indications

NABARD introduced a comprehensive scheme in 2019 to provide end-to-end support to facilitate registration of GI for Agri as well as non-Agri products along with pre- registration and post-registration activities to enhance quality, improve market access, create awareness and strengthen producers' capacity. NABARD's interventions in the GI domain are as under:

- Mobilisation of artisans/ producers & awareness creation
- Support for registration of products as GI and renewal of existing GI products.
- Registration of producers/ manufacturers as Authorised Users
- Marketing Initiatives for GI Products such as Buyer-Seller Meets, Sponsoring stalls, GI exhibitions/ Melas.
- Awareness creation through social media campaigns, e-portals, websites, documentation through brochures and catalogues.
- Capacity building of artisans through workshops, conferences, seminars, training programmes etc. and reviving/ keeping alive 'dying arts'.
- As on date, NABARD has supported 283 products for GI registration of which 130 products have already been granted GI certification. Further, various exhibitions/ melas and dedicated outlets for marketing of GI products are also being supported.

GI Status in Andhra Pradesh:

Andhra Pradesh is known for several products that have received Geographical Indication (GI) tags, which recognize the unique qualities and reputation of products originating from specific regions. Some notable GI-tagged products from Andhra Pradesh include:

Sr. No.	Geographical Indication	Product
1	Guntur Sannam Chilli	Agricultural
2	Tirupathi laddu	Food Stuff
3	Bandar Laddu	Food Stuff
4	Atreyapuram Pootharekulu	Food Stuff
5	Srikalahasthi Kalamkari	Handicraft
6	Kondapalli Bommalu	Handicraft
7	Budithi Bell & Brass Metal Craft	Handicraft
8	Machilipatnam Kalamkari	Handicraft
9	Andhra Pradesh Leather Puppetry	Handicraft
10	Uppada Jamdani Sarees	Handicraft
11	Venkatagiri Sarees	Handicraft
12	Mangalagiri Sarees & Fabrics	Handicraft
13	Bobbili Veena	Handicraft
14	Dharmavaram Handloom Pattu Sarees & Pavadas	Handicraft
15	Durgi Stone Carvings	Handicraft
16	Etikoppaka toys	Handicraft
17	Udayagiri Wooden cutlery	Handicraft
18	Allagadda stone carving	Handicraft
19	Narsapur Crochet Lace Products	Handicraft

NABARD supported the submission of the following GI applications for FY2024-25, which are currently under review at the GI Registry:

GI Submission made for	District	Project Implementing Agency
"Wood carving Art" by Sri Balaji Wood Carving Artisans Mutually Aided coop society OFPO Madhavamala, Tirupati	Tirupati	Sri Balaji Wood Carving Artisans Mutually Aided coop society OFPO
Dupion Silk	Kadapa	Department of Handlooms & Textiles
Manorama Bedsheets	Prakasam	Department of Handlooms & Textiles
Chirala kuppadam Sarees	Prakasam	Department of Handlooms & Textiles
Madhavaram Cotton Sarees	Kadapa	Department of Handlooms & Textiles
Yemmiganur towels	Kurnool	Department of Handlooms & Textiles

Annexure - I

District wise and sub sector wise PLP Projections for 2025-26

Sr. No.	Particulars (in ₹lakhs)	Alluri Sitaramaju	Anakapalli	Anantapur	Annamayya	Bapatla	Chittoor	Dr. B R Ambedkar Konaseema	East Godavari
I	Credit Potential for Agriculture								
A	Farm Credit								
1	Crop Production, Maintenance and Marketing	146855.11	204877.36	504376.67	313462.70	542957.81	366868.97	236271.54	335523.00
2	Water Resources	785.60	108454.38	19796.85	43008.44	3357.14	44463.60	1735.55	7279.36
3	Farm Mechanisation	2949.20	57842.46	5624.73	21017.93	7384.53	16543.75	4456.00	17718.35
4	Plantation and Horticulture including Sericulture	6674.57	15009.79	62642.68	22924.69	4797.78	37788.94	2270.68	8221.87
5	Forestry & Wasteland Development	719.60	927.48	1084.00	2084.56	2418.68	881.08	128.52	110.00
6	Animal Husbandry - Dairy	5980.92	132244.85	79617.27	156622.52	31428.79	73928.58	38136.19	16338.62
7	Animal Husbandry - Poultry	3296.00	11124.13	7221.60	10999.71	3209.76	21584.90	5912.20	7970.24
8	Animal Husbandry - Sheep, Goat & Piggery, etc.	1976.40	8078.08	14668.44	34838.59	6223.35	29233.37	7515.34	6185.76
9	Fisheries	2012.85	30359.62	1893.42	827.35	188923.14	374.16	116644.90	77363.78
10	Farm Credit-Others (Bullock, Bullock Carts, Two-Wheelers, Organic Inputs, etc.)	3635.00	119356.61	145563.02	292579.20	93588.79	239417.50	41829.86	42203.08
	Sub-Total A (Farm Credit)	174885.25	687974.76	842488.68	898365.69	884289.77	831084.85	454900.78	518914.06
B	Agricultural Infrastructure								
1	Construction of storage facilities (Warehouses/Godowns, Market Yards, Silos, Cold Storage Units/Cold Chains)	4450.00	4297.28	26458.17	28465.00	20167.50	9303.75	13194.73	29070.75
2	Land development, Soil Conservation and Watershed Development	1964.08	9026.70	2626.18	19790.67	1908.10	2759.88	88.44	338.01
2	Agricultural Infrastructure - Others (e-NAM, Tissue Culture, Agri Bio-technology, Seed Production, Bio-Pesticides/Fertilisers, Vermi-Composting)	151.87	1821.87	2499.96	1344.88	901.51	2538.47	124.48	784.61
	Sub-Total B (Agricultural Infrastructure)	6565.95	15145.85	31584.31	49600.55	22977.11	14602.10	13407.65	30193.37
C	Ancillary Activities								
1	Food and Agro Processing	3492.70	13347.45	28514.00	21409.30	16275.40	10886.25	101953.75	20105.90
2	Agriculture Ancillary Activities - Others (Agri-Clinic/Agri-Business Centres (ACABC), Loans to PACS/FSS/LAMPS, Loans to MFIs for On-lending, Loans to Distressed Persons to Prepay Non-institutional Lenders, PMJDY, Loans to State Sponsored Organizations for SC/ST)	4143.75	4904.50	7892.25	36422.50	43180.00	5911.75	4590.00	87303.50
	Sub-Total C (Ancillary Activities)	7636.45	18251.95	36406.25	57831.80	59455.40	16798.00	106543.75	107409.40
I	Total Agriculture (A+B+C)	189087.65	721372.56	910479.24	1005798.04	966722.28	862484.95	574852.18	656516.83
II	Micro, Small and Medium Enterprises (MSME)	66334.00	447080.55	517522.50	228310.00	437685.40	343081.25	509128.75	524186.50
III	Export Credit	6120.00	12750.00	4335.00	2550.00	0.00	6120.00	22100.00	61115.00
IV	Education	1376.50	10206.75	15200.00	15620.00	15495.00	22657.50	40389.00	16775.20
V	Housing	1566.00	52611.30	86085.00	92340.00	32989.00	36270.00	49500.00	102825.00
VI	Social Infrastructure Involving Bank Credit	280.00	3248.00	13752.00	5416.00	3632.00	4376.00	8744.00	14568.00
VII	Renewable Energy	374.88	22712.37	29010.16	130566.00	1416.53	12912.00	13397.16	9253.79
VIII	Others	1100.00	60002.00	63268.25	15400.00	66975.00	69560.00	132693.75	149836.00
	Total Priority Sector (I to VIII)	266239.03	1329983.53	1639652.15	1496000.04	1524915.21	1357461.70	1350804.84	1534476.32

Annexure - I

District wise and sub sector wise PLP Projections for 2025-26

	Particulars (in ₹lakh)	Eluru	Guntur	Kakinada	Krishna	Kurnool	Nandyal	NTR	Palnadu
I	Credit Potential for Agriculture								
A	Farm Credit								
1	Crop Production, Maintenance and Marketing	501952.14	462114.12	477108.53	789150.45	593432.97	487426.03	492818.13	863265.65
2	Water Resources	4688.34	6649.59	60304.09	5975.09	5100.40	3524.96	37006.62	6265.06
3	Farm Mechanisation	11112.43	46828.12	37128.56	51894.80	14399.72	18916.56	58119.68	22733.60
4	Plantation and Horticulture including Sericulture	205724.20	17988.30	12995.17	26711.28	5500.11	5078.41	46703.42	8583.95
5	Forestry & Wasteland Development	1307.44	673.60	2041.92	3618.33	62.40	125.12	9750.26	1722.52
6	Animal Husbandry - Dairy	33096.66	45001.35	59742.95	127440.23	70461.31	27556.03	114098.02	77704.71
7	Animal Husbandry - Poultry	11749.49	49303.10	18335.90	72321.50	1379.90	635.40	65636.30	8679.83
8	Animal Husbandry - Sheep, Goat & Piggy, etc.	4510.96	1879.16	38139.38	32540.42	5479.44	1210.95	40330.85	18213.62
9	Fisheries	255036.97	10695.92	97804.31	89388.15	74.61	754.75	7535.20	7958.42
10	Farm Credit-Others (Bullock, Bullock Carts, Two-Wheelers, Organic Inputs, etc.)	102032.81	23733.38	58334.28	139315.47	1548.51	1068.20	293150.69	12050.33
	Sub-Total A (Farm Credit)	1128211.44	664866.64	861935.69	1338355.72	697439.37	546296.41	1165149.17	1027177.69
B	Agricultural Infrastructure								
1	Construction of storage facilities (Warehouses/Godowns, Market Yards, Silos, Cold Storage Units/Cold Chains)	39080.77	55632.28	27143.97	10784.04	7558.40	4074.00	15958.43	69037.50
2	Land development, Soil Conservation and Watershed Development	1626.44	1395.36	5500.76	4686.10	846.98	420.48	9230.96	5577.88
2	Agricultural Infrastructure - Others (e-NAM, Tissue Culture, Agri Bio-technology, Seed Production, Bio-Pesticides/Fertilisers, Vermi-Composting)	889.12	6817.43	4897.01	4547.21	408.64	797.76	9890.00	1308.30
	Sub-Total B (Agricultural Infrastructure)	41596.33	63845.07	37541.74	20017.35	8814.02	5292.24	35079.39	75923.68
C	Ancillary Activities								
1	Food and Agro Processing	20227.95	63285.50	14494.50	6431.55	584.35	476.85	16562.25	531.50
2	Agriculture Ancillary Activities - Others (Agri-Clinic/Agri-Business Centres (ACABC), Loans to PACS/FSS/LAMPS, Loans to MFIs for On-lending, Loans to Distressed Persons to Prepay Non-institutional Lenders, PMJDY, Loans to State Sponsored Organizations for SC/ST)	32002.50	16447.50	24089.00	11275.25	20731.50	19035.75	7195.25	5656.75
	Sub-Total C (Ancillary Activities)	52230.45	79733.00	38583.50	17706.80	21315.85	19512.60	23757.50	6188.25
I	Total Agriculture (A+B+C)	1222038.22	808444.71	938060.93	1376079.87	727569.24	571101.25	1223986.06	1109289.62
II	Micro, Small and Medium Enterprises (MSME)	363337.60	1559614.00	486998.25	520500.05	226469.75	128838.75	1225184.90	366256.50
III	Export Credit	14790.00	25075.00	35275.00	7225.00	850.00	340.00	10370.00	54230.00
IV	Education	8370.00	37400.00	11834.50	50223.20	12308.00	6674.00	50544.00	16830.00
V	Housing	53464.50	144180.00	237.50	234360.00	110250.00	67500.00	186513.30	60030.00
VI	Social Infrastructure Involving Bank Credit	4663.20	15136.00	11976.00	20672.00	3848.00	2080.00	13156.80	7068.00
VII	Renewable Energy	1270.62	10778.33	5471.21	12802.88	6351.20	3670.40	3739.04	1583.26
VIII	Others	110609.10	97382.50	379794.50	133074.00	220908.50	417000.00	291348.70	166852.50
	Total Priority Sector (I to VIII)	1778543.24	2698010.54	1843427.89	2354937.00	1308554.69	1197204.40	3004842.80	1782139.88

Annexure - I
District wise and sub sector wise PLP Projections for 2025-26

Sr. No.	Particulars (in ₹lakh)	Parvathipuram Manyam	Prakasam	SPSR Nellore	Sri Satyasai	Srikakulam	Tirupati	Visakhapatnam	Vizianagaram	West Godavari	YSR	Grand Total PLP 2025-26 (in ₹lakhs)	Grand Total PLP 2025-26 (in ₹crores)
I	Credit Potential for Agriculture												
A	Farm Credit												
1	Crop Production, Maintenance and Marketing	237950.00	793271.35	460289.71	465098.66	434023.63	430954.42	18229.99	500738.23	299548.61	478232.56	11436498.25	114364.98
2	Water Resources	6422.68	21514.95	8488.08	25420.88	13741.89	34159.98	4926.49	10807.57	2849.87	44079.89	530807.95	5308.08
3	Farm Mechanisation	12096.00	6489.04	38076.00	4394.77	19774.71	19333.43	3605.12	6408.00	23180.08	12944.74	540972.31	5409.72
4	Plantation and Horticulture including Sericulture	3958.18	3038.20	8816.72	17042.04	11091.55	5428.61	2006.12	11062.41	27497.50	28532.00	608087.17	6080.87
5	Forestry & Wasteland Development	966.40	0.00	19379.76	777.00	1614.08	4603.80	82.36	1324.32	138.08	3663.20	59904.51	599.05
6	Animal Husbandry - Dairy	9866.93	149066.78	126852.59	100255.00	41108.88	28880.24	23325.22	40346.65	26124.37	91662.37	1726818.03	17268.18
7	Animal Husbandry - Poultry	15243.80	1711.70	29286.50	16245.89	9244.70	16413.30	19588.68	3911.96	12381.21	13582.84	436970.54	4369.71
8	Animal Husbandry - Sheep, Goat & Piggery, etc.	601.72	40913.67	74158.27	61242.67	8489.37	37399.27	5836.43	3033.08	3663.46	17018.01	500380.06	5003.80
9	Fisheries	7824.92	15347.92	90625.09	1153.50	8252.03	6060.00	44129.04	7205.68	624623.66	1524.28	1694393.27	16943.93
10	Farm Credit- Others (Bullock, Bullock Carts, Two-Wheelers, Organic Inputs, etc.)	9980.89	48534.00	396798.57	118087.56	23750.03	420557.74	144737.14	1066.32	215011.34	228330.40	321620.72	3216.21
	Sub-Total A (Farm Credit)	304851.12	1079885.61	1232711.29	809717.97	571090.87	1003790.79	266466.30	585804.22	1235018.18	919270.29	20751032.81	207510.33
B	Agricultural Infrastructure												
1	Construction of storage facilities (Warehouses/ Godowns, Market Yards, Silos, Cold Storage Units/Cold Chains)	13796.00	7950.79	30041.79	23731.90	6138.02	16311.25	9795.63	2755.00	81849.19	23077.50	580123.64	5801.24
2	Land development, Soil Conservation and Watershed Development	463.32	1098.98	5648.77	3552.87	4083.43	1389.40	20210.94	8776.80	22181.86	8582.39	143775.78	1437.76
2	Agricultural Infrastructure - Others (e-NAM, Tissue Culture, Agri Bio-technology, Seed Production, Bio-Pesticides/ Fertilisers, Vermicomposting)	3684.08	2008.32	514.34	548.07	3105.21	1421.60	737.65	5987.77	4008.24	5721.48	67459.88	674.60
	Sub-Total B (Agricultural Infrastructure)	17943.40	11058.09	36204.90	27832.84	13326.66	19122.25	30744.22	17519.57	108039.29	37381.37	791359.30	7913.59
C	Ancillary Activities												
1	Food and Agro Processing	326.90	2467.75	17377.20	8492.50	6590.75	26069.90	34137.90	3908.95	54816.50	24883.00	517650.55	5176.51
2	Agriculture Ancillary Activities - Others (Agri-Clinic/Agri-Business Centres (ACABC), Loans to PACS/FSS/LAMPS, Loans to MFIs for On-lending, Loans to Distressed Persons to Prepay Non-institutional Lenders, PMIDY, Loans to State Sponsored Organizations for SC/ST)	8483.00	2711.50	48093.00	4913.00	4309.50	4896.00	5550.50	5346.50	89360.50	40502.50	544947.75	5449.48
	Sub-Total C (Ancillary Activities)	8809.90	5179.25	65470.20	13405.20	10900.25	30965.90	39688.40	9235.45	144177.00	65385.50	1062598.30	10625.98
I	Total Agriculture (A+B+C)	331604.42	1096122.95	1354386.39	850956.31	595317.78	1053878.94	336899.12	612669.24	1487234.47	1022037.16	22604990.41	226049.90
II	Micro, Small and Medium Enterprises (MSME)												
III	Export Credit												
IV	Education												
V	Housing												
VI	Social Infrastructure Involving Bank Credit												
VII	Renewable Energy												
VIII	Others												
	Total Priority Sector (I to VIII)	421530.03	1927114.50	2108530.18	1217792.62	1075196.73	1807734.04	2387062.42	1065031.50	2353176.30	1602934.16	42433295.80	424332.96

ANNEXURE II

Overview of Ground Level Credit Flow - Agency-wise and Sector-wise - for last three years and Target for current FY

Table 1: Crop Loan

(Rs. lakh)

Particulars	2021-22		2022-23		2023-24		2024-25
	Target	Ach.	Target	Ach.	Target	Ach.	Target
Commercial Banks	78504.79	78911.31	86421.89	105387.15	110322.01	121781.43	122312.13
Cooperative Banks	13588.79	16999.62	14962.45	14458.31	11476.40	13598.07	12890.15
Regional Rural Banks	18297.88	19548.37	20147.13	21104.36	25853.16	25367.57	30345.00
Other Agencies	31.35	0.00	48.52	82.35	348.42	0.47	452.72
Sub total (A)	110422.82	115459.30	121579.99	141032.17	147999.99	160747.54	166000.00

Table 2: Term Loan (MT+LT)

(Rs. lakh)

Particulars	2021-22		2022-23		2023-24		2024-25
	Target	Ach.	Target	Ach.	Target	Ach.	Target
Commercial Banks	29913.67	46970.55	33908.27	64767.22	65427.99	82300.07	77967.88
Cooperative Banks	2169.59	4180.21	2459.54	4100.23	6523.60	6482.94	7609.85
Regional Rural Banks	5994.10	10218.95	6791.93	14696.05	10846.62	18061.43	12155.00
Other Agencies	0.23	124.59	0.26	401.75	201.58	661.63	267.27
Sub total (B)	38077.59	61494.30	43160.00	83965.25	82999.79	107506.07	98000.00

Table 3: Total Agri. Credit

(Rs. lakh)

Particulars	2021-22		2022-23		2023-24		2024-25
	Target	Ach.	Target	Ach.	Target	Ach.	Target
Commercial Banks	108418.46	125881.86	120330.16	170154.37	175750.00	204081.50	200280.01
Cooperative Banks	15758.39	21179.83	17421.99	18558.54	18000.00	20081.01	20500.00
Regional Rural Banks	24291.98	29767.32	26939.06	35800.41	36699.78	43429.00	42500.00
Other Agencies	31.58	124.59	48.78	484.10	550.00	662.10	719.99
Sub total (C = A+B)	148500.41	176953.60	164739.99	224997.42	230999.78	268253.61	264000.00

Table 4: MSME + OPS

(Rs. lakh)

Particulars	2021-22		2022-23		2023-24		2024-25
	Target	Ach.	Target	Ach.	Target	Ach.	Target
Commercial Banks	58963.48	47058.95	64263.60	69393.40	79410.00	86339.50	93500.34
Cooperative Banks	368.70	2552.17	432.19	3020.32	4999.95	6380.99	7500.00
Regional Rural Banks	4381.45	5098.49	4730.99	5422.07	4800.00	6176.00	7499.50
Other Agencies	1346.37	209.99	1513.24	2494.90	2790.40	1609.90	2500.01
Sub total (D)	65060.00	54919.60	70940.01	80330.69	92000.35	100506.39	110999.85

Table 5: Grand Total (C+D)

(Rs. lakh)

Particulars	2021-22		2022-23		2023-24		2024-25
	Target	Ach.	Target	Ach.	Target	Ach.	Target
Commercial Banks	167381.94	172940.81	184593.76	239547.77	255160.00	290421.00	293780.35
Cooperative Banks	16127.09	23732.00	17854.18	21578.86	22999.95	26462.00	28000.00
Regional Rural Banks	28673.43	34865.81	31670.05	41222.48	41499.78	49605.00	49999.50
Other Agencies	1377.96	334.58	1562.02	2979.00	3340.40	2272.00	3220.00
Grand Total	213560.41	231873.20	235680.01	305328.11	323000.13	368760.00	374999.85

Note : *OPS includes Export Credit, Education, Housing, Social Infrastructure, Renewable Energy

Note : # RCBs include StCBs, DCCBs and PACS (if any)

Annexure III Critical Infrastructure Support to be provided

Sr. No.	District	Sector	Project description	Estimated TFO (₹ lakh)	Likely impact/ Proposed benefits accruing out of the project
1	Alluri Sitarama Raju	Irrigation	Development of Gravity Irrigation systems from source to field	2000	Multiple cropping and utilisation micro irrigation through convergence of APMIP schemes
		Roads	Road Connectivity between major towns of ASR district and to plain areas	Works are in progress	Improvement in connectivity and development of commerce
		Social sector	Additional Class Rooms and infrastructure in schools	3000	6,000 students will be benefitted
		Social sector	Additional Infrastructure in Hospitals	1500	10,000 to 12,500 patients will be benefitted
2	Anakapalli	Agriculture - Storage	Rural Godowns	600	10,000 MT of storage capacity
		Fisheries	Fish Drying Yard & Market, Nakkapalli	90	Fish drying yard and market
		Fisheries	Improvements in fish seed farm in Narsipatnam	60	Improved fish production due to improved fish seeds
		Fisheries	Net mending hall in Parawada manadal	50	Net mending hall to safe guard nets and provide shelter for Net mending activity
		Fisheries	Improvements to Fish seed farms, Thandava reservoir	44	Improved fish production due to improved fish seeds
		Social sector	Additional Classroom and infrastructure in schools	3000	6,000 students will be benefitted
		Social sector	Additional Infrastructure in Hospitals	1500	10,000 to 12,500 patients will be benefitted
3	Anantapur	Agriculture - Storage	Rural Godowns	300	10,000 MT of storage capacity
4	Sri Satya Sai	Agriculture - Storage	Rural Godowns	300	10,000 MT of storage capacity

Annexure III
Critical Infrastructure Support to be provided

Sr. No.	District	Sector	Project description	Estimated TFO (₹ lakh)	Likely impact/ Proposed benefits acruing out of the project
5	Chittoor	Horticulture	Integrated Pulp Processing Industries (3)	650	The requirement of pulp industry is very essential in the District (Mango and Tomato being major crops), as the load on present industries in high. Establishment of new pulp producing industries (Mango, Tomato and other fruits) @6 tons production per hour capacity (single line).
		Minor Irrigation	Excavation of Flood flow channel from foreshore of NTR Jalasayam to feed chain of tanks at Penumuru and G.D.Nellore mandals	210	Reducing the flood effect in the 2 mandals and increasing tank ayacut of 320 ha.
		Rural Connectivity	Construction of all season roads for habitations with less than 250 population is required in the District (50).	3250	Increased economic activity in the habitations and social benefits to the rural people.
		Minor Irrigation	Formation of Balancing Reservoir near Nethiguntapalli Village in Punganur mandal	785	The project will help in providing irrigation to 841 ha.

Annexure III
Critical Infrastructure Support to be provided

Sr. No.	District	Sector	Project description	Estimated TFO (₹ lakh)	Likely impact/ Proposed benefits accruing out of the project
6	East Godavari	Agriculture - Storage	Rural Godown	650	Storage around 10000 MT will be created for protecting the produce from natural calamities and distressed price
		Irrigation	Repairing of canals and desiltation	5000	Smooth Irrigation to agriculture fields
		Agriculture Infrastructure	Food processing clusters parks for agriculture processing	2000	Value addition to rice products and oil palm products
7	Kakinada	Agriculture - Storage	Rural Godown	700	Storage around 10000 MT will be created for protecting the produce from natural calamities and distressed price
		Irrigation	Repairing of canals and desiltation	450	Smooth Irrigation to agriculture fields
		Fish drying yard & marketing	Fish Drying Yard & Market, Ch.Timmapuram	200	Reduction in the wastage of unmarketed fish and timely marketing of fish
8	Konaseema	Agriculture - Storage	Rural Godowns	6000	Storage around 10000 MT will be created for protecting the produce from natural calamities and distressed price
		Irrigation	Repairing of canals and desiltation	3000	Smooth Irrigation to agriculture fields
9	Guntur	Irrigation	Modernization of Guntur Channel		Irrigate around 30000 Ha in and around Guntur district.

Annexure III
Critical Infrastructure Support to be provided

Sr. No.	District	Sector	Project description	Estimated TFO (₹ lakh)	Likely impact/ Proposed benefits accruing out of the project
10	Eluru	Irrigation	Completion of the CHLIS	Works are in progress and is considerably delayed.	18 Mandals in Eluru District will be benefitted on completion of the CHLIS as it will create the irrigation potential in Eluru District.
		Irrigation	Yerrakalava - Repairs Works	3000	Excavation of Distributary system
11	Nellore	Agriculture Infrastructure	Construction of Mega Storage Godowns and Marketing Infrastructure like Rythu Bazaar	2500	In all mandals in the district. Nearly 2 lakh farmers will be benefitted.
			Training centre at Divisional level for training to farmers & field staff on new technologies	225	Enhances the smart farming, timely control measures & adoption of latest technology.
		Fisheries	Construction of fish markets in Major GP's & Municipalities with good hygienic condition for healthy & high consumption fish.	1000	In major towns of the district. Nearly 25000 fisher man will be benefitted
12	Visakhapatnam	Agriculture - Storage	Rural Godown	600	10000 MT
		Agriculture - Storage	Rural Godown	600	10000 MT
		Fisheries	Fish Drying Yard & Market, Ch.Timmapuram	100	Fish drying yard and market
		Social sector	Additional Class Rooms and infrastructure in schools	1500	3000 students will be benefitted

Annexure III
Critical Infrastructure Support to be provided

Sr. No.	District	Sector	Project description	Estimated TFO (₹ lakh)	Likely impact/ Proposed benefits accruing out of the project
13	Tirupati	Rural Connectivity	Construction of Rural Bridges (15)	650	The bridges in rural areas help in improving the connectivity of habitations.
		Education	Construction of 160 Additional Class Rooms (60 schools)	640	The new class rooms help in segregation of the students based on class and thus helps in improving the quality of education.
		Rural Connectivity	Construction of all season roads for habitations with less than 250 population is required in the District (60).	4000	Increased economic activity in the habitations and social benefits to the rural people.
14	West Godavari	Fisheries	Construction of the fish landing centre at Biyyaputhippa.	2000	10000 and more Fishermen will be benefitted in Narasapuram Mandal - Biyyaputippa Village after creation of the facility.
		Roads and Buildings	There are number of roads laying on the bunds of canals and drains. During modernization the sections are increased due to which the road berms and embankments are damaged. Retaining walls are necessary for retention of the roads and for strengthening.	80000	Approximately an amount of Rs.800.00 Crores is required for developing 500Kms length of roads on Canal bunds. It can be taken up for 5-8 years in phase wise manner.

Annexure IV

Critical Interventions required in various sectors/ sub-sectors

District	Activity/ Sector	Description
Anakapalli and Visakhapatnam	Crop production and maintenance	Crop diversification, popularisation of Seed Village Programme, establishment of Automatic weather station, creation of storage facilities etc
	Water resources	Financing of new irrigation/ pumping systems, Rejuvenation of existing MI tanks by de-silting
	Farm Mechanisation	Setting up of custom hiring centres, use of drones
	Agriculture infrastructure	Integrated Post-harvest management infrastructure including cold chain infrastructure and processing units
	Animal Husbandry	Promotion of calf rearing scheme, Improvement of local breeds through Artificial Insemination and other breeding activities
	Fisheries	Cold storage facilities for fish
	Sustainable Agriculture Practices	Financing of IFS models in cluster mode by banks
	Construction of storage and Marketing Infrastructure	on-boarding FPOs and PACS on eFARMARKET electronic platform for aggregation of produce and marketing.
Annamayya	Crop production and maintenance	PGS/ICS Certification for farmers practicing organic/natural farming, crop specific value chains
	Water Resources	Adoption of solar pump sets, Intensive rainwater harvesting measures, promotion of Water Users' Association (WUAs)
	Farm Mechanisation	Identification of authorised dealers
	Agriculture infrastructure	Development of agriculture value chains
	Animal Husbandry	lack of availability of good quality calves/animals, Promoting silages on cluster basis
	Fisheries	Credit support for Domestic market promotion through retail outlets, modern fish markets and kiosks.
	Sustainable Agriculture Practices	Initiation of Mission on Integrated Farming Systems in the district
	Export	Setting up an Export Facilitation Centre in the district
	Housing	Geo tagging of houses constructed under government schemes
	Public infrastructure	Safe drinking water (RO plants) through private participation
Prakasam	Farm mechanization	Setting up of Custom Hiring Centres for 65 FPOs in district
	Water resources	Clean drinking water supply scheme to fluoride affected mandals

Annexure IV

Critical Interventions required in various sectors/ sub-sectors

District	Activity/ Sector	Description
Chittoor	Crop production and maintenance	Increasing Individual Maximum Borrowing Power (IMBP) by Cooperative banks to ensure adequate credit support to the farmers
	Water resources	Participatory irrigation management, Promotion of crop diversification in favour of less water consuming high value crops
	Farm Mechanisation	Encouraging young agriculture /agriculture engineering graduates to establish Agri-clinics and agribusiness centers
	Agriculture infrastructure	IOT interventions, Adoption of new technologies, Establishing at least 1 forest nursery per block
	Animal husbandry	Setting up/ tie-up with hatcheries infrastructure in the District, timely vaccination, de-worming facilities
	Fisheries	Introduction of Cage culture practices in reservoirs
	Sustainable Agriculture Practices	More research on different combinations of production systems to determine the best IFS models
	Agriculture Infrastructure	Establishment of New Rythu Bazaars, Construction of new Godowns and Cold Storages in the Market Yards in the District
Eluru & West Godavari	Water resources	Desilting of minor irrigation tanks and maintenance of supply channels, banking plan for accessing potential for micro-irrigation is required in the district.
	Animal Husbandry	Encouraging Self Help Groups to take up Broiler Farming under contract farming with hatcheries
	Fisheries	There is a need to increase the fish seed production at Badampudi to cater the needs of the district.
	Informal credit delivery system	Encouraging cashless transactions among the SHG groups
	MSME	Setting up of Industrial Parks at identified location – Nuzvidu, Eluru, Jangareddygudem, Dwaraka Tirumala Blocks. Also, Setting up of Aqua Processing Zones in Eluru and Kaikaluru Divisions.
Kurnool	Export	Awareness Programmes on Various Schemes
	MSME	Entrepreneurs Development Programmes, Awareness Programmes, Skill Development Programmes
	MSME	Establishment of Livelihood Business Incubators.

Annexure IV

Critical Interventions required in various sectors/ sub-sectors

District	Activity/ Sector	Description
Guntur, Palnadu, & Bapatla	Agriculture Infrastructure	On-boarding FPOs and PACS on eFARMARKET electronic platform for aggregation of produce and marketing.
	Animal Husbandry	Sensitization of Bankers on issuance of KCC to AH Sector
	Crop production and maintenance	The extension wing of Agriculture Department has to be strengthened so as to guide the farmers about improved package of practices for different crops
	MSME	Establishment of RSETI/RUDSETI in the district, Lack of dynamism/strategy in banks in utilization of CGTMSE scheme and extension of credit facilities to Industries.
	Public infrastructure	The Village Water and Sanitation Committees may be formed and their capacity building may be done
YSR	Agriculture Infrastructure	Construction of additional cold storages in the district with latest technology
	Agriculture	Seed Village programme has to be popularised so as to motivate the farmers to go for seed production of major crops grown and preservation of best quality seeds.
	Agriculture	More automatic weather stations to be established
	Agriculture	Setting up of crop specific value chain and banks may channelize credit to value chain financing.
	Agriculture	State level accreditation agency for organic farming
	Export	Export of organic products through APEDA.
	Farm mechanization	Popularising the use of drones in Agriculture/Horticulture.
	Fisheries	Promotion of domestic market through retail outlets, modern fish markets and kiosks.
	IFS	Initiation of a mission on Integrated Farming System
	Plantation and Horticulture	Integrated Post-harvest management infrastructure including cold chain infrastructure and processing units
	Public infrastructure	Secondary food processing units especially for Banana
	Water resources	Intensive rainwater harvesting measures and efficient use of water is suggested for over exploited and critical i.e., water stressed mandals.

Annexure IV

Critical Interventions required in various sectors/ sub-sectors

District	Activity/ Sector	Description
Parvathipuram Manyam	Animal Husbandry	Encouraging youth for establishment of Desi Poultry Units
	Crop production and maintenance	Promoting value chain & brand building for natural farming/organic farm produce of the district
	MSME	Training to youth in EDP & New Age Skills
	Plantation and Horticulture	Establishment of Cashew Processing Centres
	Water resources	Desilting of canals of irrigation projects through MGNREGS
Tirupati	Agriculture	Promotion of water conserving technologies in Paddy
	Fisheries	Establishing cold chain for reducing post harvest aqua losses
	Fisheries	Promotion of export oriented brackish water shrimp cultivation.
	MSME	Establishing micro units catering to industrial area of Sri city
	MSME	Organizing the artisans on a cluster basis; and establishment of work place and handicraft shops in prominent places
	Renewable Energy	Promoting local entrepreneurs as solar integrators or distributor cum integrator
	Renewable Energy	Promoting establishment of new charging stations for EV vehicles.
Vizianagaram	Agriculture Infrastructure	Sensitization of Bankers on Credit Guarantee scheme for FPOs
	Animal Husbandry	Promoting Dairy Farmers collective such as FPOs in Milk Routes
	Crop production and maintenance	Promoting convergence between RBKs -FPOs for efficient supply of input needs, procurement and storage activities
	Export	Promoting awareness and capacity building on Sanitary & Phytosanitary protocols
	Export	Establishment of packhouse
	Fisheries	Promotion of Fisheries FPO in the coastal Mandals & establishing value chain
	Fisheries	Providing capacity building in alternative livelihood in for fisherfolk such as sea weed cultivation, fish processing
	MSME	Revival of jute mills and sugar mills in the district

Annexure IV

Critical Interventions required in various sectors/ sub-sectors

District	Activity/ Sector	Description
Nellore	Crop Production, Maintenance and Marketing	Additional Storage Facilities
	Water Resources	Construction of minor irrigation tanks
	Farm Mechanization	The maintenance and security of the CHCs established under Rythu Bharosa Kendras
	Plantation and Horticulture including Sericulture	Infrastructure for processing and value addition of fruits and vegetable
	Forestry and Waste Land Development	Raising nurseries and development of forestry species of economic importance.
	Animal Husbandry	Establishment of cattle shandies in and mobile veterinary clinics
	Fisheries	Creation of organized marketing facilities for fish and shrimp
	Agriculture Infrastructure	Creation of additional infrastructure for soil/ water/ pesticide/ fertilizer testing
	Ancillary Activities	Banks may encourage setting up of food processing units.
	MSME	To set up common facility centres for weavers
Anantapur and Sri Satya Sai	Agriculture Infrastructure	1. Seed banks to established by FPOs.2. SHGs to be given training in preparation of vermi compost and establishment of vermi compost units.3. Bio- fertiliser and Bio- pesticide units need to be encouraged by giving subsidised loans to FPOs4. Collection Centres allotted and sanctioned to FPOs need to be better utilised
	Export	1. Training in technical matters and financial education to be given to Micro , Small and Medium entrepreneurs to crease in export Credit 2. Bankers should guide entrepreneurs in forex management 3. Local artisans in weaving and other arts like leather puppetry to be encouraged to export their products by their respective societies and government departments
	Farm mechanization	1. Farm machinery training centers may be established at Division level in the district. 2. Custom Hiring & repairing centers to be established at mandal level.
	Fisheries	1.Small Fish market units to be encouraged 2.Fish feed units need to be established under the proprietorship of fish farming societies. 3.Retail outlets to be set up for the benefit of fishermen. 4.Loans to be provided to fishermen for purchase of small vending carts and three wheelers.

Annexure IV

Critical Interventions required in various sectors/ sub-sectors

District	Activity/ Sector	Description
Anantapur and Sri Satya Sai	Plantation and Horticulture	1.Cold storage units are to be set up in the district for storage of fruits . 2.Solar dehydrators for tomatoes and onion to be supplied to FPOs at subsidy rates for the benefit of farmers and FPOs. 3.Banana Fibre extraction Unit need to be set up 4.Areca leaf plates unit, Tomato Sauce manufacturing units, Banana Powder units need to be established.
	Water resources	1.Ground water level to be increased by encouraging watershed promotion. 2. Various structures like Mini Farm Ponds, Check dams, Mini Percolation Tanks etc. should be constructed.
	Social Infrastructure	1.Government line departments should provide necessary technical knowledge, capacity building for creation of these infrastructure through private investment. 2.Majority of the rural households lack toilets, which need to be financed, if possible, under DRI. 3.Availability of manpower for the created infrastructure is essential. This may require skill upgradation of manpower.
	Agri. Ancillary Activities	1.FPOs need to be strengthened by financing them for set up of custom hiring centres and processing units. 2. Set up of Agri Clinics and Agri Business Units need to be encouraged.
	Animal Husbandry - Dairy	1.Training needs of farmers to be addressed by arranging training to farmers by Livestock Research Station located at Siddaramapuram. 2. Training in animal feed preparation and establishment silage units to be given to farmers. 3.Silage bale packing machines to be supplied to FPOs under subsidy which will benefit both farmers and FPOs.
	Animal Husbandry- Poultry	1.Training needs of farmers to be addressed by arranging training to farmers by Livestock Research Station located at Siddaramapuram. 2. Training in animal feed preparation and establishment silage units to be given to farmers. 3. Silage bale packing machines to be supplied to FPOs under subsidy which will benefit both farmers and FPOs.

Annexure IV

Critical Interventions required in various sectors/ sub-sectors

District	Activity/ Sector	Description
Anantapur and Sri Satya Sai	Animal Husbandry- Sheep & Goat	<p>1.Training need for farmers in goat and sheep rearing techniques to be addressed with the help of LRS .</p> <p>2.Training need to be given to goat and sheep rearing farmers in preparation of Total Mixed Ration .</p> <p>3.Augmentation of reproduction and lamb crop for sheep flocks through scientific interventions of breeding and lamb care management to be addressed for the benefit of farmers.</p> <p>4.Facilities such as Meat Processing Units, Mobile Health care, Cold storage facilities may be established at Division / Mandal level.</p>

List of Abbreviations

Abbreviation	Full Form	Abbreviation	Full Form
ACP	Annual Credit Plan	DIC	District Industries Centre
AEZ	Agri Export Zone	DLRC	District Level Review Committee
ACABC	Agri-Clinics and Agri-Business Centre	DRDA	District Rural Development Agency
AHIDF	Animal Husbandry Infrastructure Development Fund	Enam	Electronic National Agriculture Market
AMIS	Agriculture Marketing Infrastructure Scheme	ECGC	Export Credit Guarantee Corporation
APMC	Agricultural Produce Market Committee	FC	Farmers Club
APY	Atal Pension Yojana	FFDA	Fish Farmers Development Agency
APEDA	Agriculture and Processed Food Products Export Development Authority	FI	Financial Inclusion
ATMA	Agricultural Technology Management Agency	FIF	Financial Inclusion Fund
BC	Banking Correspondent	FIP	Financial Inclusion Plan
BGREI	Bringing Green Revolution to Eastern India	FLC	Financial Literacy Centre
CBS	Core Banking Solution	FLCCC	Financial Literacy and Credit Counselling Centres
CDF	Co-operative Development Fund	FPO	Farmer Producer Organisation
CISS	Capital Investment Subsidy Scheme	FSS	Farmers Service Society
CRRI	Central Rice Research Institute	GLC	Ground Level Credit
CSO	Civil Society Organisation	GoI	Government of India
CWC	Central Warehousing Corporation	GSDP	Gross State Domestic Product
DAO	District Agricultural Officer	HYV	High Yielding Variety
DAP	Development Action Plan	IAY	Indira Awas Yojana
DBT	Direct Benefit Transfer	ICAR	Indian Council for Agricultural Research

List of Abbreviations

Abbreviation	Full Form	Abbreviation	Full Form
DCC	District Consultative Committee	ICT	Information and Communication Technology
DCCB	District Central Cooperative Bank	IoT	Internet of Things
DCP	District Credit Plan	ITDA	Integrated Tribal Development Agency
DIC	District Industries Centre	JLG	Joint Liability Group
DLRC	District Level Review Committee	JNNSM	Jawaharlal Nehru National Solar Mission
DRDA	District Rural Development Agency	KCC	Kisan Credit Card
eNAM	Electronic National Agriculture Market	KSK	Krishi Sahayak Kendra
ECGC	Export Credit Guarantee Corporation	KVI	Khadi and Village Industries
FC	Farmers Club	KVK	Krishi Vigyan Kendra
FFDA	Fish Farmers Development Agency	LAC	Livestock Aid Centre
FI	Financial Inclusion	LAMPS	Large Area Multipurpose Society
FIF	Financial Inclusion Fund	LDM	Lead District Manager
FIP	Financial Inclusion Plan	LI	Lift Irrigation
FLC	Financial Literacy Centre	MEDP	Micro Enterprises Development Programme
FLCCC	Financial Literacy and Credit Counselling Centres	MF	Marginal Farmer
FPO	Farmer Producer Organisation	MI	Micro Irrigation
FSS	Farmers Service Society	MIDH	Mission for Integrated Development of Horticulture
GLC	Ground Level Credit	MNRE	Ministry of New and Renewable Energy
GoI	Government of India	MNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
GSDP	Gross State Domestic Product	MoFPI	Ministry of Food Processing Industries
HYV	High Yielding Variety	MPCS	Milk Producers Co-operative Society

List of Abbreviations

Abbreviation	Full Form	Abbreviation	Full Form
IAY	Indira Awas Yojana	MPEDA	Marine Products Export Development Authority
ICAR	Indian Council for Agricultural Research	MUDRA	Micro Units Development & Refinance Agency Ltd.
ICT	Information and Communication Technology	NABARD	National Bank for Agriculture and Rural Development
IoT	Internet of Things	NBFC	Non-Banking Financial Company
ITDA	Integrated Tribal Development Agency	NFSM	National Food Security Mission
JLG	Joint Liability Group	NGO	Non-Governmental Organisation
JNNSM	Jawaharlal Nehru National Solar Mission	NHM	National Horticulture Mission
KCC	Kisan Credit Card	NLM	National Livelihood Mission
KSK	Krishi Sahayak Kendra	NMFP	National Mission on Food Processing
KVI	Khadi and Village Industries	NPBD	National Project on Bio-Gas Development
KVK	Krishi Vigyan Kendra	NRLM	National Rural Livelihood Mission
LAC	Livestock Aid Centre	NWDPA	National Watershed Development Project for Rainfed Areas
LAMPS	Large Area Multipurpose Society	PAIS	Personal Accident Insurance Scheme
LDM	Lead District Manager	PACS	Primary Agricultural Cooperative Society
LI	Lift Irrigation	PHC	Primary Health Centre
MEDP	Micro Enterprises Development Programme	PKVY	Paramparagat Krishi Vikas Yojana
MF	Marginal Farmer	PLP	Potential Linked Credit Plan
MI	Micro Irrigation	PMEGP	Prime Minister's Employment Generation Programme
MIDH	Mission for Integrated Development of Horticulture	PMJDY	Pradhan Mantri Jan Dhan Yojana
MNRE	Ministry of New and Renewable Energy	PMJJBY	Pradhan Mantri Jeevan Jyoti Bima Yojana

List of Abbreviations

Abbreviation	Full Form	Abbreviation	Full Form
MNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme	PMSBY	Pradhan Mantri Suraksha Bima Yojana
MoFPI	Ministry of Food Processing Industries	PMFBY	Pradhan Mantri Fasal Bima Yojana
MPCS	Milk Producers Co-operative Society	PMKSY	Pradhan Mantri Krishi Sinchayee Yojana
MPEDA	Marine Products Export Development Authority	PWCS	Primary Weavers Cooperative Society
MUDRA	Micro Units Development & Refinance Agency Ltd.	RBI	Reserve Bank of India
NABARD	National Bank for Agriculture and Rural Development	RIDF	Rural Infrastructure Development Fund
NBFC	Non-Banking Financial Company	RKVY	Rashtriya Krishi Vikash Yojana
NFSM	National Food Security Mission	RLTAP	Revised Long Term Action Plan
NGO	Non-Governmental Organisation	RNFS	Rural Non-Farm Sector
NHM	National Horticulture Mission	RRB	Regional Rural Bank
NLM	National Livelihood Mission	RSETI	Rural Self Employment Training Institute
NMFP	National Mission on Food Processing	RWHS	Rainwater Harvesting Structure
NPBD	National Project on Bio-Gas Development	SAP	Service Area Plan
NRLM	National Rural Livelihood Mission	SAO	Seasonal Agricultural Operations
NWDPR	National Watershed Development Project for Rainfed Areas	SBM	Swachha Bharat Mission
PAIS	Personal Accident Insurance Scheme	SCC	Swarojgar Credit Card
PACS	Primary Agricultural Cooperative Society	SCS	Service Cooperative Society
PHC	Primary Health Centre	SHG	Self Help Group
PKVY	Paramparagat Krishi Vikas Yojana	SHPI	Self Help Promoting Institution
PLP	Potential Linked Credit Plan	SLBC	State Level Bankers' Committee

List of Abbreviations

Abbreviation	Full Form	Abbreviation	Full Form
PMEGP	Prime Minister's Employment Generation Programme	STCCS	Short Term Co-operative Credit Structure
PMJDY	Pradhan Mantri Jan Dhan Yojana	SMPB	State Medicinal Plant Board
PMJJBY	Pradhan Mantri Jeevan Jyoti Bima Yojana	TBO	Tree Borne Oilseeds
PMSBY	Pradhan Mantri Suraksha Bima Yojana	TFO	Total Financial Outlay
PMFBY	Pradhan Mantri Fasal Bima Yojana	WDRA	Warehousing Development and Regulatory Authority
PMKSY	Pradhan Mantri Krishi Sinchayee Yojana	WDF	Watershed Development Fund
PWCS	Primary Weavers Cooperative Society	WSHG	Women Self Help Group

List of the District Development Managers of Andhra Pradesh

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Corporate Office C/o NABARD, Head Office, Mumbai ☎: 022-26539620/9514 ✉ : corporate@nabard.org	Registered Office C/o NABARD, Tamil Nadu RO, Chennai ☎: 044-28270138/28304658 ✉ : finance@nabkisan.org 🌐 : www.nabkisan.in



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<ul style="list-style-type: none"> A Non deposit taking systemically important NBSC-MFI-Middle Layer advancing hassle free services to the low-income households with the vision to become model MFI in the country Operating with 401 Branches in 238 districts across 18 states and 1 UT with active client base of appx. 12 lakh active borrowers. Financial product offered: Direct Lending to micro finance loans, Traders and Institutional loans 	<ul style="list-style-type: none"> Timely and adequate credit without collateral Affordable interest rate in the sector Insurance facility to borrowers and co-obligants Doorstep delivery of financial services
Registered Office: 3072,14th Cross, K.R. Road, Banasjankari 2nd Stage, Bengaluru- 560 070, Karnataka, India ☎: 080-26970500 ✉ : ho@nabfins.org 🌐 : www.nabfins.org	



NABARD Consultancy Services Private Limited (NABCONS)

A wholly owned Subsidiary of NABARD

**OFFERS
CONSULTANCY
AND ADVISORY
SERVICES**
Pan India Presence
with offices in 31
State/UTs

- | | |
|--|--|
| <ul style="list-style-type: none"> Project Management Consultancy IT Based Natural Resources Information System Feasibility, Socio-economic & Impact Evaluation Studies Third Party Monitoring | <ul style="list-style-type: none"> Climate Change & Sustainability Value Chain Development Skill & Livelihood Development Preparation Detailed Project Reports (DPRs) Transaction Advisory Services |
|--|--|

Registered Office: NABARD, 3rd Floor, C Wing, Plot No. C-24, G-Block, BKC, Bandra (E), Mumbai – 400051
☎: 022-26539419 ✉ : headoffice@nabcons.in
Corporate Office: NABCONS, 7th Floor, NABARD Tower, 24 Rajendra Place, New Delhi – 110125
☎: 011-41538678/25745103 🌐 : www.nabcons.com

- NABSanrakadhan, a wholly owned subsidiary of NABARD, offers Credit Guarantee against the credit offered by the Eligible Lending Institutions (ELIs), through the Trusts (Funds) under its Trusteeship.
- Two sovereign Credit Guarantee Schemes offered are:
 - Credit Guarantee Scheme for FPO Financing (CGSFPO) – provides credit guarantee for collateral free credit facility upto Rs. 2 crore to FPOs (including loans to FPOs under AIF)
 - Credit Guarantee Scheme for Animal Husbandry and Dairying (CGSAHD)- provides credit guarantee to MSMEs and Dairy Cooperatives
- More than 1500 FPOs provided credit guarantee till 31st March 2024, covering nearly 13.67 lakh farmers across 23 States
- Operations carried through Credit Guarantee Portal

Registered Office C- 24, G Block, Bandra Kurla Complex, Bandra East, Mumbai – 400051

☎ : 022- 2653-9243/ 9241 ✉ : ho@nabsanrakshan.org 🌐 : www.nabsanrakshan.org



NABVENTURES LIMITED | A wholly owned Subsidiary of NABARD

- NABVENTURES Ltd. is incorporated as a public company registered under the Companies Act, 2013 in April 2018 to manage Alternative Investment funds(AIF), with a paid-up capital of INR 25 crore.
- NABVENTURES, Fund I scheme I is the maiden flagship venture equity fund of NABVENTURES Ltd with a corpus of INR 598 crore.
- As of 31 March 2024, NABVENTURES Fund I has invested in 14 startups related to the Agriculture, Rural, Food, and Finance sectors.
- NABVENTURES Ltd is also acting as an Investment Manager to AgriSURE Fund- 'Agri Fund for Start-Ups and Rural Enterprises', a SEBI-registered Cat-II AIF.
- Agri SURE Fund is set up to support innovative, technology-driven, high-risk, high-impact activities in agriculture and rural Start-ups ecosystem.
- The total corpus of AgriSURE Fund is ₹750 crore.

Registered Office: NABARD, 8th Floor, C Wing, Plot No. C-24, G Block, BKC, Bandra (East), Mumbai-400051

☎ : 022-26539149 ✉ : nabventure@nabard.org 🌐 : www.nabventure.in



NAB FOUNDATION

Leveraging the power of convergence

NABFOUNDATION is a wholly owned, not for profit, subsidiary of NABARD, established under Sec 8 of Companies Act, 2013. The organization draws its strength and experience from the thousands of development projects grounded by its parent body, NABARD, in multiple domains over nearly last four decades.

WHAT DOES NABFOUNDATION WANT FROM YOU?

IF YOU ARE AN INDIVIDUAL

Reach out to us with your ideas about development projects which you believe need to be implemented. We really look forward to your fresh ideas.

IF YOU ARE A CSR UNIT

Of a corporate and believe that there is a scope for collaborating with us to have access to the vast network of resources of NABARD in a structured manner, just give us a call.

IF YOU ARE A CIVIL SOCIETY ORGANIZATION/NGO

With an idea whose time you think has come and have not been able to find willing partners, reach out to us.

IF YOU ARE WITH THE GOVERNMENT

And believe that there is a need for reimagining implementation of your Central or State government projects, allow us to be a part of your vision.

Registered Office: NABARD, 4th Floor, E Wing, Plot No. C-24, G Block, BKC, Bandra (East), Mumbai-400051

☎ : 022-26539404/9054 ✉ : nabfoundation@nabard.org 🌐 : www.nabfoundation.in



NATIONAL BANK FOR
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DEVELOPMENT

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www.nabard.org |     / [nabardonline](https://nabardonline.org)