



# संभाव्यतायुक्त ऋण योजना 2022- 23

## Potential Linked Credit Plan 2022 - 23

गुंटूर ज़िला  
Guntur District

राष्ट्रीय कृषि और ग्रामीण विकास बैंक  
National Bank for Agriculture and Rural Development

आंध्र प्रदेश क्षेत्रीय कार्यालय  
ANDHRA PRADESH REGIONAL OFFICE



## दृष्टि

ग्रामीण समृद्धि के लिए राष्ट्रीय विकास बैंक

## ध्येय

सहभागिता, संधारणीयता और समानता पर आधारित वित्तीय और गैर-वित्तीय सहयोगों, नवोन्मेषों, प्रौद्योगिकी और संस्थागत विकास के माध्यम से समृद्धि लाने के लिए कृषि और ग्रामीण विकास का संवर्धन

## 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

## प्राक्कथन

नाबार्ड का आंध्र प्रदेश क्षेत्रीय कार्यालय वर्ष 2020-21 के दौरान 17% की अति स्वस्थ वृद्धि दर्शाते हुए ₹32,844 करोड़ का अब तक का सर्वाधिक संवितरण व्यवसाय करते हुए अभूतपूर्व शिखर पर पहुंच गया है। आंध्र प्रदेश सरकार और राज्य के स्वामित्व वाली संस्थाओं को दिए गए ऋण में भी 8% की वृद्धि हुई है। भारत सरकार की कृषि अवसंरचना निधि (एआईएफ) और आंध्र प्रदेश सरकार की *रेतु भरोसा केंद्र योजना* के साथ अभिसरण में नाबार्ड ने 1305 प्राथमिक कृषि ऋण समितियों (पैक्स) के माध्यम से फार्म-गेट आधारभूत संरचनाओं के विकास के लिए आंध्र प्रदेश राज्य सहकारी बैंक को पुनर्वित्त सहायता मंजूर की है। विकास और संवर्धन के मोर्चे पर भी, नाबार्ड ने किसान उत्पादक संगठनों को बढ़ावा देने, वाटरशेडों के विकास और जनजातीय लोगों की आजीविकाओं में सुधार लाने, वित्तीय समावेशन और नवोन्मेषी परियोजनाओं के कार्यान्वयन, इत्यादि पर अपना ध्यान केंद्रित करना जारी रखा।

राज्य सरकार द्वारा कार्यान्वित की जा रही *नवरत्ना* योजनाओं को, राज्य के सर्वांगीण विकास और राज्य को प्रगति-पथ पर अग्रसर करने की दिशा में प्रक्षेपित किया गया है। इस पृष्ठभूमि में, नाबार्ड ने, तेज़ और समावेशी संधारणीय विकास प्राप्त करने के लिए स्वयं को भी राज्य के नीति-निर्देशों के साथ संरेखित किया है।

विकास की प्रक्रिया में ऋण एक महत्वपूर्ण भूमिका निभाता है। नाबार्ड वर्ष 1989 से ही सभी जिलों के लिए संभाव्यता युक्त ऋण योजनाएं (पीएलपी) तैयार करता आ रहा है, जो यथार्थवादी और कार्यान्वयन योग्य ऋण-आवश्यकताओं का अनुमान लगाने में बैंकों की सहायता करके अपनी प्रभावशीलता सिद्ध करती हैं। पीएलपी में, आधारभूत संरचनाओं में कमियों जिन पर ध्यान देना है और ग्रामीण अर्थव्यवस्था की रीढ़ कहे जाने वाले प्राथमिकताप्राप्त क्षेत्रों के तहत उपलब्ध ऋण संभाव्यताओं के दोहन के लिए राज्य सरकार और बैंकों द्वारा किए जाने वाले महत्वपूर्ण हस्तक्षेपों के संबंध में जानकारी भी शामिल रहती है।

मैं, नाबार्ड द्वारा भविष्य में किए जाने वाले प्रयासों में भी आंध्र प्रदेश सरकार, भारतीय रिज़र्व बैंक, राज्य स्तरीय बैंकर्स समिति, बैंकों और भागीदार एजेंसियों के निरंतर समर्थन की कामना करता हूँ। मैं, नाबार्ड के शीर्ष प्रबंधन और विभागाध्यक्षों को भी धन्यवाद ज्ञापित करता हूँ जिन्होंने क्षेत्रीय कार्यालय को निरंतर समर्थन और मार्गदर्शन प्रदान किया है। मैं, नाबार्ड आंध्र प्रदेश क्षेत्रीय कार्यालय की अपनी पूरी टीम का भी आभारी हूँ और उनकी प्रशंसा करता हूँ, जिन्होंने वर्ष के दौरान इन उपलब्धियों को प्राप्त करने में महत्वपूर्ण भूमिका निभाई है। मेरा दृढ़ विश्वास है कि नाबार्ड आने वाले वर्षों में भी राज्य की प्रगति और उसके सर्वांगीण विकास में योगदान देने के लिए नई-नई ऊंचाइयों को प्राप्त करेगा। मुझे पूरी उम्मीद है कि सभी हितधारकों द्वारा इस पीएलपी को उपयोगी पाया जाएगा और इस अवसर का लाभ उठाते हुए मैं इस दस्तावेज़ की सामग्री और इसकी व्याप्ति को और बेहतर बनाने के लिए रचनात्मक सुझावों को आमंत्रित करता हूँ।

**सुधीर कुमार जन्नावार**

मुख्य महाप्रबंधक

आंध्र प्रदेश क्षेत्रीय कार्यालय

हैदराबाद

अक्टूबर 2021

## Foreword

The Andhra Pradesh Regional office of NABARD has scaled to unprecedented peak during the year 2020-21 by touching all-time high business disbursement of ₹ 32,844 crore, exhibiting a very healthy growth of 17%. Credit to Government of Andhra Pradesh and State-owned entities grew by 8%. In convergence with Agriculture Infrastructure Fund (AIF) of GoI and the Rythu Bharosa Kendra Scheme of GoAP, NABARD has sanctioned refinance support to the AP State Cooperative Bank to support development of farm gate infrastructure through 1305 PACS. On the developmental and promotion front, NABARD continued its focus on promotion of Farmer Producer Organisations, development of watersheds and improving the livelihoods of tribal people, financial inclusion and implementation of innovative projects etc.

The *Navaratnalu* schemes being implemented by the State Government are directed towards holistic development and putting the State on a growth trajectory. In this backdrop, NABARD has aligned itself with the policy directives of the State for achieving faster and inclusive sustainable development.

Credit plays an important role in the development process. NABARD has been preparing Potential Linked Credit Plans (PLPs) for all the districts since 1989, which have proven their effectiveness by assisting the bankers to project realistic and implementable credit requirements. The PLPs also contain information on infrastructural gaps to be addressed and critical interventions required to be made by the State Government and banks for harnessing the credit potential available under priority sectors, which form the backbone of rural economy.

I seek continued support of the Government of Andhra Pradesh, Reserve Bank of India, State Level Bankers Committee, the banks and partner agencies in the future endeavor of NABARD. I place on record my sincere thanks to the Top Management and Head of the Departments of NABARD for their continuous support and guidance to the Regional Office. I also convey my thanks and appreciation to my entire team at NABARD Andhra Pradesh Regional Office who have been instrumental for the achievements during the year. It is my firm belief that NABARD will achieve greater heights in the coming years to further contribute to the growth and overall development of the State. I sincerely hope that the PLP will be found useful by all stakeholders and take this opportunity to invite constructive suggestions for further improving the content and coverage of this document.

**Sudhir Kumar Jannawar**

Chief General Manager

Andhra Pradesh Regional Office

Hyderabad

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## EXECUTIVE SUMMARY

**District Characteristics:** The geographical area of the district is 11391 sq.kms and it is divided into 4 revenue divisions viz. Guntur, Tenali, Narsaraopet and Gurazala. The population of the district as per the 2011 census is 48.87 lakh. The economy of the district is primarily agrarian with 66% of the population in the district who live in rural areas depending on agriculture directly or indirectly for their livelihood. Agriculture is the major economic activity and major crops grown in the district are paddy, tobacco, cotton, chilies, pulses and maize. The district has 40 banks with 840 branches and 01 extension counter as on 31 March 2021 consisting of 671 branches of Commercial Banks, 121 branches of Chaitanya Godavari Grameena Bank and 41 branches of DCCB. Besides the above, 01 branch each of AP State Financial Corporation, 6 branches of APStCB and 167 PACS affiliated to the DCCB, Guntur also cater to the credit needs in the district.

**Sectoral trends in credit flow:** The Annual Credit Plans for the year 2018-19, 2019-20 and 2020-21 have set a target of ₹18898.39 crore, ₹21217.38 crore and ₹23400.00 crore under Priority Sector respectively. The achievements under ACP during the period stood at ₹18912.72 crore, ₹17722.99 crore and ₹22208.04 crore respectively. The percentage of achievement has increased from 83.53% during 2019-20 to 94.90% respectively. The CD ratio of banks and other agencies stood at 127.11% as on 31 March 2021.

**Sector wise PLP projections for 2022-23:** The total credit potential for the FY 2022-23, under Priority Sector for the district is estimated at ₹29464.21 crore. The potential for the year is estimated keeping in view the revised Priority Sector Guidelines, revision in the scales of finance and unit costs, various initiative proposed by the GoI and State Government for achieving double digit growth under Primary Sector Mission, increase in irrigated area, etc. The credit potential for Agriculture has been estimated at ₹21288.29 crore forming 72.25% of the total projections, while the share of Other Priority Sector and MSME stood at ₹3163.31 crore and ₹5012.60 crore forming 10.74% and 17.02% respectively.

**Sub-sector wise projections:** Under crop production, a credit potential of ₹15915.60 crore lakh has been assessed for the year 2022-23. With a view to bring more cultivable area under irrigation and improve productivity of farming activities through mechanization, credit potential of ₹85.51 crore and ₹422.14 crore has been estimated for Water Resources and Farm Mechanization, respectively. Credit potential of ₹175.10 crore has been estimated under Plantation and Horticulture including sericulture for the year 2022-23. Under Animal Husbandry, an amount of ₹1805.07 crore, ₹102.07 crore and ₹371.18 crore has been assessed for Dairy, Poultry and Sheep & Goat rearing respectively. Keeping in view the revision in the Priority Sector guidelines, credit potential of ₹847.03 crore, ₹50.52 crore and ₹83.04 crore has been assessed for construction of storage facilities, land development & others activities respectively under Agri-infrastructure. A credit potential of ₹5012.60 crore has been estimated under MSME.

**Developmental Initiatives:** NABARD has undertaken several developmental projects and skill training programmes benefitting tribals, rural SHG women, unemployed youth and farmers. 03 TDF [Wadi] projects with mango, guava and Mosambi as its main component were implemented in 1500 acres and it has immensely benefitted more than 1000 tribal farmers and their average income grew by ₹30,000 – ₹40,000 per annum. 34 Farmer Producer Organizations [FPOs] including 02 FPOs under Central Sector Scheme [CSS] of GoI and 01 FPO exclusively for the development of organic products under CSS are sanctioned and are under various stages of implementation. Watershed Programmes were implemented in 8 mandals

covering around 22000 ha, 45 habitations, and 12690 families. 10 Livelihood Enterprise Development Programmes [LEDP] and 25 Micro-Enterprise Development Programmes [MEDP] were conducted and around 1650 SHG women were given training in various livelihood activities. Most of the women trained are earning average income of more than ₹4000 – ₹5000 per month. 02 Rural Marts are sanctioned one to each FPO, to sell their products. Around 08 training cum exposure visits to farmers were conducted for improving their technical capabilities in farming activities. 10 skill developmental programmes were conducted and it has provided employment to more than 1000 unemployed youth and they are earning an average income of more than ₹10,000/- per month. Mobile Demonstration ATM vans were sanctioned to DCCB and CGGB for facilitating their FI activity. During the last four years 1311 and 776 FI programmes were conducted by DCCB and CGGB respectively, covering 228200 participants in the district.

**Thrust areas for 2022-23:** The Government of India plans to reorient its interventions in the Farm and Non-Farm Sectors to double the income of farmers by 2022. The strategy for doubling the income of farmers would include raising agricultural productivity substantially, diversifying agriculture and allied activities and production towards high value agriculture and shifting a major portion of farm employment to non-farm activities. Further, timely and adequate credit by Banks to tenant farmers is very much required to uplift their economic status.

As water resources play a vital role in enhancing the agriculture production, Banks have to encourage financing water conservation & efficient use activities such as micro irrigation systems, water harvesting structures, on farm development works etc. for more crop per drop. Increasing the credit flow to MSME sector is vital for development of the district. Incentives for setting up of MSME units in aspirational backward districts may help in exploiting the potentials and growth of the sector. Food and agro processing is a promising sector which can be tapped by the Banks in coordination with Depts. Since the district also has SPICE PARK, many units can be supported.

Under Primary Sector Mission of GoI, Agriculture, Horticulture, Livestock and Fisheries have been identified for ensuring double digit growth and sector specific strategies are being implemented by the State Government. Natural farming is emerging sector and is useful in mitigating the adverse effects of climate change. Banks must extend necessary financial support for boosting the growth under these sectors.

NABARD has been extending concessional refinance to RRBs and Cooperative Banks under Long Term Rural Credit Fund, Special Refinance Scheme to APStCB for transformation of PACS as MSC and Special Refinance Scheme to Banks in NABARD Watershed, Wadi projects, Micro Food Processing and WASH activities for increasing the long-term investment credit. Banks must be proactive and tap the assistance provided by NABARD for improving the credit flow to the priority sector.

Integrated Farming System (IFS) ensures multiple use of natural resources such as land, water, nutrients, and energy in a complementary way. This not only assures year-round income to the farmers but also imparts climate resilience to the farm. Credit for establishment of IFS systems is a critical intervention as it fosters sustainable agriculture growth in the district and also plays an instrumental role in contributing towards doubling the farmer's income.

**Major constraints and suggested action points:** Land records of farmers have been digitized. However, data inconsistency has been observed and farmers are facing troubles while obtaining loans from Banks. The process of digitization of all land records has to be streamlined and must be adopted by all Banks uniformly. Seed village programme must be scaled up and Agriculture Department may take initiative to establish seed processing units in the district for making timely availability of good quality seeds to the farmers as it would help in increase of Seed Replacement Rate (SRR) to the desired level. Many marginal and small farmers do not have clear title to land which acts as a deterrent in availing institutional credit. Bankers must make use of alternative modes of lending such as Joint Liability Groups (JLGs) to extend bank credit to all those farmers who are unable to get loans and Agriculture Dept. must take initiative to form JLGs of such farmers and monitor them. CCR cards are not issued to all tenant farmers for obtaining loans from Banks. Steps must be taken to issue CCR Cards to maximum tenant farmers before the start of the crop season so that the gap between available tenant farmers and cards issued can be reduced. Few LI units are not working satisfactorily, hence Minor Irrigation Department must facilitate in getting the structures repaired and put them to optimum use. There is good scope to bring more area under drip and sprinkler irrigation especially in crops like vegetables/fruits. District Water Management Agency and Minor Irrigation must promote Rainwater harvesting structures/check dams/farm ponds, etc. to maximize the availability of groundwater. The absence of post-harvest handling facilities for Agriculture and Horticulture crops is bringing losses to farmers and hindering the growth of the sectors and they must be established. There is huge scope for increasing the Dairy activities and setting up adequate processing facilities in the district. Banks must develop flexible credit plans and take steps to finance dairy activities on large scale with the assistance of AH Dept. Scope for establishing Dairy Export Zone may be thought of. Similarly, there is good scope for the promotion of poultry, sheep and goat activities. Existing godowns in the APMC market yards have to be modernized and there is also an urgent need to develop product-specific storage and marketing facilities to avoid losses to farmers and increase their income. Banks must extend adequate credit support to FPOs as it will help them in increasing their business and also the income of farmers. Last but not least, Aquaculture Processing Centres to be developed in the coastal belt of the district which enables the fishermen to get a good price for the catch.

**Way forward:** Provision of adequate and timely credit, mechanization of farming operations, availability of quality seeds, manure, coverage of non-loanee farmers and financing tenant farmers through JLG/LEC/COC mode, financing as per revised KCC norms, utilization of extension officers exclusively for promotion of agriculture and allied activities, setting up of custom hiring centres and adoption of new technologies will enhance the credit flow under Crop Production.

Expanding cultivable area under assured irrigation, improving on farm water use efficiency to reduce wastage of water, energization of pump set with solar power, financing new farm ponds/rain water harvesting structures and promotion of micro irrigation would maximize water availability and creation of awareness on conjunctive use of water etc. are important steps for tapping the available potentials under Water Resources Sector.

In order to encourage mechanization in agriculture, more focus is to be on usage of tractor driven farm implements, transplanters, power tillers, threshers, Rotavators, etc. Extending credit and subsidy for setting up of custom hiring centres for paddy, maize, etc., has good potential.

Horticulture is one of the thrust areas in the overall development of the district and sustainable development of Horticulture is aimed at by increasing area, productivity, by encouraging post-

harvest management. Ample scope exists for expanding the area under mango, guava, chilies and vegetable cultivation. Intensive vegetable production, necessary management under protected cultivation (poly houses / shade nets) is also being promoted in specific locations in the district.

Dairy is one of the activities which is having very good scope for expansion, create an alternate livelihood activity and help the farmers in doubling their income. Creation of awareness among the rural populace on the importance of dairying as a livelihood activity will have large positive impact on the Sector. The other intervention which will have impact on the Sector is promotion of calf-rearing, poultry, goat and induction of quality animals from the neighboring states. Construction of storage facilities such as godowns, cold storages, market yards, dairy infrastructure, etc. is necessary for development of agriculture and allied activities in the district.

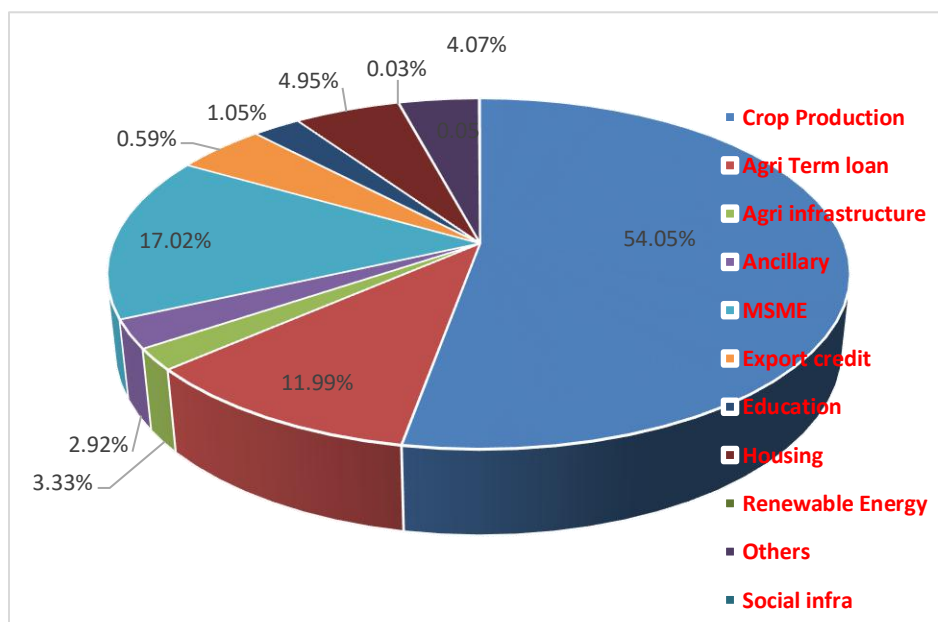
Initiatives of the Government of India/GoAP under various programmes viz. Startup India, Skill India, Make in India, Stand-up India, etc. and identification of mining, manufacturing, MSME under Industries Sector and education, trade, transport, hotels, health care, etc., under Service Sector for achieving double digit growth under Primary Sector Mission would give boost to the industrialization of the district.

In order to strengthen SHG/JLG movement in the district, the future roadmap for strengthening the SHG/JLG movement may include identification of potential activities for setting up of Micro Enterprises and motivating members for taking up the activity, training and capacity building of identified SHG/JLG members who are availing higher doses of finance under the programme, identification of dormant groups and initiate steps for their revival, training and capacity building of stakeholders including staff of banks, strengthening recovery mechanism at branch/mandal level, etc.

**BROAD SECTOR WISE PLP PROJECTIONS FOR 2022-23**

(₹ lakh)

S.No.	Sector / Activity	PLP Projections
<b>A</b>	<b>Farm credit</b>	
(i)	<b>Crop Production, Maintenance and Marketing</b>	<b>1591559.85</b>
(ii)	<b>Term loan for Agriculture and allied activities</b>	<b>353098.54</b>
	<b>Sub total</b>	<b>1944658.39</b>
<b>B</b>	<b>Agriculture Infrastructure</b>	<b>98059.39</b>
<b>C</b>	<b>Ancillary activities</b>	<b>86111.53</b>
	<b>Total agriculture</b>	<b>2128829.31</b>
<b>II</b>	<b>Micro, Small and Medium Enterprises</b>	<b>501259.58</b>
<b>III</b>	<b>Export credit</b>	<b>17369.55</b>
<b>IV</b>	<b>Education</b>	<b>30937.50</b>
<b>V</b>	<b>Housing</b>	<b>145901.25</b>
<b>VI</b>	<b>Renewable Energy</b>	<b>905.60</b>
<b>VIII</b>	<b>Others</b>	<b>119860.00</b>
<b>IX</b>	<b>Social infrastructure involving bank credit</b>	<b>1357.91</b>
	<b>Total priority Sector (I to IX)</b>	<b>2946420.70</b>



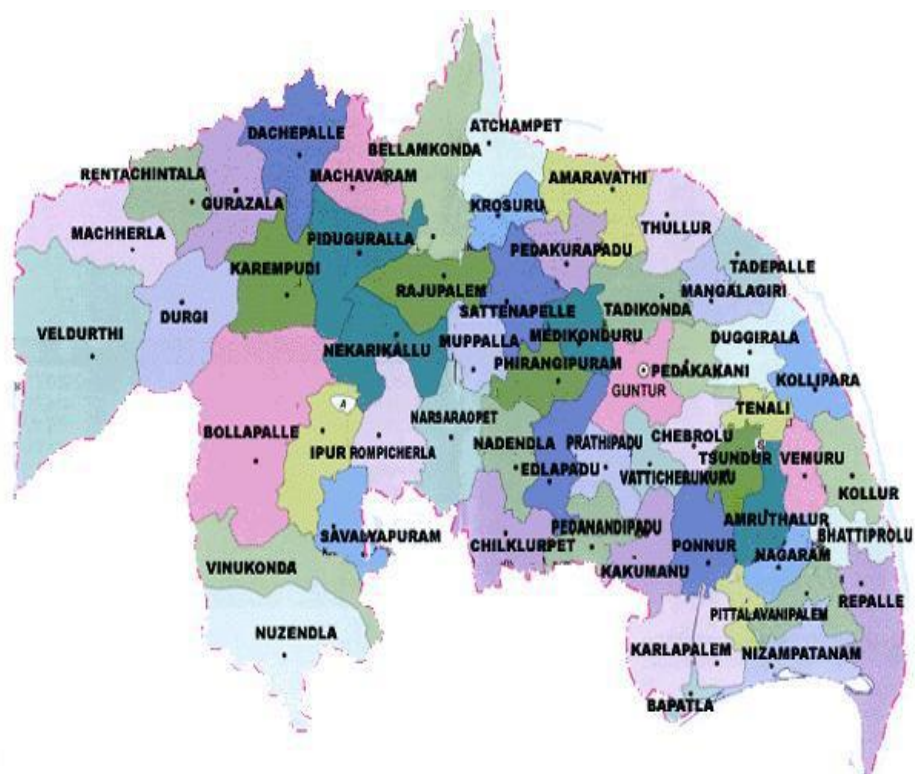
**SUMMARY OF SECTOR WISE PLP PROJECTIONS FOR 2022-23**

(₹ lakh)

<b>S.No.</b>	<b>Sector / Activity</b>	<b>PLP Projections</b>
<b>I</b>	<b>Credit potential for Agriculture</b>	
<b>A</b>	<b>Farm credit</b>	
(i)	Crop Production, Maintenance and Marketing	1591559.85
(ii)	Water Resources	8550.96
(iii)	Farm Mechanisation	42213.88
(iv)	Plantation and Horticulture (including sericulture)	17510.38
(v)	Forestry and Waste Land Development	2272.45
(vi)	Animal Husbandry - Dairy	180506.59
(vii)	Animal Husbandry - Poultry	10206.75
(viii)	Animal Husbandry - Sheep, Goat etc.	37117.92
(xi)	Fisheries (Marine/Inland/Brackish water)	8082.06
(x)	Others – Bullocks, Bullock cart etc.	44086.60
(xi)	Integrated Farming System	2250.95
	<b>Sub total</b>	<b>1944358.39</b>
<b>B</b>	<b>Agriculture Infrastructure</b>	
(i)	Construction of storage facilities (Warehouses, Market yards, Godowns, Silos, Cold Storage units / Cold storage chains)	84703.24
(ii)	Land development, Soil conservation, Watershed development	5052.10
(iii)	Others (Tissue culture, Agri bio-technology, Seed production, Bio-pesticides/fertilizers, Vermi composting)	8304.05
	<b>Sub total</b>	<b>98059.39</b>
<b>C</b>	<b>Ancillary activities</b>	
(i)	Food and agro processing	73302.13
(ii)	Others	12809.40
	<b>Sub total</b>	<b>86111.53</b>
	<b>Total agriculture</b>	<b>2128829.31</b>
<b>II</b>	<b>Micro, Small and Medium Enterprises</b>	501259.58
<b>III</b>	<b>Export credit</b>	17369.55
<b>IV</b>	<b>Education</b>	30937.50
<b>V</b>	<b>Housing</b>	145901.25
<b>VI</b>	<b>Renewable Energy</b>	905.60
<b>VIII</b>	<b>Others</b>	119860.00
<b>IX</b>	<b>Social infrastructure involving bank credit</b>	1357.91
	<b>Total priority Sector (I to IX)</b>	<b>2946420.70</b>



## GUNTUR DISTRICT MAP





District - GUNTUR			State - Andhra Pradesh		Division - GUNTUR				
1. PHYSICAL & ADMINISTRATIVE FEATURES			2. SOIL & CLIMATE						
Total Geographical Area (Sq.km)	11391		Agro-climatic Zone	Krishna Agro Climatic Zone					
No. of Sub Divisions	4		Climate	Sub-Tropical Climate					
No. of Blocks	57		Soil Type	Black Cotton Soils(72%),, Red Soil (17%), Coastal Sandy Soil (9%), Alluvial Soil (2%)					
No. of Villages (Inhabited)	729								
No. of Gram Panchayats	1011								
3. LAND UTILISATION [Ha]			4. RAINFALL & GROUND WATER						
Total Area Reported	1139100		Rainfall [in mm]	Normal	Actual	2018-19	2019-20	2020-21	
Forest Land	161941			953.00		654.00	708.60	755	
Area not available for cultivation	31612			Variation from Normal		-299.00	-244.40	-198.00	
Permanent pasture and grazing land	14251		Availability of Ground Water [Ham]	Net annual recharge		Net annual draft		Balance	
Land under Miscellaneous Tree Crops	24180			333013		35512		297502	
Cultivable Wasteland	24592		5. DISTRIBUTION OF LAND HOLDING						
Current Fallow	37599		Classification of Holding	Holding		Area			
Other Fallow	53218			Nos.	% to Total	Ha.	% to Total		
Net Sown Area	606051		<= 1 Ha	638000		76	266000	40	
Total or Gross Cropped Area	771492		>1 to <=2 Ha	139000		17	196000	29	
Area Cultivated More than Once	165411		>2 Ha	63000		8	206000	31	
Cropping Intensity [GCA/NSA]	127.30		Total	840000		100	668000	100	
6. WORKERS PROFILE [in '000]			7. DEMOGRAPHIC PROFILE [in '000] Census 2011						
Cultivators	302		Category	Total	Male	Female	Rural	Urban	
Small/Marginal Farmers	320		Population	4465	2250	2215	3179	1286	
Agricultural Labourers	1227		Scheduled Caste	818	415	403	654	164	
Workers engaged in Household Industries	47		Scheduled Tribe	208	106	102	187	21	
Workers engaged in Allied Agro-activities	25		Literate	2456	1407	1049	737	1719	
Other workers	803		BPL Households	2010	905	1105	1407	603	
8. HOUSEHOLDS [in '000] Census 2011			9. HOUSEHOLD AMENITIES [Nos. in '000 Households]						
Total Households	1077		Having brick/stone/concrete houses	712		Having electricity supply		890	
Rural Households	784		Having source of drinking water	852		Having independent toilets		460	
BPL Households	293		Having access to banking services	1023		Having radio/tv sets		850	
10. VILLAGE-LEVEL INFRASTRUCTURE [Nos]			11. INFRASTRUCTURE RELATING TO HEALTH & SANITATION [Nos]						
Villages Electrified	729		Anganwadis	4405		Dispensaries		101	
Villages having Agriculture Power Supply	707		Primary Health Centres	78		Hospitals		23	
Villages having Post Offices	698		Primary Health Sub-Centres	0		Hospital Beds		2693	
Villages having Banking Facilities	575		12. INFRASTRUCTURE & SUPPORT SERVICES FOR AGRICULTURE						
Villages having Primary Schools	702		Fertiliser/Seed/Pesticide Outlets [Nos]	5096		Agriculture Pumpsets[Nos]		15673	
Villages having Primary Health Centres	592		Total N/P/K Consumption [MT]	80882		Pumpsets Energised [Nos]		10175	
Villages having Potable Water Supply	729		Certified Seeds Supplied [MT]	14850		Agro Service Centres [Nos]		3	
Villages connected with Paved Approach Roads	729		Pesticides Consumed [MT]	18		Soil Testing Centres [Nos]		3	
13. IRRIGATION COVERAGE [Ha] 2019-20			Agriculture Tractors [Nos]	4368		Plantation nurseries [Nos]		1	
Total Area Available for Irrigation (NIA + Fallow)	644199		Power Tillers [Nos]	30		Farmers' Clubs [Nos]		520	
Irrigation Potential Created	595289		Threshers/Cutters [Nos]	12		Krishi Vigyan Kendras[Nos]		1	
Net Irrigated Area(Total area irrigated at least once)	400821		14. INFRASTRUCTURE FOR STORAGE, TRANSPORT & MARKETING						
Area irrigated by Canals / Channels	341414		Rural/Urban Mandi/Haat [Nos]	14		Wholesale Market [Nos]		21	
Area irrigated by Wells	140944		Length of Pucca Road [Km]	6170		Godown [Nos]		356	
Area irrigated by Tanks	3642		Length of Railway Line [Km]	618		Godown Capacity[MT]		492525	
Area irrigated by Other Sources	15005		Public Transport Vehicle [Nos]	400		Cold Storage [Nos]		126	
Irrigation Potential Utilized (Gross Irrigated Area)	514129		Goods Transport Vehicle [Nos]	13722		Cold Store Capacity[MT]		450000	
15. AGRO-PROCESSING UNITS			16. AREA, PRODUCTION & YIELD OF MAJOR CROPS						
Type of Processing Activity	No of units	Cap.[MT]	Crop	2019-20		2020-21		Avg. Yield [Kg/Ha]	
Food (Rice/Flour/Dal/Oil/Tea/Coffee)	2375	27267		Area (Ha)	Prod. (MT)	Area (Ha)	Prod. (MT)		
Sugarcane (Gur/Khandsari/Sugar)	1	1250	Paddy	246823.00	1708583.00	254237.00	1470415.00	6352.97	
Fruit (Pulp/Juice/Fruit drink)	2	21900	Maize	48207.00	434343.00	40510.00	337745.00	8673.64	
Spices (Masala Powders/Pastes)	39	195	Redgram	20081.00	26437.00	20852.00	16396.00	1051.41	
Dry-fruit (Cashew / Almond/Raisins)	1	10	Bengalgram	15930.00	31860.00	17456.00	31456.00	1901.01	
Cotton (Ginning/Spinning/Weaving)	710	800000	Blackgram	33425.00	24786.00	36250.00	40779.00	933.24	
Milk (Chilling/ Cooling/Processing)	14	4952	Chillies	78634.00	499634.00	78237.00	480855.00	6250.03	
Meat (Chicken/Motton/Pork/Dryfish)	4	45000	Cotton	182405.00	492129.00	162789.00	235230.00	2071.50	
Animal feed (Cattle/Poultry/Fishmeal)	4	20	Production of Cotton(lint), Jute, Mesta & Sanhemp are in Bales(177.8 kg per bale in India)						
17. ANIMAL POPULATION AS PER CENSUS 2019 [in '000]			18. INFRASTRUCTURE FOR DEVELOPMENT OF ALLIED ACTIVITIES						
Category of animal	Total	Male	Female	Veterinary Hospitals/Dispensaries [Nos]		169	Animal Markets [Nos]		8
Cattle - Cross bred	20	9	11	Disease Diagnostic Centres [Nos]		2	Milk Collection Centre [Nos]		643
Cattle - Indigenous	113	68	45	Artificial Insemination Centers [Nos]		403	Fishermen Societies [Nos]		136
Buffaloes	1021	356	665	Animal Breeding Farms [Nos]		2	Fish seed farms [Nos]		13
Sheep - Cross bred	254	58	196	Animal Husbandry Tng Centres [Nos]		1	Fish Markets [Nos]		25
Sheep - Indigenous	488	157	331	Dairy Cooperative Societies [Nos]		643	Poultry hatcheries [Nos]		19
Goat	252	52	200	Improved Fodder Farms [Nos]			Slaughter houses [Nos]		4
Pig - Cross bred	4	1	3	19. MILK, FISH, EGG PRODUCTION & THEIR PER CAPITA AVAILABILITY					
Pig - Indigenous	91	31	60	Fish	Production [MT]	88097	Per cap avail. [gm/day]		24
Horse/Donkey/Camel	7	7	0	Egg	Production [Lakh Nos]	22078	Per cap avail. [nos/p.a.]		422
Poultry - Cross bred	6877	2431	4452	Milk	Production [000 MT]	1312	Per cap avail. [gm/day]		687
Poultry - Indigenous				Meat	Production [MT]	68350	Per cap avail. [gm/day]		68
Sources (if not mentioned against the respective item):			Item Nos. 1, 6, 7, 9 & 10 - Census 2011; Item Nos. 2, 3, 5, 12, 13 & 14 - Dept. of Agr./Dir. of Eco. & Stat./CPO; Item No. 4 - Dept. of Agr./CPO; Item No. 8 - Census 2011; Item No. 15 - District Ind Centre/Dir. of Eco. & Stat.; Item No. 16 - DA Item No. 18 and 19 - Department of Animal Husbandry and Fisheries						

## **DISTRICT PROFILE**

### **Major economic activity and livelihood options in the district**

The district is known for cultivation of commercial crops. The major food and commercial crops grown in the district are Paddy, Maize, Pulses, Sugarcane, Cotton, Chilly and Tobacco. Major horticulture crops are mango, guava, sapota, banana, flowers and vegetables. The non-farm activities include hand loom and industries based on livestock resources and agro based industries viz., milk processing, Hatcheries, Poultry feed, Cattle feed, Fish animal food supplements, Fruit and vegetable processing, Oil Extraction plants, Rice Mills, Chilli powder making etc. Traditional artisans are engaged in cloth manufacturing, block printing, Kalamkari cloth printing, etc.

### **Unique / special features of the district**

The district is one of the crop intensive districts comprising of Krishna Western delta (covering 23 Mandals) and Nagarjuna Sagar Project (covering 34 upland Mandals of palnadu area) 86% of area is under ayacut irrigation sources, but actual area irrigated is 65% of net cropped area. The normal rainfall of the district is 953 mm against which the rain fall received during 2020-21 was 755 mm. The district is famous for cultivation of chilli, cotton, turmeric and tobacco. There are many cotton ginning and spinning units and cold storages which provide continuous employment to the labour force.

### **Special programmes / innovative/ new areas, etc.**

Financing of Dairy, Sheep/goat is picking up in the district. Farmers as well as bankers are showing interest in establishment / financing these units in view of the future market potential. Animal husbandry department is encouraging setting up of mini dairy units by the rural youth by providing subsidy. There is also vast scope for establishment of units under Agro processing, processing units using scampi / prawn, power generation units from agro waste arising out of sugar factories, rice mills, etc. Buoyed by the upward market and suitable climate, poultry units are on expansion mode. A few innovative and automated (partial / total) poultry units can be taken up under contract farming in the district. The district being the State Capital district, it is expected that there will be increasing demand for vegetables, flowers, milk and meat products. It is, therefore, possible that investment opportunities arise for vegetable cultivation on pandals or poly houses in semi urban areas, shade net nurseries, milk chilling plants, dairy processing plants, etc. The government departments are making all out efforts to harness potential by substantial increase in budget allocations in their Action Plans for 2021-22 and this is expected to continue in the coming years.

### **Panchayat Raj Institutions (PRIs)**

The Constitution (73rd Amendment) Act, 1992 envisages a three-tier system of Panchayat Raj for all the States having population of over 20 lakh; reservation of seats for SC / ST / women; appointment of State Finance Commission to make recommendations as regards financial powers of Panchayat; constitution of District Planning Committee to prepare development plans for the district as a whole, etc. Panchayats shall be given powers and authority to function as institutions of self-government, including preparation of plan for economic development and social justice, implementation of schemes in relation to 29 subjects given in Eleventh Schedule of the Constitution, etc.

- **Gram Panchayats:** There are 1011 Gram Panchayats in the district, out of which 118 are notified and remaining non-notified. The conduct of Gram Sabha in the District during last two years is as under: Every GP shall conduct Gram Sabha twice in a year on 14th April and 3rd October. During the last two years Gram Sabhas were conducted as per schedule in the district.

- **Mandal Parishads (MP):** There are 57 Mandal Parishads and 909 Mandal Parishad Territorial Constituencies (MPTCs) in the district. The General Body meeting of Mandal Parishad will review all the developmental activities of the Mandal Parishad.
- **Zilla Parishad (ZP) :** The major functions of the ZP are:
  - Examine and approve the budget of ZP and MPs in the District
  - Distribute funds allotted to the District by the Central and State Government among ZP and MPs.
  - Coordinate and consolidate the plans of the MPs in the District.
  - Perform such other powers and functions in relation to development programme conferred by the Government.
  - Establish, maintain or expand secondary Vocational and industrial schools.

The Zilla Parishads have no taxation powers. The source of revenue is from statutory grants like State Finance Commission Grants and development grants under centrally sponsored schemes. The villagers view gram panchayats only as a means for selection of beneficiaries for various development programmes. At present, in the district, the action taken is as follows:

- Gram panchayat level Adarsh Rythus are identified for strengthening of extension services.
- GPs are also helping in identifying the progressive farmers to form Rythu Mitra Groups.

**The PRIs can be involved in the following initiatives of Government and banks**

- The banks can take the support of PRIs in the task of ensuring total financial inclusion
- The PRIs can develop a database of all the developmental works in the villages.
- For extension services being provided by ATMA, KVKs, the institutions of PRIs can be utilised for sustainability.
- For institutionalizing the e-choupal, Village Knowledge centres initiatives, the PRIs can be effectively utilised.
- PRIs can involve themselves in SHG development, rainwater harvesting, watershed activities, storage godown and market outlets for farmers, etc.
- PRIs may explore the possibilities of involving NGOs/ VAs to act as BC/BF for the purpose of total financial inclusion in the district.

<b>District -</b>	<b>GUNTUR</b>	<b>State -</b>	<b>Andhra Pradesh</b>	<b>Lead Bank -</b>	<b>UNION BANK OF INDIA</b>
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**1. NETWORK & OUTREACH (As on 31st March 2021)**

Agency	No. of Banks/Soc.	No. of Branches				No. of non-formal agencies associated			Per Branch Outreach	
		Total	Rural	Semi-urban	Urban	mFIs/mFOs	SHGs/JLGs	BCs/BFs	Villages	Households
Commercial Banks	36	672	251	233	188	6	NA	559	5	3600
Regional Rural Bank	1	121	83	29	9	NA	NA	148	3	2850
District Central Coop. Bank	1	43	13	23	7	NA	NA	NA	3	2180
Coop. Agr. & Rural Dev. Bank	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Primary Agr. Coop. Society	168	NA	168	NA	NA	NA	NA	NA	2	16000
Others	2	7	1	1	5	NA	NA	NA	NA	NA
All Agencies	208	843	516	286	209	6	77450	707	NA	NA

**2. DEPOSITS OUTSTANDING**

Agency	No. of accounts				Amount of Deposit [Rs.lakh]				
	31 Mar 19	31 Mar 20	31 Mar 21	Growth(%)	Share(%)	31 Mar 19	31 Mar 20	31 Mar 21	Share(%)
Commercial Banks	8541372	8619648	9030994	4.55	86.61	2820645	3114557.5	3673091.33	15.21
Regional Rural Bank	1039145	1123561	1171441	4.09	11.23	273728	347029	429882	19.27
Cooperative Banks	343233	81764	224853	63.64	2.16	71228.55	88875	112537.23	21.03
Others									
All Agencies	9923750	9824973	10427288		100.00	3165601.55	3550461.5	4215510.56	100.00

**3. LOANS & ADVANCES OUTSTANDING**

Agency	No. of accounts				Amount of Loan [Rs.lakh]				
	31 Mar 19	31 Mar 20	31 Mar 21	Growth(%)	Share(%)	31 Mar 19	31 Mar 20	31 Mar 21	Share(%)
Commercial Banks	1412130	1425584	1819501	21.65	77.35	3941229.31	4069139.8	4688778.92	13.22
Regional Rural Bank	303489	289777	341599	15.17	14.52	328068	354778	430035	17.50
Cooperative Banks	253904	267073	190939	-39.87	8.12	143998.71	169940.82	228052.98	25.48
APSFC	250	245	233	-5.15	0.01	10115.73	10766.09	11431.79	5.82
All Agencies	1969773	1982679	2352272	15.71	100.00	4423411.75	4604624.71	5358298.69	14.07

**4. CD-RATIO**

Agency	CD Ratio		
	31 Mar 18	31 Mar 19	31 Mar 21
Commercial Banks	140.39	142.90	126.59
Regional Rural Bank	113.56	119.85	100.04
Cooperative Banks	162.24	202.16	202.65
Others			
All Agencies	139.08	139.73	127.11

**5. PERFORMANCE UNDER FINANCIAL INCLUSION (No. of A/cs)**

Agency	During 2019-20		Cumulative	
	Deposit	Credit	Deposit	Credit
Commercial Banks	NA	NA	NA	NA
Regional Rural Bank (A/c)	NA	NA	NA	NA
Cooperative Banks	NA	NA	NA	NA
Others	NA	NA	NA	NA
All Agencies	NA	NA	NA	NA

**6. PERFORMANCE TO FULFILL NATIONAL GOALS (As on 31st March 2021)**

Agency	Priority Sector Loans		Loans to Agr. Sector		Loans to Weaker Sections		Loans under DRI Scheme		Loans to Women	
	Amount [Rs.lakh]	% of Total Loans	Amount [Rs.lakh]	% of Total Loans	Amount [Rs.lakh]	% of Total Loans	Amount [Rs.lakh]	% of Total Loans	Amount [Rs.lakh]	% of Total Loans
Commercial Banks	2930136.17	82.4	1617933	75.0	558264.65	64.9	894.49	100.0	592158.48	78.1
Regional Rural Bank	404700.00	11.4	349395	16.2	299478	34.8			84987.00	11.2
Cooperative Banks	208803.75	5.9	191270	8.9	2964.28	0.3			81259.84	10.7
Others	11432.00	0.3								
All Agencies	3555071.92	100	2158598	100	860707	100	894	100	758405	100

**7. AGENCY-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS**

Agency	2018-19			2019-20			2020-21			Average Ach[%] in last 3 years
	Target [Rs.lakh]	Ach'ment [Rs. lakh]	Ach'ment [%]	Target [Rs.lakh]	Ach'ment [Rs. lakh]	Ach'ment [%]	Target [Rs.lakh]	Ach'ment [Rs. lakh]	Ach'ment [%]	
Commercial Banks	1551611	1394776.71	89.89	1616610.5	1254058.45	77.57	1758176	1536672.7	87.40	85.0
Regional Rural Bank	167416	284465	169.92	315522	295410	93.63	323037	408452	126.44	130.0
Cooperative Banks	165794	208860.46	125.98	183633.98	21487.26	11.70	253638	271791.31	107.16	81.6
Others	5018	3170.62	63.18	5971.48	3299.29	55.25	5149	3888.12	75.51	64.6
All Agencies	1889839	1801273		2121738	1574255	74.20	2340000	2220804	94.91	56.4

**8. SECTOR-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS**

Broad Sector	2018-19			2019-20			2020-21			Average Ach[%] in last 3 years
	Target [Rs. Lakh]	Ach'ment [Rs. Lakh]	Ach'ment [%]	Target [Rs. Lakh]	Ach'ment [Rs. Lakh]	Ach'ment [%]	Target [Rs. Lakh]	Ach'ment [Rs. Lakh]	Ach'ment [%]	
Crop Loan	970012	1078903.81	111.23	1139837	1088981.14	95.54	1280000	1251504.6	97.77	101.51
Term Loan (Agr)	291315	327647.76	112.47	339978	258439.58	76.02	360000	368169.43	102.27	96.92
Total Agri. Credit	1261327	1406552	111.51	1479815	1347420.72	91.05	1640000.00	1619674.06	98.76	100.44
Non-Farm Sector	395003	406224.54	102.84	455908	330041.00	72.39	500000	393901.11	78.78	84.67
Other Priority Sector	233509	78496.68	33.62	186015	94838.00	50.98	200000	207228.94	103.61	62.74
Total Priority Sector	1889839.00	1891272.79	100.08	2121738.00	1772299.72	83.53	2340000.00	2220804.11	94.91	92.84

**9. RECOVERY POSITION**

Agency	2018-19			2019-20			2020-21			Average Rec. [%] in last 3 years
	Demand [Rs. Lakh]	Recovery [Rs. Lakh]	Recovery [%]	Demand [Rs. Lakh]	Recovery [Rs. Lakh]	Recovery [%]	Demand [Rs. Lakh]	Recovery [Rs. Lakh]	Recovery [%]	
Commercial Banks	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Regional Rural Bank	268911	230355	81.15	12426385	8859589.15	71.30	190137.32	143243.2	75.34	75.93
Cooperative Banks	180742.52	175815.30	96.49	155734.35	149532.78	96.02	240440.89	230043.23	95.68	96.06
Others										
All Agencies										

Sources : Lead Bank &amp; SLBC

## BANKING PROFILE

### A. Bank and Branch Network

The district has 40 Banks operating as on 31<sup>st</sup> March 2021 with 36 Commercial Banks, 01 Regional Rural Bank, 01 District Cooperative Central Bank, 01 Andhra Pradesh State Financial Bank Corporation and 1 APCOB. There is a vast network of 843 branches comprising of 671 Commercial bank branches, 121 Chaitanya Godavari Grameena Bank branches, 41 Cooperative Bank branches, 01 branch pertaining to APSFC and 6 branches of APCOB. There are 168 Primary Agricultural Cooperative Societies of which 167 are affiliated to Guntur DCCB and 1 ceded PACS to Union bank of India, providing credit to the rural clientele.

### B. Performance Parameters

**Deposits:** The total deposits mobilized by the banks in the district as on 31<sup>st</sup> March 2021 are ₹4215510.56 lakh. The Commercial Bank branches have mobilized deposits of ₹3673091.33 lakh and CGGB has a share of ₹429882.00 lakh and the Cooperative Bank's share is ₹112537.23 lakh. The market share of deposits of the banks in the district is shared by Commercial Banks at 87.51 %, RRBs at 8.03 % and Cooperative Banks at 4.26%.

**Advances:** The total advances outstanding as on 31<sup>st</sup> March 2021 was ₹5358298.69 lakh. The total advance outstanding of Commercial Banks in the district was ₹4688778.92 lakh followed by CGGB at ₹430035.00 lakh and ₹228052.98 lakh pertaining to Cooperative Bank. The APSFC has also advanced loans an amount of ₹11431.79 lakhs outstanding as on 31.3.2021. The share of Commercial banks in advances outstanding was 87.69% followed by RRB at 8.04% and 4.26% by Cooperative Bank.

**Credit Deposit Ratio:** The district has a CD ratio of 127.11% as on 31<sup>st</sup> March 2021 as against a national goal of 60% prescribed by the RBI.

**C. Agency wise performance under Annual Credit Plans for the year 2020-21:** The performance of all banks target vis-à-vis achievement under Annual Credit Plan for the year 2020-21 was 91.76 % under Priority Sector advances.

(₹lakh)

Particulars	Target 2020-21	Achievement 2020-21	% of Achievement
Agriculture(Short Term)	1280000	1251504.63	97.77
Agri Term Loan	260000	332723.83	127.97
Agri Infrastructure and Ancillary	100000	35445.60	35.45
Micro & Small Enterprises	500000	393901.11	78.78
Other under Priority Sector	200000	207228.94	103.61
Total Priority Sector	2340000	2220804.11	94.91
Non-Priority Sector	700000	568727.1	81.25
<b>Total Credit Plan</b>	<b>3040000</b>	<b>2789531.21</b>	<b>91.76</b>

## Methodology of Preparation of Potential Linked Credit Plans (PLPs)

Potential Linked Credit Plan is a comprehensive documentation of potentials in the district for rural economic activities, both in physical and financial terms. It is also an assessment of the gaps in infrastructure support which need to be filled in to fully exploit the realizable potentials.

### Objectives of PLP

The objectives of PLP are:

- To enable the various organizations involved in the process of rural development in directing their efforts in a planned manner, in accordance with the potentials available for exploitation.
- To enable optimum utilization of scarce financial resources (specifically bank credit) by channelling the same into sectors with growth potential.
- To assess the gaps in infrastructure support which need to be taken care for exploiting the potentials and prioritize resource requirement for the purpose.

### Methodology

NABARD, in 1988-89, took initiative of preparing PLPs for agriculture and rural development. The broad strategy followed by NABARD for the formulation of PLPs envisages estimation of long term potential (in terms of physical units) in each sector of agriculture and rural development with reference to the natural and human resource endowments and a phased annual programme for development, keeping in view the relative national and state priorities. NABARD has been constantly endeavouring to introduce refinements in the methodology of preparing PLPs and improvement of its contents so that the PLPs could be used as support reference document for Annual Credit Plans of banks. NABARD has been reviewing continuously the methodology in estimation of potential through consultative process over the years. It adopts a detailed methodology for assessing the physical potential in major sectors of investment activity conducive to development of agriculture and rural areas. The PLP writers – who are District Development Managers of NABARD placed in most of the districts of the country – are supported by a group of technical officers/experts in the Regional Offices and Head Office of NABARD.

The methodology consists of assessment of sector-wise/sub-sector-wise estimation of potential in consultation with technical officers of the concerned line departments at the district level, identification of infrastructure facilities required to support the exploitation of the potential, identification of infrastructure facilities available at present as well as planned and working out the gap in infrastructure, examination of the trends in sector-wise credit flow, various schemes of State/Central Govt., and estimation of block-wise physical and financial credit potential.

The indicative unit costs suggested by the State level unit cost committee are made use of while arriving at the total financial outlays.

The broad methodology of arriving at the potential for major sectors is given below.

S No	Sector	Methodology of estimation of credit potential
1	Crop Loans	<ul style="list-style-type: none"> <li>• Collection of data on Gross Cropped Area for a period of 10 years and data on land holdings.</li> <li>• Distribution of Gross Cropped Area between Small</li> </ul>

S No	Sector	Methodology of estimation of credit potential
		<p>Farmer/Marginal Farmer and Other farmers based on the total land occupied by small and marginal farmers on one hand and other farmers on the other.</p> <ul style="list-style-type: none"> <li>• Make assumption to cover 100% of Small/Marginal Farmers and 20% to 50% of Other Farmers;</li> <li>• Study the cropping pattern</li> <li>• Estimation of credit potential taking into account Scale of Finance and also the KCC guidelines in vogue</li> <li>• Block-wise allocation of potential taking into account credit absorption capacity in a particular block, cropping pattern, etc.</li> </ul>
2	Water Resources	<ul style="list-style-type: none"> <li>• MI potential is the area that can be brought under irrigation by ground and surface water;</li> <li>• Collection of data on ultimate irrigation potential, area already brought under irrigation and balance potential available under groundwater and surface water for the district</li> <li>• While fairly clear estimates are available for ground water and its present and future utilization, surface water estimates for individual districts are difficult to get;</li> <li>• Estimation of potential to be attempted block-wise based on categorization of blocks, type of rock formation, suitability of MI structures, projects planned by State Govt. etc.</li> <li>• Preference of farmers for different MI structures like dug wells, bore wells, DCBW, etc. is to be taken into account.</li> <li>• The potential for MI sector is defined in terms of numbers for DW, BW and TW, and in terms of an area for lift irrigation, sprinkler and drip systems.</li> </ul>
3	Farm Mechanization	<ul style="list-style-type: none"> <li>• The potential estimate for farm mechanization takes into account irrigated and unirrigated cropped area in the district, economic life of tractor, optimum use of tractor, per acre use of tractor, replacement of tractors per year, assessment of availability of drought animal power/power tiller by using conversion factors;</li> <li>• Calculation of requirement of number of tractors assuming one tractor per 30 acres and 45 acres of irrigated and unirrigated cropped area;</li> <li>• Adjustment of tractor potential with land holdings</li> <li>• Based on the cropping pattern, topography etc. similar assessment is made for power tillers, combine Harvesters etc.</li> </ul>
4	Plantation and Horticulture	<ul style="list-style-type: none"> <li>• Estimation of additional area that could be brought under plantation crops based on trend analysis of the land utilization pattern and cropping pattern of the district, area of cultivable waste land likely to be treated and brought under plantation crops;</li> <li>• Feasibility and possibility of shifting from food crops to plantation crops;</li> <li>• Estimation of replanting by taking into account approximate economic life of a few plantation crops</li> <li>• Estimation of potential for rejuvenation of existing plantation</li> </ul>

S No	Sector	Methodology of estimation of credit potential
5	Animal Husbandry – Dairy	<ul style="list-style-type: none"> <li>Collection of data on number of milch animals as per the latest census</li> <li>Estimation of milch animals for the reference year by assuming 30% calving, 50:50 sex ratio, 40% calf mortality and 50% culling for buffaloes and 40% calving, 50:50 sex ratio, 20% calf mortality and 50% culling for CBCs and 30% calving, 50:50 sex ratio, 20% calf mortality and 50% culling for Indigenous cows;</li> <li>1/6<sup>th</sup> of the animals are assumed to be good quality animals and 60% of the good quality animals in milk and 60% of animals in milk are on 2<sup>nd</sup> and 3<sup>rd</sup> lactation. 50% of the number of animals so arrived are assumed to be animals available for bank finance.</li> </ul>

**Utility:** Concerted and continuous efforts have been on to make PLPs user friendly keeping in view the stakeholders focus. The document has been useful to various stakeholders in a variety of ways, as illustrated below:

1	Bankers	<ul style="list-style-type: none"> <li>Provides inputs/information on Exploitable potential vis-à-vis credit available</li> <li>Potential High Value Projects/Area Based scheme</li> <li>Infrastructure support available which can form basis for their business/development plans.</li> </ul>
2	Government Agencies/ Departments	<ul style="list-style-type: none"> <li>Developmental infrastructure required to support credit flow for tapping the exploitable potential</li> <li>Other support required to increase credit flow</li> <li>Identification of sectors for Government sponsored programme.</li> </ul>
3	Individual/ Business entities	<ul style="list-style-type: none"> <li>Private investment opportunities available in each sector.</li> <li>Commercial infrastructure</li> <li>Information on various schemes of Govt. &amp; Banks.</li> </ul>

### Limitations and constraints

Though concerted efforts are being made to estimate the potentials realistically, the following limitations and constraints are noticed in the exercise of PLP preparation:

- Non-Availability of accurate granular data on credit flow: Sector & sub-sector-wise
- Non-availability of data required for estimation of potential in some sectors with the line departments



## Chapter 1

### Important Policies and Developments

#### 1.1 Policy Initiatives - Government of India

The following 6 Pillars were highlighted in the first ever digital Budget 2021-22 presented by Hon'ble Union Minister of Finance & Corporate Affairs, GoI:

- Health and Wellbeing
- Physical & Financial Capital and Infrastructure
- Inclusive Development for Aspirational India
- Reinvigorating Human Capital
- Innovation and R&D

Minimum Government and Maximum Governance

#### 1.1.1 Following important announcements were made in the Union Budget 2021-22 for agriculture and farmers' welfare:

- The target for agricultural credit enhanced to ₹16.5 lakh crore for higher credit availability to farmers and agriculture & allied sectors; Animal husbandry, dairy & fisheries to be the focus areas
- Rural Infrastructure Development Fund to be enhanced to ₹40,000 crore from ₹30,000 crore.
- Water conservation commitment stands enhanced as the Micro Irrigation Fund corpus has been increased to ₹10,000 crore via NABARD.
- SVAMITVA Scheme to be extended to all States/UTs and 1.80 lakh property owners in 1,241 villages have already been provided cards.
- 'Operation Green Scheme' to be extended to 22 perishable products, to boost value addition in agriculture & allied products.
- 1,000 more mandis to be integrated with e-NAM to bring transparency and competitiveness.
- APMCs to get access to the Agriculture Infrastructure Funds for augmenting infrastructure facilities.
- Setting up a multi-purpose seaweed park in Tamil Nadu proposed to help leverage country's vast ocean resources and R&D capabilities.

#### Proposals relating to Fisheries sector:

- Investments to develop marine and inland modern fishing harbours and fish landing centres.
- 5 major fishing harbours in Kochi, Chennai, Visakhapatnam, Paradip and Petuaghat to be developed as hubs of economic activity.
- Multipurpose Seaweed Park in Tamil Nadu to promote seaweed cultivation.

#### Tax Proposals on Agriculture Products:

- Custom duty on cotton increased to 10% and on raw silk and silk yarn from 10% to 15%.
- Withdrawal of end-use based concession on denatured ethyl alcohol.
- Agriculture Infrastructure and Development Cess (AIDC) on a small number of items.

#### Achievements and Milestones during the COVID-19 pandemic

- **Pradhan Mantri Garib Kalyan Yojana (PMGKY):**
  - Valued at **₹2.76 lakh crore**
  - Free food grain to **80 crore people**
  - Free cooking gas for **8 crore families**
  - Direct cash to over **40 crore farmers, women, elderly, the poor and the needy**
- **AatmaNirbhar Bharat package (ANB 1.0):**
  - Estimated at **₹23 lakh crore** – more than **10% of GDP**
  - PMGKY, three ANB packages (ANB 1.0, 2.0 and 3.0), and announcements made later were like **5 mini-budgets** in themselves

- ₹27.1 lakh crore worth of financial impact of all three ANB packages including RBI's measures – amounting to **more than 13% of GDP**
- **Structural reforms:**
  - One Nation One Ration Card
  - Agriculture and Labour Reforms
  - Redefinition of MSMEs
  - Commercialisation of the Mineral Sector
  - Privatisation of Public Sector Undertakings
  - Production Linked Incentive (PLI) Scheme
  - 2 Made-in-India vaccines – medically safeguarding citizens of India and those of 100 plus countries against COVID-19 & 2 or more new vaccines expected soon

### **1.1.2 Measures initiated by Govt. of India to mitigate farmers' distress during COVID-19**

The worldwide outbreak of Covid-19 has posed a severe threat to human health and to the economy at large and disrupted agriculture supply chain. The various mitigating measures initiated to ensure a sustainable food system are described as under:

- NABARD extended additional re-finance support of ₹30,000 crore, in addition to ₹90,000 already being provided, for meeting crop loan requirement of Rural Cooperative Banks and RRBs.
- ₹2 lakh crore credit boost to 2.5 crore farmers under Kisan Credit Card Scheme.
- ₹1 lakh crore under Agri Infrastructure Fund for creation of farm-gate infrastructure for farmers.
- ₹10,000 crore towards the scheme for Formalisation of Micro Food Enterprises (MFE) to be implemented over a period of five years from 2020-21 to 2024-25.
- ₹20,000 crore for fishermen through Pradhan Mantri Matsya Sampada Yojana (PMMSY). ₹11,000 crore for activities in Marine, Inland fisheries and Aquaculture along with ₹9,000 crore for Infrastructure i.e., Fishing Harbours, Cold chain, Markets, etc.
- To support private investment in Dairy Processing, value addition and cattle feed infrastructure, an Animal Husbandry Infrastructure Development Fund (AHIDF) of ₹15,000 crore was set up.
- 10,00,000 ha to be covered under Herbal cultivation in next two years with outlay of ₹4,000 crore to lead to ₹5,000 crore income generation for farmers.
- "Operation Greens" run by Ministry of Food Processing Industries (MOFPI) will be extended from Tomatoes, Onion and Potatoes (TOP) to ALL fruit and vegetables. 50% subsidy on transportation from surplus to deficient markets and 50% subsidy on storage, including cold storages, to be provided. This will lead to better price realisation to farmers, reduced wastages and affordability of products for consumers.
- ₹65,000 crore to be provided to ensure increased supply of fertilizers to farmers to enable timely availability of fertilisers in the upcoming crop season.
- The GoI, launched the Pradhan Mantri Garib Kalyan Yojana (PMGKY) for ensuring food security through public distribution system, direct benefit transfers to widows, pensioners and women.
- Besides, the cash support, for better price realisation on farmers' produce during the ongoing pandemic, GoI has substantially increased the MSP vis-à-vis the cost of cultivation and enhanced the number of commodities to be procured through the state agencies.

### **1.1.3 “One-Product One-District Initiative” for better marketing and export in the Horticulture sector**

The Hon’ble Union Finance Minister, in the budget for 2020-21 announced the ‘One-Product One-District (ODOP) initiative ‘for better marketing and export of horticulture crops’ and to foster coordinated development for enhancement of income of farmers. The scheme was extended for the financial year 2021-22.

The focusing of one product in each district will help to transform local products through branding and marketing. The scheme envisages strengthening backward and forward linkages through provision of common facilities, incubation centers, training, research and development (R&D), branding and marketing. One District One Product (ODOP) initiative is operationally merged with ‘Districts as Export Hub’ initiative and is being implemented by Directorate General of Foreign Trade (DGFT), Department of Commerce, with Department for Promotion of Industry and Internal Trade (DPIIT) as a major stakeholder.

### **1.1.4 SVAMITVA (Survey of Villages and Mapping with Improved Technology in Village Areas)**

SVAMITVA, a Central Sector scheme was launched by Hon’ble Prime Minister of India on National Panchayat Day i.e., 24<sup>th</sup> April 2020. The Ministry of Panchayati Raj (MoPR) is the Nodal Ministry for implementation of the scheme. In the States, the Revenue Department / Land Records Department will be the Nodal Department and shall carry out the scheme with support of State Panchayati Raj Department. The scheme aims to provide an integrated property validation solution for rural India. The demarcation of rural abadi areas would be done using Drone Surveying technology through Survey of India.

#### **Objectives**

The scheme envisages mapping the land parcels in rural inhabited area using Drone technology and Continuously Operating Reference Station (CORS). The survey will be done across the country in a phased manner over the period 2020 -2025. This would provide the ‘record of rights’ to village household owners possessing houses in inhabited rural areas in villages which, in turn, would enable them to use their property as a financial asset for taking loans and other financial benefits from Banks.

A provision of ₹200 crores has been made for the scheme in the budget 2021 and 16 States will be covered targeting 2.30 lakh villages. The Pilot phase of SVAMITVA had been approved with a Budget Outlay of ₹79.65 crore. During the Pilot Phase, the scheme is being implemented in 9 States viz. Uttar Pradesh, Uttarakhand, Madhya Pradesh, Haryana, Maharashtra, Karnataka, Punjab, Rajasthan and Andhra Pradesh

(For details visit <https://www.nabard.org/plp-guide.aspx?id=698&cid=698>)

## **1.2 Policy Initiatives – Reserve Bank of India**

The following major initiatives have been taken by the RBI:

- Instructions were issued to all Commercial Banks, Regional Rural Banks, Small Finance Banks, Urban Cooperative Banks, State Cooperative Banks, DCCBs, NBFCs on COVID 19 Regulatory Package – Asset Classification and Provisioning to relax repayment pressure and improving access to working capital by mitigating the burden of debt servicing, prevent the transmission of financial stress to the real economy, and ensure continuity of viable businesses and households. The detailed instructions with regard to asset classification and provisioning were issued by RBI, vide circular dated 17th April 2020 and 23rd May 2020, respectively.
- In the wake of the nationwide lockdown due to outbreak of COVID -19 pandemic and the resultant restrictions imposed on movement of people, many farmers were not able to travel to bank branches for payment of their short-term crop loan dues. Instructions were issued to all Public and Private Sector Scheduled Commercial Banks to extend the benefit of IS of 2% and PRI of 3% for short term crop loans upto ₹3 lakh to farmers whose accounts had become due or shall become due between March 1, 2020 and May 31, 2020, vide circular dated 21st April 2020.

- The Reserve Bank had made recommendations on the required financial parameters with sector specific benchmark ranges for such parameters to be factored in the resolution plans and accordingly, set up an Expert Committee with Shri K. V. Kamath as the Chairperson. The Expert Committee submitted its recommendations to RBI on September 2020. Accordingly, all lending institutions shall mandatorily consider the key ratios while finalizing the resolution plans in respect of eligible borrowers vide circular dated 07 September 2020.
- RBI extended Interest Subvention (IS) and Prompt Repayment Incentive (PRI) for Short Term Loans for Agriculture including Animal Husbandry, Dairy and Fisheries for extended period upto 31 August 2020 on account of Covid-19, vide circular dated 4 June 2020.
- Master circular on Deendayal Antyodaya Yojana and National Rural Livelihoods Mission (DAY-NRLM) was suitably updated by incorporating the modifications, vide circular dated 18 September 2020.
- Government of India (GoI), vide Gazette Notification S.O. 2119 (E) dated June 26, 2020, notified new criteria for classifying the enterprises as Micro, Small and Medium enterprises. The new criteria are classification of enterprises, composite criteria of investment and turnover for classification, Calculation of investment in plant and machinery or equipment and Calculation of turnover. This will come into effect from July 1, 2020, vide circular dated 02 July 2020.
- In view of the continued need to support the viable MSME entities on account of fallout of COVID-19 and to align these guidelines with the Resolution Framework for COVID-19 related Stress announced for other advances, RBI decided to extend the scheme i.e., existing loans to MSMEs classified as 'standard' to be restructured without a downgrade in the asset classification, vide circular dated 06 August 2020. (For details visit <https://www.nabard.org/plp-guide.aspx?id=698&cid=698>)

### **1.3 Policy Initiatives - NABARD**

#### **1.3.1 Long-Term Refinance**

To ensure increased and uninterrupted credit flow to farmers, as also to give a boost to capital formation in the agriculture sector, NABARD provided refinance to the Cooperative Banks and RRBs out of Long-Term Rural Credit Fund, at a reasonable rate of interest. An amount of ₹14,481.50 crore was allocated for the year 2020-21.

#### **1.3.2 Short-Term Refinance**

Short Term Cooperative Rural Credit - STCRC (Refinance) Fund was set up in NABARD in 2008-09 to provide Short Term refinance to Cooperatives for their crop loans. The allocation for the year 2020-21 was ₹44,644.50 crore.

Short Term RRB (Refinance) Fund was set up in NABARD in 2012-13 to provide Short Term refinance to RRBs for their crop loans. The allocation for the year 2020-21 is ₹9,921 crore.

#### **Initiatives taken during the year (2020-21)**

- Disbursement of ₹25500 crore was made under Special Liquidity Facility (SLF-1) to Cooperative Banks, RRBs and NBFCs (₹16800 crore to Cooperative Banks, ₹6,700 crore to RRBs and ₹2,000 crore to NBFCs) for unhindered flow of credit to banks and farmers in the wake of the lockdown due to COVID-19 pandemic.
- Additional SLF of ₹1,567 crore was provided to NBFCs/ NBFC-MFIs with asset size less than ₹500 crore.
- SLF to SCARDBs of ₹783 crore was provided as front ended liquidity support from NABARD's own funds.
- Allocation of 25% of STRRB and LTRCF was made to aspirational and credit starved districts.
- Preliminary eligibility criteria for RRBs for availing refinance was revised and set on the basis of internal risk rating by NABARD.

**1.3.3 Special Refinance Schemes** - To address the issue of reverse migration, give boost to the agriculture & rural sector and income generating activities and focus on health and hygiene, NABARD introduced following special refinance schemes at concessional rate to eligible financial institutions:

- **PACSS as Multi Service Centers (MSCs)** - NABARD introduced 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. The scheme intends to develop all the potential PACS as Multi Service Centres (MSCs) over a period of three years commencing from the year 2020-2021 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. Under this line of credit, NABARD has envisaged transformation of 35,000 PACS in three years commencing with the transformation of 5,000 PACS in FY21. During 2020-21, 3055 PACS were given in-principle sanction by NABARD with estimated Project cost of ₹1,760.82 crore and estimated loan of ₹1,568 crore.
- **Scheme for beneficiaries of Watershed and Wadi project areas** - The objectives of the scheme are to promote sustainable economic activities, livelihood and employment opportunities for the beneficiaries in NABARD supported watershed and wadi project areas by encouraging banks to lend at concessional rate to these beneficiaries to address the issue of rural migration and to give boost to the agriculture and rural sector in the post COVID era. Refinance is available to all the eligible banks/FIs at 3% for maximum period of 5 years. The ultimate lending rate to be charged by banks/FIs under the scheme is revised as 06 months MCLR+1% or EBLR+2.5%, whichever is lower. NABARD has earmarked refinance amount of ₹5,000 crore during 2020-21 to 2022-23. During FY 2020-21, refinance of ₹126.80 crore has been disbursed under this product.
- **Scheme for promoting Micro Food Processing Activities** - The objective of the scheme is to encourage banks to lend micro-food processing activities and create sustainable livelihood and employment opportunities for rural youth as well as reverse migrants due to COVID-19 pandemic in the rural areas. The scheme also envisages modernization and enhancing the competitiveness of the existing individual micro enterprises and ensure their transition to formal sector in rural areas. The refinance scheme will give fillip to the recently launched “PM Scheme for Formalization of Micro Food Processing Enterprises (PM FME)” under Atmanirbhar Bharat Abhiyaan by MoFPI, GoI. Concessional refinance at 4% is available to eligible financial institutions viz., commercial banks, SFBs, StCBs, RRBs and NABARD Subsidiaries.
- **Special refinance scheme on Water, Sanitation and Hygiene (WASH)-A** Model Refinance Scheme on WASH activities has been prepared keeping in view the need to protect human health during infectious disease outbreaks, especially in the times of on-going COVID-19 pandemic. WASH has been conceptualized by NABARD to enable banks to provide credit to entrepreneurs for building social infrastructure relating to drinking water facilities, sanitation facilities including construction/ refurbishment of household toilets and health care facilities.
- Extension of interest subvention benefits for extended period from March 2020 to 31 August 2020 and from March 2021 to June 2021
- COVID-19 deferment of loan instalments for client borrowers of NABARD.
- **KCC Saturation Drive to cover PM Kisan Samman Scheme beneficiaries who do not possess Kisan Credit Cards** - Department of Agriculture, Cooperation and Farmers' Welfare, Ministry of Agriculture and Farmers' Welfare, Govt. of India, has launched a campaign from 08.02.2020 to cover all PM Kisan Samman Scheme beneficiaries under Kisan Credit Cards. Adequate publicity and awareness campaigns were conducted to ensure maximum coverage. Phase-II of KCC Saturation- As a part of the Atmanirbhar Bharat Package, the Government has announced to cover 2.5 crore farmers under the Kisan Credit Card (KCC) scheme

with a credit boost of ₹2 lakh crore through a special saturation drive. Department of Animal Husbandry and Dairying, Govt. of India also decided to simultaneously launch a special drive to provide KCC to 1.5 crore dairy farmers belonging to milk unions and milk producing companies and 1 crore fish farmers. As a result of concerted and sustained efforts by Cooperative Banks and RRBs in this direction of providing access to concessional credit to the farmers, the progress during the year is as under:

Phase	No. of KCCs (Lakh)	Limits sanctioned ( ₹ Crore)
I	12.58	8,499.86
II (As on 31.05.2021)	58.56	47,685.68

**viii) Government Sponsored Programmes with Bank Credit** - The Administrative approval conveying the continuation of the following subsidy schemes for 2020-21 (**till 30 June 2021**) has been received from the GoI:

- Agri Clinics and Agri Business Centers Scheme (ACABC).
- National Livestock Mission for Entrepreneurship Development & Employment Generation (EDEG), component of National Livestock Mission, Poultry Venture Capital Fund (PVCF), Integrated Development of Small Ruminants and Rabbit (IDSRR), Pig Development (PD), Salvaging and Rearing of Male Buffalo Calves (SRMBC), Effective Animal Waste Management, Construction of Storage Facility for Feed and Fodder.
- **Revised AMI sub scheme of ISAM** - Communication from GoI regarding continuation of the scheme during 2021-22 is awaited.

### 1.3.4 Rural Infrastructure Development Fund (RIDF)

The major policy changes and initiatives during 2020-21 were as under:

- The corpus under RIDF was increased from ₹30,000 crore to ₹40,000 crore, as announced in Union Budget 2021-22.
- Total sanctions of ₹34,830 crore and disbursements of ₹29,193 crore were made during the year to various State/UT Governments.
- Normative Allocation parameters for state-wise sanctions, under RIDF, were fine-tuned to include rural poverty and per capita priority sector credit flow.
- The phasing of projects sanctioned under RIDF XX and XXI was extended up to 30 September 2021 and reimbursement of expenditure was allowed upto 31 December 2021.
- To ensure better quality control and supervision through specialised agencies, the expenses on account of Quality Control/PMC/Supervisory Charges/Third Party Monitoring are considered under RIDF upto a maximum of 2% of eligible project cost, wherever an external agency is engaged by the State Government.
- A dedicated Web-portal and Mobile App for digitization of RIDF operations and real time monitoring of projects was launched.
- A corporate film on completion of 25 years of RIDF was launched during the year.

### Important Funds:

#### A. Micro Irrigation Fund (MIF)

- MIF with a corpus of ₹5000 crore was operationalized in NABARD in 2019-20 with the Ministry of Agriculture and Farmers Welfare (MoA&FW), GoI being the Nodal Ministry. The fund was fully utilised and the GoI announced additional allocation of ₹5,000 crore in the Union Budget for 2021-22.
- MIF facilitated State Govts' efforts in mobilizing additional resources and incentivizing its adoption beyond provisions of Pradhan Mantri Krishi Sinchayee Yojana-Per Drop More Crop.

- During 2020-21, loan amount of ₹1128.60 crore was sanctioned and ₹1827.47 crore was released. As on 31 March 2021, the cumulative loan sanctioned and released under MIF was ₹3970.17 crore and ₹1827.47 crore, respectively.

#### **B. Long Term Irrigation Fund (LTIF)**

- LTIF was operationalized in NABARD in 2016-17 for fast tracking completion of 99 identified Medium and Major Irrigation projects. Under LTIF, NABARD provides loan towards Central Share as well as State Share. During 2020-21, loan amount of ₹2461.84 crore was sanctioned and ₹7761.20 crore was released. As on 31 March 2021, the cumulative loan sanctioned and released stood at ₹84326.60 crore and ₹52479.71 crore, respectively.

#### **C. Pradhan Mantri AwasYojna - Grameen (PMAY-G)**

- PMAY-G aims at providing a pucca house, with basic amenities, to all households / households living in kutcha and dilapidated house, by 2022. Under the scheme, NABARD has extended loan towards part funding of Central Share.
- Under PMAY-G, 2.95 crore houses (1 crore in Phase-I and 1.95 crore in Phase-II) are targeted to be constructed from 2016-17 to 2021-22.
- During 2020-21, loan amount of ₹20,000.00 crore was sanctioned and ₹19999.80 crore was released towards part funding of Central share under PMAY-G. As on 31 March 2021, the cumulative loan sanctioned and released under PMAY-G stood at ₹61,975.00 crore and ₹48,819.03 crore, respectively.

#### **D. Swachh Bharat Mission-Gramin (SBM-G)**

- SBM-G was launched by Govt. of India on 2<sup>nd</sup> October 2014 with the goal to achieve universal sanitation coverage in rural areas. Under the scheme, NABARD extended loan during 2018-19 to 2019-20 towards part funding of Central Share.
- The cumulative sanction and disbursement as on 31 March 2020 under SBM-G stood at ₹15,000 crore and ₹12,298.20 crore, respectively.
- During 2018-19 and 2019-20, total 3.29 crore household toilets (2.23 crore in 2018-19 and 1.06 crore during 2019-20) were constructed (*Source – MoJS, GoI*).

#### **E. Rural Infrastructure Assistance to State Governments (RIAS)**

NABARD launched a new product “Rural Infrastructure Assistance to State Governments (RIAS)”, with an initial corpus of ₹15000 crore. Under RIAS, NABARD will provide financial assistance to State Governments in Eastern Region, for creating infrastructure that supports rural livelihoods, hinging on 5-J approach – Jan (Human being), Jal (Water), Jameen (Land), Janwar (Livestock) & Jungle (Forest).

### **1.3.5 Initiatives on micro-Finance**

- **Revision of grant support to JLGPIs:** To incentivise promotion of JLGs, the grant assistance to JLGPIs was enhanced from ₹2,000/- to ₹4,000/- per JLG.
- **MEDP/LEDP:** To strengthen NABARD's efforts at skilling SHG members, the grant assistance was enhanced for MEDPs to ₹1.00 lakh and for LEDPs to ₹8.80 lakh (Farm Sector) and to ₹7.15 lakh (Off Farm Sector).
- For 2020-21, the number of MEDPs has tripled and LEDPs doubled from previous year to augment supply for skills required for rural employment.
- **NABFINS as JLGPI:** NABFINS was sanctioned a pilot project as a JLGPI in five States of Assam, Chhattisgarh, Madhya Pradesh, Maharashtra and Jharkhand for a period of three years.
- **MY PAD MY RIGHT:** NABFOUNDATION, through LEDP channel, was sanctioned the Project 'My Pad My Right' for ₹1.99 crore for sanitary pad making machine for producing/marketing the pads to provide livelihood opportunities to SHGs and improve menstrual hygiene of rural women. During 2020-21, an amount of ₹1.59 crore has been utilized and machines have been installed in 33 districts.
- **EShakti:** As on 31 March 2021, the project was being implemented in 281 districts. The data pertaining to 12.33 lakh SHGs (140.91 lakh members in 1.67 lakh villages was on-boarded to EShakti portal). From 2021-22, the project will be implemented in 130

districts of 16 States/UTs for a focused approach to reduce the credit gap. EShakti portal was used for sending 40 lakh health advisory SMS to SHG members and during the pandemic, the SHGs were also engaged for making face masks, hand sanitizers, PPE kits, etc. for earning additional income.

### **1.3.6 Financial Inclusion**

#### **Availability of financial support for Standard Schemes under FIF:**

Financial support for the following activities was available from NABARD:

#### **Financial Literacy:**

- Financial and Digital Literacy Camps, Financial Literacy Centres, Reimbursement of Examination fee of BC/BF, Mobile Demo Vans and Financial Literacy Centres (FLCs).
- Opening Kiosk Outlets in unbanked villages of North Eastern (NER) States.
- Setting up of Centre for Financial Literacy (CFL).

#### **Banking Technology:**

- Deployment of micro-ATM and PoS/mPoS devices, for on-boarding to BHIM UPI Platform, for on-boarding to Public Financial Management System, Implementing Green PIN facility at ATMs and/or micro-ATMs for RuPay Kisan Card activation and On-boarding to Bharat Bill Payment System (BBPS).

#### **Regulatory requirements:**

- On-boarding to Central KYC Registry (CKYCR) and Support to obtain AUA/KUA membership of UIDAI.

#### **Connectivity and Power Infrastructure:**

- V-SATs deployment in SFDs, Mobile signal boosters' deployment in SFDs and Solar panel/UPS deployment in SFDs.

#### **New initiatives taken during the year 2020-21:**

- Green PIN facility at ATMs and/or micro-ATMs for RuPay Kisan Card activation was launched under which one-time implementation and application development cost for enabling Green PIN facility is reimbursed.
- Scaling up of the Centre for Financial Literacy (CFL) Project (a Pilot Project of Reserve Bank of India) to 200 CFLs which envisages one CFL per 3 blocks.
- Support for on-boarding to Bharat Bill Payment System (BBPS) was launched to encourage banks to give rural customers benefits of online bill payments. One time integration cost of the Bank with the Bharat Bill Payment Operating Unit (BBPOU) will be reimbursed.
- Support extended to RCBs, in addition to CBs and RRBs for opening Kiosk outlets in unbanked villages of North Eastern States through BCs for providing comprehensive financial services in unbanked villages with population less than 500.
- The support for components under connectivity and power infrastructure schemes viz. VSAT deployment, Mobile Signal Boosters deployed and solar power unit / UPS deployment has been extended to all districts.

### **1.3.7 Farm Sector Policy – Important Initiatives**

#### **I. Sustainable livelihood & NRM- Watershed and Tribal development Project**

- 101 new watershed projects were sanctioned, covering an area of 1 lakh ha and an amount of ₹90.42 crore was disbursed.
- A separate web portal and mobile 'app' was developed for uploading data on watershed projects.
- 103 KfW Soil projects viz. SEWOH II & III (One World, No Hunger) were under implementation in 5 States.



- An in-house Remote Sensing Cell was established to strengthen the monitoring of watershed projects at NABARD, HO and 39 on-going WDF projects were hosted on the NABARD Bhuvan portal.
- Under Tribal Development Programme, 51 projects were sanctioned. Out of the financial target of ₹108.00 crore, an amount of ₹93.08 crore was disbursed.
- 04 agri-allied (non-wadi based) TDF projects were sanctioned in Chhattisgarh (apiculture), Tamil Nadu (animal husbandry), Telangana (micro-enterprise development) and West Bengal (pig and goat rearing) under Tribal Development Fund.
- The exercise of GIS mapping of wadi projects was taken up with the support of GIZ.

## **II. FPO Promotion**

- An amount of ₹4.06 crore has been utilised under PODF. Under PODF-ID, an amount of ₹68.25 crore has been utilised during the year.
- Under Central Sector Scheme on Formation and Promotion of 10,000 FPOs, NABARD has sanctioned 655 FPOs as against the target of 600 FPOs and 257 CBBOs have been empanelled.
- BIRD, Lucknow as the Nodal Training Institute for Central Sector Scheme on FPOs developed 5 basic training modules for FPOs and other stakeholders.
- Steps have been initiated to set up a Credit Guarantee Fund of ₹1000 crore with matching contributions from GoI and NABARD under NABSANRAKSHAN, a subsidiary of NABARD.

## **III. FSPF – Innovations & Technology Transfer**

Under Farm Sector Promotion Fund (FSPF), an amount of ₹17.67 crore was disbursed during 2020-21, as against the budget of ₹22.00 crore. Developmental pilots for improving farmers' income and for augmenting capacity building, etc. under Beekeeping, Horticulture, Medicinal plants, Livestock, etc. were the major areas supported under FSPF during the year.

## **IV. Fostering Partnership**

- NABARD entered into an MOU with APEDA for promotion of agri exports. The potential of FPOs will be leveraged for encouraging exports.
- Grant assistance to MCCIA, Pune was sanctioned for establishing Agriculture Export Facilitation Centre (AEFC) which shall function as a 'One Stop Centre' for agri export services and capacity building of farmers in traceability, Good Agriculture Practices, etc.
- NABARD entered into an MoU with ICAR to collaborate in facilitating action research and up-scaling of various technologies / innovative farming models developed by ICAR, including successful climate resilient sustainable farming models and integrated / high-tech farming practices in participatory mode, through adapting research on watershed platform.

## **V. Climate Action**

- Under climate change initiatives, NABARD has released an amount of ₹135.07 crore under the three funding mechanisms viz. Adaptation Fund (AF), Green Climate Fund (GCF) and National Adaptation Fund for Climate Change (NAFCC).
- Under Climate Change Fund (CCF), an amount of ₹0.97 crore was disbursed, for activities like co-sponsorship towards World Sustainable Development Summit 2021, installation of Customized Automated Weather Stations in Nagaland, etc.
- Developed a Web Portal and Mobile App, for digitization of all data/information pertaining to physical & financial progress, monitoring observations along with photos of pre & post development scenarios in Climate Change adaptation /mitigation projects.

## **VI. COVID-19 Initiatives**

- Status notes on major agri-allied sectors were prepared viz. Horticulture, Fisheries, Animal Husbandry and Water Resources.
- Out of box solutions were provided by FPOs promoted by NABARD to restore disrupted supply chain using digital technologies, adoption of farm to home delivery

mechanism, ensuring timely supply of critical inputs to farmer members, extending helping hand to migrant labour and sanitary workers, etc.

### 1.3.8 Off Farm Sector Initiatives

#### 1. Initiatives during COVID-19

- A mega project on “Rapid Reskilling and Quick Employment for 10,000 Reverse Migrants” was supported in Uttar Pradesh (Raebareli, Gorakhpur, Mirzapur, Maharajganj and Allahabad), Bihar (Muzaffarpur, Vaishali, Rohtas and Gaya) and Jharkhand (Hazaribagh).
- NABARD collaborated with NSDC affiliated training institutes for capacity building of rural youth in new age skills like Mechatronics, Arc welding, Refrigeration, etc.
- NABARD supported projects for training rural women in the manufacturing of face masks and PPE kits that were in much demand to adhere to the Covid-19 protocols.
- NABARD partnered with CSR corporates like Ambuja Cement Foundation, Lupin Human Welfare and Research Foundation, ‘TATA Strive’ to provide capacity building of rural youth with skills and linking them with placement or self-employment.
- NABARD supported online training programmes to build capacity, develop entrepreneurship as well as to connect the producers to the markets.
- Revolving Fund Assistance of ₹5 lakh each to 22 registered OFPOs for restarting their business activities impacted by COVID 19 was provided.
- The rural mart scheme was revised to permit purchase of mobile vans by PACS and Producer Organisations to serve as mobile rural marts.
- Virtual B2B Exhibition was organised for OFPOs to provide opportunities to rural producers to bring their products closer to the users.
- Rural/Agri business Incubation Centres - As on date, NABARD has supported 7 Rural/Agri Business Incubation Centres with total financial support of ₹63.29 crore. These 7 centres will provide direct and indirect benefit to about 22 lakh farmers.
- Catalytic Capital Fund (CCF) – To support start-ups in farm and non-farm sector in the stage of ‘Valley of Death’, NABARD sanctioned ₹1.00 crore to MABIF, a NABARD supported RBIC and ₹5.00 crore to NABKisan Pvt Ltd, a NABARD subsidiary, during 2020-21.
- Promotion of GI Products -NABARD extended support for enabling GI registration of 72 products, including Black Pottery (Nizamabad), Wall Hangings (Ghazipur), Soft Stone Jali Work (Varanasi), Gulabi Minakari (Banaras), Handmade Dari (Mirzapur), etc.
- Launching of Sanitation Literacy Campaign - NABARD launched a campaign from 02 October 2020 to 26 January 2021 to create awareness on Water, Sanitation and Hygiene (WASH) to sustain attitudinal changes for adopting safe sanitation and hygiene practices covering about one lakh people in more than 2000 villages benefitted from this awareness campaign.

#### 1.3.9 Agri- Market Infrastructure Fund (AMIF)

- A dedicated Agri Market Infrastructure Fund (AMIF) with a corpus of ₹2,000 crore was established with NABARD to provide low-cost funds to the State Governments for:
  - Upgradation of Rural Haats to Gramin Agriculture Markets (GrAMs)
  - Creation of electronic display mechanism and linking of GrAMs with Agriculture Produce Market Committees (APMC); and
  - Upgradation of 585 e-NAM enabled APMCs.
- MoA& FW GoI has issued the scheme guidelines to the State Governments

### 1.4 Policy Initiatives – State Government

The major policy initiatives of Government of Andhra Pradesh (GoAP) are as under:

#### 1. Agriculture

- **Dr. YSR RythuBharosa – PM Kisan:** Farm Investment Support of ₹13,500 per farmer family (including tenant & RoFR farmers) per year (including ₹6,000 under PM-KISAN) was provided under Dr. YSR RythuBharosa during 2020-21. The

Government has allocated ₹7,200 crore input subsidy through Dr. YSR RythuBharosa-PM KISAN for FY 2021-22.

- **Dr. YSR Free Crop Insurance Scheme:** GoAP has decided to pay claims of farmers' crop insurance amount under Kharif 2020 directly from the State Budget. Allocation of ₹1802.82 crore is made in 2021-22 towards the scheme.
- **YSR Sunna VaddiPantaRunalu:** In order to ensure transparency, under the interest subsidy scheme of GoAP, the claim amount is now directly being credited to the bank accounts of the eligible farmers instead of routing through the banks. An amount of ₹500 crore has been allocated for FY 2021-22 for YSR Sunna VaddiPantaRunalu.
- **YSR RythuBharosa Kendra:** The GoAP has established 10,544 rural and 234 urban Dr. YSR RBKs which are functioning as integrated agriculture input shops and farmer knowledge centres. The Government has established a Price Stabilisation Fund of ₹3000 crore for the market intervention in agriculture and horticulture produce. A budget allocation of ₹500 crore has been made towards Price Stabilisation Fund recoupment for FY 2021-22.
- **Dr. YSR Agri Testing Labs:** In order to provide close proximity of the integrated quality testing facilities to the farmers, the Government is establishing 147 labs at constituency level, 11 labs at district level and 4 labs at Regional Coding Centres. An allocation of ₹88.57 crore has been made in 2021-22 towards establishment and functioning of Dr. YSR Agri Testing Labs.

## 2. Animal Husbandry and Fisheries:

- Inspired from the White Resolution through AMUL, the GoAP has initiated the GoAP-AMUL project by entering into a MoU with Gujarat Cooperative Milk Marketing Federation for revival of milk cooperatives and to strengthen the dairy sector in the State of Andhra Pradesh. The revolution has already commenced in 700 villages and the women milk producers/farmers are benefitting by additional income of ₹ 5 to ₹17 per litre of milk.
- **JagannaJeeva Kranthi:** The GoAP has launched the scheme for distribution of 2,49,151 sheep/goat units across the state with an expenditure of about ₹1,869 crore.
- **YSR PasuNashtapariharaPadhakam:** Livestock loss compensation programme continues to be the one of the priority programmes of the Government. A budget of ₹50.00 crore has been allocated towards livestock compensation fund for the FY 2021-22.
- **Fisheries:** Andhra Pradesh is the largest producer of fish in the country which constitutes around 29.40% share in the production of fish in the country. GoAP has been implementing YSR MatsyakaraBharosa Scheme for the welfare of the fishermen.
- The benefit of power tariff has been reduced for 53,550 aquaculture farmers from ₹3.86 to ₹1.50 per unit resulting in financial assistance of ₹1,560 crore, compensation of ₹ 75 crore has been provided to 14,927 families who lost their livelihood due to GSPC excavations.
- The government has enhanced the ex-gratia of ₹6.70 crore to 67 deceased fishermen families.
- Development of 08 fishing harbours has been taken up in two phases.

## 3. Jalayagnam – Water Resources:

Through Jalayagnam, the Government is committed to improve water availability for irrigation, thereby attaining to build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation. The GoAP has allocated an amount of ₹13,237.78 crore to the Department of Water Resources for 2021-22.

## 4. YSR NethannaNestham:

Under the YSR NethannaNestham, ₹24,000 per annum is provided to every BPL weaver family owning a handloom. An allocation of ₹200 crore is made for YSR NethannaNestham in 2021-22.

## 5. Micro, Small & Medium Enterprises (MSME):

- The Government has introduced ReStart package for MSMEs in order to alleviate the hardships induced due to COVID-19

- Under the YSR Navodayam – One-time Restructuring of MSME loans scheme, around 1,02,000 MSME loan accounts worth ₹2,807 crore have been restructured.

#### 6. Women Empowerment:

- **YSR Aasara:** The YSR Aasara Programme was launched by GoAP to reimburse the entire outstanding bank loan of women SHG, as on 11 April 2019. The second instalment of ₹6,337 crore is proposed to be transferred in 2021-22 to benefit around 8.71 lakh SHGs.
- **YSR Sunna Vadi:** An amount of ₹1,112 crore has been transferred towards interest on loans for the year 2021-22.

#### Education:

- **Manabadi Nadu-Nedu:** For improving infrastructural facilities through community participation, an allocation of ₹3,500 crore has been made for this scheme in 2021-22.
  - **Jagananna Vidya Kanuka & Jagananna Gorumudda (Mid-Day Meal):** Government has allocated ₹750 crore under Jagananna Vidya Kanuka scheme and under Jagananna Gorumudda 1,200 crore has been allocated for FY 2021-22.
7. **Housing:** The government is committed to providing houses to all the poor and eligible households. Under the YSR Jaganna Colonies the Government has allocated a budget of ₹5,661.57 crore for FY 2021-22 towards Housing and Infrastructure.

#### 8. Health and Nutrition:

- Through the **Dr YSR Aarogyasri scheme**, the Government provides Rs 225 per day as post-operative sustenance allowance to BPL patients to compensate towards wage loss and medicines, an allocation of ₹2,258.94 crore for 2021-22 has been made under the scheme.
- The **Nadu-Nedu Health scheme** focuses on improvement of Public Healthcare as well as Health Infrastructure.

#### 9. Welfare Schemes:

- Allocation of an amount of ₹17,403 crore, ₹6,131 crore and ₹28,237 crore towards welfare and development of SC, ST and BC sub plan.
  - **Minority Action Plan:** An amount of ₹3840.72 crore has been allocated in the budget for the welfare of the Minority community for FY 2021-22.
  - **Jagananna Amma Vodi:** An amount of ₹6107.36 crore will be transferred to the bank account of mothers of the eligible students under the scheme in 2021-22.
  - **Kapu Welfare:** An amount of ₹15000 per annum has been allocated to each woman of the Kapu Community for support of livelihood activities. An amount of ₹3,306 crore has been allocated by the Government for the Kapu Community during 2021-22 under various schemes.
10. **Rural Development:** An allocation of ₹18,580.70 crore has been made to Panchayat Raj and Rural Development for 2021-22.
11. **Environment and Forests:** An allocation of ₹806.47 crore has been allocated for Environment, Forest, and Science and Technology department.
12. **Infrastructure**
- The Government is developing greenfield airports in the State
  - The launch of Concept Cities has been announced by Government to bring a strategic and tactical focus to economic and regional development efforts. It is a unique and inclusive model of economic development led by private sector and facilitated by Government.
  - An allocation of ₹3,673.34 crore for industrial and infrastructure development has been made in 2021-22.
  - An allocation of ₹7594.06 crore has been made for Transport, Roads and Building Department for 2021-22.
13. **Energy:** The Government has begun implementation of DBT scheme for free electricity. An amount of ₹6,637.24 crore has been allocated towards energy sector for 2021-22.

(For detailed paper visit <https://www.nabard.org/info-centre-state-level-papers.aspx?cid=700&id=698>)

#### 1.4 State Government Sponsored Programmes with Bank Credit

The major State Government Programmes and Schemes involving bank credit are given below. The complete list of Government of Andhra Pradesh (GoAP) schemes can be accessed from the link: <http://apfinance.gov.in/Budget2021/>. It may, however, be noted that not all schemes are credit linked.

- **Dr. YSR RythuBharosa (PM Kisan) Scheme on Farm Investment Support:** The objective of the scheme is to provide financial assistance to the farmer families including tenant farmers across the state @ ₹13500/- per farmer family per year. Farmers of AP who own cultivable land and enrolled under the PM-Kisan scheme are eligible under the scheme. As per the government, even those cultivating on endowments / temples/ Inam lands are also eligible under the scheme.
- **Dr. YSR Free Crop Insurance:** The government of AP, is implementing the free crop insurance i.e., without any financial burden to the farmers. The crop insurance amount is being directly met from the State budget. Allocation of ₹1802.82 crore is made in 2021-22 has been made towards Dr. YSR Free Crop Insurance scheme for the benefit of farmers.
- **YSR Sunna VaddiPantaRunalu:** The State Government will reimburse all the outstanding crop loans of those farmers who repay their loans on timely basis.
- **Government of Andhra Pradesh (GoAP)- AMUL Project:** The objective of this project is the socio-economic upliftment of milk producers in Andhra Pradesh with special focus on economic empowerment of women, providing remunerative price to milk producers, availability of quality milk and milk products at value for money to the consumers.
- **YSR MatsyakaraBharosaKendra:** The scheme is for the welfare of the Fishermen community. GoAP has been providing enhanced fishing ban period relief to fishermen under this scheme.
- **Micro, Small & Medium Enterprises (MSME):** The Government has introduced ReStart package for MSMEs in order to alleviate the hardships induced due to COVID-19.
- **YSR Aasara:** The objective of the programme to reimburse the entire outstanding bank loan of women SHG's as on 11 April 2019.
- **YSR Sunna Vadi:** The programme has benefitted around 8,78,874 SHGs. An amount of ₹ 1,112 crore has been transferred towards interest on loans for the year 2021-22.

(For detailed paper visit <https://www.nabard.org/info-centre-state-level-papers.aspx?cid=700&id=698>)

## CHAPTER 2

### CREDIT POTENTIAL FOR AGRICULTURE 2022-23

#### 2.1 Farm Credit

##### 2.1.1 Crop Production, Maintenance and Marketing

- Agriculture is the backbone of the economic structure of Andhra Pradesh. The State is popularly known as “Bejewelled Rice Bowl of India”. Agriculture and related activities provide direct and indirect income to 62% of its population. Rice is the major food crop and staple food of people in the State. Other important crops grown are Maize, Sugarcane, Cotton, Pulses, Mango Turmeric and Chillies etc.

##### 2.1.2 Introduction

- Guntur District is known for its commercial agriculture. Farmers are progressive and grow food and non-food cropson commercial scale. The district falls under Krishna Agro Climatic Zone with gross cropped area of 7.534 lakh ha, net sown area of 6.06lakh ha, average rainfall of 755 mm and cropping intensity of 124.32%. The Zone is characterized by heavy rains in late Kharif season during Sep-Oct and cyclones during Oct - Nov. The percentage of working population to total population is 49.05%, of which 38% is under Agriculture sector. The district is broadly divided into two regions viz., Krishna western delta region and upland region. The district has three major irrigation sources viz., i.e., Krishna western delta, Nagarjuna Sagar right canal and Guntur Channel. It has 72% black cotton soils, 17% red soils, 9% coastal sandy soils and 2% alluvial soils.
- The average size of land holding is 0.79 ha. Of the 8.41 lakh farm holdings, small and marginal farmers constitute 92.3% in terms of number of landholding and 69.1% in terms of area. The number of tenant farmers in the district is reported to be 2.3 lakh.
- The district has two accredited cold storages, of which one is registered with WDRA for issue of Negotiable Warehouse Receipts. Efforts are on for issue of pledge loans against NWR. 25 AMCs of Guntur district have also been accredited, however yet to be registered with WDRA. In order to encourage NWR financing, considerable efforts are necessary to create awareness among bankers, cold storage/godown owners and farmers. There is also a need to review various costs especially insurance of stock and warehouse for registration with WDRA.
- The major crops grown in the district during Kharif season are paddy, cotton, chilli, redgram, blackgram, etc. and during Rabi season are maize, blackgram, bengalgram, tobacco are cultivated. Paddy is cultivated in 2.80 lakh ha, cotton in 1.85 lakh ha, maize in 0.32 lakh ha and chilli in 0.61 lakh ha. Chilli grown in Guntur district has national and international reputation. The ground level credit flow for the last three year's viz., 2018-19, 2019-20 and 2020-21 stood at ₹1078903.81, ₹1088981.00 and ₹1251504.63lakh respectively.

#### Area, Production &Yield of Major Crops in the District

Major Crops	Area (Ha)		Production (MT)		Yield (Kg/Ha)		Avg Yield (Kg/Ha)
	2019-20	2020-21	2019-20	2020-21	2019-20	2020-21	
Paddy	246823.00	254237.00	1708583.00	1470415.00	6922.30	5783.64	6352.97
Maize	48207.00	40510.00	434343.00	337745.00	9009.96	8337.32	8673.64
Redgram	20081.00	20852.00	26437.00	16396.00	1316.52	786.30	1051.41
Bengalgram	15930.00	17456.00	31860.00	31456.00	2000.00	1802.02	1901.01
Black gram	33425.00	36250.00	24786.00	40779.00	741.54.00	1124.94	933.24

Major Crops	Area (Ha)		Production (MT)		Yield (Kg/Ha)		Avg Yield (Kg/Ha)
	2019-20	2020-21	2019-20	2020-21	2019-20	2020-21	
Chilies	78634.00	78237.00	499634.00	480855.00	6353.92	6146.13	6250.02
Cotton	182405.00	162789.00	492129.00	235230.00	2698.00	1445.00	2071.50

(Source: Department of Agriculture, Guntur)

### 2.1.3 Infrastructure and linkage support available, planned and gaps

Seeds Outlets	1265
Whole sale Fertilizers Outlets	128
Retail Fertilizer Outlets	1596
Pesticide Outlets	2107
Regulated markets	27
Soil Testing Labs	4 existing, additional 4 labs requires
No. of Cold Storages	125
No. of Agri Labs	15

The Agriculture Department is providing farm equipment like tillers, paddytransplanters, harvesters, threshers, chaff cutters, sprayers, etc., to the farmers on subsidy. There are 20Agricultural Marketing Committees (AMCs) in the districtand together with private warehouses, a total storage capacity of 4.925 lakh ton is existing.In addition to food grain storage, 126 cold storages exist with a capacity of 4.05 lakh tonne. Though storage space is available, scientific storage of agriculture produce remains an issue of concern.

### 2.1.4 Assessment of Credit Potential for 2022-23

The projections made for the sector in PLP 2022-23 is ₹1591559.85lakh. The crop-wise PLP projections for the year 2022-23 are given in the table hereunder:

(₹ Lakh)

S.No.	Activity	Unit	PLP 2022-23			
		No/Area	Scale of Finance	Physical Units	Fin.Outlay	Bank loan
1	Paddy	ha	0.951	250900	238605.90	238605.90
2	SRI Paddy	ha	0.869	15000	13035.00	13035.00
3	Ground nut	ha	0.734	5500	4037.00	4037.00
4	Oil Seeds	ha	0.326	8500	2771.00	2771.00
5	Pulses	ha	0.625	117000	73125.00	73125.00
6	Cotton	ha	1.195	175300	209483.50	209483.50
7	Tobacco	ha	1.983	22000	43626.00	43626.00
8	Chilies	ha	2.690	115000	309350.00	309350.00
9	Sugarcane	ha	1.875	860	1612.50	1612.50
10	Vegetables	ha	1.223	52000	63596.00	63596.00
11	Turmeric	ha	2.309	38500	88896.50	88896.50
12	Maize	ha	0.897	42000	37674.00	37674.00
13	Other Crops	ha	1.032	26000	26832.00	26832.00
14	Working capital for fruit crops	ha	0.679	8196	5567.13	5567.13
15	Produce loans	mt	1.235	113000	139555.00	139555.00
	<b>Sub-Total</b>				<b>1257766.52</b>	<b>1257766.53</b>
Post-harvest/household requirement (10%) (for S.No 1-13)						<b>111264.44</b>
Repairs and Maintenance (20%) (for S.No 1-13)						<b>222528.88</b>
<b>Final Total</b>						<b>1591559.85</b>

The joint mandal wise credit potential is indicated in Annexure I. A separate sheet indicating SoF is mentioned as separate Annexure.

It may be noted that based on average growth rates in area and increase in scales of finance, it is expected that overall projection may increase substantially. The Agriculture Department has been encouraging short duration pulse crops before main crop is planted / transplanted and this is expected to increase area under pulses and other short duration crops.

### **GoI/GoAP Policies & schemes for crop production**

#### **GoI Scheme of Subvention of Interest on Crop Loans**

The Government of India continues to provide interest subvention to banks during 2020-21 to ensure availability of crop loans upto ₹3.00 lakh at an interest of 7% p.a. to the farmers. For banks, the interest subvention @2% is available on their own involvement in eligible crop loans. For farmers, an additional 3.0% incentive is available for prompt repayment, making the effective rate of interest at 4% p.a. The policy is likely to continue in 2022-23. In addition, GoI has also extended interest subvention benefit of 2% to banks and 3% incentive to farmers on prompt repayment who has been provided working capital requirements for Animal Husbandry and fisheries activities under KCC upto ₹2.00 lakhs at interest of 7% p.a.

#### **GoI Interest Subvention on financing against Negotiable Warehouse Receipts (NWRs)**

In order to discourage distress sale and to facilitate better price realization, Government of India is continuing to provide 2% interest subvention to all public sector Commercial Banks, Regional Rural Banks and Cooperative Banks during 2020-21 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. The policy is likely to continue in 2021-22.

#### **Refinance support from NABARD for Seasonal Agricultural Operation**

NABARD is continuing its short-term refinance support at 4.5% rate of interest to Cooperative Banks and Regional Rural Banks during 2020-21, to enable them to finance crop loans at 7% p.a rate of interest to farmers. Such refinance support at 4.5% rate of interest is also available to Public Sector Commercial Banks for financing crop loans through Primary Agricultural Societies (PACs) ceded to them. The policy is likely to continue in 2022-23.

Taking into account the financial crunch being faced by some of the RRBs and Cooperative Banks in the country, NABARD continued its separate line of refinance called “Additional Short Term (SAO) Refinance” for them for financing crop loans. Under this line of credit, additional refinance to the extent of 20% of ground level credit flow, over and above the normal quantum of refinance support (40% of GLC) available to Cooperative Banks whereas for RRBs, the quantum of Additional SAO refinance is 30% over and above normal refinance support (20% of GLC). The rate of interest on this new line of SAO refinance is 5.50% (subject to change from time to time) for the year 2021-22. The amount of refinance support availed under this Additional ST (SAO) is reckoned towards own funds of bank for the purpose of claiming interest subvention from GoI. Thus, the banks will get 2% interest subvention on such outstanding refinance.

#### **Government of Andhra Pradesh’s Interest Subsidy / Rebate Scheme on Crop Loans**

The Interest Subvention Scheme of Government of AP on crop loans viz. Vaddi Leni Runalu (Sunna Vaddi Panta Runalu) is on-going Scheme. The scheme was continued during 2021-22 and may likely to continue during 2022-23. They are linked to prompt repayment of crop loans within due date fixed by banks subject to a maximum period of 12 months, in line with GoI scheme of 3% interest incentive. Under Vaddi Leni Runalu, for crop loans up to Rs.1 lakh, in addition to GoI incentive of 3% p.a, there is further subvention of 4%, effectively making the crop loans at zero percent rate of interest.



Government of Andhra Pradesh is implementing the 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 Mission on Oil Seeds and Oil Palm (NMOOP)
- Mission for Integrated Development of Horticulture (MIDH)
- Further, Govt of AP is also implementing a programme “Andhra Pradesh Community Managed Natural Farming (APCNF) under the aegis of RythuSadhikaraSamstha. In addition, Govt. of Andhra Pradesh from 15 October 2019 (i.e., from Rabi 2019) onwards, is implementing an input subsidy scheme known as “**RythuBharosa**” wherein financial assistance of ₹13500 per year is provided to farmer family (including Tenant Farmers). A farmer family is defined as “a family comprising of husband, wife and minor children having cultivable land”.
- **E-Crop booking:** Is done to create farmers’ database through e-Crop Application. This database is made mandatory for usage in implementation of Crop Insurance, Providing Input Subsidy, Sunna VaddiPantaRunalu and Procurement of Agriculture Produce.
- **Dr. YSR Free Crop Insurance:** The scheme is being implemented as 100% state scheme for all cultivators, who are cultivating notified crops in the notified areas based on registration through e-crop.

**Dr.YSRPolambadi:** Introduced in 2019, in order to nullify the adverse effects of Chemical Pesticides and to transform agriculture into a more prosperous occupation. It is a field-oriented training Program, where farmers are trained on diagnostic Procedures to study and evaluate the field conditions in respect of the incidence of pests and diseases in relation to ecological factors, and to take suitable decisions that warrant zero or minimum use of chemical adopting IPM technologies to enhance the crop yields. Polambadi focus on growing healthy crop, conserve natural enemies, conduct regular field observations, Farmers understand the ecology to become experts in their own fields.

### 2.1.5 Suggested action points

- The banks should cover all tenant farmers, share croppers, oral lessees under crop loan financing. The Joint Liability Groups need to be encouraged by the bankers for financing such farmers.
- The banks should finance crop loans to the full extent of scale of finance as fixed by the technical committee, extend consumption loans and also investment credit as per new KCC guidelines.
- Concerted efforts are necessary to enhance coverage under crop insurance especially commercial crops such as chilli, turmeric, etc where premium is high.
- Banks, while extending pledge loan need to ensure that the warehouses are accredited for scientific storage. Similarly, banks may encourage financing pledge loans under Negotiable Warehouse Receipt system.
- Crop specific value chain financing may be explored.

### 2.1.2 Water Resources

#### 2.1.2.1 Introduction

The important rivers and rivulets in the district are Krishna, Naguleru, Chandravanka and Gundlakamma. River Krishna travels 250 kms through the district along the northern boundary. Guntur district has canal network of Krishna Western Delta System and Nagarjuna Sagar Right canal for assured irrigation. Of the 6.06 lakh ha net sown area, 5.01 lakh ha is under ayacut of irrigation sources. However, actual irrigated area is 4.0081 lakh ha. Geologically, the district comprises of hard rocks (khondalites, granites, charnokites, limestone, shales and phyllites), semi-consolidated rocks (sandstones) and alluvial deposits along the river course and in delta region. Partly, Guntur district has consolidated formations which are suitable for dug wells, DCBs and bore- wells. There is an increased

awareness amongst the farming community on the need to use efficient irrigation systems alongside the traditional methods of irrigation. This coupled with the enabling support provided by the Central & State Government during the last two years, has resulted in the increased use of efficient irrigation systems.

The district is classified as low usage district with respect to ground water i.e., overall stage of development is 39%. The groundwater exploitation in the district is mainly through dug wells, bore wells, filter point wells and shallow tube wells. Of the 57 mandals, as per the latest estimates in March 2017, onemandal i.e., Karempudiis semi critical, 2 mandals viz., Veldurthi, Bollapalli are over exploited and 1 mandal i.e., Piduguralla is critical and the rest are categorized as safe. The Ground level credit flow to the sector was ₹12636.00 lakh, ₹9381.80 and ₹22742.13lakh during the years 2018-19, 2019-20 and 2020-21 respectively.

### 2.1.2.2 Infrastructure and linkage support available, planned and gaps

- The Ground Water Department has 17 Key observation wells, 32 general observation wells, 188 Command area observation wells and 10 Aqua observation wells.
- Blasting and drilling machines are available with private organizations in adequate number.
- There are 335 Water Users' Associations in the district. The total ayacut under the management of WUAs is about 4.84 lakh ha under various irrigation sources.
- The number of electrical connections for agricultural pump sets is about 55000. The major infrastructural constraint is non-availability of electricity supply for pump sets.

### 2.1.2.3 Assessment of Credit Potential for 2022-23

Though the GLC has increased, the volume of credit for the sector is still less since considerable potential exists. The State Government has introduced new schemes for farm ponds, bore-wells, has given impetus to micro irrigation under the APMIP. Considering, the present status and trends in ground level credit, infrastructure availability/gaps and recent policy and promotional interventions, the physical projections have been revised. The activity wise credit projections for the year 2022-23 are given in the following table.

(₹lakh)

S.No	Activity	Unit No/Area	PLP 2022-23			
			Unit Cost	Phy Units	Fin. Outlay	Bank loan
1	Dug well + pumpset	No.	1.438	280	402.64	361.20
2	Borewell + Pumpset	No.	1.290	1375	1773.75	1596.38
3	Irr. Pumpsets	No.	0.691	3190	2204.29	1983.86
4	Drip sets	No.	0.799	6650	5313.35	1328.34
5	Sprinkler sets	No.	0.413	1960	809.48	404.74
6	Lift Irrigation + pumpset	ha	1.331	959	1276.43	1148.79
7	Pipelines	ha	0.396	4550	1801.80	1621.62
8	Dug Out Well	No.	0.121	275	33.28	29.95
9	Artificial Recharge Bore Wells	No.	0.583	145	84.54	76.08
	<b>Total</b>				<b>13699.56</b>	<b>8550.96</b>

The potential for solar Pumpsets is indicated in Chapter 5.3 on Renewable Energy.

The joint mandal wise credit potential is indicated in Annexure I.

### **Water Conservation and Development Projects – NABARD interventions:**

NABARD is supporting the development of water resources both surface and groundwater through various schemes like watershed development, climate change projects addressing solution for water scarcity in arid and semi-arid regions. The efforts of NABARD promoted created enormous conservation structures throughout the Nation through watershed development approach.

NABARD has been identified as National Implementing Entity for formulation and routing of climate change projects for availing national and international funds under climate change.

NABARD has been implementing watershed development projects since inception of Indo German Watershed Development Programme in India (IGWDP) during 1990s. The participatory watershed development concept and methodology has been proved to be a successful initiative in enhancing the productivity, production and improving livelihood security of rural community. In order to further replicate the initiatives in the drought prone areas of the country, the Union Finance Minister, in his budget speech for 1999- 2000 had announced the creation of a Watershed Development Fund (WDF) in National Bank for Agriculture and Rural Development (NABARD) with broad objectives of unification of multiplicity of watershed development programmes into a single national initiative through involvement of village-level institutions and Project Facilitating Agencies (PFAs). In pursuance thereof, WDF has been created in NABARD with a contribution of 100 crore each by MoA, Government of India (GoI) and NABARD. NABARD is supporting projects many of which can be classified under climate finance. Over 28% of NABARD's cumulative disbursements have links with climate change adaptation and mitigation. Specifically, NABARD's thematic areas of forestry, agriculture, animal husbandry, land development, minor irrigation, etc., have projects / components with emission reduction potential. Apart from these, areas like farm mechanisation, Self Help Groups, Storage & Market Yards, etc. have some linkages with climate change adaptation.

### **Proposed Strategy for Accelerating Pace of Irrigation Development:**

About 50% of the GCA in the state is irrigated, the rest being rainfed. The productivity gap between rainfed and irrigated areas is large for all the major crops. Empirical evidences suggest that assured or protective irrigation encourages farmers to invest more in farming technology and inputs leading to productivity enhancement and increased farm income. A rapid expansion of irrigation systems is, therefore, critical for realizing the full potential of agriculture and enhancing farming incomes.

A three-pronged supply side strategy is suggested for making rapid strides in this area, differentiated as per the three major irrigation sources viz. rivers, tanks and ground water. Firstly, the ongoing major and medium irrigation projects need to be quickly completed in a limited time frame with intensive implementation monitoring. In the major and medium projects, there is also a substantial gap between potential created and utilized, which may be addressed by focusing on participatory irrigation management (PIM), better budgetary support for O&M, and rationalization of water rates with their plough-back. New projects also may be taken up under this category to utilize the balance potential available, with river basin planning. Secondly, the renovation/ revival and management of the traditional systems of tanks needs to be continued with full community involvement. New farm ponds/ check dams/ rainwater harvesting structures also need to be promoted mostly in critical and semi critical mandals like Bollapalli, Karempudi, Piduguralla etc., to maximise water availability. Third and a most important strategy is cautious development of ground water irrigation which has been one of the mainstays of irrigation development in the state so far. The strategy needs to be groundwater development in safe mandals as per need and a calibrated movement in the other ground water stressed mandals, accompanied by various artificial recharge measures, on a community basis.

Promotion of crop diversification in favour of less water consuming high value crops like vegetables and more water conserving systems like SRI, other irrigated dry (ID) crops along with increasing water use efficiencies through various measures including intensive promotion of micro irrigation in the state, better agronomic practices are some of the critical

demand side strategies for realizing the imperative of “more income per drop” for the benefit of farming community. With the large-scale adoption of micro irrigation in the state, net irrigated area through ground water in the state may increase manifold. In situ soil moisture conservation by mulching, silt application wherever feasible needs to be promoted. Also, a watershed approach along with appropriate rainfed farming practices, is an effective strategy in the rainfed areas. Better quality pumping power also needs to be provided with greater promotion of renewable (mainly solar) energy systems. Recycling and reuse of water also needs to be promoted as this shall also help in addressing deteriorating water quality issues besides making additional resources available for productive purposes. Some of these interventions also contribute to climate change adaptation and mitigation efforts in the water resources sector.

### **Policy Initiatives of Govt. of India**

#### **Pradhan Mantri Krishi Sinchai Yojana (PMKSY)**

With view to address the water scarcity situations and ensuring more equitable use of water, the Govt. of India launched Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) during 2015-16, which envisage the concept of “water for every farm” and “more crop per drop” to which, NABARD is a key stakeholder. The main objectives of the scheme are to achieve convergence of investments in irrigation at the field level, enhance the physical access of water on the farm and expand cultivable area under assured irrigation for providing ‘*Har Khet Ko Pani*’. Under this initiative, it is targeted to enhance irrigation efficiency by about 20% and creating 28.5 million ha additional area under irrigation in the country. The total budget allocated for implementing various components under PMKSY is ₹50,000 crore over four year’s period (2015-16 to 2019-20). The major components include fast tracking completion of 99 incomplete major and medium irrigation projects, greater use of micro irrigation systems, ensuring water in every farm and improving soil & water management practices on watershed approach for enhancing livelihood security. The funds are being utilized in the State of Andhra Pradesh also for various envisaged purposes, including for watershed management and micro irrigation projects.

Department of Agriculture Cooperation & Farmers’ Welfare is implementing ‘*Per Drop More Crop*’ component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY- PDMC). The PMKSY- PDMC focuses on enhancing water use efficiency at farm level through Micro Irrigation technologies viz. Drip and Sprinkler irrigation systems. Drip micro irrigation technique not only helps in water saving but also in reducing fertilizer usage, labour expenses and other input costs. For the current year, annual allotment of ₹4000 crore has already been allocated and conveyed to the State Governments. The State Governments have identified the beneficiaries to be covered under the programme. Fund release to some of the States is already under process for the year 2020-21. Further, Micro Irrigation Fund corpus of ₹10,000 crore has been created with NABARD. The objective of the fund is to facilitate the states in mobilizing the 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.

#### **National Water Mission**

Under the National Action Plan for Climate Change (NAPCC), the Govt. of India envisaged National Water Mission with the core objective of “conservation of water, minimizing wastages and ensuring its more equitable distribution both across and within states through integrated water resources development and management”. The Mission outlines the following five goals across which major initiatives have been envisioned as well as aligned from ongoing schemes pertaining to development and management of water resources in the country.

- Comprehensive water data base in public domain and assessment of impact of climate change on water resources
- Promotion of citizen and state action for water conservation, augmentation and preservation

- Focused attention to vulnerable areas including overexploited areas
- Increasing water use efficiency by 20%
- Promotion of basin level integrated water resources management

The above serve as guiding principles for the planning of water resources in the State.

**Initiatives of the Govt. of AP:** The Govt. of AP has completed/ is implementing a large number of irrigation projects under state funding as well as through other funding supports viz PMKSY, NABARD, World Bank, JICA, MGNREGS, RKVY, etc. Focusing on irrigation has been one of the key components of the growth strategy of the Govt. The top priority is being given for the completion of prioritized irrigation projects and bridging of gap ayacut. The Government has taken up Major and medium irrigation projects besides modernization of delta systems, and flood banks to create new irrigation potential and stabilization of the ayacut in Irrigation sector. The Govt. has also undertaken Bridging the gap ayacut in Minor Irrigation systems through RRR and NREGS funds as well as Creation of new ayacut and stabilization of ayacut under APSIDC. The District Irrigation Plans (DIP) and State Irrigation Plan (SIP) under the PMKSY are providing a comprehensive convergence framework for irrigation projects in the districts. The Govt. is committed to completing the mega Polavaram project on the Godavari in a fixed time frame. Other projects viz. the NeeruPragathi (covering farm ponds, checkdams, recharge, desilting, etc.) and the NTR Jalasiri Programme (promoting borewells including solar pumpsets) have been important strategies for water conservation and conjunctive use of ground and surface water. The Government has decided to provide Borewells to the needy and eligible farmers at free of cost under “YSR RythuBharosa” programme of ‘NAVARATNALU’.

#### **2.1.2.4 Critical Intervention required for creating a definitive impact in the sector**

- Harnessing of groundwater for irrigation purposes through drip and sprinkler system would improve the production and productivity under horticulture and plantation crops. Drip and sprinkler irrigation needs to be encouraged for banana, papaya, cotton and vegetables besides fruit crops.
- WUAs are existing in many areas but are not active. Their functioning needs to be comprehensively revamped through training and capacity building on functional, governance aspects and also conduct of elections wherever due.

#### **2.1.2.5 Suggested action points**

- Banks may extend credit support to farmers for bore wells, farm ponds, drip and sprinkler system by formulating Area Development Scheme for which concessional refinance assistance is provided by NABARD.
- Rejuvenation of existing MI tanks by desilting would enhance their storage and percolation capacities.
- District level gaps in critical irrigation infrastructure need to be identified and funded under RIDF.

### **2.1.3. Farm Mechanisation**

#### **2.1.3.1 Introduction**

Guntur is one of the crop intensive districts of Andhra Pradesh as most of the food and non-food commercial crops are grown here. The major crops grown in the district (2019-20) are paddy in 2.46 lakh ha, maize in 0.48 lakh ha, red gram in 0.20 lakh ha, black gram in 0.33 lakh ha, cotton in 1.8 lakh ha, chilli in 0.78 lakh ha. Farm operations are undertaken on a large scale with mechanized devices such as tractors, power tillers, threshers and sprayers. The demand for farm mechanization arises from fresh investment as well as replacement of the existing machinery.

Government of Andhra Pradesh is supporting for establishment of RythuBharosa Farm Machinery Banks (FMBs) through FPOs with a subsidy of 80% of the project outlay or ₹8lakh, whichever is lower. FPOs may need credit support for establishing the FMBs.

### **Promotion of Farm Mechanization – GoI initiatives**

#### **Human Resources Development in Farm Mechanization:**

It is essential to develop human resources to generate self-employment opportunities by way of providing skill-oriented training in the agricultural sector. Keeping this in view, Farm Machinery Training and Testing Institutes (FMTTIs) in Budni (M.P.), Hissar (Haryana), Garladinne, District Anantapur and BiswanathChariali (Assam) are engaged in conducting different types of training programmes in the selection, operation, repair/maintenance and management of farm machinery for various section of participants with stipend. Besides this, the training is also outsourced to institutions identified by State Governments such as SAUs, Agricultural Engineering Colleges, ICAR institutions, Polytechnics, etc.

#### **Popularization of New Agricultural Machines:**

For improving adoption of technologies for crop production, it is necessary to properly demonstrate utility of technologies to farmers for achieving higher production and productivity. Therefore, with the objective of induction of improved/new technology in agricultural production system, demonstration of newly developed agricultural/ horticultural equipment at the farmers' fields have been introduced with 100% grant-in-aid is given to the implementing agencies i.e., State Governments/UTs and Government organizations like ICAR and State Farm Corporation of India.

#### **Incentives for Purchase of Agricultural Machines/ Implements:**

In order to make available various agricultural implements and machines available to farmers, subsidy @ 25% to 50% of the cost of equipment/machine with permissible ceiling limits is made available to all category of farmers under various schemes of the Department of Agriculture and Cooperation such as Macro Management of Agriculture, National Food Security Mission, Rashtriya Krishi Vikas Yojana, National Horticulture Mission etc.

#### **Incentives for setting up of Custom Hiring Centers:**

In order make farm machinery available to small and marginal farmers, incentives in the form of subsidy are provided through the RKVY and Macro Management Schemes for setting up Farm Machinery Banks / Custom Hiring Centers. Sub Mission on Agricultural Mechanization (SMAM) envisages increase of farm power availability to 2 kW/ha to small/medium farms from the present level of less than 1 kW/ha. Subsidy @ 40% is made available to entrepreneurs willing to set up Farm Machinery/equipment bank for custom hiring. At present 852CHCs will be sanctioned for the JLGs and PACS in HUB and SPOKE model in the district in two phases. The loan shall be sanctioned by DCCB to these JLGs and the subsidy shall be sanctioned by GoAP.

#### **Promotion of Post-Harvest Management:**

The post-harvest management is promoted by way of establishment of post-harvest technologies in the production catchments under the bilateral agreement of ICAR and Self-Help Group (SHG)/User Groups (UG) of farmers/Cooperative Societies of Farmers/Non-Governmental Organizations (NGOs) with 40% assistance from the Government and remaining 60% coming from the beneficiary. Establishment of low-cost Post Harvest Technology (PHT) with Government assistance @ 40% of the total cost of technology/project is also supported and the technologies involving initial project investment upto ₹2 lakhs may be opted by individual farmer.

### **Recent policies and interventions**

- **Normal State Plan** – Aims in supply of implements / equipment to individual farmers. These equipments performs a single operation or part of various operations in a crop. This is being funded by the State Government through SDP (State Development Plan).
- **Rashtriya Krishi Vikas Yojana** – Aims in supply of Crop based group (set) of machinery / equipments to a group (Rythu Mithra Groups / Joint Liability Groups

etc.,) of farmers. These set of equipment aims in performing all /majority of feasible farm operations of a particular crop. This is being funded by the Govt. of India through RKVY (Rashtriya Krishi Vikas Yojana). The budget allocation for 2020-21 is ₹ 319.20 crore for CDP programme.

- **Sub-Mission on Agriculture Mechanization (SMAM):**

During the period from 2014-15 to 2020-21 an amount of ₹621.23 crore was released to our state by DAC&FW and during 2021-22 ₹32.93 crore was released as 1st instalment under Sub-Mission on Agriculture Mechanization (SMAM) for the establishment of 525 custom hiring centres and 34 hi-tech herbs

**Trends in Ground level credit flow:** During the last three financial years, i.e., 2018-19, 2019-20 and 2020-21 an amount of ₹16085.3 lakh ₹11942.79 lakh and ₹19061.68 lakh was disbursed respectively by banks in the district.

### 2.1.3.2 Infrastructure and linkage support available, planned and gaps

The district is having good network of dealers for sale of tractors and power tillers as well as for supply of spare parts, lubricants, etc. Adequate facilities are available for repairs and maintenance of the tractors even at the mandal level. Further, such infrastructure facilities are growing constantly in tune with growth in demand. There have been no specific problems in infrastructural facilities and marketing arrangements. While the existing infrastructure and support services available in the district are adequate, the predominance of smaller land holdings necessitates establishment of Agri-business Centres and other such custom hiring services for farm machinery to exploit the full potential.

#### Farm Power Availability:

No of Blocks	No. of available CHCs in the State	No. of Tractors available	Agricultural Labourers	Draught Animals	Farm Power Availability (kw/Ha)
57	168	30885	836149	44287	1.667

**RythuBharosa –Farm Machinery Banks (FMBs):** GoAP is providing financial assistance to FPOs for establishing Farm Machinery Banks (FMBs) near RythuBharosa Kendras (RBKs) with a project cost of ₹10 lakhs. GoAP is providing subsidy @80% of the project outlay or ₹8 lakhs whichever is less.

### 2.1.3.3 Assessment of credit potential for 2022-23

The projection made in the PLP for the year 2021-22 stood at ₹41530.91 lakhs. However, taking into account the impetus likely to be provided to this sector due to various policy announcements by the Central/State Government, infrastructure availability/gaps and recent policy and promotional interventions, increase in costs, the projections have been revised to ₹42213.88 lakhs. The sub-sector wise PLP projections for the year 2022-23 are given in the following table:

(₹Lakh)

S.No	Activity	Unit	PLP 2022-23			
		No./Area	Unit Cost	Phy units	Fin. Outlay	Bank loan
1	Tractors	No.	8.250	2950	24337.50	18260.50
2	Mini tractors upto 24 HP	No.	4.950	1050	5197.50	3895.50
3	Power tillers	No.	2.200	600	1320.00	990.00

4	Threshers	No.	1.742	2400	4180.80	3144.00
5	Combined Harvesters	No.	26.499	160	4239.84	3179.20
6	Rotovators	No.	1.265	150	189.75	142.50
7	Custom Hiring Centre (Cotton)	No.	25.817	170	4388.89	3291.20
8	Custom Hiring Centre (SMSRI)	No.	53.240	126	6708.24	5031.18
9	Paddy driers	No.	19.965	200	3993.00	2994.00
10	Plant protection equipment (knapsack sprayers)	No.	0.220	4800	1056.00	816.00
11	Paddy straw baler – Tractor operator	No.	4.400	130	572.00	429.00
12	Turmeric cooking machines	No.	5.445	10	54.45	40.80
	<b>Total</b>				<b>56237.97</b>	<b>42213.88</b>

Though, the unit cost of Plant protection equipment is less banks may consider financing them in JLG mode and also in combination with other items. The higher projection vis-a-vis previous PLP is due to increase in unit costs and increasing allocations from State Governments which can be leveraged for extending credit support. Considering the availability of subsidy ranging from 50% to 90%, the bank loan was considered at 75%. The joint mandal wise credit potential is indicated in Annexure I.

#### 2.1.3.4 Critical intervention required for creating a definitive impact:

Farm Labour has become scarce and costly in Guntur district. Guntur is crop intensive district and farmers grow chilli, cotton and paddy. More mechanization is required for seed sowing, pesticide spraying. Under RIF, NABARD had provided grant to two individual innovators to develop prototypes of tractor mounted boom sprayer and zero tillage maize seed dispenser. They have proved very useful and both the innovators got National Level Awards for the same. These new and innovative technologies have to be further scaled up and commercialized. Banks should come forward for financing these new machineries to overcome labour shortage and make farm operations cost effective.

#### 2.1.3.5 Suggested Action Points

- Banks may provide credit support for the establishment of CHCs at RBK level and also mandal level.
- Banks to encourage financing second hand tractors and repairs & maintenance of tractors.
- Bankers/Agricultural Department may organize farmers into JLGs for financing various types of farm implements/ establishment of Custom hiring centres so that the farmers can collectively service the loans with ease. Bankers may also consider financing through other modes like farmers clubs, SHG federations and FPOs for undertaking such ventures.
- Intensive awareness programmes need to be undertaken at various levels on incentives available from Government.

### 2.1.4 Plantation and Horticulture including Sericulture

#### 2.1.4.1 Introduction

Plantation and horticulture crops occupy 16% of the net cultivated area in the district. Important crops such as banana, citrus, mango, sapota, guava, chilli, turmeric; marigold, jasmine and crossandra, bhindi, brinjal, tomato, gourds, onion, elephant foot yam, etc. are commercially grown in the district. Total area under plantation and horticultural crops in the



district is 1, 04,217ha as on march 2021. Considering the pre-eminent position of Guntur in chilly, Spice Board is implementing several schemes, programmes in production, quality management and export of chillies. Turmeric is cultivated extensively in few pockets of the district and Guntur district hosts one of major turmeric markets of the state at Duggirala. Besides, vegetable cultivation on pandals is gaining popularity especially in Chebrolumandal and is expected to grow further.

Parts of the district are identified as the State Capital region. This will trigger very high demand for agri produce especially fruits and vegetables in the next 2-3 years. It is therefore necessary to strategize for increasing area and production under horticulture crops especially fruits (seasonal) and vegetables to meet the demand. The strategies include intensive cultivation of vegetables including poly house production, area expansion, productivity enhancement, etc.

During the last three financial years, i.e., 2018-19, 2019-20 and 2020-21 an amount of ₹10842.94 lakh, ₹8050.52 and ₹11679.66 lakh respectively were disbursed by banks in the district. The reduction in exposure is due to non-availability of CCR cards to majority of tenant farmers and also slowdown in JLG financing due to increase in defaults.

The area under sericulture in Guntur District is spread over 16 mandals. Despite having suitable agro climatic conditions, the spread and development of mulberry cultivation is well below the existing potential, due to absence of marketing facilities, reeling units, etc. in the district.

### **Mission for Integrated Development of Horticulture**

Government of India have launched ***Mission for Integrated Development of Horticulture (MIDH)***, to promote holistic growth of horticulture sector, through area based regionally differentiated strategies, which includes research, technology promotion, extension, post-harvest management, processing and marketing. The incentives and back-ended subsidy extended for investments by private sector under the programme include:

- Production
- Post-harvest handling infrastructure
- Pre-cooling units, on-farm pack houses, mobile pre-cooling units, staging cold rooms, cold storage units with/ without Controlled Atmosphere storage capability, integrated cold chain system, reefer vans, and reefer containers.
- Primary/ mobile processing units, ripening chambers.
- Setting up of new markets in private and cooperative sector (Please refer Operational Guidelines for details).

### **State Govt. strategies for development of Guntur District:**

- Cluster approach and promotion of FPOs.
- Data base through survey of crops & farmers.
- Extension and training programmes.
- Monitoring production in polyhouse and shadenet units in 8 Lakh Sq.Mtrs.
- Increasing productivity through –
  - Soil testing.
  - Use of micronutrients & water-soluble fertilizers.
  - Intercropping and multiple cropping.
  - Micro- irrigation linked with fertigation.
  - IPM and INM.
- Promotion of organic farming.
- Dry spell mitigation through Rain Guns.
- Mapping of existing post-harvest infrastructure to bridge the gap.
- Coconut palm insurance and weather-based insurance.

**Potential for the District:**

Name of the Activity	Potential in Mandals/belts
Poly House Cultivation	Great Potential in Palnadu Region
Vegetable nurseries under shade nets/polytunnels	Bapatla Region, Palnadu region and Guntur Region are highly Potential
Modern / hi-tech nurseries	Like Kadiyam, we can try in Bapatla region, Palnadu region of the district.
Horticulture based Integrated Farming Models	All upland regions of Palnadu region and some parts of Bapatla constituency.
Integrated Value Chain Financing	Great Potential for Chilli and Turmeric

**2.1.4.2 Infrastructure and linkage support available, planned and gaps**

There is one Horticulture Farm under the Department of Horticulture located at Kantheru and a number of private nurseries are also existing. The farm at Kantheru produces 16000 grafts of Acid lime. Besides, Agriculture College at Bapatla also supplies the planting material. The Department of Horticulture in the district is headed by a Deputy Director supported by two Assistant Directors (Horticulture) and 10 Horticulture Officers and other technical staff. Spices Board is having a regional office at Guntur for promoting chilly and other spices. There are 126 cold storages in the district with a capacity to handle about 4.50 lakh MT of chili. The Agriculture Marketing Committees (AMC) at Guntur and Duggirala facilitate marketing of horticulture crops (spices) like chilly and turmeric. Spices Board set up a Spices Park at Edlapadu which is designated as Food Park by MoFPI and is expected to stimulate investment.

Six horticulture based FPOs are promoted by NABARD in Guntur district consisting of three of chilli, one of turmeric, one of flowers and one on organic inputs. State Horticulture Dept. is also promoting FPOs in the district with the support of NGOs. It is expected that in the times to come, these FPOs will be the fulcrum of activities and all support from bankers and Government departments will be routed through these FPOs.

The Department of Sericulture at Guntur is headed by Assistant Director. He is assisted by 3 Sericulture Officers, 4 Asst. Sericulture Officers, 11 Technical Officers and 17 other staff. There are 2 Technical Service Centers at Tenali and Guntur imparting technical guidance and also training new entrepreneurs. There is one model seed farm located at Kantheru in Tadikonda mandal extended over an area of 5 acres, which produces seed cocoons. There are no grainages in the district and the DFLs are supplied with tie up from other districts, especially from the Gannavaram grainage in Krishna district. The cocoon production is about 10 MT. There is a silk reeling unit at Autonagar, Guntur run by the Department of Sericulture with 6 basins running to full capacity with per day consumption of 100kg of cocoon and production of about 5 kg of raw silk every day.

**2.1.4.3 Assessment of credit potential for 2022-23**

The projections made in PLP for the year 2021-22 stood at ₹13455.41 lakh. However, considering the likely impetus to be provided to this sector due to various policy announcements by the Central/State Government and NABARD, infrastructure availability/gaps and recent policy and promotional interventions, the projections have been revised to ₹17510.38 lakh. The sub-sector wise PLP projections for the year 2022-23 are given in the table hereunder:

(₹ lakh)

S.No	Activity	Unit	PLP 2022-23			
		No/Area	Unit Cost	Phy Units	Fin.Outlay	Bank loan
1	Mango	ha	2.002	285	570.57	427.50
2	Rejuvenation of Mango	ha	0.532	300	159.60	120.00

3	Coconut	ha	1.502	60	90.12	67.80
4	Guava	ha	3.806	172	654.63	490.20
5	Sapota	ha	1.409	300	422.70	318.00
6	Sweet orange	ha	1.969	410	807.29	606.80
7	Acid lime	ha	2.072	730	1512.56	1131.50
8	Papaya	ha	3.207	465	1491.26	1120.65
9	Tissue culture banana	ha	2.649	520	1377.48	1034.80
10	Pomegranate	ha	2.379	495	1179.89	881.10
11	Flowers	ha	1.903	370	704.11	529.10
12	Rejuvenation of Orange orchard	ha	0.532	300	159.60	120.00
13	Lemon grass	ha	0.532	20	10.64	8.00
14	Nursery	no	6.050	28	169.40	127.12
15	Chillishadenets	no	12.100	145	1754.50	1316.60
16	Pack houses	no	6.050	11	66.55	49.94
17	Integrated Pack houses	no	73.300	16	1172.80	879.68
18	Functional infrastructure for sorting, grading, packing and collection centre to farmer groups	no	18.150	8	145.20	108.88
19	Permanent pandals for vegetables	no	6.050	108	653.40	490.32
20	Chilli driers	no	1.694	70	118.30	88.90
21	Poly houses	1000 sqmt	24.200	100	2420.00	1815.00
22	Reefer vans	no	22.022	28	616.56	462.56
23	Ripening chambers (60 ton)p	no	50.820	7	355.74	266.84
24	Turmeric boiling and polishing machines	no	9.680	19	183.92	137.94
25	Dragon Fruit(2.5*2.5 for 1600 plants)	no	17.008	220	3741.76	2807.20
26	Mulberry/rearing of silk worms	ha	7.480	235	1757.80	1581.55
27	Rearing Sheds	no	6.600	63	1134.44	374.22
28	CRC	No.	18.007	8	144.06	129.68
29	Kisan Nurseries	No	2.057	10	20.57	18.50
	<b>Total</b>				<b>23595.45</b>	<b>17510.38</b>

For 2021-22, the assessed potential is higher in view the inclusion of new potential activities as envisaged under action plan of horticulture department. Area expansion has been brought down since not much scope exists to increase area.

The joint mandal wise credit potential is indicated in Annexure I.

#### 2.1.4.4 Critical interventions required for creating a definitive impact:

- The Sericulture farm at Kanthreru requires to be spruced up with model rearing sheds and adequate facilities for raising varieties of mulberry and production of planting material. The Department needs to continue its efforts on linking subsidies with bank credit either on individual basis or JLG mode.
- Strengthening quality testing Assay Labs facilities for spices, encouraging vegetable cultivation in poly houses and pandals in peri urban areas, financing private nurseries, promotion of FPOs who can provide reliable market linkages will help the farmers a long way.
- Credit support especially for perennial crops with long generation.

- The working capital credit for maintenance of horticultural crops should be ensured and should be given as per scale of finance and requirement

#### **2.1.4.5 Suggested Action Points:**

- Popularizing Good Agriculture practices (GAP) for Horticultural crops.
- Awareness creation on programmes and incentives under Government programmes.
- Formation of crop specific FPOs/FPGs to facilitate technology adoption and better price realization through collectivization. Concerted efforts are necessary to forge convergence of banks, Government Departments and Corporates to exploit the potential of FPOs and enhance income levels of farmers.
- Availability of Mulberry Planting material in required quantity, bank finance on liberal terms and creation of better marketing facilities for the cocoons, without going to Chittoor/Anantapur markets, etc. are some of the concerns which need to be resolved.
- Extension efforts may further be strengthened for necessary trainings on mulberry cultivation, chawki rearing, etc.
- To supplement the requirement of quality planting material of improved varieties of mulberry such as V-I, G 2 and G 4 produced in the Govt. Nurseries, private nurseries may be encouraged by imparting required training.
- To facilitate complete utilization of cocoons produced within the district, setting up of reeling units needs to be encouraged in the private sector.

### **2.1.5 Forestry and Wasteland Development**

#### **2.1.5.1 Introduction**

Forests are both an environmental resource and an economic resource for sustaining natural systems and promoting economic development. Forests contribute to biological diversity and play a key role in the maintenance of air, water, and soil quality. Forests influence biogeochemical processes, regulate runoff and groundwater, control soil erosion, and reduce downstream sedimentation and flooding. Forests also have aesthetic value and offer recreational opportunities. The loss of "environmental services" can amount to considerable costs in economic terms (especially when the effect is irreversible) but these costs are difficult to quantify.

Forests also contribute to the economy by providing timber products (saw logs, veneer logs, and logs for pulp), as well as non-timber products (nuts, fruits, gums, fibers, latex, bush meat, and palms). Moreover, forests are an important source of food, fiber, and energy for indigenous populations and local communities. The economic benefits arising from the use of non-timber products on a sustainable basis can be substantial.

In recent years, environmental and economic issues relating to forest use have moved from a local to a global scale, and from simple to complex dimensions. Perceptions of these environmental concerns have also shifted towards higher level of awareness. As a result, important regional and global implications associated with deforestation have heightened the need for conservation and sustainable forest management.

#### **Status of Forestry:**

As per Biennial Indian State Forest Report 2019 (latest), Andhra Pradesh state has a forest cover area of 37392 sq.km, which amounts to 22.94% of the total geographical area. Out of this, Very Dense Forest is 1995 sq.km, Moderate Dense Forest is 13938 sq.km, Open Forest is 13205 sq.km, Scrub Forest is 8254 sq.km. (Source: Indian State Forest Report 2019)

The protected areas in the state are covered under 3 National Parks and 13 Wild life sanctuaries. A total of 8139.88 sq.km, which is 21.87% of the total notified forest area in the state falls under category of protected forests (Reserved + Protected forests) where no production (exploitation) operations are taken up.

The State has a cultivable wasteland of 4.12 lakh ha which can be tapped for promotion of Social and Farm forestry. The vision of Forestry of the State Government is to ensure forest cover with rich biodiversity over 33% of State's geographical area.

GLC during the years 2018-19, 2019-20 and 2020-21 is ₹292.45 lakh, ₹217.14 lakh and ₹319.01 lakh respectively.

Very dense(Sq.kms)	Moderate Dense (Sq.kms)	Open( Sq.kms)	Scrub (Sq.Kms)	Total (Sq.kms)
1	291	596	451	<b>1339</b>

### Agroforestry

For mitigating risks viz. economic as well as environment and for better returns, one of the viable options could be 'Agro-Forestry' which has traditionally been a way of life and livelihood in India for centuries. The role of agroforestry in improving land productivity, soil conservation, bio-amelioration, climate moderation, and increasing farmers' income is widely acclaimed. There can be various elements of Agro-Forestry System. However, the basic element is 'Agriculture' which in broader sense encompasses agronomic crops, horticulture activities & animal husbandry activities integrated with trees or woody perennials. The system can also facilitate additional income generation through Integrated Farming with elements like poultry, mushroom growing, fish farming, beekeeping, sericulture etc. A very important feature of Agro-Forestry Systems is interaction between the elements which makes it a unique and a distinctive land use system.

### Agroforestry Systems

Agroforestry systems, in addition to the economic benefits provide environmental gains leading to resilience of agriculture through adaptation/mitigation strategies in respect of climate change. Being perennials, the trees provide an element of long-term economic stability to the farmer in the event of a crop failure. Thus, broadly the Agroforestry Systems can be classified on the basis of structure i.e., its components and their arrangement (spatial & temporal) as also the functions they perform. The broad classification would be as under:

Agro-Forestry Systems			
Structural Basis		Functional basis	
Nature of Components	Arrangement of Components	Productive Function	Protective Function
Agri-Silvicultural Systems	Spatial Arrangement	Timber, Fodder & Fuel wood	Wind Breaks & Shelterbelts
Silvi-Pastoral Systems		Food, Fiber & Shelter	Soil Conservation
Agro-Silvi-Pastoral Systems	Temporal Arrangement	Non-Timber Forest Produce	Soil Improvement
<ul style="list-style-type: none"> <li>▪ <b>Agri- Component</b> comprises of Food Grains; Horticulture Crops viz. Fruits, Vegetables, Flowers, Medicinal &amp; Aromatic Plants; Animal husbandry – Livestock Animals, SGP, Poultry, etc.</li> <li>▪ <b>Silvi - Component</b> comprises of Woody Perennial or Trees including Bamboos which is a grass – Primarily grown for timber, fodder &amp; fuel wood, NTFPs</li> <li>▪ <b>Pastoral - Component</b> comprises of fodder grasses</li> <li>▪ <b>Agro - Components</b> only comprises of food grain component</li> </ul>			

### 2.1.5.2 Infrastructure and linkage support available, planned and gaps

About 50 lakh seedlings of different tree species including fruit bearing ones are raised each year for distribution by 19 nursery centres maintained in the district. The Forest Department is encouraging private individuals to take-up farm forestry and block plantations by supplying seedlings at nominal rates, depending on the quantum of requirement. At each Mandal Office, the list of nurseries, their location and type of tree species raised is available. The Department is also involved in formation of "Vana Samrakshana Samithi" (VSS) for joint forest management. Under this scheme, about 20538 ha of forest area is allocated to

179 VSS. International Paper APPM Ltd, Rajahmundry and Bhadrachalam Paper Boards Ltd. are encouraging farmers to take up tree planting especially Subabul, Casuarina and Eucalyptus. In the recent past, considerable tree plantation has taken place through NeeruChettuprogramme initiated by GoAP and all the social forestry nurseries have geared up to raise nurseries.

### 2.1.5.3 Assessment of credit potential for 2022-23

The projection made in the PLP for the year 2021-22 stood at ₹ 2072.35 lakh which has been revised marginally to ₹2272.45 lakh as huge plantation programme is taken up by Government which is highly subsidized and linked to MGNREGA.

(₹Lakh)

S.No	Activity	Unit	PLP 2022-23				
		No/Area		Unit Cost	Phy.Units	Fin.Outlay	Bank loan
1	Nurseries	No.		3.993	165	658.85	592.35
2	Farm forestry (Eucalyptus)	No.		0.710	1200	852.00	768.00
3	Wastelands Dev (Subabool).	ha		0.729	1070	780.03	706.20
4	Wastelands Dev (Casuarina).	ha		0.785	290	227.65	205.90
	<b>Total</b>					<b>2518.53</b>	<b>2272.45</b>

The joint mandal wise credit potential is indicated in Annexure I

### 2.1.5.4 Critical interventions required for creating a definitive impact:

The extent of forest area is below the recommended level and also below the state average. While, State Government in the recent past has taken up massive tree plantation programme, there is need to promote commercial forestry. The upland areas especially Vinukonda, Durgi, Gurajala, Macharla, Bollapalli, etc offer good potential for raising forestry species such as Subabul, eucalyptus and teak. Promotion of nurseries for continuous supply of planting material in adequate numbers will support plantation activities

### 2.1.5.5 Suggested action points:

Availability of planting material of required species, in required quantities, is immediate requirement. Institutional credit flow to the forestry and wasteland development is very low. This may be due to lack of awareness/demand from the farmers for financial support and also due to implementation of government sponsored programmes. Marketing arrangements for forest produce need to be strengthened. Further, the Vana SamrakshnaSamithi need to be revitalized by building their capacities. Awareness about the economics / bankability of agro-forestry/ farm forestry schemes among the farmers/ bankers needs to be created.

## 2.1.6 Animal Husbandry – Dairy Development

### 2.1.6.1 Introduction

Dairy activity is the second most important economic activity in the district after agriculture and is undertaken by all categories of farmers. As per the latest livestock census 2019, there are 0.95 lakh cattle, 8.82 lakh buffaloes in the district. CB cattle account only 10.0 % of total cattle population. The milk production in the district is estimated at 13.1226 lakh MT (9% of state milk production, 3th position among districts) for the year 2020-21 and buffaloes accounted for nearly 88% of the district milk production. The average yield based on animals in milk is 5.521 kgs/ day as against state average of 5.133 kg/day. The per capita availability works out to 687 gm per day.

### 2.1.6.2 Infrastructure and linkage support available, planned and gaps

- The Department of Animal Husbandry provides veterinary health services through one Veterinary Polyclinic at Guntur, 27 veterinary hospitals at the erstwhile block headquarters, 142 veterinary dispensaries, 114 rural livestock units and two mobile clinics. Sangam Dairy has about 50 veterinary aid centers. The number of AI centres is 283 with AH Dept. and in addition 193 Gopal Mitras and 120 centres of APDDCF are operating in the field for taking care of AI activity. There are total no of 151 Veterinary Asst. Surgeons in the district.
- There are 5 organized cattle markets situated at Krosuru, Chilakaluripet, Narsaraopet, Piduguralla and Gurajala. Training programmes are organized by Sangam Dairy and the AH department centre located at Guntur for prospective dairy farmers.
- The Sangam Milk Producer Company Ltd (earlier called Guntur District milk producers Co-operative Union Limited or Sangam dairy) has milk plant with a handling capacity of 3.50 lakh litres per day. Besides, it has also facilities for making Skim milk powder, Ghee, White and Table butter, U.H.T. Milk and other bi-products. The dairy operates through 78 milk routes with over 792 milk collection centers. There are 648 milk producers' cooperative societies functioning, with a membership of 1.495 lakh. There are four milk chilling centers of Sangam at Jagarlamudi, Narsaraopet, Bhattiprolu and Gurajala with a total handling capacity of 4.95 lakh liters per day. Besides Sangam dairy, there are 43 private dairy units with milk handling capacity of nearly 3.50 lakh liters per day. Sangam dairy also has a Cattle Feed mixing plant of 5 MT capacity and a Mineral Mixing plant.
- The area under permanent pastures and other grazing lands is 14251. The availability of fodder is estimated at 23.85 lakh MT for the year 2014-15 as against requirement of 22.38 lakh MT for total Livestock units indicating surplus of 1.47 lakh MT.
- With an objective of addressing the regional imbalance in dairy development and also to give boost to the Dairy Sector as a whole through credit support from the banking sector, NABARD prepared Area Based Schemes in the district. The State Government is implementing Special Development Package for production of livestock in the district. 'Sunandini Calf Feed programme is being implemented for rearing of heifers. Dairy has been identified for achieving double digit growth under Primary Sector Mission by the State Govt.
- Considering the norm of one AI centre for 1000 breedable population, the district needs 100 AI centers. There is no gap in the requirement, considering Gopal Mitras and centres with APDDCF under RIDF, NABARD sanctioned loan of ₹1311.9 lakh towards 118 veterinary institutions till date. There are 21 ongoing projects under RIDF with respect to Animal husbandry department with a RIDF loan of ₹1359.19 lakh.  
The GLC under the sector for 2018-19, 2019-20 and 2020-21 are ₹129434.41 lakh, ₹96100.67 lakh and ₹122054.88 lakh respectively. As per DRDA estimates, about 25-30% of SHG lending is catered to dairy sector.
- As on 17<sup>th</sup> March 2021 the number of KCC to Animal Husbandry farmers sanctioned are only 610. This will be definitely increasing in the upcoming financial years as the Banks have started financing under this scheme.

#### GoAP – AMUL Project:

GoAP had signed an MoU with Gujarat Cooperative Milk Marketing Federation which is otherwise called as GoAP-AMUL Project. Under this project the total Milk Routes identified are 12, covering 831 villages. At present it is being implemented in 129 villages of Guntur. Under YSR Cheyutha the SHG women are being financed to purchase animals. In this scheme the beneficiaries will be given an assistance of ₹75000/- in 4 installments with ₹18750 as 1<sup>st</sup> installment. As on 31.03.2021 the number of beneficiaries selected for this



scheme are 39712 only. This will be increasing in 2021-22 as the Milk Routes shall be finalized and also the number of villages shall be increased.

### 2.1.6.3 Assessment of credit potential for 2022-23

The projections made in the PLP for the year 2021-22 stood at ₹167169.22 lakh. However, taking into account the present status and trends in ground level credit, infrastructure availability/gaps and recent policy and promotional interventions, the credit potential is projected to ₹180506.59lakh. 25% of SHG lending has been imputed into dairy sector. With capital city being set up in Guntur district, the demand for milk and milk products is expected to significantly increase and this aspect has been taken into cognizance in estimating the potential. The sub-sector wise PLP projections for the year 2022-23 are given in the table here under:

(₹ Lakh)

S.No	Activity	Unit	PLP 2022-23			
		No/Area	Unit cost	Phy.Units	Fin.Outlay	Bank loan
1	CB Cows (1+1)	No	1.672	244	407.97	366.00
2	GM Buffaloes (1+1)	No	2.046	34300	70177.80	63112.00
3	Mini Dairy (10 GMBs)	No	13.049	635	8286.12	7454.90
4	Com. Dairy (50 GMBs)	No	78.650	213	16752.45	15078.27
5	Female GMB Calf-rearing	No	0.495	3650	1806.75	1642.50
6	Female CBC Calf-rearing	No	0.389	228	88.69	79.80
7	Fodder Cultivation	ha	0.363	4580	1662.54	1511.40
8	Gopalmitra	No	0.605	73	44.17	39.42
9	Pvt.Vet Clinics	No	3.465	10	34.65	31.20
10	SHG – Dairy(4-6)Animals/SHG)	No	8.800	10350	91080.00	91080.00
11	ZBNF unit - nondescript cows (1+1)	No.	1.217	101	122.92	111.10
	<b>Total</b>				<b>190464.06</b>	<b>180506.59</b>

The joint mandal wise credit potential is indicated in Annexure I.

### 2.1.6.4 Critical interventions required for creating a definitive impact:

Promotion of fodder cultivation from Department would improve the productivity of animals. Promotion of FPOs of dairy farmers will help to exploit the growing demand of milk especially in urban areas.

### 2.1.6.5 Suggested action points

- Availability of fodder and supply of concentrated feed through milk Cooperatives and Fodder development on commercial lines with institutional finance should be encouraged in the district
- Banks should finance calf rearing schemes to augment the supply of quality animals for future years. These need to be clubbed with commercial and mini dairies.
- Considering the projections, there is a need for induction of quality animals to meet the gap in the requirement of animals.



## 2.1.7 Animal Husbandry – Poultry

### 2.1.7.1 Introduction

Guntur is one of the developed districts in poultry farming in the state. Eggs & cull birds are supplied to Chennai, eastern and north eastern parts of the country. The poultry population was 68.77 lakh as per Livestock Census 2019. The egg production in the district is estimated at 22078.00 lakh numbers for the year 2020-21. Poultry accounts for 62.7% of meat production in the district. The estimated per capita availability of eggs is 422/year. The ground level credit flow for the sector during the last three 2018-19, 2019-20 and 2020-21 was ₹24322.162 lakh, ₹18058.39 lakh and ₹25448.28 respectively. As per the latest circular available under EDEG-PVCF 13 activities were deleted and also there is no circular on the subsidies available till date. Hence the potential is reduced.

### 2.1.7.2 Infrastructure and linkage support available, planned and gaps

The two main problems confronting poultry industry in the state are unremunerated egg price and the soaring feed cost. Infrastructure support like water, power, technical assistance, feed manufacturing, etc., are considered adequate in the district. Generally, units with improved layer/broiler birds depend on poultry hatcheries / private veterinarians for animal health care, which are reasonably good.

### 2.1.7.3 Assessment of credit potential for 2022-23

The projections made in PLP 2021-22 stood at ₹9162.16 lakh. However, taking into account the present status and trends in ground level credit, infrastructure availability/gaps and recent policy and promotional interventions, the credit potentials have been projected at ₹10206.75 lakh. As per the latest circular available under EDEG-PVCF 13 activities were deleted and also there is no circular on the subsidies available till date. Hence the potential is reduced.

The sub-sector wise PLP projections for the year 2022-23 are given in the table hereunder.  
(₹ Lakh)

S.No	Activity	Unit No	PLP 2022-23			
			Unit Cost	Phy units	Fin. Outlay	Bank loan
1	Com. Broiler (800 Birds)	No.	3.080	347	1068.76	961.19
2	Com. Layer (1000 birds)	No.	6.270	940	5893.80	5301.60
3	Egg/Chicken cart	No.	0.143	170	24.31	22.10
4	Hatcheries	No.	87.846	8	702.77	632.48
5	Chicken meat outlets	No.	1.997	29	57.91	52.20
6	Feed plant and analytical lab.	No.	23.430	7	164.01	147.63
7	Working capital	10000 birds	15.972	215	3433.98	3089.55
	<b>Total</b>				<b>11345.54</b>	<b>10206.75</b>

The joint mandal wise PLP projections are indicated in Annexure I.

### 2.1.7.4 Critical interventions required for creating a definitive impact

Highly fluctuating market price is forcing the poultry farmers to close their units as they are incurring heavy losses. The fluctuation is mainly due to increasing feed cost and mortality rate is very high due to heat. State Government should intervene in regulating the market price by providing feed at subsidized rates. Poultry disease diagnostic facilities need further improvement in the district.

### 2.1.7.5 Suggested action points

- Encourage farmers to take up maize cultivation by assuring minimum support price for their produce and check diversification to other uses.

- Small sized back yard poultry units with improved desi birds may also be encouraged under Government sponsored programmes.
- Contract farming in Broilers should be encouraged to reduce the middlemen and reduce market risk since poultry provides cheap source of animal protein, subsidized supply of maize is recommended for sustenance of broiler and layer industry.

## 2.1.8 Animal Husbandry – Sheep, Goat, Piggery etc.

### 2.1.8.1 Introduction:

The upland areas of the district offer the agro-climatic conditions suitable for sheep rearing and grazing land is also available. The population of sheep, goat and pigs as per the livestock census (2019) is 7.42 lakh, 2.52 lakh and 0.95 lakh, respectively. The meat production in the district is estimated at 68350 MT during 2020-21 with a per capita availability at 68gm per day. The ground level credit flow for the sector during the last three years i.e., 2018-19, 2019-20 and 2020-21 was ₹11211.13 lakh, ₹8323.89 lakh and ₹14935.67 lakh respectively.

### 2.1.8.2 Infrastructure and linkage support available, planned and gap

The livestock markets for sheep/goat have been set up near Chilakaluripeta, Nallapadu and Macherla. There are 11 slaughter houses (4 recognized) in the district. The butchers and the traders purchase sheep and goat directly from farmers. Vaccination and other health care facilities are available from veterinary institutions, the details of which are given in Animal Husbandry – Dairy chapter. 57 Primary Sheep cooperative societies and one district union are functioning in the district. The District Branch of the A.P. Sheep & Goat Development Co-operative Federation is giving training to the educated youth among shepherd community in First-Aid, Deworming and Vaccination of small ruminants.

### 2.1.8.3 Assessment of credit potential for 2022-23

The projections made in the PLP for the year 2021-22 stood at ₹34006.79 lakh. However, taking into account the present status and trends in ground level credit, infrastructure availability/gaps and recent policy and promotional interventions, the credit potentials have been projected at ₹37117.92 lakh. The projection is on account of imputing 15% of SHG lending under the sector, which has hitherto been reported only under OPS – SHGs. The sub-sector wise PLP projections estimated for the year 2022-23 are given in the table under:

(₹Lakh)

S.No	Activity	Unit No	PLP 2022-23			
			Unit Cost	Phy units	Fin. Out lay	Bank loan
1	Sheep (20+1)	No.	2.163	3175	6867.525	5143.50
2	Goat (20+1)	No.	1.815	1700	3085.5	2312.00
3	Com. sheep farm (100+4)	No.	10.813	83	897.479	673.13
4	Ram lamb Rearing (20)	No.	1.012	209	211.508	158.84
5	Sheep/Goat (500+25)	No.	48.067	58	2787.886	2090.90
6	Meat Shops	No.	3.993	45	179.685	134.55
7	Sheep – SHG(10+1)	No.	5.000	6210	26400.00	26400.00
8	Piggery (breeding unit) 10+1	No.	5.471	50	273.55	205.00
	<b>Total</b>				<b>40703.133</b>	<b>37117.92</b>

The joint mandal wise PLP projections are indicated in Annexure I

### 2.1.8.4 Critical interventions required for creating a definitive impact:

- Infrastructure in the slaughter houses need to be improved especially sanitation, electricity, water supply and space.
- Rearing of sheep under semi-intensive system with fodder cultivation needs to be promoted.
- Community lands may be leased to cooperative societies for raising green fodder.

### 2.1.8.5 Suggested action points

- More than 3000 sheep/goat rearers have been formed into JLGs for availing bank finance for smaller units by utilizing GOI subsidy scheme. Majority of them are not having anything to offer as security. Small loans can be offered without security, but financing banks are not encouraging the scheme due to mis-utilisation of the earlier units sanctioned by them. Banks should encourage the scheme and finance the deserving poor people through proper selection in coordination with AH department and Sheep & Goat Development Federation.
- Financing of ram/lamb rearing units may be encouraged.
- Sheep cooperatives should educate the sheep rearers on the importance of exchange of breeding ram, at least once in two years.

## 2.1.9 Fisheries

### 2.1.9.1 Introduction

Guntur district is endowed with vast inland, marine and brackish water resources for development of fisheries. River Krishna encircling three sides of the district flows from Macherla to Repalle for about 250 km. There are two reservoirs viz. Nagarjuna Sagar Project and Buggavagu pick up reservoir with a water spread area of 29732 ha. In addition, this district is endowed with 206 perennial and 738 long seasonal tanks with a water spread area of 15578 ha and 8918 ha, respectively, which are suitable for fish culture. The no. of registered hatcheries of vannamei broodstock for seed production are 289 and the list of Farms registered under Guntur district are 2382. There are 2745 ha of area under short seasonal tanks for fish culture. The district has a coast line of 43 km and continental shelf area of 1373 sq.km. Capture fisheries is taken up in reservoirs and in irrigation tanks. Culture of fish is also taken up in tanks and ponds owned by private individuals. The predominant varieties of fish cultured are rohu, catla, mrigal and vannamei.

There are about 75315 fishermen spread over 120 villages in the district. The district is having 45 functional Marine Fishermen Cooperative Societies and 129 Inland Fishermen Cooperative Societies with membership of 7,033 and 16,976 respectively. In addition to that, there are 22 functional Fisherwomen Cooperative Societies with a membership of 1272 members. The district has one brackish water society with a total membership of 36 members and a District Fishermen Cooperative Society with membership of 455650 fisherwomen have formed into 550 SHGs under Velugu project and the major activity undertaken by them is marketing of dry and fresh fish, besides a few members are also taking up dairy activity.

S.No.	Total Production	2017-18 (MT)	2018-19 (MT)	2019-20 (MT)	2020-21 (MT)
1	Marine Fish and Shrimp	53316.00	55717.00	60459.00	61557
2	Inland Fish and Fresh water Prawn	46705.00	79929.00	88097.00	92160
3	Brackish water Shrimp	49664.00	59839.00	73200.00	72234

The total area under aquaculture is about 10541.5 ha. Large areas of private lands have been converted to prawn farming in the coastal Mandals of Bapatla, Repalle, Karlapalem, Pittalavanipalem, Nizampatnam and Nagaram. Most of the fields near the drains were converted to prawn farming as the activity offered quick returns for growing tiger prawn. There are 191 mechanized boats, 1546 non mechanized, 8750 Fishing gears.

Some policies and interventions in the sector include replacement of boats and nets, stocking of fish fingerlings, Motorcycle with ice boxes, exemption of sales tax on HSD oil, fishing rights in minor irrigation tanks and reservoirs, supply of gambusia fish seed to local bodies to arrest the menace of mosquitoes and stocking of fish fingerlings in MI tanks and reservoirs.

Under RIDF tranche XX and XXIII i.e., 2014-15 and 2017-18 NABARD has sanctioned six projects for strengthening on shore facilities with a support of ₹15.14 crore and ₹96.00

lakhs. In addition, NABARD also sanctioned three Fisheries Producer Companies in Repalle, Dachepalli and Nizampatnammandals.

RIDF Tranche – XX	RIDF Tranche - XXIII
Total No. of projects sanctioned – 6 (for strengthening on shore facilities)	Total No. of Projects -4
Credit support given – ₹ 15.14 crore	Credit Support given – ₹96.00 Lakhs.
No. of FPO's sanctioned – 3 at Repalle, Dachepalli and Nizampatnammandals	MoU signed by GoAP and NABARD for the development of Nizampatnam Harbour under FIDF.

#### Status in the District

1.	Ponds	10354.16 ha
2.	Tanks (206)	15578.00 ha
3.	Reservoirs (2)	29732.00 ha
4.	Scampi Culture	1300.00 ha
5.	Brackish	6888.49 ha

S.No	Coast line (Km)	Marine Fishing Villages	Fishing Harbours	Fish Landing Centres	Fish Drying platforms	Continental Shelf Area (in sq.km)	Fishing crafts			
							Mechanised	Motorised	Traditional	Total
1	43	35	1	15	6	1373	191	1902	722	2843

S.No	Shrimp Hatcheries		Scampi Hatcheries		Feed Mills		Fish Seed farms (Public)	Fish Seed Farms (Pvt.)
	No.	Capacity (Million nos. of PL)	No.	Capacity (Million nos. of PL)	No.	Capacity (Tonnes)		
1.	8	345	0		7	4440	3	48

The ground level credit flow for the sector during the last three years i.e., 2018-19, 2019-20 and 2020-21 was ₹16531.00 lakh, ₹12273.71 lakh and ₹ 18543.43 respectively.

#### 2.1.9.2 Infrastructure and linkage support available, planned and gap

- There are 4 fish seed hatcheries under government sector and 4 under private sector with a capacity to produce 345 Million per year. There are 6 brackish water shrimp seed hatcheries and 4 private scamp hatcheries. There is one fish processing plant at Nizampatnam with a capacity to process 20 tonnes per day. There are 3 cold storages with storage capacity of 145 tonnes of fish. 7 feed mixing plants with a production capacity of 4440 tonnes per year exist in the district.
- There are 21 fish landing centers and 3 Boat Building Yards in the district. There is one fishing harbour at Nizampatnam. Five shore-based centers and 7 drying platforms were developed during 2005-06. Shore based facilities, like net repairing, boat repairing, drying platforms, etc.: are provided at Ramachandrapuram, Lankavaradibba, Adivipallipalem, Nakshatranagar and Mollaguntecenters.
- Two urban fish markets at Guntur and Narsaraopet are developed for marketing of fish products. Besides, the fishermen also market the fish in 10 general municipal markets and also in other rural markets as well as shandies. NABARD has promoted three FPOs at Dachepalli, Nizampatnam and Lankevanidibba.

#### 2.1.9.3 Assessment of credit potential for 2022-23

The projections made in the PLP for the year 2021-22 stood at ₹ 5531.63 lakh. The projections have been revised to ₹8082.06 lakh in view of the changes in the unit cost of a few activities. The activity-wise PLP projections for the year 2022-23 are given in the table hereunder:

(₹ lakh)

S.No	Activity	Unit No	PLP 2022-23			
			Unit Cost	Phy units	Fin. Outlay	Bank loan
1	Renovation of inland fish tanks	ha	3.630	70	254.10	203.00
2	New tanks	ha	8.371	25	209.25	167.50
3	WC for scampi/fish	No.	1.815	821	1490.12	1190.45
4	Renovation brackish water tank	No.	1.815	75	136.13	108.75
5	WC for brackish water prawn	No.	2.420	1000	2420.00	1940.00
6	FRP Boats	No.	5.500	13	71.50	57.20
7	Motorised Boats	ha	3.025	45	136.13	108.90
8	Recirculatory Aqua Culture System (Tank Size - 7.65 x 7.65 x 1.5m)	No	55.000	80	4400.00	3520.00
9	Construction of Biofloc ponds for Fish water, fish farming incl inputs	No	15.400	35	539.00	431.20
10	Establishment of stationary or mobile Aqualabs for fish and Shrimp diseases diagnosis.	No	38.500	2	77.00	61.60
11	Purchase of Motor cycle with ice-box for retail fish marketing	No	0.825	265	218.63	174.90
12	Establishment of mini-retail fish outlets	No	1.430	104	148.72	118.56
	<b>Total</b>				<b>10100.58</b>	<b>8082.06</b>

The joint mandal wise PLP projections for the year 2021-22 are furnished in Annexure-I.

### Major interventions in the district:

The GoI scheme called PMMSY was introduced with outlay of ₹20050 crores in fisheries sector. The scheme intends to address critical gaps in fish production and productivity, quality, technology, post-harvest infrastructure and management, modernization and strengthening of value chain, traceability, establishing a robust fisheries management framework and fishers' welfare.

- Fisheries and Aquaculture Infrastructure Development Fund (FIDF) has been set up by the Govt. of India with total outlay of ₹7522.48 crore. It is expected that FIDF may spur the infrastructure development required to arrest post-harvest losses and increased returns to farmers.
- The detailed guidelines of providing short term credit for fisheries under KCC has been issued by RBI. The scheme provides working capital requirements to fishers/fish farmers
- The State Government is implementing "Y.S.R. Matsyakara Bharosa", a unique kind of scheme in the country. Under the scheme, the Relief to marine fishermen families during fishing ban period, has been enhanced from ₹4000/- to ₹10000/- The relief was also extended to fishers of traditional boats as lean period relief. Enhanced the subsidy on diesel oil to fishing boats from ₹6.03 ps to ₹9.00 per litre. The subsidy is transferred at source (front end) through smart cards. All the registered Mechanized and Motorized crafts are sanctioned HSD oil subsidy irrespective of registration date. Further, Enhanced the ex-gratia payable to the deceased fishermen family to ₹10.00 lakhs from ₹5.00 Lakhs when active fishermen dies while fishing.
- The Govt. of AP Government has established RythuBharosa Kendralu (RBKs) for supply of quality and certified inputs. The RBKs is the one stop shop for the requirements of all aqua inputs by the farmers. The RBKs will also have a Demo centre and a Training hall. The RBKs are manned by Village Fisheries Assistants (VFAs). YSR Matsya Sagubadi, a Farm Field School is conducted for on farm extension services.
- Dr. YSR Integrated Aqua labs under RIDF-XXV will test the quality of the relevant inputs to be supplied through RBKs. In Guntur district, with the introduction on Matsyakara Bharosa 7701 fisherman families got benefitted during 2019-20 and

8300 fisherman families got benefitted in 2020-21 (till date) to the tune of ₹ 7.701 crore and ₹ 8.3 crore respectively. 1291 smart cards were issued to the boat owners during 2019-20 to avail front end subsidy on HSD oil. 2166 Aqua farmers were benefitted with the reduction of power tariff from ₹ 2 to ₹ 1.50.

- A.P 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. APSADA also aims to attract investments to promote aquaculture-based establishments and industries; create conducive atmosphere for sustainable trade and export of aquaculture produce and seafood products and to monitor, regulate and promote the supply of quality aquaculture inputs like seed, feed, feed supplements, aqua chemicals, aqua products, medicines etc.
- AP Fish Feed (Quality Control) Act, 2020 was enacted to enforce Quality Standards for Fish Feed being sold to aquaculture farmers in Andhra Pradesh State. The main objective of the Act is to ensure the comply of BIS/FAO/ GOAP quality standards of fish feed through legal enforcement.
- AP Aquaculture Seed (Quality Control) (Amendment) Act 2020 was enacted to enforce the quality standards for Aquaculture Seed, promoting quality produce of fish and shrimp for supply to other states and exports to international market with good brand image.
- Enacted AP Fisheries University (APFU) Act, 2020 for establishment of AP Fisheries University in West Godavari to generate highly skilled Fisheries Manpower to meet the technical manpower demand in aquaculture sector in the state.

### Domestic Fish Marketing:

Andhra Pradesh State is top in Fish production but the domestic consumption in the state is 10% of the total fish produce in the state i.e., 4.36 lakh tonnes and per capita consumption is only 8.07 Kgs.

- Hence, to make 30% of the fish produce accessible to the community within the state, which is cost effective and provides nutritional security to the public apart from assuring remunerative price to the aqua farmers and fishermen, the Government has decided to accord priority for promotion of Domestic Marketing of fish in the state.
- Towards this Hub & Spoke Model is envisaged for promoting Domestic Marketing of Fish produce across length and breadth of the state following saturation mode. In first phase 25 hubs will be developed and in second phase 75 hubs will be developed in the State.
- Further, to ensure remunerative price to the Aqua Farmers during the times of distress apart from creating gainful employment to many directly or indirectly and to promote domestic marketing and consumption of fish and fish produce, the Government desires to set up processing units (10) and Pre-Processing units (23) in the state to be managed by the processing Aqua Farmers Societies.
- Establishment of three integrated aqua labs sanctioned at Repalle, Bapatla and Vinukonda to the tune of ₹45 lakhs.
- Development of Nizampatnam Fishing Harbour phase-II under FIDF assistance.
- Construction of fish landing centre at Gokarnamatam to the tune ₹ 2.15 crore and fish market to the tune of ₹ 7.5 lakh were sanctioned under RKVY.
- The details of Hub and Spoke model is given below:

S.No.	Particulars	Unit cost	Subsidy		Margin/Bank loan	
			General	SC/ST	General	SC/ST
1	Value added unit	₹50.00 lakhs	40%	60%	60%	40%
2	Live fish vending units	₹20.00 lakhs	40%	60%	60%	40%
3	Fish kiosks/fish & food vending vehicle	₹10.00 lakhs	40%	60%	60%	40%
4	3- wheeler fish vending vehicles	₹3.00 lakhs	40%	60%	60%	40%

#### 2.1.9.4 Critical intervention required for creating a definitive impact

- Fish landing facilities at Nizampatnam port may be improved.
- Fish landing centres at Gokarnamatam may be developed.
- Domestic fish marketing activities need to be promoted through credit support from bank.
- Cold Storage facilities at the catching area is the need of the hour. These facilities may be created with Government support or under Public Private Partnership. Fish drying platforms are to be constructed for fish drying at the port sites.

#### 2.1.9.5 Suggested Action Points

- Cage culture in Reservoirs, Mari culture, and Sea weed culture shall be promoted.
- Polyculture of fish and fresh water prawn (scampi) may be encouraged by banks and fisheries department, to ensure increased profitability.
- Issuance of KCC to fishers /fish farmers for their working capital requirements shall be given top priority.
- The banks shall provide loans towards beneficiary contribution for the various schemes under PMMSY.
- Promotion of Domestic fish marketing for increasing per capita fish consumption
- The Department of Fisheries may educate the farmers regarding good management practices including optimum stocking density, use of PCR tested seeds, provision for sedimentation tanks, discontinuance of excessive application of fertilizers, provision for separate drainage system, etc.
- The Department may converge their programmes among the 3 FPOs promoted by NABARD
- Banks to identify the investment opportunities in the value chain and adopt area development approach for financing.
- The defunct/non-functional inland fishermen cooperative societies need to be revived by the fisheries department and good societies may be encouraged for availing loan from banks for taking up aquaculture on commercial basis.

#### 2.1.9.6 Other related issues

- **Doubling of farmer's income:** Given the climatic factors and small and marginal nature of farm holdings the commitment of doubling of farmer's income in the next six years is a challenge. It cannot be achieved by crop production alone. Requires comprehensive strategy of integrated farming practices involving all the sectors of agriculture i.e., horticulture, animal husbandry, dairying, fisheries etc. Some important contributory interventions to enhance farmers income are use of quality seed, good management practices from stocking of seed to harvest, proper packing especially for marine fish, promotion of FPOs for aggregation of produce, hygienic dry fish processing, etc
- **Climate change impacts on fisheries and aquaculture**  
Guntur district being a coastal district is vulnerable to the impacts of climate change that affect fisheries and habitats. Lack of irrigation facilities coupled with large scale aquaculture is leading to heavy dependence on groundwater, reportedly resulting in seawater intrusion into fresh water aquifers in the east coast. This is also increasing salinity in freshwater systems. In order to adapt to climate changes, some measures could be diversification into species such as crab culture, improved tilapia culture, ornamental fish breeding, information to fishermen on Potential Fishing Zones, sea safety equipment such as GPS, management of craft and gear, etc.

### 2.1.10 Farm Credit - Others – Bullock, Bullock-Carts, etc.

#### 2.1.10.1 Introduction

Guntur district is known for commercial agriculture. Most of the farmers are using farm machinery for cultivation. In the mechanized era, Bullocks still play a vital part in the rural economy of the district, with majority of the small and marginal farmers depending on animal power to till their lands and for transporting agricultural produce. There is one sugar factory in the district at Jampani which creates good demand for bullock carts for 120 to 150 days in a year. The demand for tyre carts is also high in the sugarcane growing areas.

#### 2.1.10.2 Infrastructure and linkage support available, planned and gap

- Quality bullocks and bullock carts are available in the local shandies.
- Traditional carpenters in the rural areas possess the requisite skill for manufacturing wooden carts.

#### 2.1.10.3 Assessment of credit potential for 2022-23

The projections made in the PLP for the year 2022-23 stood at ₹44086.60 lakh. The sub-sector wise PLP projections are given in the table hereunder:

(₹lakh)

S.No	Activity	Unit	PLP 2022-23			
			Unit Cost	Phy units	Fin. Outlay	Bank loan
1	Bullocks	No.	0.726	2700	1960.2	1560.00
2	Bullock Carts (pneumatic tyre carts)	No.	0.519	1700	882.3	836.60
3	SHG Other allied	No.	5.500	7580	41690.00	41690.00
	<b>Total</b>				<b>44532.50</b>	<b>44086.60</b>

The projections for 2022-23 have been increased owing to increase in unit costs. The joint mandal wise PLP projections for the year 2022-23 are given in Annexure I.

#### 2.1.10.4 Suggested action points:

Due to frequent drought conditions in the district, farmers are facing financial problems in maintaining the bullocks. Banks need to finance for maintenance of farm implements/assets as per the revised KCC norms, which will enable the farmers to maintain the animals.

#### 2.1.10.5 Infrastructure and linkage support

- Ongole breed bullocks are most popular in the State. Further, there is no problem in availability of the animals as these are purchased from the districts of Prakasam and Guntur. If any district specific breed is there same may be indicated including their availability.
- Details on training, subsidy and credit assistance is provided to a number of carpenters under various Government Programmes.
- Declining wood resources, lack of awareness about the tyre carts among the farmers are major constraints. In addition, if any issue persists, the same may be indicated.
- The AH Department through its field institutions is providing the requisite health cover to the animals.

Bankers support in financing the bullocks and bullock cart.



## 2.1.11 - Integrated Farming Systems for Sustainable Income and Climate Resilience

### 2.1.11.1 Introduction

At present, farmers concentrate mainly on crop production which is subject to uncertainty in income and employment. In this context, integration of various agricultural enterprises has great potential to supplement farmers' income and increase family labour employment.

**An Integrated Farming System (IFS)** is defined as “a judicious combination of two or more components using cardinal principles of minimum competition and maximum complementarity with advanced agronomic management tools aiming for sustainable and environment friendly improvement of farm income, family nutrition and ecosystem services”. Assessment of farm incomes indicate that diversified farms with more than two enterprises get twice the income than those with two or less enterprises. Scientifically designed IFS with minimum competition and maximum complementarity are essential to achieve multiple goals.

The advantages of IFS are indicated below:

- Soil fertility and productivity enhancement through organic waste recycling and increased sustainable farm income
- Integrated farming system shall meet the energy and timber needs of rural households and also timber needs of construction sector in a cost-effective manner.
- Higher food production to equate the demand of the exploding population.
- Integrated farming has immense potential to make farmers climate smart through cultivating different crops on the same land and using farm resources sustainably.
- IFS improves soil's physical and chemical properties, nutrients status and biological components. It is an ideal solution to ensure food security of ever-increasing global population at a time when there are twin problems of land degradation and carbon emission.
- The various components of IFS are crops, live stocks, birds and trees. The crops may have subsystem like mixed/intercrop, multi-tier crops. The livestock components may be milch animals, goat, sheep, poultry and the tree components include fruits, timber, fuel and fodder. The major factors which need to be considered in choosing an IFS model are soil type, rainfall, its distribution and length of growing season.

### Different types of IFS

Main farming systems practiced in India are:

- Crop- livestock farming system
- Agri- horticulture farming system
- Agro-forestry system
- Crop-livestock-pastoral system
- Mixed farming system

Table below shows the different combination of Farming systems:

FS1	Crops+dairy	FS6	Crops+dairy+horticulture+poultry+fish
FS2	Crops+dairy+horticulture	FS7	Rice +fish
FS3	Crops+dairy+poultry	FS8	Coconut+banana
FS4	Crops+dairy+goat	FS9	Coconut+banana+cocoa+pineapple+nutmeg
FS5	Crops+dairy+fishery+poultry	FS10	Crop+dairy+horticulture+apiary+fish

Crop dominant farming system is predominant in Andhra Pradesh. Among the various IFS models listed above, FS9 is found to be of highest returns.

### Model Integrated Farming System for Andhra Pradesh - Crops + Livestock (1 ha) for irrigated regions

Cropping systems	Horticulture	Livestock
Rice -maize/castor	Guava	2 buffaloes
Pigeon pea +sweetcorn-pearlmillet	Intercropping with vegetables (Tomato, chilli, carrot)	14 goats
Maize + Pigeon pea-sunhemp		50 poultry birds
BT cotton+green gram-fodder		

sorghum		
Maize – groundnut		
Bajra Napier hybrid		
This model results in production of 37 t/ha, Net income ₹1.60 lakh/year, employment 877-man days. (Reference: <a href="http://www.iifsr.res.in">www.iifsr.res.in</a> )		

### 2.1.11.2 Policy Support in Andhra Pradesh

#### Polambadi Program

- Introduced in 2009, uses farmer field schools to encourage the use of economical and environmentally friendly cropping systems. This includes integrated crop management such as crop rotation.

#### Half- Acre Annapurna Model

- It is a flexible and intensive integrated farming model that incorporates Organic Horticulture, intercropping, farm ponds and poultry.

#### State Nutrition Mission

- IFS systems are encouraged for risk mitigation.
- Kitchen garden in anganwadi centres to improve the availability of locally available fruits and vegetables.

#### Rainfed Area Development under NMSA (National Mission on Sustainable Agriculture)

- RAD focuses on IFS for enhancing productivity and minimizing risks associated with climatic variabilities.
- During 2019-20, ₹14.00 crore was released as central share under IFS and covering an area of 5866 ha in Andhra Pradesh.
- Allocation for IFS under RAD for the year 2020-21 is ₹1400 lakh.

### State/District specific IFS models

#### Farm Income Improvement through Farming System Approach

S.No	Parameters	Units	Interventions	Interventional cost	Yield advantage (No of times)	Net benefit due to interventions
1	Cropping systems	1.5 ha	Vegetables	2000	8 times	18000
2	Livestock	15 birds	Vanaraja	900	6 times	6300
3	Vermicomposting	2 RCC rings	Method knowledge, worms	1900	3 times	7100
4	Sheep and goat	2	Nellore jodipi white and goat kid	4200	2 times	14000
	<b>Total</b>			<b>9000</b>		<b>45400</b>

(Reference: [www.iifsr.res.in](http://www.iifsr.res.in), Farming System Research: success stories, series 1)

### Economics of Paddy cum Dairy IFS Model

Component	Extent (Ha)	Yield (Q/ha)	Price/Q/	Gross Income (₹)	Cost of Cultivation (₹)	Net income (₹/ unit)
<b>(A) Agriculture Alone</b>						
Paddy Kharif	0.4	20	1500	30000	18500	11500
Pulses Rabi	0.4	1.5	4200	6300	3000	3300
<b>Total</b>				<b>36300</b>	<b>21500</b>	<b>14800</b>
<b>(B) IFS :(Paddy+Dairy )</b>						
<b>I. Agriculture</b>						
Paddy -Kharif	0.28	16	1500	24000	11000	13000
Pulses Rabi	0.28	1	4200	4200	3000	1200

<b>Total I</b>				<b>28200</b>	<b>14000</b>	<b>14200</b>
<b>II. Dairy</b>						
	<b>No.of Animals</b>	<b>No.of litre per day</b>	<b>Cost per litre</b>	<b>Gross Income per month</b>	<b>Cost of Feed per month</b>	<b>Net Income</b>
<b>Total II</b>	<b>4</b>	<b>20</b>	<b>40</b>	<b>24000</b>	<b>4000</b>	<b>20000</b>
<b>Total I+II</b>				<b>52200</b>	<b>18000</b>	<b>34200</b>

Indian Institute of Farming Systems Research (IIFSR), Modipuram and other ICAR institutions have developed 51 integrated farming systems suitable to marginal and small holders of 25 States/UTs of India. State specific IFS models are available from the link: [http://www.iifsr.res.in/sites/default/files/prog\\_files/Bulletin\\_IFS\\_July\\_2020.pdf](http://www.iifsr.res.in/sites/default/files/prog_files/Bulletin_IFS_July_2020.pdf)

Location specific IFS models were also evolved by SAUs.

The credit potential for IFS is projected under respective sectoral chapters.

### 2.1.11.3 Assessment of credit potential for 2022-23

(₹ Lakh)

S.No	Activity	Unit	PLP 2022-23			
		No/Area	Unit Cost	Phy Units	Fin.Outlay	Bank loan
1	Mangoes+Vegetables+Cows(1+1)+Goatery (5+1)	No	2.23 3	345	700.35	576.15
2	Maize+Pulses(RedGram)+Sheep Rearing	No	2.68 6	330	805.86	663.30
3	Paddy+Fishery+Poultry	No	2.86 2	610	1587.22	1311.50
	<b>Total</b>				<b>3093.43</b>	<b>2550.95</b>

### 2.1.11.4 Issues and Suggestions

- Finance for various components of IFS simultaneously and parallelly is not forthcoming. Also, the marketable surplus with SF/MF may be small and therefore needs aggregation.
- Initiation of Mission on Integrated Farming Systems in the district by converging various schemes of crop husbandry, horticulture, livestock, and fisheries can give impetus to integrated farming systems approach.
- Banks may explore possibility of financing IFS models in cluster mode.

### Success Story:

Meesala Ramakrishna a progressive farmer from Nandivelugu who does integrated farming in 13 acres of land with wide varieties of Rice, Vegetables, Fruits and even Fish.

It is an integrated nature farm that provides all kinds of food products that every family needs on a daily basis. Ramakrishna is turning his crop field into a food market and earning a living. With his commitment of doing chemical free farming, the list of crops that are being cultivated in a planned manner is much to say

Fish pond in Half acre , over 35 varieties of fruits, vegetables, rice varieties like Siddhasannam, Chittimutyalu, Red Rice (Navara), Ratnachodi, BPT-5204 and Yellow (Pragati, Salem, Black Yellow) are cultivated in six acres of land. Intercrops include papaya and mango ginger. Bananas (camphor, sugarcane, and curry bananas) are cultivated in half acre, bear, coriander, lentils, pumpkin, bitter gourd, spinach, two varieties of chilies, zucchini, beetroot, gourd, asparagus, lettuce, asparagus and green leaves in half an acre. Total Land contains coconut, mango, guava, acid lime, orange, mango, curry, custard apple and pineapple. The water from the fish pond is used for cultivation of paddy. The bran and husks that come from the rice mill are used to feed the fish. RNR-15048 (thin rice with low glycemic index) is grown in another five acres nearby. Five cows are being raised. Ramakrishna said that he is using kashayam in Palekar method and fish amino acid in Chauhan queue method. He also uses fertigation method for Panchagavya, dhrarvajeevaamurutam, Pseudomonas, humic acid, fish amino acids. No chemicals should be sprayed on the soil mother 'says Raakrishna humbly! Most of the rice is milled, ground into yellow powder and sold on the farm embankment, including fruits, curry leaves and leafy greens. The rest is being sent to organic stores in cities, he said. Vegetables, greens and bananas are sown at regular intervals to ensure that they are available throughout the year. Getting a daily income is another specialty of this ideal farmer! Ramakrishna explained that he is earning Rs 40-50 thousand per month. He has inspired many to take up this kind of cultivation.



## 2.2 Agriculture Infrastructure

Agriculture Infrastructure is the most essential input which contributes to agriculture growth rate. Agricultural output growth is determined largely by technology and prices, in combination with agricultural infrastructure such as roads, irrigation, market, post-harvest infrastructure supported by credit facilities. Given the critical role of infrastructural facilities in agricultural growth, the government of India has accorded high priority to its development since the beginning of planning in the country. In this chapter on agriculture infrastructure, an attempt is made to assess credit potential in respect of few private investments such as storage facilities.

## **2.2.1 Storage and Marketing Infrastructure**

### **2.2.1.2 Introduction**

Paddy is the major food crop in the district, with cotton, chilli and tobacco being taken up as commercial crops. The production in the district is to the tune of 14.75 lakh MT of paddy, 5.03 lakh MTs of Maize and 1.14 lakh MT of pulses. Chilli production is about 4.56 lakh MT and cotton production is around 9.86 lakh bales. Most of the farmers store their agricultural produce in their houses and these are susceptible to losses.

There are 27 market yards, 3 Regulated Market Yards and 20 Agriculture Market Committees (AMC) in the district. The AMCs together have capacity to store about 1.692 lakh MT of agricultural produce. The agriculture marketing department is providing interest free produce loans for 90 days upto a maximum of ₹2,00,000/- or 75% of the amount of produce pledged, whichever is less, to each farmer for crops like paddy, pulses, turmeric and chilli.

The ground level credit flow to the sector in the district during 2018-19, 2019-20 and 2020-21 was, ₹74695.00 lakh, ₹55458.51 lakh and ₹60837.11 lakh respectively.

### **2.2.1.3 Infrastructure and linkage support available, planned and gap**

- It is estimated that there are 356 rural godowns under private sector with a capacity of 4.92 lakh MT. Taking into account the production of food grains and pulses and storage requirement for fertiliser, considerable scope exists for establishment of rural godowns.
- Cold Storage Units: There are 126 Cold storage units functioning in Guntur district which have the capacity to handle about 4.50 lakh MT of chilli.
- Sangam Dairy has a milk plant with a capacity of handling 3.50 lakh litres per day and has 4 chilling centres with handling capacity of 1.45 lakh litres per day. There are 43 private dairy plants with a milk chilling capacity of 3.50 lakh litres per day. The milk production in Guntur district is estimated at 10.75 lakh ton per year.
- Govt. of India provides subsidy to farmers, private individuals, NGOs, SHGs, etc. for construction of Rural Godowns, Cold Storages and Agri. Marketing Infrastructure under Integrated Scheme for Agriculture Marketing (ISAM), wherein subsidy ranging from 25% to 33% is available for godowns constructed as per the specifications.

NABARD provides financial assistance to the State Govt., State-Owned Agencies, PACS & Producers Organizations for construction of Rural Godowns, Cold Storages and Agricultural Marketing infrastructure in the State. Construction of 10000 MT godowns by AP State Warehousing Corporation under RIDF is completed at Piduguralla. Another warehouse of 15000 MT sanctioned to NCML under NABARD'S Warehouse Infrastructure Fund has also been completed. Co-operative societies and Voluntary Agencies can play a vital role in aggregation of farmers produce for transport/storage in order to reduce costs. These agencies can also facilitate primary processing of commodities for increasing the shelf life.

### **2.2.1.4 Assessment of credit potential for 2022-23**

Taking into account the present status, trends and need for scientific storage, the projections for credit has been estimated to be ₹84703.24lakh. Considerable cold storage capacity has been built up in recent years and therefore the physical units of cold storage have been downscaled. The demand for rural godown, however will still continue as many of the existing godowns cannot cater to the scientific storage needs. The Integrated Scheme for Agriculture Marketing (merger of erstwhile Grameen Bhandaran Yojana and AMIGS) has provided impetus to the activity. Also, the increasing demand for pledge loans necessitates scientific storage facilities.



The sub-sector wise PLP projections for the year 2022-23 are given in the following table:  
(₹ lakh)

S.No	Activity	Unit	PLP 2022-23			
			Unit cost	Phy units	Fin.Outlay	Bank loan
1	Cold Storages (5000 MT)	No.	585.640	106	62077.84	46558.38
2	Rural Godowns (1000 MT)	No.	73.205	265	19399.33	14548.50
S.No	Activity	Unit	PLP 2022-23			
			Unit cost	Phy units	Fin.Outlay	Bank loan
3	Bulk milk chilling units (2000 lps)	No.	14.641	18	263.54	237.24
4	Chilling Units	No.	439.230	20	8784.60	6588.40
5	Agri Mktg infrastructure	No.	465.850	48	22360.80	16770.72
	<b>Total</b>				<b>112886.11</b>	<b>84703.24</b>

The joint mandal wise PLP projections are given in Annexure I.

### **Policies and Various Schemes on Agriculture Infrastructure:**

**NABARD Warehousing Scheme** For our country, achieving food security has always remained one of the prime objectives. Though the problem of low production has been largely solved, proper storage of the produce has been a cause of concern till date. To alleviate this problem, NABARD Warehousing Scheme was launched in 2011-12. To give a fillip to this sector an allocation of ₹5,000 crore each to NABARD was made in the budget for 2013-14 & 2014-15 for supporting creation of infrastructure for storage of agricultural commodities. Reserve Bank of India issued guidelines for creation of Warehouse Infrastructure Fund in NABARD. With a view to operationalizing WIF, NABARD has formulated a scheme viz., NABARD Warehousing Scheme 2013-14(NWS) and WIF 2014-15 which envisages extension of loans to Public and Private sectors for construction of warehouses, silos, cold storages and other cold chain infrastructure..

### **Agri Marketing Infrastructure Fund (AMIF)**

In order to provide farmers, particularly small and marginal ones, with proper marketing facilities nearer to farm-gate and improve farmer-market linkages, Government of India had announced creation of the fund in the Union Budget, 2018-19 to develop and upgrade existing (approximately 22000) rural haats into Gramin Agricultural Markets (GrAMs). In these GrAMs, physical infrastructure will be strengthened using MGNREGS and other Government Schemes. AMIF with a corpus of ₹2000 crore has been set up for developing and upgrading agricultural marketing infrastructure in the 22000 GrAMs and 585 Agriculture Produce Market Committee (APMC) Markets. The GrAMs are to be linked to the electronic National Agricultural Market (e-NAM).

### **Agriculture Infrastructure Fund (AIF)**

AIF 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 FY2020-21 to FY2032-33. Under the scheme, ₹1 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 Crores. Eligible beneficiaries include farmers, FPOs, 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. PACS who have opted digitization for its operations will be given preference under this scheme.

### **Agricultural Marketing Infrastructure (AMI)**

The revitalized and farmers' income enhancing centric sub-scheme AMI of ISAM is meant for holistic development of agricultural value chain critically focusing each linkage of post-harvest value chain including 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 developing and upgrading GraminHaats as GrAMs through strengthening of infrastructure, which 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 retain 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 by eligible promoters are focused and is an eligible activity under this sub-scheme.

The scheme seeks to-

- Create scientific storage capacity with allied facilities in rural areas to help farmers in storing farm produce, processed farm produce and agricultural inputs.
- Promote grading, standardization and quality control of agricultural produce so as to improve its marketability.
- Prevent distress sale immediately after harvest by providing the facility of pledge financing and marketing credit.
- Create a robust agricultural marketing infrastructure in the country by facilitating the creation of a national system of warehouse receipts in respect of agricultural commodities stored in such warehouses.
- Revive the prospects of agricultural investments by encouraging private and cooperative sectors to invest in the creation of storage infrastructure in the country.

### **Mapping and Geo-tagging of Agri-Storage Infrastructure**

NABARD has undertaken the task of geo-tagging of Agri-Storage Infrastructure across the Country and almost 100% of the storage structures have been surveyed. The said structures have now been integrated with an App (Kisan Bhandar, Android-based), which will be used by the farmers to locate storage units in their vicinity.

### **Scheme for Integrated Cold Chain and Value Addition Infrastructure under PRADHAN MANTRI KISAN SAMPADA YOJANA**

The objective of the scheme is to provide integrated cold chain, preservation and value addition infrastructure facilities without any break, from the farm gate to the consumer to reduce post-harvest losses of horticulture and non-horticulture agri-produce. This will enable linking groups of producers to processors and markets through a well-equipped supply chain and cold chain, thereby ensuring remunerative prices to farmers and year-round availability of food products to consumers.

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.

### **COVID 19 – Economic Stimulus Package by Govt of India:**

Govt. of India rolled out its third tranche of ₹20 lakh crore economic stimulus package focussing on agriculture, dairy, animal husbandry and allied activities. The Centre will create Agri-Infrastructure Fund for farm- gate infrastructure for small and medium farmers, most of whom are marginalized.

Union Finance Minister announced 11 measures - of which 8 of them focused on strengthening infrastructure, capacities and building better logistics in Agriculture, Fisheries and Animal Husbandry, while the rest 3 pertained to governance and administrative reforms. Agricultural reforms included rolling out schemes to finance farming infrastructure,

micro food enterprises, fishermen, animal health, dairy infrastructure, herbal cultivation, bee-keeping and food supply chain management. The other three measures included amendment to Essential Commodities Act, Central law for Agriculture marketing reforms and e-trading of agriculture produce. The details are as follows:

- ₹1 lakh crore for farm gate infrastructure.
- ₹10,000 crore scheme for formalization of Micro Food Enterprises
- ₹20,000 crore for Fishermen through PM MatsyaSampada Yojana
- National Animal Disease Control Program launch
- ₹15,000 crore to be spent for dairy infrastructure
- ₹4000 Crore for Promotion of Herbal Cultivation
- ₹500 crores for bee-keeping initiatives
- ₹500 crore 'Top' to total initiative
- Amendment to Essential Commodities Act
- Agriculture marketing reforms to provide marketing choices
- Agriculture produce price and quality assurance

#### **2.2.1.5 Critical intervention required for creating a definitive impact**

- All godowns above 1000 MT capacity need to be registered with Warehousing Authority after due accreditation. Negotiable warehouse receipt system may be encouraged, as this will reduce distress sale immediately after harvest. There is a need for creation of awareness.
- Farmers' institutions such as FPOs, MACS, PACS need to participate in the commodity markets to avail benefit.

#### **2.2.1.6 Suggested Action Points**

- Frequent power cuts and non-availability of timely power connections for new units are deterrents in establishment of cold storages.
- Forward Markets Commission facilitates marketing and price discovery of many agricultural produce to reduce uncertainty in prices. Awareness needs to be created on forward markets.
- The Negotiable warehouse receipt system is yet to be adopted in the district. Creating awareness amongst farmers on the importance of scientific storage of agri produce is the need of the hour.

Banks may lend to farmers on the strength of Negotiable Warehouse Receipt.

### **2.2.2. Land Development Soil conservation and Watershed Development**

#### **2.2.2.1 Introduction**

Guntur district is broadly divided into two parts viz., Krishna western delta region and upland region. The soils, in general, are fertile and are broadly classified as Black cotton, Red loamy and Sandy loams. The black cotton soils occupy about 72% of area, red loams 17%, Coastal sandy soils 9% and alluvial soils about 2%. The district has 1.14 lakh ha of fallow lands and 0.25 lakh ha of cultivable wastelands which can be transformed into productive lands with appropriate land development works. Frequent cyclones during monsoon season pose threat to the fertile top soil, for which adequate land/soil conservation measures need to be taken up on a regular basis. There are 852 RythuBharosa Kendra's in the district. The major activities that are being taken up are as given below.

- Conducting awareness programmes on government agriculture schemes.
- Supply of seeds, fertilizers and pesticides to farmers
- Village level crop booking
- Establish custom hiring centers.
- Technical support to farmers in Agri, Horti, Seri, Fishery and Animal Husbandry sectors.
- Provide marketing facilities and information on price stabilisation.



### 2.2.2.2 Infrastructure and linkage support available, planned and gap

The following national-level/state-level programmes are under implementation in the district:

**National Food Security Mission (NFSM):** Includes supply of gypsum, micronutrients, lime/liming materials in pulses & rice. These are supplied through MARKFED at 50% subsidy during 2018-19 and it was confined to one village one Mandal. During the year 2020-21 the same were supplied at full cost through RBK as there is no subsidy available on this.

**Integrated Watershed Management Programme (IWMP):** Mega watersheds of 5000-10000 ha are envisaged under this initiative and in Guntur district, two such projects are under implementation. There are total of 36 Watersheds of which 7 are the major and 29 are Micro Watersheds with ayacut of 31009 Ha.

NABARD has implemented 21 watershed projects in the district and two mega watersheds under GoI's Integrated Watershed Development Programme are under implementation. Besides these, NABARD along with ITC through their Mission SunehriKal programme have also been implementing 6 watershed, soil and water conservation works in Guntur. There are 6 ongoing watershed programmes with the CSR support of ITC. As a part of preparation of banking plan, the ongoing as well as completed watersheds, Wadi programmes have been considered.

S.No.	Implementing Agency	Watershed/Wadi	Financial Outlay (₹ crore)	Bank loan (₹ crore)
1	MYRADA	8 Watersheds	17.27	15.55
2	NilagiriFoundation	6 Watersheds	15.931	14.337
3	EFFORT	1 Wadi	5.34	4.806
4	NilagiriFoundation	1 Wadi	4.635	4.171
<b>Total</b>			<b>43.176</b>	<b>38.864</b>

- Seed Production & Processing activities:** Seed is the primary & basic input for Agriculture. AP is considered as seed capital of India and about 70% of certified seed of the country is being produced in the State. The State has good seed infrastructure with more than 440 seed producing companies/firms and 288 registered seed processing plants with a processing capacity of more than 25 lakh quintals. Despite these facts it is estimated that the total seed production in the State is only 40% of the total requirement of all crops. This offers excellent scope for establishing seed production and processing units in the State particularly in private sector with the help of bank credit. The District has a good scope for seed production units as the requirement for the chilli, cotton, paddy, pulses are more during the season. Mini Seed Production units, one per cluster may be developed.  
NABARD, AP Regional Office has sanctioned an amount of ₹200 crore to AP State Seed Development Corporation under CFF in May 2020. It is understood that one seed processing centre per mandal will be established initially which turns out to be 57 seed processing units in the district.
- Soil Health Card Scheme:** The scheme was launched by the Government of India on 19 February 2015. Under the scheme, the Government issues soil cards to farmers which will carry crop-wise recommendations of nutrients and fertilizers required for the individual farms to help farmers to improve productivity through judicious use of inputs. The soil samples will be tested in various soil testing labs across the country. Thereafter, the experts will analyze the strength and weaknesses (micro-nutrients deficiency) of the soil and suggest measures to deal with it. The result and suggestion will be displayed in the cards. The district agriculture department had issued a total of 9,57,857 cards were issued as on 08<sup>th</sup> Oct 2021. The total no. of soil health cards printed in the district are 9, 57,857 and the no. of farmers data entered is 10,86,621. There are 5 soil testing labs in the district at

Guntur, Narsaraopet, Chilakaluripeta and Bapatla. The soil testing facility at Bapatla has both Mobile Soil Testing Laboratory (MSTL) and Regional Soil Testing Laboratory (RSTL) which facilitate testing of all major and micro nutrients.

- **Andhra Pradesh Community Managed Natural Farming (APCNF):** A pilot was implemented in 2016 across 704 villages covering 48,565 farmers. The pilot project was successful with around 10,000 farmers adopting APCNF practices and the remainder adopting it partially. The practices and the benefits recorded include improved yields, lower costs and better ability to withstand climate adversities – prolonged dry spells or heavy rains. A study of 285 crop yield experiments conducted in paddy fields observed that APCNF farm plots had an average yield of 6417 kg/ha, compared to 5816 kg/ha in non-APCNF farm plots. Following the success of pilot, the programme is being scaled up to 500,000 farmers based on a tripartite agreement between RySS, the Dept. of Agriculture – Govt. of AP and the Azim Premji Philanthropic Initiative (APPI). The scaling up of the programme is planned during the period 2017-2022 covering all the districts of AP. A pilot project, for assessing the impact on productivity between APCNF and Chemical Farming covering 4 villages with 100 farmers is being implemented in Guntur.
- **Water Conservation Campaign:** A nation-wide water campaign was launched by NABARD during 2017 with focus on most vulnerable/ rain fed/ water scarcity and problem areas covering around 1,00,000 villages across 200 districts in the country. The main objective of the campaign is to create mass awareness about the need for conservation/ preservation and efficient use of water through available technologies by the rural community. Guntur district has been identified as one of the districts where water campaign was implemented in 500 villages in 27 Mandals during 2017-18. As a result of the campaign, it was understood that there is a great necessity for Farm Ponds, Check Dams and Percolation tanks in many places of Guntur for judicious and efficient management of water resources.
- NABARD, AP RO had sanctioned ₹150.33 crore under RIDF - XXV to Agriculture Department, GoAP for establishing Integrated Agri labs. A total of 15 Agri labs were sanctioned for Guntur District with a financial outlay of ₹1215 lakh and RIDF loan of ₹956.85 and also, a regional coding center has been sanctioned in the district with a financial outlay of ₹ 87.5 lakh and RIDF loan of ₹83.13 lakh.

### 2.2.2.3 Assessment of credit potential for 2022-23

The ground level credit flow to the sector during last three years i.e., 2018-19, 2019-20 and 2020-21 was ₹14441.99lakh, ₹10722.69lakh and ₹16977.27lakh respectively. Taking into account various policy announcements by the GoI/GoAP, infrastructure availability/gaps and recent policy and promotional interventions, the credit projection has been estimated at ₹5052.10lakh. There is a scope of barbed wire fencing in the district as most of the fields are left open without any fencing. The sub-sector wise PLP projections for the year 2022-23 are given in the table hereunder:

(₹ lakh)

S.No	Activity	Unit	PLP 2022-23			
		No/Area	Unit cost	Phy units	Fin. outlay	Bank loan
1	Land Reclamation	Ha	0.451	620	279.62	254.20
2	On Farm Dev. Works	Ha	0.620	2100	1302.00	1176.00
3	Farm ponds (18 X 18 X 3 m)	Ha	2.372	860	2039.92	1831.80
4	Farm ponds (10 X 10 X 2.5 m)	No	0.914	255	233.07	209.10
5	Tank Silt Application	Ha	0.652	900	586.80	531.00
6	Barbed Wire Fencing (cement Poles)	Ha	1.386	840	1164.24	1050.00
	<b>Total</b>				<b>5605.65</b>	<b>5052.10</b>

**2.2.2.4 Critical Intervention required for creating a definitive impact:**

- Area-based programme for land development like Command Area Development, Watershed Development etc., has good impact. There may be scope for dovetailing OFD works in command areas of irrigation projects.
- Organic compost reduces cost of purchased inputs while improving soil health. However, it takes 2-3 years to achieve optimum yield. Thus, some farm income scheme may have to integrate for small and marginal farmers so that their farm income loss is off-set during this period.
- Commercial Production of Organic Inputs viz. Bio fertilizer, Vermi compost / vermi hatcheries & Compost from vegetable and fruit waste etc., may be taken up by farmer aggregates like FPOs.

**2.2.2.5 Suggested Action Points:**

- 15% of net cultivated area is under horticulture crops. These crops especially turmeric, chilli, vegetables and orchards offer potential for setting up of FPOs. Farmers clubs, SHGs may be encouraged to federate into Producer Companies for input disaggregation and output aggregation and achieve higher net returns.
- Coastal mandals viz., Bapatla, Nizampatnam, Karlapalem, Nagaram, Battiprolu and Repalle have about 2421 ha of salt affected area. The productivity in such soils can be improved through adoption of suitable practices such as application of Gypsum followed by repeated flood irrigations for leaching of salts, growing green manure crops etc.
- There is need to conduct capacity building programmes for farmers and bankers on soil conservation measures and modalities of schemes such as farm ponds, tank silt application, reclamation of saline soils, integrated farming systems etc.

**Special Refinance Scheme in NABARD Watershed and Wadi Project areas**

NABARD has been implementing watershed development projects on participatory approach for conserving natural resources and Adivasi Development Projects known as “wadi” for improving the socio-economic status of the tribal families across the countries for more than two decades. All these projects are implemented with grant/ grant-cum-loan assistance by NABARD with the help of local NGOs. These developmental initiatives have transformed the natural and human resource endowments in compact areas and are conducive for absorption of higher capital and economic avocations. In order to make efficient use of conserved resources, further investments by the farmers/tribals for taking up appropriate economic activities are required.

Further, on account of lockdown due to onset of COVID-19, millions of rural people lost their employment and livelihood opportunities. The severity of this problem further increased due to reverse migration of labour force from urban areas to rural areas, necessitating the need to create investment opportunities for rural youth in agriculture.

In order to take up additional economic activities in watershed and wadi project areas, NABARD has decided to extend concessional refinance support to all eligible banks/FIs to enable them to deepen institutional credit to beneficiaries in these project areas. **NABARD has earmarked a refinance amount of ₹5,000 crore under this special dispensation during 2020-21 to 2022-23.**

**Objective** To promote sustainable economic activities in NABARD supported watershed and wadi project areas. To give a boost to the agriculture and rural sector in post-COVID era through credit intensification. To enable banks to extend financial support at concessional rate to the beneficiaries for taking up economic and livelihood activities. To address the issues related to reverse migration due to Covid-19.

**Eligible beneficiaries**

The scheme will cover all the eligible beneficiaries of watershed projects and TDF projects supported by NABARD as also the small and marginal farmers, tenant farmers, oral lessees, reverse migrants; SHGs, FPOs, JLGs, cooperatives, partnership/proprietorship firms etc.

**Eligible financial institutions**

All Commercial Banks, SFBs, RRBs, Cooperative Banks and NABARD subsidiaries complying to refinance policy of NABARD are eligible for special refinance scheme.

**Eligible Purposes**

- All priority sector loans extended by the banks in watershed development project areas and agro-processing activities for tribal farmers will be eligible for refinance

**Refinance assistance**

Refinance assistance is provided to the banks/FIs under Automatic Refinance Facility (ARF).

**Interest rate on refinance will be at 3%** and the ultimate lending rate to be charged by banks/FIs should not be more than 2.5% over & above the interest rate charged by NABARD. Repayment period of refinance ranges between 18 months (minimum) to 5 years. **Potential in the State**

In the last two decades, NABARD has supported 206 Watershed projects in the state, of which 179 projects have already been completed and there are 27 on-going projects. The projects have treated an area of 1.56 lakh hectares, covering 465 villages. NABARD has also supported 54 Wadi projects in the state, of which 49 projects have already been completed and there are 05 on-going projects. The major plantations undertaken in the wadi project areas include mango, gooseberry, sapota, cashew and guava. These wadi projects have provided sustainable livelihoods to more than 36,000 tribal families in the project areas and brought over 33,000 acres under perennial horticulture crops.

NABARD has prepared banking plans in consultation with the Project Implementing Agencies and the banks in the project areas. Accordingly, the potential for credit available in the area will be assessed, to enable the banks to finance in the project areas.

**Potential in the District**

The details of the banking plan prepared for activities like Dairy, Farm Machinery, Poultry and Non-Farm Business like Saree shop, General Store etc., are given below.

S.No.	Implementing Agency	Watershed/Wadi	Financial Outlay (₹ crore)	Bank loan (₹ crore)
1	MYRADA	8 Watersheds	17.27	15.55
2	Niligiri Foundation	6 Watersheds	15.931	14.337
3	EFFORT	1 Wadi	5.34	4.806
4	Niligiri Foundation	1 Wadi	4.635	4.171
<b>Total</b>			<b>43.176</b>	<b>38.864</b>

### **2.2.3 Agriculture Infrastructure – Others(e-NAM, Tissue Culture, Agri, bio-technology, Seed Production, Bio-pesticide/fertilisers, Vermi-composting)**

**2.2.3.1 Introduction**

This chapters covers investment opportunities such as organic inputs (vermi-compost, bio fertilizer and bio-pesticide units), agri biotechnology investments such as tissue culture, seed production and seed processing, etc.

Guntur is a hub of commercial crops such as chilli, turmeric, cotton besides pulses, paddy and maize. The Govt. of AP is dedicated to develop the State as a leading player in seed technology, innovations and business. To ensure that the quality seeds reach every small farmer in AP, the state government in collaboration with Seeds Science Centre of Iowa State University, proposed to establish a Mega Seed Park at Kurnool District. Quality of seed and produce is an area of concern. Increasing use of chemical fertilisers and pesticides make Guntur as one of the major districts of the country where consumption of chemical inputs is high. Further, few pockets of Guntur are also well known for vegetable crops (Chebrolumandal), flower crops (Bapatla, Pedavadlapudi, Tadikonda mandals), Elephant foot yam (Bhattiprolu, Repallemandals) and banana (various mandals in Krishna delta).

This offers huge scope for investments in organic input production, agri bio-technology especially tissue culture. In addition, seed processing is gaining popularity with the introduction of Agriculture Marketing and Infrastructure Grading scheme (now called Integrated Scheme of Agri Marketing), wherein 25-33% subsidy will be made available by DMI, GoI through NABARD.

### 2.2.3.2 Infrastructure and linkage support available, planned and gap

Several Government programmes also support these interventions. For instance, tissue culture banana is supported under Mission for Integrated Development of Horticulture and Normal State Plan of Horticulture Department. Similarly, Vermi-compost is supported by Agriculture Department under RKVY. The Seed Village programme of Agriculture Department aims to supply certified seeds of notified varieties to the farmers at affordable prices, besides ensuring quick multiplication of new seed varieties based on the crop situation. The Dept plans to cover 500 ha to benefit about 1000 farmers under the programme. The seed village programme can be taken up with bank credit for quick scale up and supplement in a Govt efforts. The action plans of District Agriculture and Horticulture Departments for the year 2021-22 reflect considerable budget allocations towards these interventions.

### 2.2.3.3 Assessment of credit potential for 2022-23

Taking into account various policy announcements by the Central/State Government, infrastructure availability/gaps and recent policy and promotional interventions, the credit projection has been estimated at ₹8304.05 lakh. There is an AP State Seed certificate agency functioning at Amaravati which is primarily used for Seed certification. A total of 4 such agencies are present in the State primarily at Kadapa, Guntur, Krishna and West Godavari. The sub-sector wise PLP projections for the year 2022-23 are given in the table hereunder.

(₹ lakh)

S.No	Activity	Unit/ No	PLP 2022-23			
			Unit Cost	Phy units	Fin. Outlay	Bank loan
1	NADEP units (1.8 tpa)	No	0.252	1260	317.52	239.40
2	Vermi Hatchery cum compost units (260 tpa)	No	14.890	120	1786.80	1340.40
3	Vermicompost (1.5 tpa)	No	0.305	1420	433.10	326.60
4	Bio fertilizer and biopesticide units	No	212.377	17	3610.41	2707.76
5	Tissue culture production units	No	26.620	2	53.24	39.94
6	Seed processing units	No	266.200	18	4791.60	3593.70
7	Seed village		0.333	225	74.93	56.25
	<b>Total</b>				<b>11067.60</b>	<b>8304.05</b>

The joint mandal wise PLP projections are indicated in Annexure I.

### List of agencies involved in seed supply of Andhra Pradesh State

S No	Agency Name	Seeds Supplied
1	APSSDC	Paddy, Maize, Peral Millet, Blackgram, Cowpea, Green gram, Horse gram, Rajma, Groundnut, Sudan grass, Diancha, Pillipesara, Sunhemp, Navadhanyalu
2	APOILFED	Paddy, Maize, Groundnut, Diancha, Sunhemp, Bengal gram, Navadhanyalu
3	APMARKFED	Blackgram, Green gram, Horse gram, Groundnut, Diancha, Pillipesara, Sunhemp, Bengal gram, Navadhanyalu

4	WASSAN	Groundnut, Navadhanyalu
5	NSC	Paddy, Black gram, Pillipesara, Sunhemp, Bengal gram, Navadhanyalu
6	Biological Control Lab	Paddy, Navadahnyalu
Source: Andhra Pradesh SAIDP report		

The Department of Agriculture has prepared the state-wise crop-wise seed requirement plan.

### **Seed Production & Processing:**

- **APSSDC** supplies quality certified seed to the farmers throughout the State of Andhra Pradesh, assuring availability of certified seed during the agricultural seasons without resorting to open market procurements, elimination of uncertainty about seed availability and quality assurances is the major benefit to the farming community.
- To develop Andhra Pradesh as a Global Seed Hub and to ensure that quality seeds reach every farmer in Andhra Pradesh, GoAP is establishing **Mega Seed Park** in 627 acres with an outlay of ₹650 Crores at Tangadencha Seed farm, Kurnool in collaboration with IOWA State University, USA, which is a pioneer Institute in Seed Research.
- Centre of Excellence: Kurnool as Seed Hub (₹25.0 crores) Government of Andhra Pradesh has declared Kurnool as “**Seed Hub**” which is a very positive step in the right direction. Further, in this context to start with a “Centre of Excellence” is proposed at Nandyal under the aegis of RARS, ANGRAU by investing ₹25.0 crores and this need to be up-graded to the level of University on Seed Technology in near future.
- 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.
- There are 4 Seed Multiplication Farms (SMF) located at Edurur, Thangadancha, Yemmiganur and Nandyal in Kurnool district.
- Krishna district has one ‘State Seed Farm’ at Ghantasala with limited farm area of seven ha with a cultivable area of six ha, there is one model seed farm at Uppalapadu with 14.72 and 10 ha of total and cultivable land area, respectively.

### **Bio-pesticides and fertilizer:**

- The Govt. of AP has decided to provide quality and certified fertilizers to the farmers at RBKs so the (3) existing Fertilizer Quality Control Laboratories(FQCLs) and also one Biofertilizer testing lab in the State will be strengthened under SHM Scheme during 2020-21.
- The budget allocated under the RKVY scheme- Biological control laboratories – ₹1.37 Cr.
- Under NFSM, cluster demos of all critical inputs like seed, bio-fertilizers, PP chemicals, need-based farm implements are distributed to the farmers on 50% subsidy FOR FY 20-21.

### **Vermi-composting/ NADEP composting:**

- 1 tonne of vermi-compost contains N (0.75%), P (0.6%) and K (1.0%) which is equivalent to 16.3 Kg of Urea, 37.5 Kg SSP, 16.7Kg MOP
- Under RKVY project, vermicomposting is promoted with 50% subsidy. The unit cost of the vermi-compositng unit is ₹50000 (64- 71 kg earthworms with 150 kg filler material @ ₹8000; 4 composting pits@ ₹14000; and semi-permanent shed@ ₹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 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.

**List of Mandis and the major commodity traded in Guntur District:**

<b>Mandi Name</b>	<b>Commodity</b>
Duggirala	Turmeric
Guntur	chilli
Pidugurlla	chilli
Tenali	Lemon

**2.2.3.4 Critical Intervention required for creating a definitive impact**

Small size vermi-compost units or NADEP units will reduce the production costs and improve soil structure for better water retention and adds to fertility. However, in order to make these investments viable by themselves, community-based units of larger size say at an FPO level or at the level of SHG federation needs to be encouraged. Such units will reduce the production costs of a large number of farmers. Another critical intervention could be seed villages, especially for pulses. It may be noted that the area under pulses in the district is increasing owing to drought conditions and reduced productivity of crops such as paddy, cotton and maize.

**2.2.3.5 Suggested Action Points**

- The bio input manufacturing units are presently small scale and given the increasing demand, it is necessary to scale up in size. Also, there is need for quality control and price regulation of these inputs.
- Research and development efforts need to be stepped up to standardize the formulations of bio inputs

There is need to conduct capacity building programmes for farmers and bankers on aforesaid interventions and also on modalities of Government programmes.



**Watershed Development:** Watershed development has been one of the flagships grant-based programmes of NABARD being implemented across the country. The watershed development model of NABARD follows the principles of community participation in planning and execution, transparency in project management, shramadan, adoption of local technology and rigorous capacity building at various levels. In Guntur district, 21 watershed projects were implemented by 5 PFAs in 8 mandals viz., Vinukonda, Bollapalli, Veldurthi, Bellamkonda, Machavaram, Achchampeta, Dacheipalli, Gurajala covering 22000 ha, 45 habitations, 12690 families. 6 Watersheds by MYRADA are ongoing with the CSR Support of ITC.

Photos



NPM Practices at Tripurapuram and Zeba application at K.Uppalapadu ws,

Crop Diversification with Millets at Hasanayunipalem, Jangalapalli watersheds

## 2.3 Agriculture - Ancillary Activities

### 2.3.1 Food and Agro Processing

#### 2.3.1.2 Introduction:

Food Processing includes process under which any raw product of agriculture, dairy, animal husbandry, meat, poultry or fishing is transformed through a process in such a way that its original physical properties undergo a change and the transformed product has commercial value and is suitable for human and animal consumption. Therefore, food processing is an important intervention in the agriculture value-chain as it reduces post-harvest losses at farmer's level and links the farm gate to consumer plate. Production is seasonal whereas consumption is perennial. Hence, it is important to add value to raw agriculture produce so that, perishable produces are processed, preserved and consumed over a period of time. As food processing requires technologies, investment, infrastructure and skill, the sector is dominated by entrepreneurs and Agribusiness companies.

#### Agro Food Processing Industry in the State

Andhra Pradesh Food Processing Society (APFPS) has been established by the Government of Andhra Pradesh under The Andhra Pradesh Societies Act in November 2012 to act as a nodal agency for the development of Food Processing Sector in the State. The core schemes of Government of Andhra Pradesh are as follows:

#### Pradhan Mantri Kisan SAMPADA Yojana

Government of India (GoI) has approved a new Central Sector Scheme – Pradhan Mantri Kisan SAMPADA Yojana (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) with an allocation of ₹6,000 crore. The scheme will be implemented by the Ministry of Food Processing Industries (MoFPI).



As on 10th February 2021, MoFPI have 296 Designated Food Parks (DFPs) throughout India for availing the credit under NABARD Food Processing Fund. Andhra Pradesh state has 30 DFPS.

### **Government of India Policy Initiatives:**

Several policy initiatives have been taken from time to time to promote the growth of the food processing sector in the country. Some of these are:

### **Production Linked Incentive Scheme for Food Processing Industry (PLISFPI):**

- Support food manufacturing entities with stipulated minimum sales and willing to make a minimum stipulated investment for expansion of processing capacity and branding abroad to incentivize emergence of strong Indian brands,
- Support creation of global food manufacturing champions, Strengthen select Indian brand of food products for global visibility and wider acceptance in the international markets,
- Increase employment opportunities of off-farm jobs,
- Ensuring remunerative prices of farm produce and higher income to farmers,
- The food processing sector in India encompasses manufacturing enterprises in all the segments from micro to large industries,
- India is having competitive advantage in terms of resource endowment, large domestic market and scope for promoting value added products,
- Achieving full potential of this sector would require Indian companies to improve their competitive strength vis-à-vis their global counterpart in term of scale of output, productivity, value addition and their linkages with the global value chain,
- The Production Linked Incentive Scheme for Food Processing Industry has been formulated based on the Production Linked incentive scheme of NITI Aayog under “Atmanirbhar Bharat Abhiyaan for Enhancing India's Manufacturing Capabilities and Enhancing Exports”.

### **One District One Product (ODOP):**

- The scheme adopts the One District One Product (ODOP) approach to reap the benefit of scale in terms of procurement of inputs, availing common services and marketing of products. ODOP for the scheme will provide the framework for value chain development and alignment of support infrastructure. There may be more than one cluster of ODOP products in one district. There may be a cluster of ODOP products consisting of more than one adjacent district in a State.
- The States would identify the food product for a district, keeping in perspective the focus of the scheme on perishables. A baseline study would be carried out by the State Government. The ODOP product could be a perishable Agri produce, cereal-based product, or a food product widely produced in a district and their allied sectors. An illustrative list of such products includes mango, potato, litchi, tomato, tapioca, kinna, bhujia, petha, papad, pickle, millet-based products, fisheries, poultry, meat as well as animal feed among others. Besides, certain other traditional and innovative products including waste to wealth products could be supported under the Scheme. For example, honey, minor forest products in tribal areas, traditional Indian herbal edible items like turmeric, amla, haldi, etc.
- Support for agricultural products would be for their processing along with efforts to reduce wastage, proper assaying, and storage and marketing.
- For providing support existing individual micro-units for capital investment, preference would be given to those producing ODOP products. However, existing units producing other products would also be supported. In the case of capital investment by groups, predominately those involved in ODOP products would be supported.
- Support to groups processing other products in such districts would only be for those already processing those products and with adequate technical, financial, and

entrepreneurial strength. New units, whether for individuals or groups would only be supported for ODOP products.

- Support for common infrastructure and marketing & branding would only be for ODOP products. In case of support for marketing & branding at the State or regional level, the same products of districts not having that product as ODOP could also be included.
- The Department of Commerce is focusing on agriculture crops on a cluster approach for support of exports under the Agriculture Export Policy, and the Ministry of Agriculture is also focusing on a cluster approach for the development of specific agriproducts in districts having a comparative advantage. The ODOP approach of the scheme would lead to ease in providing common facilities and other support services.

### 2.3.1.3 Infrastructure and linkage support available, planned and gap

Guntur district is the largest producer of chilli and second in turmeric production in the state. With the huge production base, there is considerable scope for processing these commodities into base products like powders, pickles and extraction units such as curcumin. A designated Food Park i.e., Spice Park has been set up at Edlapadumandal under the aegis of Spices Board. Investments in this food park will qualify for support under Food Processing Fund set up in NABARD. It is expected that about 40 processing units would be set up in the Spice Park. GoI has also notified establishment of Spice Development Agency in Guntur district which is expected to bring all spice promotion activities under one umbrella. In addition, 25% subsidy is available under RKVY for various food processing units. The recent industrial policy announced by GoAP provides for various incentives such as reimbursement of stamp duty, land conversion charges, seed capital assistance, investment subsidy, reimbursement of VAT/CST/SGST, interest subsidy on term loan, etc. The favourable policy environment, available production base and infrastructure is expected to provide much needed stimulus to the sector for rapid growth.

The district has a good road, rail and other communication network. As a result, transport of produce from production belts to industrial areas is quick and easy. The setting up of Spice Park to provide infrastructure to various spice processing units is expected to boost the sector. The district hosts Spice Board Regional Office with quality testing facilities, Sub Office (State Office) of DMI with AGMARK, quality testing, very large network of bank branches, research institutes, besides a vibrant DIC to ground the policy into an implementable action plan.

### 2.3.1.4 Assessment of credit potential for 2022-23

Potential assessed for lending to Food & Agro Processing Sector, keeping in view of the special focus of the State and potential for the exponential growth of agro-processing units during 2022-23 is ₹73302.13 lakh.

(₹ lakh)

S.No	Activity	Unit	PLP 2022-23			
		No	Unit Cost	Phy units	Fin. Outlay	Bank loan
1	Chilli powder making units	No	14.641	156	2284.00	1712.88
2	Turmeric powder making unit	No	14.641	20	292.82	219.60
3	Spice processing units (Spice park)	No	266.200	39	10381.80	7786.35
4	Micro agro based units such as rice mills, Dal mills	No	14.641	740	10834.34	8125.20
5	Small agro based units (oil extraction units, etc)	No	73.205	100	7320.50	5490.00
6	Medium agro based units (spice	No	732.050	32	23425.60	17569.28

S.No	Activity	Unit	PLP 2022-23			
	park, Guntur					
7	Working capital	No	14.641	2450	35870.45	32291.00
8	Ind. Milk Product(100 lpd)	No	13.310	9	119.79	107.82
	<b>Total</b>				<b>90529.30</b>	<b>73302.13</b>

The joint mandal wise PLP projections are given in Annexure I.

The potential projected for PLP is based on additional infrastructure set up in the district (for instance, establishment of Spice Park), favorable policy environment (incentives from Food Processing Society and DIC as per Food Processing Policy of GOAP, coverage of new activities etc.

Status in the District:

- There are 103 large and medium scale industries with an installed capacity of 54082.10 MT having a capital investment of 4128.14 crore.
- There are 4365 factories presently working in the district of which the major share goes to Food products factories. The number of factories for food product production are 2007 in number giving employment to 25956 workers.
- Cotton Ginning mills stands second with 539 factories giving an employment to 9494 male and 10691 female.
- Under small scale industries there are 16676 units in total with a capital investment of 337829 lakhs employing 92,679 male and 59,038 female. There are 3947 food product industries with a capital investment of ₹202323 lakhs employing 21092 male and 14200 female.

### **2.3.1.5 Critical Intervention required for creating a definitive impact**

Though backward linkages are well established, the quality of produce is a concern owing to high chemical residues in all agri products. Adoption of good crop management practices coupled with appropriate post-harvest practices such as drying, packing and storage will help to improve quality and fetch premium prices in the international market. In order to ensure continuous supply of raw material in adequate quantities, aggregation of produce through FPOs will be win-win situation for farmer and processing industry. The incentives available under Food Processing Policy of GoAP require to be widely publicized for encouraging entrepreneurs. Another critical intervention is to set up quality control labs which can provide accurate analysis at an affordable cost.

### **2.3.1.6 Suggested Action Points**

- Though processing into powders, pickles, etc is well established, high-end extraction units of spices/others for oils, oleoresins, etc are very limited. The exports are also affected due to high pesticide residues leading to export rejections. Thus, quality testing facilities need to be developed in a big way.
- Multiple departments such as agriculture, horticulture, Spices Board, DMI and DIC are functioning in the district. An effective coordination will certainly help the sector exploit the potential.
- Training and capacity building of all stake holders, including bankers is necessary

## **2.3.2 Agriculture – Ancillary activities – Others**

### **2.3.2.1 Introduction**

This chapter covers ancillary activities like loans to Cooperative Societies of farmers for disposing of their produce, Agri-clinic/Agri-Business Centres, Loans to PACS/FSS/LAMPS, Loans to MFIs for on-lending to agriculture, etc. Guntur district is famous for commercial crops such as chilli, cotton, turmeric, banana, vegetables and flower crops. The prices of these products are prone to very high fluctuations leading to uncertain margins to farmers.

Promotion of Farmer Producers Organizations (FPO) both by NABARD and Govt. of AP is a positive step in this direction and this would also provide enhanced credit flow to the members of these organizations. The loans under this category would be to those institutions who are typically FPO and other PACS for providing loans against agri produce. The Agri-Clinic/Agri-Business Centres have an important role in not only providing advisory services to farmers, but also in supplying of necessary farm inputs. MFIs, one of the important last-mile financial service providers, have been able to bridge the gap between the formal banking institutions and the needy farmers and other sections of the society.

### **2.3.2.2 Infrastructure and linkage support available, planned and gap Farmers' Producers Organisations (FPOs)**

- During 2020-21 ministry of Agriculture & Farmers welfare had come out with detailed guidelines for the formation of 10000 FPOs over a period of 5 years. The FPOs to be promoted with focus on “one district one product” and also to promote value chain, processing and export. Initially the implementing agencies identified are SFAC, NCDRC, and NABARD.
- We also have a National Project management agency engaged by SFAC with a team having 5 categories of specialisation to support the implementing agencies. The implementing agencies shall in turn set up Cluster Based Business Organisation to form and to promote FPOs. The nodal training institutes identified are BIRD and LINAC. A credit guarantee fund of ₹1000 crore with NABARD and ₹500 crore with NCDRC will be credited to facilitate easy credit linkages of FPOs with financial institutions. A state level and district level monitoring committee were already formed to review the progress of existing as well as newly formed (to be formed) FPOs.
- FPOs are being promoted by NABARD under PRODUCE Fund since FY 14-15, with a total of 106 FPOs being promoted in the state of AP. Various Line Departments of GoAP such as Agriculture, Horticulture, Animal Husbandry and Fisheries are also actively engaged in the promotion of FPOs in the state. A number of FPOs in the state have been in existence for around 2-3 years now, and are in need of credit for their working capital and infrastructure needs to scale up their business and marketing activities. The credit needs of the FPOs may vary from ₹ 10 lakh to ₹1 crore based on the sector/activity. In order to boost the flow of bank credit to FPOs, RBI has included lending to FPOs by commercial banks and RRBs under Priority Sector.
- NABARD also intends to promote an additional 3000 FPOs in the country, of which 200 will be promoted in AP, by leveraging on the existing promotional schemes such as Watershed & TDF projects, SHG/JLG, PACS, and Farmers' Clubs etc. in cluster mode at district level. These newly formed FPOs may also hold potential for credit for their business activities.
- Credit is also required by Producer Organizations, Cooperative Societies and MACTS in the state for furthering their thrift and credit activities in agriculture and allied sectors. Potential also exists for on-lending to the members of the POs, cooperatives and MACTS as they are very active in the state with good membership.
- The credit potential is assessed sector/activity wise for these entities, with close interactions with all the stakeholders including banks and line departments of GoAP.

**2.3.2.3 Assessment of credit potential for 2022-23**

Consequent to the revision in Priority Sector guidelines by the RBI, these activities are now being reported under “Ancillary Activities”. Taking into account the information and also based on discussions with the stakeholders involved in the above activities, a credit potential of ₹12809.40 lakh has been estimated for the FY 2022-23. The sub-sector wise loan projections estimated for the year 2022-23 are given below.

(₹ Lakh)

S.NO.	Activity	Unit	PLP 2022-23			
		No	Unit Cost	Phy units	Fin. Outlay	Bank loan
1	Farmer Producer organisations	No.	133.100	41	5457.10	4093.03
2	ACABC	No.	19.327	18	347.89	261.00
3	Loans to PACS/FSCS/Coop Scty	No.	146.410	77	11273.57	8455.37
	<b>Total</b>				<b>17078.56</b>	<b>12809.40</b>

Therefore, the said activities, picking up in the district, require considerable promotional efforts before significant credit flow takes place. The Activity-wise and joint mandal wise physical and financial projections are furnished in Annexure I.

**Critical Gaps/ Issues:**

- There is a need to sensitize banks, including RRBs and Cooperative Banks, on the need to finance FPOs for their short term and long-term credit needs. Bank officials such as branch managers need to be acquainted with the concept of FPOs and the modalities of their financing. FPOs need to be strengthened by increasing their equity base and membership, so as to be able to leverage the benefits accorded by the Equity Grant and Credit Guarantee Schemes of SFAC. Banks may identify the existing organisations which are helping farmers in aggregating their produce and marketing the same, and consider extending credit to such organisations.
- NABARD entered into MoU with NGOs for promotion of 35 FPOs in the district. These are commodity specific FPOs handling crops such as chilli, maize, turmeric, vegetables, flowers (jasmine and marigold), allied activities such as fisheries and dairy. The membership of each FPO would be around 500-1000 and the credit need of these FPOs ranges between ₹50.00 lakh and ₹200 lakh depending upon the scale of business. A total of 8 FPOs were credit linked by NABKISAN in the district primarily for doing input business. In 2020-21, 5 FPOs were credit linked which are primarily into floriculture, dairy, vegetables, chillies, maize and paddy, to the tune of ₹15- ₹25 lakhs as per the business plan.
- Small Farmers Agri-Business Consortium (SFABC), a society promoted by Government of India has been playing a catalytic role in promotion of FPOs and the services offered by them include credit guarantee, grant assistance for certain activities, etc.

**Agri Clinics and Agri Business Centres (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.
- Candidates trained for two months in the Nodal Training Institutes (NTI) recognised by MANAGE, 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.

- This programme 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.
- As on date there are 07 NTIs in Andhra Pradesh, one each in Anantapur, Chittoor, Guntur, Krishna, Kurnool, Visakhapatnam and West Godavari districts(Source: <http://www.agriclinics.net/Nti-Contacts.aspx>).
- A credit linked subsidy scheme is being implemented by GoI through NABARD since 2002. Subsidy will be back-ended with minimum 3 years lock in period. Subsidy will be 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.

**MFIs** -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. 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”.

A “qualifying asset” under priority sector refers to a loan disbursed by MFI, which satisfies the following criteria:

- The loan is to be extended to a borrower whose household annual income in rural areas does not exceed ₹1, 00,000/-.
- Loan does not exceed ₹60,000/- in the first cycle and ₹1, 00,000/- in the subsequent cycles.
- Total indebtedness of the borrower does not exceed ₹1, 00,000/-.
- Tenure of loan is not less than 24 months when loan amount exceeds ₹15,000/- with right to borrower of prepayment without penalty.
- The loan is without collateral.
- The loan is repayable by weekly, fortnightly or monthly instalments at the choice of the borrower.

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.

There is no NBFC-MFI headquartered in Andhra Pradesh.

### **Loans to PACS/ FSS/ LAMPS**

Primary Agricultural Credit Societies (PACS) and Farmers’ Service Societies (FSS) are an integral part of 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 business. The large-sized Adivasi Multi-Purpose Co-operative Societies, shortly called LAMPS cater to the developmental requirements of tribals.

There are 168 PACS in the district of which 167 are affiliated to GDCCB and 1 is the ceded PACS for Union bank. The total membership of PACS is with a membership of 1.49 lakh farmers. The total amount of outstanding is ₹1869.90 crore to PACS.

Potential: PACS to diversify their business and follow “Credit Plus” approach.

### **Special Refinance Scheme for Transformation of PACS as MSC**

Primary Agriculture Cooperative Societies (PACS) are grass root level cooperative institutions primarily involved in meeting the credit requirement of the farmer members. With a view to rejuvenate the PACS, many initiatives have been undertaken by NABARD and one such initiative has been supporting the PACS as MSC programme from the year 2011 onwards through direct credit as well as through refinance to CCBs/StCBs in order to make them a self-sustainable entity. Positive impact and the benefits derived by the members of PACS as well as limitations in implementing the programme were assessed and accordingly the operational methodology, coverage of investments and terms of refinance have since been revised. The drivers for transformation of PACS as MSC are recent reforms by GoI in APMC Act, Essential Commodities Act, Contract Farming Act and COVID 19 led reverse migration necessitating to create investment opportunities for rural youth in agriculture. Further, with the proposed Agriculture Infrastructure Fund (AIF) scheme under AtmaNirbhar Bharat initiative of GoI, for establishing decentralized farm-gate Post-Harvest Management infrastructure wherein PACS have been included as one of the eligible institutions for interest subvention, it is envisaged that PACS can now play a major role in physical and financial supply chain of commodities by working as spokes to the Gramin Agriculture Markets (GrAMs). With investments in post-harvest infrastructure, it is hoped that farmers would be able to reduce post-harvest losses and increase their value realization for the produce.

#### **Objective**

Transformation of 35,000 PACS into MSC in a phased manner spanning over three years with an objective of PACS acting as enabling institutions for meeting the national goal of doubling of farmers' income. The target proposed for current year is transformation of 5,000 PACS and for subsequent years it shall be 15,000 PACS during FY22 and 15,000 PACS during FY23. **₹5000 crore has been earmarked under this special dispensation for the year 2020-21.**

#### **Eligible PACS**

All PACS which have powers to borrow for creation of infrastructure in the byelaws and have sufficient borrowing power are eligible. The minimum margin money requirement from PACS is 10% under this special refinance facility. However, considering the current financial status of PACS and to enable them to kick-start establishing agri infrastructure, wherever necessary, StCB/DCCB may consider relaxing margin money to 5%. NABARD may consider providing grant not exceeding 10% of the loan component not exceeding ₹2 lakh per PACS towards preparation of DPR, exposure visits, capacity building etc.

#### **Eligible financial institutions**

All State Cooperative Banks and DCCBs complying to refinance policy of NABARD are eligible for special refinance scheme.

#### **Eligible Purposes**

Thrust areas for refinance include custom hiring centres, collective purchase of inputs, procurement of farm produce, scientific warehouses, pack houses, assaying units, sorting & grading units, cold chains, logistics facilities, primary processing centres, supply chain services including e-marketing platforms, marketing facilities etc. will be eligible for refinance.

#### **Refinance assistance**

Refinance assistance is provided to the banks under pre-sanction procedure wherein banks are required to submit the projects for approval of NABARD. Before sanction of the same, NABARD appraises these projects to determine its technical feasibility, financial viability and bankability. Interest rate on refinance will be 3%. However, the ultimate interest rate to be charged from PACS should not be more than 1% over & above the interest rate charged by NABARD and can be shared by StCB & CCB as per the mutually agreed terms. Repayment period of refinance will be up to 7 years.

#### **Potential in the State**

Under the scheme, a total number of 347 PACS have been shortlisted to provide Special Refinance Facility with a total outlay of ₹344 crore and refinance to the tune ₹310 crore. Out of the 347 PACS, more than 50% of the PACS proposed to construct rural godown and dry warehouses, with capacity ranging from 100 MT to 500 MT. Besides rural godowns, the other activities proposed by the PACS include Custom Hiring Centres, Cold Storages, Agro Service Centres, Agri Labs/Agri Clinics, Agri-Processing Units and RO Water Plants.

#### **Potential in the District**

The total no. of PACS in Guntur are 167 of which 103 PACS are in profits. As a first step towards converting PACS into MSC (by creating only storage capacities) we have identified 52 PACS where storage capacity ranging from 50MT to 5000MT was identified. A proposal of ₹121.75 crore was sent to APCOB and in turn to RO. An amount of ₹109.57 crore was sanctioned which is 90% of the total proposed loan. A 10% margin money shall be contributed by PACS. More no. of PACS shall be brought under this scheme.

- There are a few Mutually Aided Cooperative Thrift Societies (MACTS) operating in the district and taking up thrift and credit activities, including extending credit for agricultural and allied activities. Discussions with some of the MACTS indicate the existence of potential to extend credit to the MACTS to enable them to on-lend to their members. NABARD has sanctioned direct loan to Prathipadu MACS for a project on cotton value chain.

#### **2.3.2.4 Critical Intervention required for creating a definitive impact**

The institutional set up is strong as indicated above. However, in the light of various government initiatives particularly under primary sector mission, huge potential exists for convergence of Govt initiatives through these ground level institutions. In order to realise this potential, concerted efforts are necessary in terms of coordination, optimum use of funds allocated under respective line departments, yearly action plans, sensitisation of stake holders and capacity building of man power.

#### **2.3.2.5 Suggested Action Points**

- With a good number of FPOs being promoted by NABARD and State Government Departments, banks may actively engage with these societies and extend both term loans and WC loans for taking up the activities by the FPOs.
- Strengthening of FPOs and leveraging the benefits of SFAC equity grant and credit guarantee scheme for extending credit facilities.
- The banks need to sensitize their branch managers to encourage agricultural graduates in setting up of agri clinics and agri business centres for providing last mile services to the farmers.
- Banks may also selectively encourage few last-mile financial intermediaries like MFIs, MACTS, etc. after careful appraisal.



## CHAPTER – 3

### **Credit Potential for Micro, Small and Medium Enterprises (MSME) - 2022-23**

#### **3.1 Introduction:**

Micro, Small and Medium Enterprises popularly called as MSMEs are key contributors to the country's economic activity as an important source of employment, growth, and innovation. Around 75 million MSMEs contribute to about a third of the GDP and 45 per cent of the manufacturing output of the country. These enterprises also provide employment to more than 110 million Indians. The sector's sustained growth and health are important to achieve India's GDP growth targets. MSMEs, today are exposed to higher level of integration with global value and supply chains and are playing critical role in global trade systems.

Andhra Pradesh is ranked no. 1 in the country on Ease of Doing Business as per the 2020 assessment of States conducted by DIPP. As a recognition of the successful implementation of the EODB reforms, Andhra Pradesh had been accorded an additional borrowing permission of ₹2,525 crores by GoI in Feb 2021. Through the Single Desk Portal, over 24,000 approvals have been provided to setup industry within the state. Since June 2014, Government released ₹3,061 crore of industrial incentives against 16,792 claims. The AP Public Service Delivery Guarantee Act 2017 has also been enacted where timelines have been stipulated for delivery of public services. Currently, 74 services across 22 departments are covered under the Act. Factoring the hardships faced by the MSMEs during the Covid-19 pandemic, the Andhra Pradesh government has come up with a ₹1,110-crore 'ReSTART' policy boost. The ReSTART package includes the payment of all sanctioned but outstanding incentives to MSME units, waiver of three months fixed demand charges, deferment of power minimum demand charges for three months for large and mega units, and working capital loans along with preferential market access. The MSMEs Preferential Market Access Policy will ensure that 25 per cent of government purchases will be from Micro and Small units covering about 364 items. The government has also constituted a task force with Industries Minister Shri Mekapati Goutham Reddy as chairman to attract investments into the State.

#### **3.2 Infrastructure and linkage support available, planned and gap**

- In Guntur district, there are 103 large and medium sized industrial units functioning with an investment of ₹412814.00 lakh, providing employment to 22562 persons. Large number of spinning mills have come up in the district. These large and medium sized units fall under the category of mineral based, food based, textile based, engineering based, chemical based, tobacco based and agro-based industries. The working capital requirements of these units will be of high order.
- There are 16676 micro and small-scale industrial units functioning with an aggregate investment of ₹337829 lakhs, providing employment to 151717 persons. These units are engaged in food products, metal and non-metal products, textiles, limestone kilns, engineering and other activities. These industries in small scale category need the working capital to carry on their production activities. The quantum of working capital requirement would depend on the production cycle, nature of the industry and their specific requirements.
- There are 71 Weavers' Cooperative Credit Societies with membership of over 12620. Besides, there are 11700 weavers outside the cooperative fold engaged in handlooms. The number of looms in the cooperative fold and private sector are 13768 and 5526, respectively.
- The working capital needs of the SSI units are generally met by the commercial banks while the working capital needs for handloom activity are being met by Guntur DCCB in the form of cash credit limits to the weavers' societies.

### 3.3 Assessment of credit potential for 2022-23

The credit flow to the sector during the last three years 2018-19, 2019-20 and 2020-21 was ₹406224.54 lakh and ₹ 325366 and ₹393901.11lakh respectively. Taking into account the present status, trends in ground level credit, infrastructure availability/gaps and recent policy announcements, and increased unit costs, the credit projections have been estimated at ₹ 501259.58lakh. The sub-sector wise PLP projections for the year 2022-23 are given in the table hereunder:

(₹Lakh)

S.No	Activity	Unit	PLP 2022-23			
		No	Unit Cost	Phy units	Fin. Outlay	Bank loan
<b>A</b>	<b>Manufacturing sector - term loan</b>					
1	Micro Enterprises					
	Hand looms	No.	2.926	1710	5003.46	3744.90
	Tiny Sector	No.	6.655	2800	18634.00	13972.00
	Village Industries	No.	2.662	2890	7693.18	5780.00
	Rural Artisans	No.	1.331	2750	3660.25	2750.00
2	Small Enterprises	No.	66.550	2530	168371.50	126272.30
3	Medium Enterprises		665.500	140	93170.00	69878.20
<b>B</b>	<b>Manufacturing sector - working capital</b>					
1	Micro Enterprises		6.655	3850	25621.75	20482.00
2	Small Enterprises		36.603	1550	56734.65	45384.00
3	Medium Enterprises		29.282	49	1434.82	1148.07
<b>C</b>	<b>MSME services - investment credit</b>					
1	<b>Micro</b>					
	Transport Operators	No.	3.993	3735	14913.86	11167.65
	Retail Trade & Small Business	No.	2.926	26098	96844.75	72484.62
	Professional & Self Employed	No.	4.389	19200	84268.80	63168.00
2	<b>Small</b> Enterprises	No.	33.275	65	2162.88	1622.40
3	<b>Medium</b> Enterprises	No.	242.000	165	39930.00	29947.50
<b>D</b>	<b>MSME - services working capital</b>					
1	Micro Enterprises	No.	6.655	850	5656.75	4522.00
2	Small Enterprises	No.	33.275	47	1563.93	1251.14
3	Medium Enterprises	No.	133.100	170	34606.00	27684.80
					<b>660270.56</b>	<b>501259.58</b>

The thrust given by Government towards MUDRA, Stand Up India and encouraging response from bankers in the district are expected to bring lot of investments both in manufacturing and service sectors. The joint mandal wise PLP projections are indicated in Annexure I

### 3.4 Revised Definition of MSME -effect from 01.07.2020:

In exercise of the powers conferred by sub-section (1) read with sub-section (9) of section 7 of the 'Micro, Small and Medium Enterprises Development Act, 2006 (27 of 2006) and in supersession of the notification of the Government of India, Ministry of Small Scale Industries, dated the 29th September, 2006, published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section(ii), vide S.O. 1642(E), dated the 30th September 2006 except as respects things done or omitted to be done before such supersession, the Central Government, notified the following criteria for classification of micro, small and medium enterprises, which will be effect from 01<sup>st</sup> July 2020, namely:

- i. a micro enterprise, where the investment in Plant and Machinery or Equipment does **not exceed one crore rupees and turnover does not exceed five crore rupees.**
- ii. a small enterprise, where the investment in Plant and Machinery or Equipment does **not exceed ten crore rupees and turnover does not exceed fifty crore rupees.**
- iii. a medium enterprise, where the investment in Plant and Machinery or Equipment does **not exceed fifty crore rupees and turnover does not exceed two hundred and fifty crore rupees.**

#### Revised Definition of MSME

Revised MSME Classification			
Composite Criteria: Investment and Annual Turnover			
Classification	Micro	Small	Medium
Manufacturing & Services	Investment < ₹1 cr. and Turnover < ₹5 cr.	Investment < ₹10 cr. and Turnover < ₹50 cr.	Investment < ₹50 cr. and Turnover < ₹250 cr.

#### Policy Initiatives

**Revised Priority sector guidelines:** In terms of RBI Circular dated 23 April 2015 on revised Priority Sector Guidelines, for the first time **a separate sub limit of 7.5% of ANBC has been created for lending to Micro Enterprises under Priority Sector.** As per RBI circular dated 20 September 2020, the definition of MSMEs will be as per Government of India (GoI), Gazette Notification S.O. 2119 (E) dated June 26, 2020 read with circular RBI/2020-2021/10 FIDD.MSME & NFS.BC.No.3/06.02.31/2020-21 read with FIDD.MSME & NFS. BC. No.4/06.02.31/2020-21 dated July 2, 2020, August 21, 2020 respectively on 'Credit flow to Micro, Small and Medium Enterprises Sector' and updated from time to time.

Further, such MSMEs should be engaged in the manufacture or production of goods, in any manner, pertaining to any industry specified in the First Schedule to the Industries (Development and Regulation) Act, 1951 or engaged in providing or rendering of any service or services. All bank loans to MSMEs conforming to the above guidelines qualify for classification under priority sector lending.

- i. **Factoring Transactions (not applicable to RRBs and UCBs)**  
With Recourse' Factoring transactions by banks, which carry out the business of factoring departmentally wherever the 'assignor' is a Micro, Small or Medium Enterprise would be eligible for classification under MSME category on the reporting dates.
- ii. **Khadi and Village Industries Sector (KVI)**  
All loans to units in the KVI sector will be eligible for classification under the sub-target of **7.5 percent** prescribed for Micro Enterprises under priority sector.
- iii. **Other Finance to MSMEs**
  - Loans up to ₹50 crore to Start-ups, as per definition of Ministry of Commerce and Industry, Govt. of India that confirm to the definition of MSME.
  - Loans to entities involved in assisting the decentralized sector in the supply of inputs and marketing of output of artisans, village and cottage industries.
  - Loans to co-operatives of producers in the decentralized sector viz. artisans, village and cottage industries (Not applicable for UCBs).
  - Loans sanctioned by banks to NBFC-MFIs and other MFIs (Societies, Trusts etc.) which are members of RBI recognised SRO for the sector for on-lending to MSME

sector as per the conditions specified in paragraph 21 of these Master Directions (not applicable to RRBs, SFBs and UCBs)

- Loans to registered NBFCs (other than MFIs) for on-lending to Micro & Small Enterprises as per conditions specified in para 22 of these Master Directions (not applicable to RRBs, SFBs and UCBs)
  - Credit outstanding under General Credit Cards (including Artisan Credit Card, LaghuUdyami Card, Swarojgar Credit Card and Weaver's Card etc. in existence and catering to the non-farm entrepreneurial credit needs of individuals).
  - Overdraft to Pradhan Mantri Jan-Dhan Yojana (PMJDY) account holders as per limits and conditions prescribed by Department of Financial Services, Ministry of Finance from time to time, will qualify as achievement of the target for lending to Micro Enterprises.
  - Outstanding deposits with SIDBI and MUDRA Ltd. on account of priority sector shortfall.
  - Under the revised guidelines issued on July 2, 2021, the Ministry of MSME has issued an order to include retail and wholesale trade as MSME and extending to them the benefit of priority sector lending.
- iv. **Small Industries Development Bank of India (SIDBI)** has been established as the apex institution for financing the MSME. Specific schemes have been designed for implementation through SIDBI, SFCs, Scheduled Banks, SIDCs and NSIC etc.
- v. **Pradhan Mantri MUDRA Yojana (PMMY): 2015-16**  
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. MUDRA Bank has launched three loan instruments:
- Shishu: covers loans upto ₹50,000/-
  - Kishor: covers loans above ₹50,000/- and upto ₹5 lakh
  - Tarun: covers loans above ₹5 lakh and upto ₹10 lakh
- Progress made under Pradhan Mantri MUDRA Yojana for the financial year 2020-21 in Andhra Pradesh.

Particulars	Shishu	Kishor	Tarun	Total
No. of A/Cs	91679	22346	5486	119511
Sanction Amount	161.39	377.04	404.21	942.64
Disbursement Amount	150.07	359.57	383.68	893.32

(₹ crores)

(Source: [www.mudra.org.in](http://www.mudra.org.in))

vi. **Stand Up India**

The Hon'ble Prime Minister launched Stand Up India scheme on 5<sup>th</sup> April, 2016. To monitor the progress of implementation of Scheme and submission of information, a portal is developed by SIDBI. The objective of the Stand-Up India scheme is to facilitate bank loans between ₹10 lakh and ₹1 crore to at least one Scheduled Caste (SC) or Scheduled Tribe (ST) borrower and at least one Women borrower per bank branch for setting up a new enterprise (also termed as Greenfield enterprise)

**Eligibility:**

SC/ST and/or Women entrepreneurs, above 18 years of age.

Loans under the scheme is available for only new project being setup i.e. the first time venture of the beneficiary in the manufacturing or service or trading sector.

In case of non-individual enterprises, 51% of the shareholding and controlling stake should be held by either SC/ST and/or Women entrepreneur.

**Salient Features:**

- Composite loan of 75% of the project cost inclusive of term loan and working capital.
- The scheme envisages 25% margin money which can be provided in convergence with eligible Central / State schemes. while such schemes can be drawn upon for availing admissible subsidies or for meeting margin money requirements, in all cases, the borrower shall be required to bring in minimum of 10% of the project cost as own contribution.
- The rate of interest would be lowest applicable rate of the bank for that category (rating category) not to exceed (base rate (MCLR) + 3% + tenor premium).
- Besides primary security, the loan may be secured by collateral security or guarantee of Credit Guarantee Fund Scheme for Stand-Up India Loans (CGFSIL) as decided by the banks.
- The loan is repayable in 7 years with a maximum moratorium period of 18 months.
- For drawl of working capital upto ₹10 lakh, the same may be sanctioned by way of overdraft.
- Rupay debit card to be issued for convenience of the borrower. Working capital limit above ₹10 lakh to be sanctioned by way of Cash Credit limit.
- Under the scheme, which covers all branches of Scheduled Commercial Banks and RRBs, loan aspirants may access in three potential ways:
  - Directly at bank branch;
  - Through Stand-Up India Portal ( [www.standupmitra.in](http://www.standupmitra.in) ); or
  - Through the respective Lead District Manager (LDM)
- Lead District Managers (LDMs), SIDBI and NABARD offices have been entrusted with the responsibility to co-ordinate with various handholding agencies, banks and other related agencies so as to create a network of Stand Up India Help Centres (SUHC) all across the country. Additionally, DLCC under the Collector have been entrusted to review progress periodically, handle grievance redressal at district level, assist in resolving issues, if any, relating to public utility services and work space for potential borrowers.
- Financial assistance is available from institutions such as Nationalized Banks, Small Industries Development Bank of India, Regional Rural Banks, National Small Industries Corporation, State Financial Corporations etc. depending upon the project requirement and promoters background. Financial assistance has two components. Loan for fixed capital is used to acquire Plant and Machinery, land and building. Working capital loan is used to meet day to day operational cost of the production. State Financial Corporation and National Small Industries Corporation generally provide working capital. However, under a package assistance, State Financial Corporations also provide a composite loan covering plant and machinery and working capital.

**New Industrial Policy 2020-23 (IMP)**

The Government of Andhra Pradesh ("AP Government") recently unveiled its new Industrial Policy 2020-23 with the aim of providing incentives and an investment-friendly environment for certain industries in the state.

Broadly, the interventions by the state – that are intended to support and facilitate industry – include infrastructural interventions (related to the development and management of industrial parks), ease of doing business measures (such as creation of a single desk portal for approvals, deemed approvals for certain industries), improving labour access / skilling,

developing a support centre for entrepreneurs, incentives (such as GST reimbursements for certain industries), and special incentives for socially disadvantaged groups such as women, members of the scheduled caste, scheduled tribes and other communities.

### **Key Measures**

#### **Industrial Parks**

The development of industrial parks and provision of plots at affordable rates are a key area of focus for AP Government under the new policy with the AP Government intending to promote new industries only in industrial parks/ estates to ensure greater environmental sustainability.

#### **Fiscal Incentives**

- The AP Government has granted certain fiscal and other incentives based on the size of the enterprise.
- Micro and small enterprises<sup>1</sup> shall receive the following benefits:
- Reimbursement of stamp duty on land purchased for industrial use; leases; mortgages and hypothecations;
- Uninterrupted power at concessional rates of Re.1 per unit for the first 5 years after commencement;
- Reimbursement of 100% of net SGST for a period of 5 years from the date of commencement of commercial production, or up to realisation of 100% of fixed capital investment, whichever is earlier;
- Investment subsidy on fixed capital investment up to INR 2,000,000.
- Interest subsidy of 3% on the term loan taken for fixed capital investment by new industries for 5 years from the date of commencement of commercial production;
- Reimbursement on land conversion charges for industrial use of 25%.
- Medium enterprises, large and mega industries shall receive a reimbursement on SGST for a period of 5 years from the date of commencement of commercial production, or up to realisation of 100% of fixed capital investment, whichever is earlier. The amount of reimbursement will vary based on employment generated. If the magnitude of employment generated is less than 1000 then 50%; if 1000 to 2000 then 75%; and if greater than 2000 then 100% of SGST.
- *Ease of Doing Business*
- Among the transparency measures undertaken is the 'deemed approval' granted to all green and white category industries (classifications based on environmental impact). Such industries would be able to commence activities and formalise their approvals within 3 years and need only submit an undertaking / declaration of intent.
- Creation of a robust, single desk portal for all necessary approvals and clearances from multiple government agencies and departments and a central helpline for approvals related grievances. The portal currently grants nine pre-establishment approvals and seven pre-operational approvals with fixed timelines which include approvals for change of land use, factory licensing, consent to operate, fire NOCs and permission to utilise contract and migrant workers with the intent being to eliminate the need for in person contact with the authorities at the district level. The AP Government currently guarantees the granting of all approvals within 21 days.
- Other efficiency measures such as more frequent department meetings for quicker approvals and disbursement of loans.

#### **Entrepreneurship**

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

#### **Special Incentives for Disadvantaged Groups**

The AP Government shall grant fiscal incentives (relating to stamp duty, investment subsidies, loan interest subsidies, rebates in land cost, and SGST reimbursements) to socially disadvantaged groups such as women, scheduled caste, scheduled tribe and other



backward class community members ensuring inclusive development. In addition, the AP Government shall reserve plots in industrial parks for members belonging to these groups.

### **Conclusion**

Due to the ongoing Covid-19 crisis, India has faced a significant economic slowdown. In this context, the measures announced by the AP Government to enhance investor friendliness and streamline the processes for obtaining approvals / clearances at district level are a welcome step. The restriction on commencement of new industries to land designated for such purposes ensures greater environmental sustainability and mitigates damage to more sensitive regions of the state. Lastly, the fiscal incentives to new industry are a welcome step in light of supply side slowdowns. The State itself presents a good industrial opportunity, especially with its logistics' channel being so clean with Vizag port and access to Hyderabad airport. Hopefully, this policy will attract some takers.

#### **vii. Skilling people to meet industry requirements**

- GoAP has set up Andhra Pradesh State Skill Development Corporation (APSSDC) on the lines of National Skill Development Corporation (NSDC), a not-for-profit company under the Companies Act, 2013. APSSDC will provide funding to build scalable, for-profit vocational training initiatives. It will also enable support systems such as quality assurance, information systems and train the trainer academies either directly or through partnerships.
- State will identify required quantum of skilled manpower, map industry specific skill sets and provide courses at different levels of education – matriculation and above.
- Training institutions at divisional level shall be setup through PPP approach to facilitate
- industry wide initiatives aimed at enhancing the employability of unskilled/semi-skilled labour.
- Special emphasis will be laid on skilling first generation entrepreneurs, women, minorities, SC/ST and backward class entrepreneurs.

#### **viii. Incentives for MSME**

- GoAP places strong impetus on development of MSMEs. The Government intends to offer a conducive eco-system and competitive fiscal incentives to MSMEs. Details of fiscal incentives pertaining to MSMEs will be charted in a dedicated MSME policy. Incentive with regards to stamp duty and VAT/CST/SGST are mentioned below:
- Stamp Duty: 100% of stamp duty and transfer duty paid by the industry on purchase of land meant for industrial use will be reimbursed 100% of stamp duty for lease of land/shed/buildings, mortgages and hypothecations will be reimbursed. Stamp duty will be reimbursed only one time on the land.
- VAT/CST/SGST for micro & small enterprises, 100% of net VAT/CST/SGST will be reimbursed for a period of 5 years from the date of commencement of commercial production. For medium industries, 75% of net VAT/CST/SGST will be reimbursed for a period of 7 years from the date of commencement of commercial production or up to realization of 100% fixed capital investment, whichever is earlier.
- For sector specific industries like apparel, food processing, biotech, automobile VAT/CST/SGST concession may vary.

#### **ix. Khadi and handloom Sector:**

Andhra Pradesh is one of the important states in the handloom industry with 200310 handloom weavers in cooperative fold and 158902 in outside cooperative fold. There are about 81000 power looms working in the state both in the cooperative and outside the cooperative sector. There are 1282 weaver cooperative societies in the state engaged in cotton, silk and woollen fabrics. Major centres are Mangalagiri, Pedana, Uppada, pochampalli, Dharmavaram, Narayanpet, Venkatagiri, Chirala,

Bandarulanka, Gadwal, Madhavaram etc. (Source: Dept of Handlooms and textiles, GoAP)

Various recommendations to bring vibrancy in Khadi and village industries the following recommendations were made in the Double digit growth GoAP vision 2015 document.

- Establishing artisan parks by reforming existing Shilparamams as artisan parks with production cum sales outlets, sales huts etc.
- Government information cum sales based Portal for weavers
- Online portal for registration of weavers with their detailed profiles
- Technology driven e-commerce, to help small town communities and micro business clusters based on traditional skills
- Organised clusters/mega cluster to be shaped into producer companies with end to end support from procuring raw material to marketing produce
- Development of appropriate technologies for various manufacturing processes will lead to substantial reduction in cost of manufacturing, enhanced labour productivity, reducing Material, wastage and minimising energy consumption. Development of Handloom Sector through effective linkages, extension of credit and training needs to be addressed urgently.

**x. Announcements under Atmanirbhar scheme:**

**₹3 lakh crores Collateral-free Automatic Loans for Businesses, including MSMEs**

Businesses/MSMEs have been badly hit due to COVID19 need additional funding to meet operational liabilities built up, buy raw material and restart business.

- Emergency Credit Line to Businesses/MSMEs from Banks and NBFCs up to 20% of entire outstanding credit as on 29.02.2020.
- Borrowers with up to ₹25 crores outstanding and ₹100 crore turnover eligible.
- Loans to have 4 years tenor with moratorium of 12 months on Principal repayment.
- Interest to be capped.
- 100% credit guarantee cover to Banks and NBFCs on principal and interest.
- Scheme can be availed till 31<sup>st</sup> Oct 2020.
- No guarantee fee, no fresh collateral.
- 45 lakh units can resume business activity and safeguard jobs.

**₹20,000 crores Subordinate Debt for Stressed MSMEs**

- Stressed MSMEs need equity support
- GoI will facilitate provision of ₹20,000 cr as subordinate debt
- Two lakh MSMEs are likely to benefit
- Functioning MSMEs which are NPA or are stressed will be eligible
- Govt. will provide a support of ₹4,000 Cr. to CGTMSE
- CGTMSE will provide partial Credit Guarantee support to Banks
- Promoters of the MSME will be given debt by banks, which will then be infused by promoter as equity in the Unit

**₹50,000 cr. Equity infusion for MSMEs through Fund of Funds**

- MSMEs face severe shortage of Equity.
- Fund of Funds with Corpus of ₹10,000 crores will be set up.
- Will provide equity funding for MSMEs with growth potential and viability.
- FoF will be operated through a Mother Fund and few daughter funds.
- Fund structure will help leverage ₹50,000 cr of funds at daughters funds level
- Will help to expand MSME size as well as capacity.
- Will encourage MSMEs to get listed on main board of Stock Exchanges.



**Effect of COVID-19 on MSMEs** - Survey reports have shown that disruptions caused by the Covid-19 pandemic have impacted MSMEs earnings by 20-50%, micro and small enterprises faced the maximum heat, mainly due to liquidity crunch. Extended lockdown had negative impact on supply of finished goods, procurement of raw material and availability of employees to work in production and supply processes. In addition, the sector also faced challenges related to debt repayments, wages/salaries, statutory dues, etc.

### 3.5 Critical Intervention required for creating a definitive impact

Single window clearance / approvals for speedy establishment of the projects, uninterrupted and dedicated power supply are very crucial for these industries. The banks and DIC may identify sick units which have the potential to become viable units and draw a rehabilitation programme, wherever necessary.

The Department of Handlooms & Textiles and Guntur DCCB have to draw a plan of action for rationalization/ strengthening of weaver's societies by identifying the genuine weaver's societies, providing adequate working capital and ensuring proper functioning and management of the societies.

Massive awareness camps for borrowers on MUDRA, stand up India and Start up India are required. Sensitisation programmes for bankers and Government departments are essential for promotion of this sector.

### 3.6 Suggested Action Points

- The District Industries Centre (DIC) may conduct intensive industrial development campaigns on a continuous basis involving APSFC, banks, etc. Other state level agencies like APITCO, APSSIDC may organise awareness campaigns and provide proper support in the form of training in marketing, etc. to the industrial entrepreneurs. A series of training programmes on developing enterprenueal skills and livelihood creation for SHG women, Rural Youth, Farmers, FPOs are being conducted in the district. The District Industrial and Export Promotion Committee (DIEPC) is also formed to review and monitor various items related to export promotion and entrepreneurship development in the district.
- An apex marketing organisation for marketing the products of rural artisans, village and cottage industries may have to be developed and existing network for procurement of raw materials should be strengthened.
- Credit limits to SSI units should be expeditiously sanctioned by bank after making scientific assessment of their working capital requirement.
- The weavers, outside the cooperative fold, should be formed into self-help groups or JLGs to have access to institutional credit. Setting up of common facility centres with building and machinery for pre-loom activities like dyeing, sizing, drying and warping can be encouraged at major handloom clusters like Mangalagiri, Guntur, Repalle, Ponnur, Chilakaluripeta and Sattenapalli.

(For detailed paper visit <https://www.nabard.org/info-centre-state-level-papers.aspx?cid=700&id=698>)

## CHAPTER- 4

### 4.1. Credit Potential for Export Credit – 2022-23

#### 4.1.1 Introduction

Export sector is an important sector on account of its advantages in earnings in foreign currency and its significant contribution to the economy. The reliance on exporting raw material and importing finished goods has detrimental effects on the economy. To give fillip to the export sector, GoI has come out with a comprehensive “Agriculture Export Policy”, 2018 with the objective of doubling the agricultural exports and integrating Indian farmers and agricultural products with the global value chains. The vision is also to make India global power in agriculture and raise farmers’ income. The Agriculture Export Policy seeks to double farm exports to \$60 billion by 2022 from \$30 billion, and will invest ₹1,400 crore to set up specialised clusters in different states for different produce to push exports. The policy will also give a big push to food processing/manufacturing to have much higher growth in food production which will increase India’s share of value-added processed products in its Agriculture export basket at the global level. Besides, ‘Make in India’, ‘Digital India’ and ‘Skills India’ programmes have been launched which are expected to improve brand ‘India’ image to gain global competitiveness.

#### 4.1.2 Infrastructure and linkage support available, planned and gap

Guntur district is well known for export of agriculture commodities such as tobacco, cotton yarn, and chilli and granite. Various banks such as SBI, BOI, Indian Bank, IOB, KVB, TMB, UBI and UCO bank are actively engaged in export credit. Knowledge of export quality standards and quality testing facilities are the need of the hour.

For export of agricultural products factors such as domestic as well as an international demand and supply situation, price competitiveness, quality concerns, sanitary & phyto sanitary requirements and relevant rules & regulations of the importing countries need to be duly taken into consideration. Temporary restrictive measures sometimes adopted by the importing countries in view of non-conformity to any of these standards/rules ruin the unit.

#### 4.1.3 Assessment of Export Credit Potential for 2022-23

Export credit plays a significant role in facilitating exports. Accordingly, Export Credit has been included in the Priority Sector and a programme for providing interest subvention on identified sectors has been made available since the year 2015-16. All contract farming arrangements within and outside AEZs are eligible for availing special refinance package.

Under export financing, banks provide loans to the exporters at two stages. The first one is Packing Credit (PC) for working capital to purchase raw materials, processing, packing, transporting and warehousing of goods meant for export. The second stage namely, Post Shipment (PS) finance was provided by the banks against the shipping documents after liquidating the PC advances. There are about 50 exporting houses in Guntur district which avail packing credit, of which about 20 avail post shipment credit also. A Spice Park (designated food park by MOFPI) has been set up in Guntur district where in 40 export-oriented spice processing units will be set up through private investment. This is expected to boost export credit from Guntur district. Assuming that 50% of the existing units and the new units will avail Export credit, the potential for 2022-23 is assessed to be ₹17369.55 lakh. The Block-wise Activity wise projections are indicated at Annexure –I and the summary is given below.

(₹ lakh)

S.No.	Activity	Unit	PLP 2022-23			
		No	Unit Cost	Phy. Units	Fin. Outlay	Bank Loan
1	Pre-Shipment / Packing Credit	No.	2420.000	5	13310.00	11979.00
2	Post Shipment	No.	1815.000	3	5989.50	5390.55
	<b>Total</b>				<b>19299.50</b>	<b>17369.55</b>

#### 4.1.4 Export Promotion Plan of Govt. of India

Export is expected to grow in coming years as various sectors of the Indian economy became more competitive globally. The impetus from 'Make in India', 'Digital India' and 'Skills India' programmes would support the Export Promotion Mission by helping various sectors of the Indian economy, improve self-reliance and establish brand 'India' image to gain global competitiveness. Coordinated efforts of the Centre and State Governments have commenced and institutional mechanisms are being created. An outlay of ₹206.8 crore was approved for 2019-20 under the central sector scheme, out of which ₹134.50 crore was allocated to setup dedicated clusters for mangoes, pomegranate, bananas, grapes, tea, coffee, turmeric, and marine products, among others along with pre and post-harvest management of the production, upgrading the supply chain to attain much higher levels of export from those clusters. As revealed during Annual Budget 2020-21, each district would be developed as an export hub.

#### 4.1.5 State Initiatives

The Agricultural and processed food products forming major part of the export from the state include non-Basmati rice, maize, groundnut, pulses, poultry products, buffalo-sheep-goat meat, dairy products, fruit and vegetables - processed and fresh, floriculture etc. The State Govt. has planned to make Andhra Pradesh one of the most preferred destinations for investments for promoting exports. The infrastructure development plan includes setting of food processing parks, fishing harbours, SEZ, SPV, establishment of green airports, horticulture hubs, integrated logistic parks to promote exports under horticulture etc., which would boost the exports in the State in the coming years. To promote industrial development vis-a-vis promotion of exports, the State Govt. has announced various incentives/concessions, viz., stamp duty reimbursement, land cost rebate, VAT reimbursement, quality/patent support, etc., to new eligible entrepreneurs under the State plan. Andhra Pradesh State Industrial Infrastructure Corporation (APIIC) has sanctioned 47 SEZs in the State. The APEDA has identified three districts under AEZ, which are Chittoor (Mango pulp/ fresh vegetables) Krishna (Mango), Guntur (Chilli).

The strategy envisaged to achieve the objectives are

- Strengthen State's association with Export Promotion Councils, International Trade bodies, Federation of Indian Exports Organisation, India Trade Promotion Organization, National Centre for Trade Information and Product Sectoral Associations.
- Provide e-governance support to exporters of Andhra Pradesh
- Create a strong analytical database on market potential for exports and develop new markets for exporters in Andhra Pradesh.
- Promote public-private partnership in developing competitive export infrastructure
- Setup institutional mechanism in the State for promoting exports like State Level Export Promotion Council, State Level Export Promotion Committee and District Level Export Promotion Committee
- Identify sector specific support key performance indicators and support measures required for acceleration of exports in sectors in which the State has competitive advantages and to encourage them in consultation with the concerned sectoral association.

GoAP has focused on the high growth export potential areas such as Shrimp and other Marine products, processed food products, Spices - Horticulture - Agriculture products. In this connection, the State Government has put in place Incentive schemes for these sectors:

- Shrimp and other Marine products – mechanism for traceability of Seafood growers would be placed to track, test and certify the seafood produce at Farm level, Hatchery level and Port level. Capital subsidy to the extent of 35% for setting up cold storage/chain for Marine exports have been provided with a maximum capping of ₹5.00 crore. Also, the GST applicability has been slashed from 18% to 5%.

- Spices, Horticulture & Agriculture products – Along with Coffee, the cultivation of pepper and turmeric are to be promoted in Arakku valley in Visakhapatnam district. For transportation of products for export purpose the road transport cost shall be reimbursed upto 50% with a capping of ₹10 lakh per unit.

#### **4.1.6 Critical Intervention required and suggested action points**

Knowledge of export quality standards and quality testing facilities are the need of the hour. Availability of quality testing facilities, training to Micro, Small and Medium Export units by MSME / export promotion organizations will promote the Sector.

- Micro, Small and Medium Exporters should be properly trained by MSME / export organizations with technical assistance from banks.
- Awareness among prospective entrepreneurs must be increased on policies and procedural aspects concerning export of agricultural products such as domestic as well as an international demand and supply situation, price competitiveness, for exportable and related domestic factors etc.
- Facilities and dedicated services may be extended by qualified centres to guide FPOs / producers on quality concerns, sanitary & phyto-sanitary requirements and relevant rules & regulations of the importing countries.
- Exporters may be encouraged to avail the export credit insurance facilities extended by ECGC. It was noticed that not all export units would take cover under ECGC.
- Incentives may be extended for organic certification for potential exportable.
- The banks should put in place a control and reporting mechanism to report export credit dispersed for products from the institutions.

(For detailed paper visit <https://www.nabard.org/info-centre-state-level-papers.aspx?cid=700&id=698>)

## **4.2. Credit Potential for Education – 2022-23**

### **4.2.1 Introduction**

Education is a process of learning, acquiring knowledge, sharpening skills, enhancing values, morals, beliefs and habits. Proper and good education is important for all. Educational process is a structured system of organizational and didactic measures aimed at performing requirements of a definite educational level according to the state standards of higher education. Educational process is based on the principles of science, humanism, democracy, lifelong and degree education. Main purpose of education is to educate individuals within society, to prepare and qualify them for work in economy as well as to integrate people into society and teach those values and morals of society. Role of education is means of socializing individuals and to keep society smoothing and remain stable.

Education is a significant factor in India for its economic development. Since, its independence, India has always focused on improving the literacy rate in our country. The Government of India runs many programmes to improve the Primary and Higher Education in India.

The Indian education system has developed over the time. An important difference in our education system came with the establishment of the nation by the British. They introduced the contemporary education in India as they wanted a few Indians to be educated to help them in governing the State.

The educational system in India is broadly classified into four stages viz.,

- Lower primary (age 6-10)
- Upper primary (age 11-12)
- High (age 13-16)
- Higher secondary (age 17-18)

The top 6 States in terms of highest number of colleges in India are Uttar Pradesh, unified Andhra Pradesh, Maharashtra, Karnataka, Rajasthan and Tamil Nadu. The Gross Enrolment Ratio (GER) in Higher education for 18-23 years of age group worked out to 27.1 % (2019-20).

### Need for financial support for Education Sector

Supporting higher education depends on various factors, among which finance plays a major role. According to revised RBI guidelines, Priority Sector Lending includes educational loans up to ₹20 lakh, including vocational courses. The Government of India has launched a scheme to provide full interest subsidy during the moratorium period i.e., Course Period plus one year as will be borne by the Government of India on modern education loans without any collateral security and third-party guarantee, for pursuing technical/professional courses in India. Students whose annual gross parental/family income is upto Rs. 4.5 lakhs are eligible under the scheme.

### Population & Literacy – 2011 Census (lakh)

Particulars	Population			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)
Guntur District	32.35	16.52	48.87	67.40

### Education Sector – Scenario in Andhra Pradesh

The Government has initiated several schemes for bringing out both quantitative and qualitative improvement in the education system in Andhra Pradesh. The government has earmarked ₹24624.22 crore for education in the annual budget for FY 2021-22.

Enrolment in Government/ Government aided schools in the state during 2020-21 was 42.46 lakhs as compared to 39.78 lakh in 2019-20.

Welfare Schemes being implemented in the State for Children,

- Mid-day meal Scheme
- Digital Classroom Projects
- Virtual Classrooms
- *Badikosta* – Bicycles to Girl Students
- Inclusive Education for Disabled at Secondary Stage (IEDSS) – DBT
- Model Schools and Hostels
- *Amma Vodi*
- Learning Enhancement Program
- Kasturba Gandhi Balika Vidyalaya – drop-outs & orphans.
- Jawahar Knowledge Centres – Employability enhancement
- AP Fibre Grid Connectivity to Colleges
- Fee reimbursement under *Navaratnalu* to students pursuing Technical education.
- Skill Development
- *Naadu-Needu* Program
- *9-point program to overhaul the quality of infrastructure available in existing govt. schools (Primary, Upper-Primary, Secondary and Junior Colleges)*

### 4.2.2 Assessment of credit potential for 2022-23

The projection made in the PLP for the year 2022-23 stood at ₹30937.50 lakh. As against the target of 341.45 crore as decided by SLBC for the district for the year 2020-21, the achievement stood at ₹353.77 crore. As on 31 March 2021 the total no. of accounts under education loans are 14461 and the amount outstanding on 31<sup>st</sup> March 2021 stood at ₹751.87 crore. Hence, taking into account, the present pandemic situation, there has been only a meagre revision made in the potential of the district.

(₹lakh)

S.No	Activity	PLP 2022-23			
		Unit cost	Phy units	Financial outlay	Bank loan
1	Education loans	16.500	2500	41250.00	30937.50

### 4.2.3 Critical gaps and interventions required, Suggested Action Points

#### Government

- 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 to support the banks for the mounting overdues, in education loans and as a result, the banks are finding it difficult to provide credit to this sector.
- Government may identify Nodal Officers in the concerned department to recommend the cases to the banks.

#### Banks

- Banks may also 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 are insisting for security/third party guarantee for sanction of education loans. As per IBA guidelines, banks should not insist for surety/collateral security for educational loans up to ₹7.50 lakh.

### Impact of COVID -19 on Education System

- It is beyond doubt that COVID-19 pandemic has adversely affected the education system in the country. The closure of schools and other educational institutions has changed the traditional education system to the educational technologies model in which teaching and assessments are conducted online. But this transition has been difficult, especially low income private and government schools.
- Further, teachers as well as the students are facing hurdles during the online education. At home, with lack of basic facilities due to affordability are forcing lower income group to withdraw the admission of their wards. Further, the educated parents are able to guide their wards but all do not have the adequate level of education needed to teach the children in the house.
- This pandemic has revealed some of the major loopholes in the education system in the country. There is a need to introduce a fully technically equipped system such that education reaches every corner of the country. Such platform should be created that the lesser privileged system does not suffer due to the present choice of digital platforms. The need of the hour is that the education system of the country should be able to strengthen the knowledge and Information Technology Infrastructure in order to face such challenging situations.

### 4.2.4 Infrastructure linkage support:

There are 214 projects being undertaken by GoAP under Education sector. These projects are supported under RIDF to the tune of ₹36263.59lakh. Credit support under RIDF, for providing additional infrastructure and also for the construction of toilet blocks in the schools and colleges is being provided, which will eventually increase the attendance in the rural areas.

(For detailed paper visit <https://www.nabard.org/info-centre-state-level-papers.aspx?cid=700&id=698>)

## 4.3. Credit Potential for Housing – 2022-23

### 4.3.1 Introduction

Housing has been recognized as a basic human need. Several Initiatives at the Central Government & State Govt. levels have focused on “housing” as an integral part of the growth process. Housing is known to have multiple linkages with the rest of the economy and investments in housing have orchestrated impact in the region and on the broader economy.

Housing initiatives must be viewed in the background of the overall economic development and the needs of the people.

#### **Housing Finance under Priority Sector lending**

- Loans to individuals up to ₹35 lakh in metropolitan centres (with population of ten lakh and above) and loans up to ₹25 lakh in other centres for 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.
- Loans for repairs to damaged dwelling units up to ₹10 lakh in metropolitan centres and up to ₹6 lakh in other centres.
- Bank loans to any governmental agency for construction of dwelling units or for slum clearance and rehabilitation of slum dwellers subject to a ceiling of ₹10 lakh per dwelling unit.

#### **4.3.2 Infrastructure and linkage support available, planned and gap**

The level of urbanization with a good network of roads, rail and other host of public sector undertakings, industrial estates, etc offers an excellent demand for housing. The good number of professional colleges and universities and the rapid urbanization, etc. also add to the ever-growing housing demand.

#### **4.3.3 Assessment of Credit potential 2022-23**

The projections made in the PLP - 2021-22 stood at ₹140992.50 lakh. As against the target of ₹1189.70 crore set by SLBC for the year 2020-21, the total achievement under housing is ₹1232.64 crore. Hence, keeping in view of the pandemic situation the potential was increased only in Repairs to damaged dwelling units and reduced in purchase / construction of dwelling unit. The projections for 2022-23 have been revised upwards to ₹145901.25 lakh as given below.

(₹ lakh)

S.No	Activity	Unit	PLP 2022-23			
		No	Unit Cost	Physical units	Financial outlay	Bank Loan
1	Purchase/ construction of a dwelling unit	No.	25.000	6150	169125.00	126843.75
2	Repairs to damaged dwelling units	No.	6.000	3850	25410.00	19057.50
	<b>Total</b>				<b>194535.00</b>	<b>145901.25</b>

The activity-wise and joint mandal wise physical and financial PLP projections are furnished in Annexure I.

#### **Recent Policies/Initiatives**

**MIG:** Under Credit Linked Subsidy Scheme, beneficiaries of Middle-Income Group (MIG) can seek housing loans from Banks, Housing Finance Companies and other such institutions for acquisition/ construction of house (including re-purchase). The credit linked subsidy will be available only for loan amounts upto ₹9 lakhs for MIG-I and ₹12 lakhs for MIG-II and such loans would be eligible for an interest subsidy at the rate of 4 % and 3% respectively for a tenure of 20 years or during tenure of loan whichever is lower. The Net Present Value (NPV) of the interest subsidy will be calculated at a discount rate of 9%. Any additional loan amount beyond the limit will be at non-subsidized rate. However, the carpet area of the house should be strictly restricted within the permissible carpet area of 160 sq m and 200 sq m for MIG-I and MIG-II categories respectively.

#### **Income Classification**

The income norms for various Household categories are defined as under:

- EWS households with an annual income up to ₹3 lakh.
- LIG households with an annual income more than ₹3 lakh and up to ₹6 lakh.
- MIG I households with an annual income more than ₹6 lakh and up to ₹12 lakh.



- MIG II households with an annual income more than ₹12 lakh and up to ₹18 lakh.
- Further details : [https://pmayuclap.gov.in/content/html/clss\\_faq.html](https://pmayuclap.gov.in/content/html/clss_faq.html)

Ministry of Housing & Urban Affairs has initiated Affordable Rental Housing Complexes (ARHCs), a sub-scheme under Pradhan Mantri Awas Yojana - Urban (PMAY-U). This will provide ease of living to urban migrants/ poor in Industrial Sector as well as in non-formal urban economy to get access to dignified affordable rental housing close to their workplace.

#### **Initiatives by the State Government**

Andhra Pradesh is the eighth largest State in India accounting for 4.1% of the country's population. Since 2001, the number of towns have increased by 45%. Faster urbanization can be anticipated given proposed strategic economic initiatives in the State such as Capital City, industrial clusters, Vizag-Chennai Industrial corridors, etc. The Government of Andhra Pradesh as a part of "Navaratnalu PedalandarikiIllu" have decided to distribute 30.66 Lakh house site pattas to all the eligible beneficiaries @ 1.50 Cents in Rural areas and 1.00 Cent in Urban areas. It is proposed to take up 28.30 lakh Individual Houses in two Phases i.e., 15.60 lakh Houses in 1st Phase and 12.70 lakh Houses in 2nd Phase. 15,60,227 houses are being taken up under Phase 1 of the programme with a unit cost of ₹1.80 lakh each house for both Urban & Rural areas, with a project cost of ₹28,084.09 Crore and planning is to complete within (18) months. All these houses will be taken up in 8,929 layouts with all infrastructure facilities and are named as "YSR Jagananna Colonies". In the 2nd Phase 12.70 lakh houses are proposed in 7,141 Layouts with a project cost of ₹ 22,860.00 Crore

#### **NABARD**

In order to give a boost and strengthen the housing sector in tune with GoI's policies, NABARD (In terms of Circular No.NB.14/OFDD 1/2016-17 dated 21 January 2016) introduced the following products under Rural Housing besides the existing refinance products:

- Direct Loans for Rural Housing (loan only –without grant)
- Direct Loans for Rural Housing (Loan-cum-Grant assistance)
- Composite Loans for Rural Housing along with Income Generating Activities.

Eligible Institutions:

- Scheduled State Co-operative Banks (Product 1)
- District Central Co-operative Banks (Product 1,2,3)
- Primary Agricultural Cooperative Societies (Product 1,2,3)
- Primary Urban Cooperative Banks (Product 1,2,3)
- State entities i.e., State Housing Boards, Corporations (Product 1)

#### **GLC for the last three years (under Priority Sector)**

(₹ in crore)

Year	Total outstanding		Disbursements	
	No. of Ac.	Amount	No. of Ac.	Amount
2016-17	396028	20028	45504	4919
2017-18	283326	22223	51189	4526
2018-19	300835	24371	86449	6451

(Source: AP, SLBC)

#### **4.3.4 Critical interventions/Suggestions required for creating a definite impact**

Creation of awareness of the various schemes by the Branch Managers, Controlling offices & Line Departments. APSHCL may coordinate with Banks for identification and financing of rural housing loans.

- Efforts required from government to strengthen foreclosure laws, computerization of land records and archaic land laws, especially rental laws, need a complete overhaul.
- The credit risks originating in the housing sector, particularly low-ticket housing segment, should also be internalized through proper insurance schemes for banks and other lenders.



- As residential housing loans do not create direct additional income, recovery of loan may prove to be difficult even though loan may be adequately secured. There are many legal and other hurdles to be tackled in this regard. District Administrations may provide assistance to banks in recovery of loans.
- Government bodies may consider single window clearance mechanism for the purpose of further simplifying the approval processes for low-cost affordable housing along with reconsideration of the taxation policies. Geo tagging of houses constructed under government schemes facilitating reduction in delays and preventing misuse of funds.

#### **Support under AatmaNirbhar Bharat**

The Govt. of India has announced continuation of CLSS-MIG for an amount of ₹70,000 crore under AatmaNirbhar Bharat Scheme. Credit Link Subsidy Scheme has been extended till March 31, 2021, from earlier March 31, 2020. This will benefit nearly 2.5 lakh middle-class families in the country

### **4.3.5 Other Related Matters**

#### **Impact of COVID-19 on Housing Finance**

Even though there has been no research on the actual tangible impact of COVID-19 on Housing finance, the stress in housing sector has impacted the financial sector the most. Nonperforming Assets are on the rise as borrowers are unable to pay EMIs due to loss of jobs /businesses due to abrupt cash flow disruption. The Housing sector growth will rely on the economy. Housing sector is one of the major employers of unorganized labour, it will depend on availability of labour, returning of migrant labourers and availability of material and logistics to accelerate the recovery.

Coming to demand side, if property rates are reduced by housing developers, then the demand for housing by salaried employees for houses in the range of ₹25 lakh to ₹75 lakh is expected to revive soon after the lockdown ends. However, low-income affordable housing demand (below ₹15 lakh) will take a little more time and will depend much on government support/subsidy/relaxations. The contribution of margin money by prospective buyer will have an impact on their ability to avail housing finance. Restarting of CLSS scheme may help home buyers in this regard.

In Andhra Pradesh, both the first and second wave of COVID have severely impacted the housing sector as there is both shortage of skilled workers and construction materials due to vehicular movement restriction between states.

**(For detailed paper visit** <https://www.nabard.org/info-centre-state-level-papers.aspx?cid=700&id=698>**)**

## CHAPTER 5

### Credit Potential for Infrastructure

Social Infrastructure covering schools, health care facilities, drinking water and sanitation facilities in tier II to tier VI centers have now been brought under the ambit of PSL norms and the potential for this sector through public and private investments is assessed separately with reference to 'Infrastructure Index' for the district as follows:

#### 5.1 Infrastructure – Public investments

##### 5.1.1 Introduction

Infrastructure Development in rural areas is crucial for inclusive growth of the economy and for bridging the rural-urban divide. Economic infrastructure like transport, communication and power facilitates the growth of economic activities and enables production and distribution of goods and services for human welfare. Social infrastructure such as education, health care, water supply, sanitation, housing, integrated child development services etc. help in human capital formation and human development. High rates of human development indicators will help in economic growth of a country. Provision of adequate and quality infrastructure in rural areas is necessary for increasing the productivity and efficiency of agriculture, improving the credit absorption capacity, enhancing the productivity of crops and livestock, generating employment and increasing farmers' income thereby minimizing the incidence of rural poverty.

While infrastructure has been recognized as crucial input for economic development, there is no clear definition of infrastructure according to the current usage of the term in India. The Income Tax Department, Government agencies, Commissions/Committees of GoI, Economic Survey cover different segments under the 'infrastructure' sector. The definition of Reserve Bank of India covers a wide range of sectors under 'Infrastructure facility' viz,

- road, bridge, rail system
- highway project
- port, airport, inland waterway or inland port
- irrigation, sanitation, sewerage or solid waste management system
- telecommunication services
- industrial park or special economic zones
- generation, distribution and transmission of power
- projects involving agro-processing and supply of inputs to agriculture
- construction for preservation and storage of processed agro-products, perishable goods such as fruits, vegetables and flowers including testing facilities for quality;
- construction of educational institutions and hospitals;
- Gas, crude oil and petroleum pipelines.
- Any other infrastructure facility of similar nature.

The Socio-Economic Survey of Government of Andhra Pradesh 2018-19 covers irrigation, power, roads and buildings, transport, airports, ports, communications, banking, tourism, information technology under the 'economic infrastructure' and education, public health, housing, sanitation, women development and child welfare, social welfare, housing etc. under 'Social infrastructure'.

##### **Rural Infrastructure Development Fund:**

- With the objective of assisting State Governments in the completion of ongoing rural infrastructure projects and to take up new infrastructure projects, the Rural Infrastructure Development Fund (RIDF) was set up with NABARD in 1995-96. The total corpus covering RIDF I (1995-96) to XXVI (2019-20) is ₹378022 crore for the financial year 2021-22 the GOI allocated the corpus of ₹40,000 crore for RIDF XXVII. At present, 37 activities are eligible for sanction under RIDF the list of which is given at the end of the chapter.
- As on 31 March 2021, ₹8583.13 crore was sanctioned to Government of Andhra Pradesh for 7393 different infrastructure projects such as roads and bridges,

irrigation, drinking water supply, education, animal husbandry, water harvesting, etc. The Govt. of AP had availed an amount of ₹6005.43 crore as on 31st March 2021 for implementing the projects sanctioned under various tranches.

The Sector wise sanctions under RIDF from (Tranche XX to XXVI) is as under

(₹lakh)

S.No.	Tranche	No. of projects	Amount Sanctioned	Loan Disbursed
1	RIDF XX	317	125368.30	120582.82
2	RIDF XXI	381	91831.06	77579.82
3	RIDF XXII	329	104390.90	89689.73
4	RIDF XXIII	723	107495.45	77561.71
5	RIDF XXIV	1638	129951.24	78672.53
6	RIDF XXV	870	119916.91	61362.56
7	RIDF XXVI	3135	179359.51	95094.35
	<b>Total</b>		<b>858313.37</b>	<b>600543.52</b>

A total amount of ₹839.87 crore was sanctioned as against the total financial outlay of ₹1039.38 crore. The total amount released till date is ₹611.59 crore (as on 31st March 2021). The total no. of projects under RIDF in Guntur are 436 as (31st March 2021)

(₹ lakh)

S.No.	Tranche	No. of projects	Amount Sanctioned	Loan Disbursed
1	RIDF XX	32	18599.95	17868.37
2	RIDF XXI	23	11586.01	9735.71
3	RIDF XXII	33	9317.63	8174.39
4	RIDF XXIII	62	13596.04	8350.08
5	RIDF XXIV	91	11182.62	6987.65
6	RIDF XXV	71	5209.57	2804.61
7	RIDF XXVI	124	14495.27	7238.89
	<b>Total</b>		<b>83987.09</b>	<b>61159.70</b>

#### **Rural Infrastructure Promotion Fund (RIPF)**

Despite making remarkable progress under RIDF a number of constraints like inadequate planning, lack of awareness of officials involved in implementation of the projects etc., have been experienced while implementing the RIDF projects. Recognizing the need for capacity building of officials, creation of experimental/critical infrastructure of smaller investments with focus on last mile connectivity benefiting the community may generate demand for RIDF funding for other infrastructures of higher order, NABARD has set up a separate fund titled 'Rural Infrastructure Promotion Fund (RIPF)'. The objective of the fund is to support the activities required for promotional efforts for RIDF which will include support for conducting knowledge sharing workshops, creation of experimental infrastructure projects by Gram Panchayat, SHG/SHG Federation, Farmers Clubs/FC Federation, and support for survey of potential assessment/demand survey for new Agri/rural infrastructure projects.

#### **NABARD Infrastructure Development Fund (NIDA)**

NABARD has recognized the need for providing flexible infrastructure financing and launched NABARD Infrastructure Development Assistance (NIDA) for this purpose. The limited flexibility of terms and conditions and limited borrowing power of State Governments under RIDF warranted opening of opportunity for direct access to well managed State Government entities. NIDA is designed to fund directly to State-owned institutions/corporations for creation of rural infrastructure outside the ambit of RIDF borrowing. NABARD has extended credit facilities to the erstwhile AP TRANSCO to the tune of ₹346 crore under NIDA for establishing transmission infrastructure. Further, an amount of ₹1931 crore was sanctioned (out of which ₹819 crore was released) under NIDA for Chintalapudi Lift Irrigation project in West Godavari District of Andhra Pradesh during 2019-20.

NIDA has the following advantages:

- NABARD provides 90% term loan for government entities and 75% for others.
- Flexible products tailor-made to suit the requirements.

- The rate of interest will depend upon the type of borrower, type of security offered, type of project and credit rating of the entity and the prevailing market conditions, and the tenor for repayment of loan shall be for a maximum of 25 years with need-based moratorium period of up to 3-5 years.
- The interest resetting option is available under scheme – the interest can be reset at the end of 3-5 years.
- Financing beyond Financial Responsibility and Budgetary Management (FRBM) limits, outside the borrowing power of the State Government under Article 293 (3).
- Funding under NIDA has been broadened by covering PPP and non-PPP projects by registered entities like companies, co-operatives etc.

**Eligible activities** include agriculture, transport, energy, drinking water, sanitation, social and commercial infrastructure, etc., with a focus on benefitting rural areas or population. The major sectors financed under NIDA include transmission, warehousing, renewable energy and road infrastructure among others.

**Eligible institutions** include State/Central Government Companies/ Corporations/ Institutions, Dairy Co-operatives/Federations, Agri. Marketing Co-operatives/ Federations, Local bodies, Private Companies, SHG Federations/ NGO/Community Owned Organizations/ Producer Organizations and Special Purpose Vehicle (SPV) formed by the above institutions.

### **Long Term Irrigation Fund (LTIF)**

Many major and medium irrigation projects taken up under AIBP were languishing mainly due to inadequate provision of funds. A substantial amount of funds already invested on these projects were locked up and benefits envisaged could not be achieved. To cater to the huge fund requirement and ensure completion of these projects, the Hon'ble Union Finance Minister, during his Budget speech 2016-17, announced creation of dedicated Long Term Irrigation Fund (LTIF) in NABARD with an initial corpus of ₹20,000 crore for funding of Central and State shares for the identified projects under PMKSY. Subsequently, the Union Cabinet has approved the proposal of Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD & GR) for establishment of Mission for completion of prioritized irrigation projects and funding arrangements.

In Andhra Pradesh, Govt. of India has identified 8 irrigation projects for extending the financial support under LTIF. A Memorandum of Agreement (MOA) was executed on 01 March 2017 amongst Govt. of Andhra Pradesh, NABARD, Ministry of Water Resources, River Development & Ganga Rejuvenation and National Water Development Agency to facilitate credit facility under LTIF to meet the State Government's share amounting to ₹691.579 crore in respect of 7 projects for AIBP components. Loan amount of ₹513.87 crore towards funding of state share for 4 projects under LTIF was sanctioned. Cumulative amount of ₹489.34 crore pertaining to 4 projects was released so far.

### **Micro Irrigation Fund (MIF)**

Pradhan Mantri Krishi Sinchai Yojana (PMKSY) was launched in 2015-16 with an aim to enhance physical access of water on farm, expand cultivable area under assured irrigation, improve on farm water use efficiency, introduce sustainable water conservation practices etc. It envisages '**per drop more crop**' as one of the objectives.

The current coverage under Micro irrigation is about 7.73 million ha. The Govt. of India Task Force on micro irrigation (2004) estimated a potential of 27 million ha for drip irrigation and 42.5 million ha for sprinkler irrigation with total potential of 69.5 million ha. This estimate is based on the area under crops that are suitable for micro irrigation. Thus, there is a gap of 61.8 million ha still to be covered under micro irrigation.

With a view to provide impetus to the micro irrigation, GoI, had announced a dedicated Micro Irrigation Fund to be instituted with NABARD with a total corpus of ₹10,000 crore for encouraging public and private investments in modern irrigation methods such as sprinkler and drip irrigation as also water use enhancing practices to realize the objective of per drop more crop. It is envisaged that the State Governments will borrow loans from NABARD from

out of Micro Irrigation Fund (MIF) for investments in irrigation efficiency improvement projects in respective states.

Govt. of Andhra Pradesh was sanctioned an amount of ₹616.13 crore towards top-up subsidy under MIF during the year 2019-20.

### **5.1.2 Infrastructure and linkage support available, planned and gaps**

- There are 241 lift irrigation schemes in the district of which 235 are normal and 6 are mini lift irrigation schemes covering an ayacut of 2,44,614 acre.
- There are 272 mini-irrigation tanks in the district with the storage capacity of 3158.66 mcft.
- The total water conservation structures are 21,050 of which there are 20,222 Farm ponds, 638 check dams, 190 percolation tanks. All these structures have the storage capacity of 770.96 mcft.
- Total no. of educational institutions are 5625. Only 400 villages have medical facilities. There is a requirement of creation of medical facilities in the district.
- There are only 175 warehouses and 126 cold storages functioning in the district, and there is a great scope for financing by banks. There are 24 villages in the district which are having fluoride water problem. Hence there is a requirement for creation infrastructure for providing good drinking water facility for the public.

### **5.1.3 Critical interventions required for creating a definite impact**

- In the coming 3-4 years, drip irrigation may be promoted to bring cotton and chilly crop to minimize water consumption, increase the yield and quality of the produce. The entire area under cotton and chilly can be brought under drip irrigation system in the district in the next three to four years. The estimated cost of drip system for cotton is ₹62000/ acre which requires ₹2480 crore as investment. The estimated cost of drip system for chilli crop is ₹90000/ acre which requires ₹1575 crore as investment.
- There are 72 Lift Irrigation projects are supported under RIDF which are benefiting 45000 ha of area for taking up irrigated dry crops. APSIDC is implementing these projects in the district. There are 25-30 LI schemes which require revival or renovation with an estimated cost of ₹30-35 crore. The ayacut that will be brought under irrigation is about 45000 ha.

## **5.2 Social infrastructure involving bank credit – 2022-23**

### **5.2.1 Introduction**

Besides strong economic growth, the state of Andhra Pradesh requires holistic development in social sector viz. education, healthcare, nutrition, water supply, housing, social security and other basic minimum social services that results in a healthy ambience and happy living. The state needs to yoke the strength of the vast Self-Help Groups network and generate employment, create awareness, improve water-use efficiency and inculcate cleanliness among citizens. The focus areas of the current government include providing quality education to children, improving service delivery in public health, ensuring nutrition for all and ensuring safety of women and citizens.

Bank loans up to a limit of ₹5 crore per borrower for building social infrastructure for activities namely schools, health care facilities, 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.

Bank credit to Micro Finance Institutions (MFI) extended for on-lending to individuals/ members of SHGs/ JLGs for water and sanitation facilities is also eligible for classification as priority sector loans under 'Social Infrastructure' subject to certain criteria.

### 5.2.2 Availability of Infrastructure, critical gaps, interventions required and action points/issues to be addressed

- The infrastructure facilities are concentrated around urban centres only and therefore emphasis may be given to setting up facilities in remote mandals especially upland areas of Palnadu region
- Quality testing facilities for RO water plants need to be put in place.
- Awareness programmes at various levels including bankers may be taken up by concerned Government departments on the modalities and incentives available under government programmes.

### 5.2.3 Assessment of Credit Potential for 2022-23

- Though at present most of the banks are extending loans to private individuals for establishment of schools, hospitals, etc. estimation of credit potential for the above social sectors is not easy in the absence of any specific and credible indicators as to the no. of students per school/college, etc.
- Some of the banks have even specific credit products like school+, Hospital+, etc. and are extending credit to construction of new buildings to start new schools and purchase of other infrastructure. Similarly, credit facility can also be extended for expansion of some of the existing schools/hospitals, etc. In view of the subsidy being made available by the State Government to rural households for taking up construction of toilets, there is very little scope for credit flow to this sector.
- The financial estimates are higher owing to likely increase in unit cost as per details given below.

(₹ Lakh)

S.No	Activity	Unit	PLP 2022-23			
		No	Unit Cost	Phy units	Fin. Outlay	Bank loan
1	Construction / Improving schools	No	16.500	33	598.95	449.13
2	Construction / Improving hospital	No	33.000	10	363.00	272.30
3	RO waters plants (2000 LPD)	No	3.300	234	849.42	636.48
	<b>Sectoral Total</b>				<b>1811.37</b>	<b>1357.91</b>

Joint-mandal-wise break-up is given in Annexure I.

### 5.2.4. Critical interventions/Suggestions required for creating a definite impact:

- The infrastructure facilities are concentrated around urban centres only and therefore emphasis may be given to setting up facilities in remote mandals especially upland areas of Palnadu region. There is a requirement of 26 Govt. primary schools and 9 Private primary schools for the entire district, with decent infrastructure facilities.
- Quality testing facilities for RO water plants need to be put in place.
- Awareness programmes at various levels including bankers may be taken up by concerned Government departments on the modalities and incentives available under government programmes.
- 

## 5.3 Renewable Energy – 2022-23

### 5.3.1 Introduction

Striving for Affordable and Clean Energy for all its' Citizen through harnessing Renewable energy" is a part of India's Sustainable Development Goal (SDG No. 7). India had announced 175 Gigawatt (GW) targets for renewable sources of powers by 2022. With the initiatives of

GOI and the State Govt., renewable energy has been witnessing substantial growth in the last five years. The share of renewable energy in total generation has increased from 6 % in 2014-15 to 23.6 % in 2019-20. The year 2019 has seen a significant leap forward for renewable energy with India undertaking one of the world's largest renewable energy expansion programmes in the world. Further, at the UN Climate Action Summit in September 2019, it was announced that "India's renewable energy capacity would be increased much beyond 175 GW and later till 450 GW".

The total installed capacity in the country is 381.73 GW. Out of this Renewable Energy Sources constitute 95 GW as on March 2021 the wind and solar energy comprises 39.24 GW and 40.08 GW, respectively. Biomass and small hydro power energy constitute 10.145 GW and 4.786 GW, respectively.

According to Australia-based Institute for Energy Economics and Financial Analysis the renewable energy sector needs new investment in a range between \$500 billion and \$700 billion by 2030 to meet its target of 450 (GW) of installed capacity.

### 5.3.2 Infrastructure and linkage support available, planned and gap

NREDCAP is operating in Guntur with a Project Director and supporting staff and functions through a network of service providers for supply of solar panels. Service providers are available at district level for laying out bio gas plants. Four grid connected solar power projects have been commissioned in the district. However, solar panel manufacturing units are not available. Only one unit financed by Chaitanya Godavari Grameena Bank is set up at Bhattiprolu.

### 5.3.3 Assessment of Credit potential for 2022-23

The district is suitable for tapping the solar energy on a large scale. . The high number of bovine population in the district offers a very good scope for commissioning of bio-gas plants. Taking into account the present status and and policy measures, the credit potential for the year 2022-23 has been estimated at ₹ 905.60 lakh. The sub-sector wise PLP projections are given in the table here under:

(₹Lakh)

S.No	Activity	Unit No	Unit Cost	PLP 2022-23		
				Phy units	Fin. Outlay	Bank loan
1	Bio-gas	No.	0.231	270	62.37	32.40
2	Solar Off grid – home lighting systems	No.	0.363	240	87.12	64.80
3	Solar On grid – roof top solar systems	No	1.463	190	277.97	209.00
4	Solar Pump sets	No	6.655	180	1197.90	599.40
	<b>Total</b>				<b>1625.36</b>	<b>905.60</b>

The joint mandal wise financial projections are indicated in Annexure I.

### Fostering Effective Energy Transition

India has a per-capita energy consumption of only about one-third of the global average. Over and above access to clean fuel is abysmally low in rural areas. A large segment of rural households still depend on solid fuel, forest wood and bio waste for their cooking needs. Almost 63 % of India's installed capacity is in thermal power out of which the major source is the coal based thermal power plants. Coal and Oil are being imported for energy purpose and these imports account for 28 per cent of India's total energy needs.

India, therefore, needs to multiply its per-capita energy consumption to meet the rising aspirations of its citizens with the focus on energy efficiency and shift to renewable sources. The Non-Conventional Energy based power projects are environment friendly and produce green power. Every KWH of power generated from Non-Conventional Energy Sources (NCES) will eliminate 1 kg of Carbon emission into the atmosphere. As the fossil fuels are non-renewable sources of energy and are fast depleting and creating ecological imbalance, there is a need to promote viable, renewable and clean sources of energy. India's Nationally



Determined Contribution (NDC) under the Paris Agreement states that India will achieve 40 per cent installed capacity of power from non-fossil fuels by 2030.

Union Budget 2018-19 announced zero import duty on components used in making solar panels to give a boost to domestic solar panel manufacturers. Government has also offered various financial incentives for off grid and decentralized renewable energy systems and devices for meeting energy needs for cooking, lighting and productive purposes. Thus, progressively declining costs, improved efficiency and reliability have made renewable energy an attractive option for meeting the energy needs in a sustainable manner and helping India pursue its low carbon development pathway.

#### **Renewable Energy Schemes:**

Andhra Pradesh is a solar rich state with huge potential of 120GW in variable renewable energy and reverse pumped hydro power. As on 31 March 2021, the cumulative Renewable Energy capacity installed is 8633.22MW out of the total installed capacity of 18799.56 MW in the state.

Under Navaratnalu, State Government is providing free power of 9 hours per day to Agriculture farmers for 18.43 lakh connections, aqua farmers at subsidised unit rate of ₹1.50 and free power supplied to SC colonies/ST colonies. This has resulted in ballooning of government subsidy from ₹2525 Cr in FY15 to ₹12391.64 Cr in FY20-21 putting enormous pressure on the state finances as per the AP State Socio economic survey 2020-21. Therefore, adoption of Renewable energy sources could provide a viable and sustainable solution to address the issue of subsidy.

Power projects: Government of AP has announced Solar Policy and invited entrepreneurs to set up Solar power projects. This policy of GoAP on solar has provisions for creating an enabling environment for prospective solar power developers to harness substantial quantum of solar power in the best possible manner. One Mega Power project is also being set up in YSR Kadapa and Anantapur districts of AP with a capacity of 2500 MW.

Andhra Pradesh is one of the pioneering states in the country to announce Solar Policy, and implementing various other programmes, viz. Improved Chullah Programme, Solar Energy Programme, Solar Water heating System programme, Solar Rooftop Projects (SRP) and under Swachh AP plan, convert municipal solid waste (MSW) into energy.

The wind power potential in Andhra Pradesh as estimated by the National Institute of Wind Energy (NIWE) is around 14,497 MW at 80 m level with maximum potential existing in the districts of Anantapur, Kadapa, Kurnool, Chittoor and Nellore. The total installed capacity is more than 4300 MW under wind power generation in the State.

#### **5.3.4 Critical Interventions and Suggested Action Points:**

Availability of reliable spare parts and after sales service for solar appliances to be ensured.

- Farmers may be encouraged to go for solar pump-sets to meet higher demand of power supply to the agriculture sector.
- Gridconnected Solar PV power plant / Solar projects / Solar Power Plants (up to ₹15.00 crore for companies and ₹10.00 lakh for individuals) as the same is considered under priority sector credit.
- Home loan /Home improvement loan for approved products for roof top solar PVs
- Solar Mini Cold Stores Solar pump sets, solar fencing and solar power-based farm implements, Solar Aerators in Fishery projects Bio Gas may be promoted in large scale.
- Plan of action for installing vehicle charging stations at different locations to meet the demand of electric vehicles.
- Banks may pro-actively extend finance on solar home lighting system, water heating system & solar pumping system.



## CHAPTER 6

### Informal Credit Delivery System

#### 6.1 Introduction

- NABARD has been striving for inclusive development by bringing the vulnerable, marginalized and the distressed population, especially women, into the formal banking system by addressing both demand and supply side constraints mainly through the Self-Help Group Bank Linkage Programme (SHG-BLP) and Joint Liability Groups (JLGs). The SHG -bank linkage programme, pioneered and nurtured by NABARD is the biggest micro finance programme in the world, touching more 12 crore households thereby linking 112 lakh SHGs to formal banking channel, making available credit to more than 57 lakh SHGs, with outstanding loan amount of ₹1, 03, 28,970 crores as on 31March 2021 (Source: Status of Microfinance in India by NABARD).
- The SHG movement took a firm root in the State with the implementation of World Bank assisted poverty reduction project, **Velugu** in the year 2000. Further, to fast pace the programme an independent support institution called **Society for Elimination of Rural Poverty (SERP)** was established. The state adopted social mobilisation and inclusiveness to address poverty alleviation and today Andhra Pradesh is an example of Participatory Poverty Alleviation in action. To give a further thrust to the SHG – BLP and to ensure that the group functions effectively and graduates to micro entrepreneurs at large scale through skill and entrepreneurship development training, MORD, GoI, launched the National Rural Livelihood Mission (NRLM) by restructuring the existing Swarna Jayanti Gram Swarozgar Yojana (SGSY) with effect from 01 April 2013.
- NABARD in its efforts to augment the flow of credit to landless tenant farmers cultivating land either as oral lessees or sharecroppers and small/marginal farmers has institutionalized formation and financing of JLGs. To support the efforts of banks / JLGPIs including NGOs in this direction, a scheme for extending grant assistance for promotion and financing of JLGs was started in 2009, with grant of ₹ 2000 per JLG for formation, nurturing and financing. This grant incentive has been further enhanced to ₹4000 per JLG in FY 20-21. As on 31.03.2021, there are 41 ongoing JLG promotion projects under NABARD's JLGPI scheme.
- SERP/DRDAs/MEPMA have relentlessly worked on a unique structure of community- based organization by organizing rural women into 103236 SHGs, 1980 Village Organizations, 57 Mandal Samakhya and one Zilla Samakhya. In the district as on date the banks have financed 17,110 CCRC Card holders with a loan amount of ₹75.42 crore (Individual-1758 tenant farmers and amount financed ₹8.56 crores, JLG 884 groups, 4682 tenant farmers and amount financed ₹16.20 crore RMGs-941 groups, 8303 farmers covered and ₹32.01 crores financed).

#### **PM Formalization of Micro Food Processing Enterprises Scheme**

Ministry of Food Processing Industries, Govt. of India has launched a scheme for Formalization of Micro Food Processing Enterprises as a part of Atmanirbhar Bharat Abiyan with an approximate outlay of ₹ 500 crore to benefit 10,029 units in Andhra Pradesh as a centrally sponsored scheme over a period of 5 years from 2020-2025 with the objective of supporting unorganized micro food processing enterprises both technically and financially. The scheme adapts “**One District One Product**” approach for implementation. Andhra Pradesh Food Processing Society, Industries and Commerce Department, Govt of AP has been nominated as State Nodal Agency for implementing the scheme in Andhra Pradesh. The scheme support to capital investment to Groups, seed capital grant to SHGs, support for common infrastructure, for marketing & branding and training & research for appropriate product, machinery and packaging development for micro units.

## 6.2 Status of SHG-BLP in Guntur

The total number of SHGs in the district as on 31 March 2021 stood at 103236 of which 70601 have been credit linked to the tune of ₹2209.96 crore.

(₹crores)

Particulars	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
No. of SHG Groups Financed	40,684	40,031	50,985	70601
Total amount Financed	1207.78	1454.09	1677.10	2209.96
Avg amount per SHG	0.029	0.036	0.032	0.0313

Though, the average amount has decreased the no. of groups were increased by 19,616 which shows that a great no. of SHG's were covered under bank finance. Apart from the above there were also special covid loans disbursed in the district. The total no. of accounts for which the said loan disbursed is 33509 to the tune of ₹162.24 crore

## 6.3 Achievement and major development in the State:

- Andhra Pradesh is the pioneering state in the SHG – BLP Programme. As on 31.03.2021, a total of 7, 55,994 SHGs have been credit linked and loan outstanding is ₹20,623 crores. The average per SHG bank loan increased from ₹0.45 lakh in 2004-05 to ₹2.72 lakhs in 20-21 and NPA as percentage to SHG bank loan outstanding has declined to 0.88% only as on 31.03.2021. (Source:SLBC)
- SERP, AP has issued “Post Lockdown Livelihood Promotion among SHG members – operational guidelines for digitization of HLP & MCP”. The objective is to ensure that the SHG members utilize bank credit as per the activities indicated in MCP.
- With a view to incentivize prompt payment, and to make the rural enterprises more remunerative, Government of A.P started PavalaVaddi scheme under which interest on all Bank loans over and above 3% per annum was reimbursed directly to SHGs. From 2012, the PavalaVaddi scheme was converted into ‘Vaddi Leni Runalu’ under which total interest reimbursement is being made by the Government to further strengthen the viability of rural enterprises. VLR is available up to a loan outstanding of ₹ 5.00 lakh per group.
- Government of Andhra Pradesh enacted ‘Andhra Pradesh Crop Cultivator Rights Act 2019’ which seeks to preserve the rights of the crop cultivators without affecting the rights the owner of the land.
- Augmenting credit to landless tenant farmers/sharecroppers is critical for the inclusive rural development. In FY 20-21, 12,075 JLGs were financed in the state with the amount of ₹21355 lakhs.

## 6.4 Issues related to micro finance:

The average SHG lending in the state has seen a decline of 24% from 3.57 lakhs per SHG in FY 19-20 to 2.7 lakhs per in FY 20-21. This decline may be partly attributed to the lockdown imposed in light of COVID-19 pandemic.

The general issues observed in SHG financing are as follows –

- There is a scope for consolidating the commercial activities of the SHGs in order to ensure emergence of vibrant activity-based clusters.
- Lack of in-house capacity especially for Book Keeping and overdependence on animators.
- Internal lending among the groups is on a declining trend.
- Group dynamics are not sound and awareness about group objectives beyond thrift and credit at member level is limited.

- Discrepancy between Micro Credit Plan (MCP) and end use of loan post disbursement by banks
- With no rotation of leadership, dependence of groups on same leader continues to be high and there is no clear understanding of rights and responsibilities of leaders/members
- Groups are unaware of the benefit of financial products like CC limits over TL, insurance etc.

The numbers of JLGs financed by the banks have seen a declining trend in last three years from 75,544 in FY 18-19 to 26,186 in FY 19-20 and 12,075 in FY 20-21. Financing of JLG in the state is also declining from ₹1, 71,967 lakhs in FY 18-19 to ₹51,967 lakhs in FY 19-20 to ₹21,355 lakhs in FY 20-21. (Source: Status of Microfinance in India by NABARD)

### 6.5 Assessment of Credit Potential for 2022-23

The promotion of new SHGs may be limited to only some areas where addition to women population occurs due to marriages, and also those girls completing the age of 18 etc. Mandal-wise projections are furnished below.

#### Mandal wise potential for promotion and savings linkage of SHGs

##### Annexure VI

S.No	Joint Mandal	Total potential for promotion of SHGs	No of SHGs savings linked as on 31 March 2021	Balance potential as on 31.3.2021	No of SHGs likely to be promoted and savings linked during 2021-22	No of SHGs likely to be promoted and savings linked during 2022-23
1	Bapatla	5736	5636	100	50	50
2	Chilakaluripeta	6356	6256	100	50	50
3	Gurazala	7256	7156	100	50	50
4	Macherla	7876	7718	158	74	84
5	Mangalagiri	6837	6687	150	75	75
6	Narasaraopeta	5864	5707	157	75	82
7	Piduguralla	7727	7627	100	60	40
8	Ponnuru	7703	7408	295	140	155
9	Prathipadu	7795	7495	300	165	135
10	Repalle	7312	7212	100	60	40
11	Sattenapalli 1	5423	5323	100	60	40
12	Sattenapalli 2	4236	4136	100	30	70
13	Tadikonda	7294	7188	106	40	66
14	Tenali 1	4264	4086	178	78	100
15	Tenali 2	5581	5473	108	50	58
16	Vinukonda	8228	8128	100	54	46
<b>Total</b>		<b>105488</b>	<b>103236</b>	<b>2252</b>	<b>1111</b>	<b>1141</b>

**Mandal wise potential for credit linkage of SHGs**

S.No	Joint mandal	No of SHGs credit linked as on 31 Mar 2021	SHGs credit to be linked during 2021-22				SHGs to be credit linked during 2022-23			
			Fresh		Repeat		Fresh		Repeat	
			No.	Amt	No.	Amt	No.	Amt	No.	Amt
1	Bapatla	5294	50	155	1985	4021	50	250	1890	9450.00
2	Chilakaluripeta	4142	50	155	2023	4155	50	250	1890	9450.00
3	Gurazala	3189	50	155	1692	2548	50	250	1800	9000.00
4	Macherla	3132	74	229	1422	2580	84	420	1530	7650.00
5	Mangalagiri	5560	75	233	3074	8769	75	375	2700	13500.00
6	Narasaraopeta	4154	75	233	2337	6257	82	410	2340	11700.00
7	Piduguralla	3192	60	186	1724	2342	40	200	2340	11700.00
8	Ponnuru	4163	140	434	2709	7619	155	775	2340	11700.00
9	Prathipadu	4641	165	512	1894	3729	135	675	1890	9450.00
10	Repalle	4615	60	186	3278	9863	40	200	2790	13950.00
11	Sattenapalli 1	5274	60	186	2834	5706	40	200	2790	13950.00
12	Sattenapalli 2	4476	30	93	2267	1341	70	350	1890	9450.00
13	Tadikonda	4355	40	124	2436	5932	66	330	2790	13950.00
14	Tenali 1	4916	78	242	2752	7530	100	500	2790	13950.00
15	Tenali 2	5162	50	155	2186	7607	58	290	2790	13950.00
16	Vinukonda	4336	54	167	1997	2466	46	230	2700	13500.00
Total		70601	1111	3444	36610	82467	1141	5705	37260	186300.00

**6.6 Financing through Joint Liability Groups (JLGs)**

The JLG mode of financing serves as collateral substitute for loans provided to the small, marginal, tenant farmers, oral lessees, share croppers, etc. It enables the banks to reach farmers through group approach and inculcate credit discipline. Hence, the banks in the district may increase their financing to the small, marginal, tenant farmers and oral lessees through JLG mode of financing. Government of Andhra Pradesh has enacted the Andhra Pradesh Licensed Cultivators Act, 2011 to provide Licensed Cultivators Eligibility Cards (LECs) to tenant and oral lessee farmers so that they could access credit from public financial institutions. NABARD has been advocating formation of JLGs for Farm as well as Non-Farm Sector to access credit from banks. However, the lending under JLGs is not very encouraging owing to problems of recovery.

To motivate the banks to actively get involved in promotion and financing of JLGs, incentive is extended by NABARD to Commercial Banks, RRBs and Cooperative Banks. Grant assistance will be extended to banks for formation, nurturing and financing of JLGs over a period of 3 years @ ₹4000/- per JLG.

**6.7 Critical Intervention required for creating a definitive impact**

The SHG portfolio is the major portfolio in rural bank branches in the district, the other being crop loans. The strong network of SERP/IKP/DRDA personnel in the district has contributed to the growing SHG loan portfolio. In order to exploit the potential, the following critical interventions need to be focussed

- **Asset Creation & Micro enterprise development** - Given the huge number of SHGs and credit limits availed by SHGs, the focus should be on asset and livelihood creation which has not happened to the expected level. SERP claims that mostly the loan amount extended to SHGs was used by the members for investment purposes with nearly 37% of the loan amount having been used for dairy development, 17% for agriculture and other allied activities, 20% for sheep/goat rearing, 13% for petty businesses and the remaining 13% for other activities including consumption. This

seems to be based on the MCPs created rather than the actual utilization, as discussions with bankers in various fora viz., DCC, JMLBCs, etc. indicate that there is lot of variation between the MCPs and the actual utilization of the loan amount. Though the banks are extending loan or renewing credit limits to SHGs as per the Micro Credit Plans (MCPs) prepared by SHGs, the end-utilization of credit is not strictly as per the MCPs.

- **Monitoring performance and repayment** - The IKP has sound implementation strategies which inter alia include Community Based Recovery Mechanism (CBRM) at bank branch level, institution of Bank Mitra for poorly staffed bank branches, bank linkage committees at federation level, etc. However, there is a need to strengthen especially CBRM at branch level in the wake of growing concerns over the increasing over dues in respect of SHG lending.
- **Multiple lending** - Multiple lending to a single borrower has been one of the important issues that should not be lost sight of. Field level interactions indicate that apart from taking loan from the SHG, a rural woman is entitled to and is availing of loan from Sthree Nidhi, crop loan and term loans from banks, MACTS, etc. Quite a good number of MACTS have been working in the district with women as their members.
- **Other issues**- The other issues in the SHG-Bank Linkage programme in the district include the following:
  - Lack of monitoring / supervision by banks.
  - No proper credit appraisal or rating of SHGs before extending bank loan
  - Inadequate training to bank staff

## 6.8 Suggested Action points/Road map for the future:

- Focus on creation of assets by SHG members at individual level or group level, increasing income levels by taking productive activities, strengthening recovery mechanism, etc. Identification of potential activities for setting up of Micro Enterprises and close follow up.
- Training and capacity building of identified SHG members who are availing higher doses of finance under the programme.
- Need to identify dormant SHGs and initiate steps for their revival
- Training and capacity building of stakeholders including bank branches and other staff of banks.
- Strengthening supervisory and monitoring mechanism over SHGs at branch level.
- Strengthening recovery mechanism at branch/mandal level.
- There is a scope for integration between SERP and NABARD's ESHAKTI, which can not only help in enhancing the book keeping practices of the SHGs but also facilitate the bankers to take up SHG financing.
- In order to enhance emergence of vibrant cluster, regional interventions are required in the form of developing marketing and packaging support, activity-based incentives, product-based consultancy services etc. In this light, there is a scope for convergence between GoAP and NABARD's Livelihood and Enterprise Development Programme.
- In order to graduate the SHGs into an enterprising entity, there is a need to ensure suitable income generating opportunities during the credit linkage. Bankers need to ensure that the lending to an individual in a group should be based on merit and need.
- The demand for a dedicated Project Management Agency (PMA) for JLG financing was raised by various bankers at the State level strategy meet organised by NABARD in December 2020. It was suggested that a body and field cadre on lines of SERP can help the bankers in formation and recovery of the credit, which in turn will boost the confidence in the JLG lending models. However, it is suggested that, instead of having a rigid structure of PMA, a flexible structure may be adopted. State

Government in association with NABARD may come up with a scheme to identify, train and support lead agencies in the district on the lines of CBBOs for FPOs.

- To enhance recovery mechanisms, Village Agriculture Assistants may be roped in for assisting in recovery of JLG loans.
- There is a need to initiate discussions to review the Consent clause and Validity clause under the Crop Cultivators Rights Act, 2019.

Banks and the concerned state government departments may encourage their officers and staff to participate in the sensitization workshops organised by NABARD at district level on regular basis. Training institutions may also be encouraged to seek NABARD's support for organizing trainings on SHG and JLG financing.

Annexure-I  
Activity wise/Block Wise Physical and Financial Projections for 2022-23

State : ANDHRA PRADESH												DISTRICT : GUNTUR										Chilakaluri petla		Total	
Activity	Unit Cost	Unit Size	Phy / Fin.	Bank Loan	Guntur/M angaligiri	Prathipadu	Tadikonda	Sattenapa III-I	Sattenapa III-II	Tenali-I	Tenali-II	Repalle	Ponnur	Bapla	Narasara pet	Pidugurala	Gurajala	Macherla	Vinukonda						
1.Credit potential for agriculture																									
A. FARM CREDIT																									
(1) Crop Production, Maintenance, Marketing																									
i) Paddy	0.951	ha	Phy.	70000	11000	7000	4000	14000	9000	19000	27000	29000	27000	27000.00	23000.00	14000.00	11000.00	5400.00	20000.00	3500.00	250900.00				
			Fin.	0.951	10461.00	6657.00	3804.00	13314.00	8559.00	18069.00	25677.00	27579.00	25677.00	25677.00	21873.00	13314.00	10461.00	5135.40	19020.00	3328.50	238605.90				
ii) SRI Paddy	0.869	ha	Phy.	2000	2000	2000	2000	2000	2000	1000	1000	300	300	400	400	300	300	300	500	200	15000.00				
			Fin.	0.869	1738.00	1738.00	1738.00	1738.00	1738.00	869.00	869.00	260.70	260.70	347.60	260.70	260.70	260.70	260.70	434.50	173.80	130335.00				
iii) Groundnut	0.734	ha	Phy.	300	200	200	250	250	350	0	0	900	500	700	400	200	850	300	150	150	5500.00				
			Fin.	0.734	220.20	146.80	183.50	183.50	256.90	0.00	0.00	660.60	367.00	513.60	293.60	146.80	623.90	220.20	110.10	110.10	4037.00				
iv) Oil Seeds	0.326	ha	Phy.	500	500	500	500	500	600	400	200	200	200	100	100	800	800	800	800	800	8500.00				
			Fin.	0.326	163.00	163.00	163.00	163.00	195.60	130.40	65.20	65.20	32.60	32.60	260.80	260.80	260.80	260.80	260.80	277.10	2771.00				
v) Pulses	0.625	ha	Phy.	10000	5000	5000	5000	3000	3000	21000	21000	21000	3000	3000	1000	1000	500	500	1000	0.00	117000.00				
			Fin.	0.625	6250.00	3125.00	3125.00	1875.00	1875.00	13125.00	13125.00	13125.00	1875.00	1875.00	625.00	625.00	312.50	312.50	625.00	0.00	73125.00				
vi) Cotton	1.195	ha	Phy.	10000	10000	10000	25000	20000	0	0	300	0	5000	15000	20000	20000	15000	15000	15000	15000	175000.00				
			Fin.	1.195	11950.00	11950.00	29875.00	23900.00	0.00	0.00	358.50	0.00	5975.00	17925.00	23900.00	17925.00	17925.00	17925.00	17925.00	17925.00	209483.50				
vii) Tobacco	1.983	ha	Phy.	1983	1000	1000	1000	1000	1000	1000	1000	1000	1000	1983.00	1983.00	3966.00	3966.00	3000	5000	1000	22000.00				
			Fin.	1.983	1983.00	1983.00	1983.00	1983.00	1983.00	1983.00	1983.00	1983.00	1983.00	0.00	1983.00	1983.00	3966.00	3966.00	5949.00	9915.00	1983.00				
viii) Chillies	2.690	ha	Phy.	5000	10000	10000	10000	11000	11000	0	5000	5000	2000	10000	10000	10000	10000	10000	10000	5000	115000.00				
			Fin.	2.690	13450.00	26900.00	26900.00	29590.00	29590.00	0.00	13450.00	5380.00	5380.00	10000.00	29590.00	26900.00	26900.00	26900.00	26900.00	13450.00	308350.00				
ix) Sugarcane	1.875	ha	Phy.	100	0	0	0	0	0	150	500	500	897.00	3588.00	897.00	0.00	0.00	0.00	0.00	0.00	860.00				
			Fin.	1.875	187.50	0.00	0.00	0.00	0.00	281.25	937.50	112.50	93.75	112.50	1000.00	1000.00	1000.00	1000.00	2000.00	2000.00	1612.50				
x) Vegetables	1.223	ha	Phy.	5000	5000	5000	5000	5000	5000	5000	3000	3000	5000	3000	10000	10000	2000	2000	2000	2000	52000.00				
			Fin.	1.223	6115.00	6115.00	6115.00	6115.00	6115.00	6115.00	2446.00	2446.00	6115.00	3668.00	1223.00	1223.00	2446.00	2446.00	2446.00	2446.00	63596.00				
xi) Turmeric	2.309	ha	Phy.	7000	7000	2000	2000	1000	1000	7000	7000	7000	2000	10000	500	0.00	500	0.00	500	0.00	38500.00				
			Fin.	2.309	16163.00	4618.00	4618.00	2309.00	2309.00	16163.00	16163.00	16163.00	4618.00	2309.00	1154.50	0.00	1154.50	0.00	0.00	0.00	1154.50				
xii) Maize	0.897	ha	Phy.	2000	2000	2000	1000	1000	1000	12000	12000	6000	4000	10000	0.00	0.00	0.00	0.00	0.00	0.00	42000.00				
			Fin.	0.897	1794.00	1794.00	897.00	897.00	897.00	10764.00	10764.00	5382.00	3588.00	897.00	0.00	0.00	0.00	0.00	0.00	0.00	37674.00				
xiii) Other crops	1.032	ha	Phy.	3000	2000	2000	3000	2000	2000	1000	1000	1000	1000	1000	1000	1000	1000	2000	2000	2000	26000.00				
			Fin.	1.032	3096.00	2064.00	3096.00	2064.00	2064.00	1032.00	1032.00	1032.00	1032.00	1032.00	1032.00	1032.00	1032.00	2064.00	2064.00	2064.00	26832.00				
xiv) Working Capital for fruit crops	0.679	ha	Phy.	400	1000	1000	600	400	701	500	400	300	400	300	250	250	500	595.00	1000	350	8196.00				
			Fin.	0.679	271.76	679.25	407.55	271.76	476.15	339.63	271.76	203.78	169.81	339.63	404.15	339.63	404.15	679.25	679.25	237.74	5567.13				
xv) produce loan	1.235	ha	Phy.	10000	10000	10000	10000	10000	10000	10000	5000	5000	4000	20000	8000	4000	4000	6000	5000	10000	113000.00				
			Fin.	1.235	12350.00	12350.00	12350.00	12350.00	12350.00	6175.00	6175.00	6175.00	4940.00	2470.00	9880.00	4940.00	4940.00	7410.00	6175.00	12350.00	139555.00				
Sub- Total			Phy.	67300.0	57700.0	54350.0	76150.0	68651.0	78050.0	83100.0	42500.0	42500.0	42500.0	68460.0	42500.0	68460.0	42500.0	42500.0	68460.0	42500.0	989756.00				
			Fin.	66192.40	80283.05	77330.05	102728.20	92308.65	81221.28	92958.40	92555.78	86357.31	76147.93	76147.93	86357.31	76147.93	76147.93	86357.31	76147.93	86354.45	1257766.53				
Post-Harvest/HH Consumption					7357.07	6725.38	6457.25	9010.65	7948.25	6853.17	8651.17	8626.78	5987.74	3988.20	7630.75	7086.83	6534.24	6147.36	7970.04	4289.57	111264.44				
Repairs and Maintenance of Farm Assets(20%)					14714.14	13450.76	12914.50	18021.30	15886.50	13706.33	17302.34	17253.55	11975.48	7976.40	15261.50	14173.66	13068.48	12294.72	15940.08	8579.14	222528.88				
Sectoral total Crop Loan																					1591559.85				
(2) Water Resources																									
i) Dug well + pumpset	1.438	No.	Phy.	50	0	0	30	30	30	2	0	0	0	15	50	20	0	16	0	16	21	280			
			Fin.	1.29	64.50	0	38.70	38.70	38.70	2.88	0	0	0	19.35	64.50	25.60	0	20.64	0	20.64	27.09	361.20			
ii) Borewell + Pumpset	1.290	No.	Phy.	100	100	100	150	100	100	70000	70000	70000	50	50	100	85	100	120	130	50	50	1375			
			Fin.	1.16	116.10	116.10	174.15	116.10	116.10	81.27	81.27	58.05	58.05	116.10	116.10	116.10	139.32	150.93	58.05	58.05	1596.38				
iii) Irr. Pumpsets	0.691	ha	Phy.	400	400	400	220	200	160	0	100	100	150	140	110	200	220	260	240	170	3190				
			Fin.	0.62	248.76	248.76	136.82	124.38	99.50	0	62.19	93.265	87.066	68.41	124.38	136.818	136.818	161.69	149.256	105.723	1983.86				
iv) Drip Sets	0.799	ha	Phy.	500	1000	1000	1000	500	500	1000	200	200	200	100	100	300	300	300	300	100	6650				
			Fin.	0.20	100	198.75	198.75	99.88	99.88	199.78	39.95	39.95	19.975	10	59.93	59.925	59.925	59.93	59.925	19.975	1328.3375				
v) Sprinkler sets	0.413	No.	Phy.	100	100	120	150	120	100	100	50	50	100	100	60	150	220	220	200	200	1960				
			Fin.	0.21	20.65	20.65	24.78	30.98	24.78	20.65	10.325	10.325	10.325	20.65	10.325	16.52	20.65	30.975	45.43	45.43	41.3	404.74			
vi) Lift Irrigation + pumpset	1.331	Ha	Phy.	1000	1000	1200	1000	1000	1000	0	0	0	0	60	40	40	0	0	100	169	130	959			
			Fin.	1.20	11.98	115.75	143.75	119.75	119.75	0	0	0	0	19.79	47.92	47.92	0	0	119.79	202.4451	155.727	1148.79			
vii) Pipelines	0.396	Ha	Phy.	100	300	300	300	300	300	250	200	500	150	500	500	300	300	300	300	200	4550				
			Fin.	0.36	35.64	106.92	106.92	106.92	106.92	89.1	71.28	178.2													

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Activity	Unit Cost	Unit Size	Phy. / Fin.	Bank Loan	Guntur/M angaluri	Prathipadu	Tadikonda	Sattenapa III-J	Sattenapa III-JI	Tenali-J	Tenali-JI	Repalle	Ponnur	Bapla	Narasara pet	Pidugurala	Gurajala	Macherla	Vinukonda	Chilakaluri peta	Total
ii) Mini Tractors with matching equipments (15 to24 HP)	4,950	No.	Phy.	Fin.	200	200	200	50	100	20	20	20	20	20	20	20	20	20	20	20	1080
iii) Power Tillers	2,200	No.	Phy.	Fin.	742.00	742.00	742.00	185.50	371.00	371.00	74.20	74.20	74.20	74.20	74.20	74.20	74.20	74.20	74.20	74.20	3885.50
iv) Thrashers	1,742	No.	Phy.	Fin.	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	82.50	980.00
v) Combined Harvesters	26,498	No.	Phy.	Fin.	262.00	262.00	262.00	262.00	262.00	262.00	262.00	262.00	262.00	262.00	262.00	262.00	262.00	262.00	262.00	262.00	3144.00
vi) Rotavators	1,265	No.	Phy.	Fin.	198.70	198.70	198.70	198.70	198.70	198.70	198.70	198.70	198.70	198.70	198.70	198.70	198.70	198.70	198.70	198.70	3792.20
vii) Custom Hiring Centre (Cotton)	25,817	No.	Phy.	Fin.	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50	142.50
viii) Custom Hiring Centre (SMSRI)	53,240	No.	Phy.	Fin.	193.60	193.60	193.60	193.60	193.60	193.60	193.60	193.60	193.60	193.60	193.60	193.60	193.60	193.60	193.60	193.60	3881.20
ix) Paddy dries	19,985	No.	Phy.	Fin.	399.30	399.30	399.30	399.30	399.30	399.30	399.30	399.30	399.30	399.30	399.30	399.30	399.30	399.30	399.30	399.30	2007.00
X) Plant protection equipment (knapsack)	0,226	No.	Phy.	Fin.	748.50	299.40	299.40	74.85	14.97	748.50	89.82	224.55	149.70	224.55	89.82	14.97	14.97	0.00	300.00	300.00	2984.00
xi) paddy straw baler- tractor operated	4,400	No.	Phy.	Fin.	10	10	5	5	5	10	10	10	10	10	10	10	10	10	10	10	130
xii) Turmeric coking machines	5,445	No.	Phy.	Fin.	33.00	33.00	16.50	16.50	16.50	33.00	33.00	33.00	33.00	33.00	33.00	33.00	16.50	16.50	33.00	33.00	429.00
Sectoral total Farm Mechanization	3941.42				16.32	4.08	4.08	4.08	4.08	4.08	4.08	2634.13	2456.90	2628.55	2390.97	2273.42	1823.07	2037.74	1599.08	1359.06	42213.88
(4) Plantation/Horticulture/Sericulture																					
i) Mango	2,002	ha	Phy.	Fin.	25	0	25	25	25	0	0	0	25	0	0	0	25	0	50	50	285.00
ii) Rejuvenation of Mango	0,532	ha	Phy.	Fin.	40	0	40	40	40	0	0	0	40	0	0	0	40	0	50	50	300.00
iii) Coconut	1,502	ha	Phy.	Fin.	0	0	0	0	0	0	0	0	20	10	20	10	0	0	0	0	60.00
iv) Guava (high density)	3,806	ha	Phy.	Fin.	20	10	20	12	10	0	0	0	22.60	11.30	22.60	11.30	0	20	25	25	172.00
v) Sapota	1,408	ha	Phy.	Fin.	57.00	26.50	57.00	34.20	28.50	0	0	0	0	0	0	0	57.00	71.25	0	20	300.00
vi) Sweet orange	1,968	ha	Phy.	Fin.	10.60	0	79.50	79.50	21.20	20	20	20	0	0	0	0	0	0	0	0	410.00
vii) Acid lime	2,072	ha	Phy.	Fin.	26.60	0	26.60	74.00	59.20	0	0	0	0	0	0	0	26.60	88.80	60	100	608.80
viii) Papaya	3,207	ha	Phy.	Fin.	77.50	31.00	77.50	62.00	155.00	0	0	0	31.00	31.00	20	62.00	44.40	30	60	100	730.00
ix) Tissue culture banana	2,649	ha	Phy.	Fin.	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	1131.50
x) Pomegranate	2,378	No.	Phy.	Fin.	89.00	44.50	89.00	53.40	35.60	89.00	71.20	0	53.40	0	0	89.00	0	89.00	178.00	0	486.00
xi) Flowers	1,903	ha	Phy.	Fin.	100.00	20.00	20.00	20.00	20.00	30.00	50.00	50.00	0	0	0	0	0	0	0	0	370.00
xii) Rejuvenation of Orange orchard	0,532	ha	Phy.	Fin.	143.00	28.60	28.60	28.60	0	42.90	71.50	71.50	0	85.80	14.30	0	0	0	0	0	529.10
xiii) Lemon grass	0,532	ha	Phy.	Fin.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	300.00
xiv) Nursery	6,050	No.	Phy.	Fin.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20.00
xv) Chili shade nets	12,100	No.	Phy.	Fin.	15	15	5	15	15	5	5	5	5	5	5	5	5	5	5	5	127.12
xvi) Peck houses	6,050	No.	Phy.	Fin.	136.20	136.20	45.40	136.20	136.20	0	0	0	45.40	0	0	136.20	90.80	90.80	90.80	90.80	1316.60
xvii) Integrated Peck houses	73,300	No.	Phy.	Fin.	4.54	4.54	4.54	0	0	4.54	9.08	4.54	9.08	9.08	4.54	0	0	0	0	0	49.94
xviii) Functional infrastructure for sorting, grading, packing and collection centre to farmer groups	18,150	No.	Phy.	Fin.	54.98	54.98	54.98	54.98	54.98	54.98	54.98	164.94	54.98	109.96	109.96	0	0	54.98	54.98	54.98	879.68
xix) Permanent pandals for	6,050	No.	Phy.	Fin.	13.61	13.61	13.61	0	0	0	0	0	0	0	0	13.61	0	0	0	0	108.88
xx) Chili driers	1,694	No.	Phy.	Fin.	90.80	45.40	45.40	45.40	22.70	22.70	0	22.70	45.40	22.70	13.62	0	22.70	22.70	22.70	45.40	490.32
xxi) Poly houses	24,200	1000	Phy.	Fin.	12.70	12.70	0	12.70	12.70	0	0	0	0	0	6.35	6.35	6.35	6.35	6.35	6.35	88.90
xxii) Reeler vans	22,022	No.	Phy.	Fin.	18.15	0	8	5	0	15	0	0	10	10	10	10	10	10	10	10	28.00



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Activity	Unit	Unit Cost	Size	Phy	Bank Loan	Guntur/M angalagiri	Prathipadu	Tadikonda	Sattenapa III-I	Sattenapa III-II	Tonnali -I	Tonnali -II	Repalle	Ponnur	Bapla	Narasara pet	Pidugural la	Gurajala	Macherla	Vinukonda	Chilakaluri peta	Total	
Sectoral total PH & Sericulture	xxiii) Ripening chambers (60 ton)	50.820	No.	Phy.	16.52	82.60	82.60	0.00	82.60	0.00	82.60	0.00	33.04	82.60	16.52	0.00	0.00	0.00	0.00	0.00	0.00	462.56	
	xxiv) Turmeric boiling and polishing machines	9.680	No.	Phy.	38.12	76.24	38.12	0.00	0.00	0.00	38.12	0.00	38.12	38.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	268.84	
	xxv) Dragon Fruit(2'x2.5 for 1600 plants)	17.008	ha	Phy.	7.26	72.60	0.00	14.52	0.00	0.00	14.52	0.00	21.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	137.94	
	xxvi) Mulberryrearing of silk worms	7.480	ha	Phy.	12.76	255.20	255.20	382.80	255.20	382.80	255.20	0.00	0.00	0.00	0.00	63.80	255.20	255.20	255.20	255.20	63.80	2807.20	
	xxvii) Rearing Shus	6.600	No.	Phy.	6.73	269.20	0.00	201.90	168.25	168.25	168.25	0.00	0.00	134.60	67.30	0.00	0.00	67.30	0.00	0.00	100.95	1561.55	
	xxviii) CRC	18.007	No.	Phy.	5.94	59.40	29.70	11.88	89.10	59.40	11.88	11.88	11.88	11.88	0.00	0.00	29.70	11.88	11.88	11.88	11.88	63.00	
	xxix) Kisan Nurseries	2.057	No.	Phy.	16.21	16.21	16.21	0.00	16.21	0.00	16.21	0.00	0.00	0.00	0.00	0.00	16.21	0.00	16.21	0.00	0.00	8.00	
				Phy.	1.85	1.85	0.00	1.85	3.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.55	3.70	1.85	0.00	0.00	10.00	
				Fin.	2044.11	955.26	1340.50	1641.35	1088.13	1101.87	613.05	1045.60	713.23	693.14	1214.88	882.18	823.63	1351.41	1439.82	562.16	17510.35		
	(5) Forestry & Wasteland Development																						
Sectoral total Forestry & WLD	i) Nurseries	3.993	No.	Phy.		10	20	10	15	10	10	0	0	10	5	10	10	10	10	10	20	5	165
	ii) Farm Forestry (Eucalyptus)	0.710	Ha	Phy.	3.59	35.90	71.80	35.90	53.85	35.90	35.90	0.00	35.90	35.90	17.95	35.90	35.90	35.90	35.90	35.90	71.80	17.95	592.35
	iii) Wastelands Dev(Subsoil)	0.728	Ha	Phy.	0.64	32.00	32.00	64.00	64.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	128.00	64.00	96.00	128.00	0.00	768.00	
	iv) Wasteland Dev(Casuarina)	0.785	Ha	Phy.	0.66	0.00	6.60	0.00	46.20	26.40	0.00	0.00	0.00	0.00	0.00	13.20	66.00	66.00	132.00	165.00	165.00	705.20	
				Phy.	0.710	0.00	0.00	0.00	7.10	7.10	0.00	0.00	0.00	35.50	0.00	71.00	14.20	14.20	7.10	7.10	21.30	205.50	
				Fin.	67.90	110.40	67.90	171.15	133.40	35.90	71.40	35.90	102.15	244.10	180.10	271.00	336.00	386.10	59.05	2272.45			
	(6) Animal Husbandry - Dairy																						
	i) CB Cows	1.672	No.	Phy.		18	18	18	18	18	18	18	15	20	16	20	10	10	10	20	0	244.00	
	ii) GM Buffaloes	2.046	No.	Phy.	1.50	27.00	28.50	27.00	27.00	27.00	27.00	21.00	30.00	30.00	24.00	30.00	16.50	15.00	15.00	30.00	0.00	18.00	566.00
				Phy.	1.50	1500	1500	2000	2500	2500	2500	2500	2000	2000	2000	2000	3000	2000	2000	2000	2500	2500	34300.00
iii) Mini Dairy Unit of GMB (10)	13.048	No.	Phy.	1.84	2760.00	2760.00	3680.00	4600.00	4600.00	4600.00	3680.00	3680.00	3680.00	3680.00	3680.00	5520.00	3680.00	3680.00	4232.00	3680.00	4600.00	83112.00	
iv) Com. Dairy (50 GMBs)	78.650	No.	Phy.	11.74	704.40	469.60	281.78	352.20	352.20	352.20	352.20	352.20	352.20	352.20	352.20	587.00	587.00	587.00	469.60	587.00	587.00	7454.90	
v) Female GMB Calf-rearing	0.485	No.	Phy.	70.79	1415.80	1415.80	1415.80	1415.80	1415.80	1415.80	1081.85	1081.85	1081.85	1081.85	707.90	707.90	283.16	141.58	707.90	707.90	15078.27		
vi) Female CBCalf-rearing	0.389	No.	Phy.	0.45	123.75	123.75	108.00	108.00	108.00	99.00	99.00	99.00	99.00	90.00	90.00	90.00	108.00	108.00	108.00	99.00	1642.50		
vii) Fodder Cultivation	0.363	Ha	Phy.	0.35	8.75	3.85	4.20	4.20	4.20	6.30	7.70	7.70	7.70	4.20	4.20	3.50	4.20	4.20	4.20	2.10	6.30	79.80	
viii) Gopalmitta	0.605	No.	Phy.	0.33	145.20	115.50	123.75	123.75	92.40	79.20	79.20	79.20	79.20	79.20	79.20	4.00	4.00	92.40	79.20	105.60	79.20	1511.48	
ix) Pst-Vet Clinics	3.465	No.	Phy.	0.54	3.24	2.16	2.70	2.70	2.16	2.16	2.16	1.62	2.16	2.16	2.16	1.00	1.00	2.16	2.16	4.86	2.70	39.42	
x) Cattle feed plant	3.333	No.	Phy.	3.12	0.00	0.00	0.00	0.00	0.00	0.00	3.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	213.00	
xi) SHG - Dairy (25%)	8.800	No.	Phy.	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10350.00	
xii) ZBNF unit - nondescript cows(1+1)	1.217	No.	Phy.	8.80	5840.00	5720.00	5720.00	6600.00	6600.00	7700.00	6600.00	6600.00	6600.00	6600.00	5500.00	5500.00	4400.00	4400.00	4400.00	4400.00	4400.00	91080.00	
Sectoral total AH - Dairy			Fin.	1.100	11442.26	10644.86	11556.55	13168.71	13207.26	14284.28	11917.07	11920.73	11903.33	10459.78	12520.38	9146.22	9038.96	9475.36	9600.58	10520.46	180506.59		
(7) Animal Husbandry -Poultry																							
i) Corn Boller (800 Birds)	3.080	No.	Phy.		30	24	30	30	24	30	20	20	20	20	20	30	15	12	12	10	20	347	
ii) Corn Layer (1000 birds)	6.270	No.	Phy.	2.77	83.10	66.48	83.10	83.10	66.48	83.10	55.40	55.40	55.40	55.40	55.40	83.10	41.55	33.24	33.24	27.70	55.40	961.19	
iii) Egg/Chicken cart	0.143	No.	Phy.	5.64	1128.00	846.00	846.00	846.00	282.00	282.00	15.00	15.00	15.00	15.00	56.40	282.00	112.80	112.80	56.40	84.60	169.20	5301.60	
iv) Hatcheries	87.846	No.	Phy.	0.13	4.55	0.65	0.78	1.98	1.98	1.98	1.56	1.56	1.56	0.91	0.91	0.91	0.91	0.91	0.91	0.91	22.10	8	
v) Chicken meat outlets	1.997	No.	Phy.	79.06	158.12	0.00	0.00	0.00	79.06	79.06	0.00	0.00	0.00	0.00	0.00	79.06	0.00	79.06	0.00	79.06	0.00	632.48	
vi) Feed plant and analytical lab.	23.430	No.	Phy.	1.80	9.00	5.40	0.00	5.40	5.40	10.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	52.20	
vii) Working capital	15.972	birds	Phy.	21.09	63.27	0.00	0.00	0.00	0.00	0.00	42.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	147.63	
			Fin.		25.00	20.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	10.00	10.00	5.00	10.00	10.00	10.00	10.00	215	
			Fin.	14.37	359.25	287.40	215.55	215.55	215.55	215.55	215.55	215.55	215.55	215.55	143.70	143.70	71.85	143.70	143.70	143.70	143.70	3089.55	

Annexure-I

Activity	Unit	Unit Cost	Unit Size	Phy. / Fin.	Bank Loan	Guntur/M angalgiri	Prathipadu	Tadikonda	Sattenapa lli-I	Sattenapa lli-II	Tenali -I	Tenali -II	Repalle	Ponnur	Bapla	Narasora pet	Pidugurala	Gurajala	Macherla	Vinukonda	Chilakaluri peta	Total	
Sectoral total AH - Poultry						1805.29	1205.93	1145.43	1231.06	692.62	635.58	365.98	336.11	326.26	335.47	588.77	298.96	297.86	234.25	335.97	369.21	10206.75	
(8) Animal Husbandry - SGP																							
i) Sheep(20t+1m)	No.	2.163	100	Phy.			100	200	200	200	0	0	0	100	50	25	250	450	400	500	400	200	3175
	Fin.		162.00	Fin.			162.00	324.00	324.00	324.00	0.00	0.00	0.00	81.00	40.50	40.50	405.00	729.00	648.00	810.00	648.00	324.00	5143.50
ii) Goat(rearing (20+1)	No.	1.815	100	Phy.			30	30	100	200	150	10	10	30	0	0	200	200	150	200	250	50	1700
	Fin.		136.00	Fin.			40.80	40.80	136.00	272.00	204.00	13.60	40.80	40.80	0.00	0.00	272.00	272.00	204.00	272.00	340.00	68.00	2312.00
iii) Com.Sheepfarm(100t+4m)	No.	10.813	5	Phy.			5	10	10	0	0	0	0	0	0	0	0	0	22	18	18	0	83
	Fin.		40.55	Fin.			81.10	0.00	81.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	178.42	145.98	145.98	0.00	673.13	
iv) Ram lamb Rearing	No.	1.012	100	Phy.			100	500	500	500	0.00	0.00	0.00	0.00	0.00	0.00	35.00	38.00	30.00	25.00	25.00	5.00	209
	Fin.		12.16	Fin.			3.80	3.80	3.80	3.80	0.00	0.00	0.00	0.00	0.00	0.00	26.60	26.60	28.88	22.80	19.00	3.80	168.84
v) Sheep/Goat(500+25)	No.	48.067	100	Phy.			100	500	500	500	1.00	1.00	1.00	1.00	1.00	2.00	5.00	5.00	5.00	5.00	5.00	3.00	58
	Fin.		36.05	Fin.			360.25	360.25	360.25	360.25	36.05	36.05	36.05	36.05	36.05	72.10	180.25	180.25	180.25	180.25	180.25	108.15	2080.90
vi) Meat Shops	No.	3.963	100	Phy.			2.00	2.00	2.00	2.00	1.00	1.00	1.00	2.00	3.00	2.00	5.00	5.00	5.00	5.00	5.00	45	50
	Fin.		14.95	Fin.			5.98	5.98	5.98	5.98	2.99	2.99	2.99	5.98	8.97	14.95	5.98	5.98	14.95	14.95	14.95	134.55	134.55
vii) Sheep(SHG(10t+1m) - (15%)	No.	5.000	100	Phy.			250.00	250.00	300.00	200.00	250.00	200.00	300.00	300.00	300.00	250.00	300.00	250.00	300.00	250.00	250.00	650.00	4800
	Fin.		1375.00	Fin.			1375.00	1375.00	1650.00	1100.00	1375.00	1100.00	1650.00	1650.00	1650.00	1375.00	1650.00	1375.00	1650.00	1650.00	2475.00	3575.00	26400.00
viii) Piggery (breeding unit) 10+1	No.	5.471	100	Phy.			0.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	5.00	5.00	10.00	10.00	10.00	0.00	205.00	50
	Fin.		0.00	Fin.			20.50	20.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.50	20.50	41.00	41.00	41.00	0.00	205.00	50
Sectoral total AH - SGP						1920.91	2029.18	1785.63	2401.63	1903.54	1618.04	1116.59	1858.78	1776.83	1771.57	2294.30	2864.33	2661.53	3136.98	3864.18	4493.90	37177.92	
(9) Fisheries																							
i)Renovation of inland fish tanks	No.	3.630	100	Phy.			0	0	0	0	0	0	20	0	30	0	0	0	0	0	20	0	70
	Fin.		2.90	Fin.			0.00	0.00	0.00	0.00	0.00	0.00	58.00	0.00	87.00	0.00	0.00	0.00	0.00	58.00	0.00	203.00	70
ii) New tanks	No.	8.371	100	Phy.			0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	25
	Fin.		6.70	Fin.			0.00	0.00	0.00	0.00	0.00	0.00	67.00	0.00	67.00	0.00	0.00	0.00	0.00	0.00	35.50	0.00	167.50
iii) WC for scamp/fish	ha	1.815	0	Phy.			0	50	41	50	30	0	0	140	100	200	30	0	30	0	150	0	821
	Fin.		0.00	Fin.			0.00	72.50	59.45	43.50	0.00	0.00	203.00	145.00	290.00	43.50	0.00	43.50	0.00	217.50	0.00	1190.45	
iv) Renovation brackish water tank	No.	1.815	100	Phy.			0.00	0.00	0.00	0.00	0.00	0.00	40.00	0.00	35.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	75
	Fin.		0.00	Fin.			0.00	0.00	0.00	0.00	0.00	0.00	50.75	0.00	50.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.75
v) WC for brackish water prawn	No.	2.420	100	Phy.			0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1000
	Fin.		1.94	Fin.			0.00	0.00	0.00	0.00	0.00	0.00	97.00	0.00	97.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1940.00
vi) FRP Calamarans	No.	5.500	100	Phy.			0.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13
	Fin.		4.40	Fin.			0.00	0.00	0.00	0.00	0.00	0.00	22.00	0.00	22.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	57.20
vii) Motorised Boats	ha	3.025	100	Phy.			0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	25.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45
	Fin.		2.42	Fin.			0.00	0.00	0.00	0.00	0.00	0.00	46.40	0.00	60.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	108.90
viii) Recirculatory Aqua Culture System(Tank Size- 7.68 x 7.68 x 1.83m)	No.	55.000	100	Phy.			5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	80
	Fin.		44.00	Fin.			220.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	220.00	3520.00	3520.00
ix) Construction of Bldfoc ponds for Fish water, fish farming ind inputs	No.	15.400	100	Phy.			4.90	2.00	2.00	2.00	1.00	1.00	4.00	2.00	4.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	35
	Fin.		12.32	Fin.			49.28	24.64	24.64	24.64	12.32	12.32	49.28	24.64	49.28	24.64	24.64	24.64	24.64	24.64	24.64	12.32	431.20
x) Establishment of stationary or mobile Aquacults for fish and	No.	38.500	100	Phy.			0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2
	Fin.		30.80	Fin.			0.00	0.00	0.00	0.00	0.00	0.00	30.80	0.00	30.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	61.60
xi) Purchased Motor cycle with box for retail fish marketing	No.	0.825	100	Phy.			5.00	5.00	5.00	5.00	10.00	10.00	50.00	15.00	100.00	15.00	5.00	10.00	5.00	10.00	5.00	5.00	295
	Fin.		0.66	Fin.			6.60	3.30	3.30	3.30	6.60	6.60	33.00	9.90	66.00	9.90	3.30	6.60	3.30	6.60	3.30	3.30	174.90
xii) Establishment of mini-retail fish outlets	No.	1.430	100	Phy.			5.00	5.00	5.00	5.00	5.00	5.00	10.00	4.00	20.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	104
	Fin.		1.14	Fin.			5.70	5.70	5.70	5.70	5.70	5.70	11.40	4.56	22.80	5.70	5.70	5.70	5.70	5.70	11.40	5.70	118.56
Sectoral total Fisheries						281.58	253.64	326.14	326.14	313.09	288.12	244.62	1770.88	404.10	1949.33	303.74	253.64	300.44	253.64	571.64	241.32	8082.06	
(10) Farm credit - other activities																							
i) Bullocks	No.	0.726	100	Phy.			200	100	100	100	100	200	200	200	200	200	200	150	100	150	100	2400	2400
	Fin.		0.65	Fin.			130	65	65	65	65	130	130	130	130	130	97.5	65	97.5	65	65	1560.00	1560.00
ii) Bullock Carts	No.	0.519	100	Phy.			110	110	110	100	100	150	100	100	100	140	100	100	100	100	100	1780	1780
	Fin.		0.47	Fin.			51.7	51.7	51.7	47	47	70.5	47	47	65.8	65.8	47	51.7	47	51.7	47	836.60	836.60
iii) SHG Other allied +(20%)	No.	5.500	100	Phy.			540	520	600	600	600	600	600	400	300	400	300	400	300	400	400	7880	7880
	Fin.		5.500	Fin.			2970	2860	3300	3300.00	3850.00	3300.00	3300.00	2200	1650	2200	1650	2200	1650	2200	2200	41690.00	41690.00
Sectoral total Farm Credit -Others						3151.70	3041.70	2976.70	3416.70	3412.00	3962.00	3500.50	3477.00	2377.00	1845.80	2395.80	1794.50	2316.70	1794.50	2312.00	2312.00	44086.60	
(11) Integrated Farming System																							
i) Mangoes+Vegetables+Cows(1+1)+G attery(5+1)	No.	2.233	100	Phy.			20.00	20.00	20.00	20.00	10.00	10.00	20.00	20.00	20.00	30.00	30.00	30.00	30.00	30.00	15.00	345	345
	Fin.		1.67	Fin.			33.40	33.40	33.40	33.40	16.70	16.70	33.40	33.40	33.40	33.40	50.10	50.10	50.10	50.10	50.10	25.05	576.15
ii)Maize+Pulses(Red Gram)+Sheep rearing	No.	2.886	100	Phy.			0.00	40.00	30.00	30.00	15.00	15.00	10.00	10.00	10.00	10.00	30.00	30.00	30.00	30.00	30.00	20.00	330
	Fin.		2.01	Fin.			80.40	20.10	60.30	60.30	30.15	30.15	20.10	20.10	20.10	40.20	60.30	60.30	60.30	60.30	60.30	40.20	663.30
iii) Paddy+Fishery+Poultry	No.	2.862	100	Phy.			20.00	40.00	40.00	40.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	20.00	610
	Fin.		2.15	Fin.			43.00	86.00	86.00	86.00	107.50	107.50	107.50	86.00	86.00	107.50	86.00	86.00	86.00	86.00	86.00	43.00	1311.50
Sectoral total Integrated Farming System						76.40	199.80	118.00	179.70	179.70	154.35	154.35	161.00	139.50									

# Annexure-I

Activity	Unit Cost	Unit Size	Phy. / Fin.	Bank Loan	Guntur/M angalgiri	Prathipadu	Tadikond	Sattenapa a	Sattenapa II	Tenali-I	Tenali-II	Repalle	Ponnur	Bapla	Narasara pet	Pidugural la	Gurjala	Machirla	Vinukonda	Chilakalur peta
B. Agriculture Infrastructure B. Agriculture Infrastructure (1) Construction of Storage Facilities	555.640	No.	Phy.	439.2	5	10	4	8	5	2	5	2196.15	2196.15	5	10	10	10	10	5	106
	Fin.			2196.15	4392.30	1756.92	3513.84	2196.15	878.46	878.46	2196.15	2196.15	2196.15	4392.30	4392.30	4392.30	4392.30	4392.30	2196.15	46550.38
	73.205	No.	Phy.	3	10	15	15	15	10	15	20	20	20	20	20	15	20	15	20	265
	Fin.			54.90	823.50	823.50	823.50	549.00	823.50	823.50	1098.00	1098.00	1098.00	1098.00	1098.00	823.50	1098.00	1098.00	1098.00	14548.50
	14.64	No.	Phy.	2	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	18
	Fin.			13.18	26.36	0.00	13.18	0.00	0.00	0.00	13.18	0.00	26.36	26.36	26.36	26.36	26.36	26.36	26.36	237.24
	439.230	No.	Phy.	3	1	2	1	1	1	1	2	1	1	1	2	1	1	1	1	20
	Fin.			329.4	988.26	329.42	658.84	329.42	329.42	329.42	329.42	329.42	329.42	658.84	329.42	329.42	329.42	329.42	329.42	6866.40
	465.850	No.	Phy.	2	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	48
	Fin.			349.3	698.78	1048.17	1048.17	1048.17	1048.17	1048.17	1397.56	1048.17	1048.17	1048.17	1048.17	1048.17	1048.17	1048.17	1048.17	16770.72
Sectoral total Storage Facilities				4458.55	6593.39	4287.43	5728.11	4122.74	3079.55	3079.55	5034.31	4871.74	4698.10	7223.67	6619.75	6619.75	6619.75	6884.25	4698.10	84703.24
(2) Land Development, Soil Conservation, Watershed Development	0.451	ha	Phy.	0	0	0	0	0	0	0	310	0	0	0	0	0	0	0	0	620
	Fin.			0.41	0	0	0	0	0	0	127.1	0	0	0	0	0	0	0	0	254.20
	0.620	ha	Phy.	0	270	270	270	180	0	0	160	150	70	100	300	260	2100	100	300	1176.00
	Fin.			0.560	151.20	151.2	100.8	0	0	89.6	84	39.2	39.2	56	168	145.60	56	60	60	860
	2.372	No.	Phy.	50	50	50	50	50	40	50	60	60	60	60	60	60	60	60	60	860
	Fin.			2.130	106.50	106.5	106.5	106.5	85.2	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8	127.8	1831.80
	0.914	No.	Phy.	20	20	20	20	20	0	0	10	25	25	25	25	25	25	25	25	255
	Fin.			0.820	16.40	16.4	16.4	16.4	16.4	0	0	8.20	20.5	20.5	20.5	20.5	20.5	20.5	20.5	209.10
	0.652	ha	Phy.	30	30	30	30	35	30	0	0	70	150	150	65	65	65	65	65	900
	Fin.			0.59	17.76	17.7	29.5	29.5	0	0	41.3	41.3	41.3	41.3	41.30	88.5	38.35	38.35	38.35	531.00
1.386	Ha.	Phy.	50	50	50	50	50	50	50	50	50	50	50	50	50	60	60	60	840	
Fin.			1.25	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.5	62.50	75	75	75	75	1050.00	
Sectoral total LD, SC, WD				203.10	354.30	366.10	357.25	315.70	164.10	147.70	296.10	231.60	448.30	323.80	338.50	351.00	317.65	429.65	407.25	5052.10
(3) Agri Infra Others	0.252	No	Phy.	100	80	80	80	80	80	80	80	80	80	80	80	80	80	80	100	1280
	Fin.			19.00	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	15.20	19.00	238.40
	14.890	No.	Phy.	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	120
	Fin.			11.1	11.1	11.1	11.1	167.35	167.35	55.85	55.85	55.85	55.85	55.85	55.85	55.85	55.85	55.85	55.85	1340.40
	0.305	No.	Phy.	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	1200
	Fin.			0.23	34.50	23.00	23.00	16.10	16.10	13.80	13.80	13.80	13.80	13.80	23.00	23.00	23.00	27.60	27.60	328.60
	212.377	No.	Phy.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	17
	Fin.			159.2	318.56	159.28	159.28	159.28	159.28	159.28	159.28	159.28	159.28	159.28	159.28	159.28	159.28	159.28	159.28	2707.76
	26.620	No.	Phy.	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Fin.			19.97	19.97	0.00	0.00	0.00	0.00	19.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.94
268.200	No.	Phy.	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	18	
Sectoral total Agri Infra -Others				908.03	510.08	510.08	506.93	559.03	762.43	448.78	468.75	448.78	434.53	447.83	455.48	455.48	460.08	463.88	463.88	8304.05
Sub -Total Agriculture Infrastructure																				98059.39
C. Ancillary Activities (1) Food & Agro Processing	14.84	No.	Phy.	20	12	10	15	10	10	5	15	10	5	10	10	10	10	10	2	156
	Fin.			219.00	131.76	109.80	164.70	109.80	109.80	54.90	164.70	109.80	54.90	109.80	109.80	109.80	109.80	109.80	21.96	1712.88
	14.64	No.	Phy.	4	4	4	4	0	0	2	3	2	2	2	2	2	2	2	2	20
	Fin.			10.98	43.92	43.92	43.92	0.00	0.00	21.96	32.94	21.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	219.60
	266.200	No.	Phy.	10	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	38
	Fin.			199.65	998.25	998.25	998.25	0.00	0.00	199.65	0.00	199.65	0.00	199.65	399.30	0.00	0.00	0.00	1998.30	7786.35
	14.64	No.	Phy.	40	40	40	40	30	30	30	30	30	30	30	30	30	30	30	30	40
	Fin.			109.80	439.20	549.00	549.00	549.00	549.00	439.20	549.00	439.20	329.40	549.00	549.00	549.00	439.20	439.20	549.00	8123.20
	73.205	No.	Phy.	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	80
	Fin.			54.90	135.16	274.50	274.50	274.50	274.50	274.50	274.50	274.50	274.50	274.50	274.50	274.50	274.50	274.50	274.50	5490.00
732.080	No.	Phy.	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	20	
Sectoral total Food Processing				3843.38	1098.08	549.04	549.04	549.04	549.04	2745.20	549.04	1098.08	1098.08	1098.08	1098.08	549.04	1098.08	549.04	1098.08	17569.25
14.64	No.	Phy.	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	40
Fin.			400.00	150.00	100.00	100.00	100.00	100.00	200.00	100.00	100.00	100.00	100.00	200.00	100.00	100.00	100.00	150.00	200.00	2450
13.310	No.	Phy.	13.18	5272.00	1977.00	1318.00	1318.00	2636.00	1977.00	1318.00	1318.00	1318.00	1318.00	2636.00	1318.00	1318.00	1318.00	1977.00	2636.00	32291.00
Fin.			11.98	35.94	23.96	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	107.82
Sub-Total Food Processing				13881.74	4986.67	3842.51	3755.67	2811.32	4130.32	4085.40	5942.99	2712.50	3274.53	5078.66	3041.94	2580.74	3239.58	3349.54	6588.02	73302.13

## Annexure-I

Activity	Unit Cost	Unit Size / Fin.	Phy. / Fin.	Bak. / Fin.	Guntur/ M. angalgiri	Prathipadu	Tadikonda	Sattenapa III-4	Sattenapa III-11	Tenali-I	Tenali-II	Repalle	Ponnur	Bupla	Narasara pet	Pidugurala	Gurajala	Macherla	Vinukonda	Chilakaluri peta	Activity
<b>(2) Agri Ancillary Others</b>																					
i) Farmer Producer organisations	133.100	No.	Phy.	99.83	4.00	3.00	1.00	2.00	1.00	2.00	2.00	2.00	2.00	2.00	4.00	4.00	2.00	4.00	4.00	2.00	41
ii) Agri clinics and Agri Business centres	19.327	No.	Phy.	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	18
iii) Loans to PACS/SCS/Coop societies	148.416	No.	Phy.	14.50	28	29	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	14.5	261.00
Sectoral total Agri Ancillary -Others			Phy.	109.81	549.05	549.05	549.05	549.05	549.05	549.05	549.05	549.05	549.05	549.05	549.05	549.05	549.05	549.05	549.05	549.05	8455.37
<b>SUB TOTAL ANKILARY ACTIVITIES</b>			Fin.	97.37	877.54	877.54	877.54	877.54	877.54	877.54	877.54	877.54	877.54	877.54	877.54	877.54	877.54	877.54	877.54	877.54	12809.40
<b>TOTAL AGRICULTURE</b>																					8611.53
																					2128829.30
<b>II - Micro, Small and Medium Enterprises (MSME)</b>																					
<b>A) Manufacturing sector - term loan</b>																					
1. Micro enterprises -Term loan																					
i) Hand looms	2.926	No.	Phy.	2.19	1095.00	438	200	200	200	200	200	200	200	200	200	200	200	200	200	200	1710
ii) Tiny Sector	6.655	No.	Phy.	5.32	2128	1862	1117.4	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	3744.30
iii) Village Inds.	2.662	No.	Phy.	4.99	2495.00	998	998	998	998	998	998	998	998	998	998	998	998	998	998	998	13972.00
iv) Rural Artisans	1.331	No.	Phy.	2.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	2890
2. Small enterprises	66.550	No.	Phy.	48.91	59892	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	2750
3. Medium enterprises	66.550	No.	Phy.	48.91	59892	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	4991	2530
Sectoral total -Term loan working capital			Fin.	499.13	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	9982.6	6887.20
<b>B. Manufacturing sector - credit</b>																					
i) Micro Enterprises	6.655	No.	Phy.	5.32	2128	1862	1117.4	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	3850
ii) Small Enterprises	36.603	No.	Phy.	29.28	5856	5856	5856	5856	5856	5856	5856	5856	5856	5856	5856	5856	5856	5856	5856	5856	1950
iii) Medium Enterprises	29.282	No.	Phy.	23.43	234.3	117.1	46.86	46.86	46.86	46.86	46.86	46.86	46.86	46.86	46.86	46.86	46.86	46.86	46.86	46.86	49
Sectoral total MSME Working Capital			Fin.	8218.30	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	7635.15	6704.07
<b>C. MSME services - Investment credit</b>																					
Micro enterprises																					
i) Transport Operators	3.983	No.	Phy.	2.99	1794	1495	500	200	200	200	200	200	200	200	200	200	200	200	200	200	3735
ii) Retail Tra. & Small Busi.	2.926	No.	Phy.	2.19	1095.00	5000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1167.65
iii) Professional & Self Emp.	4.389	No.	Phy.	3.29	3100	10950	4380	4380	4380	4380	4380	4380	4380	4380	4380	4380	4380	4380	4380	4380	33098
Small enterprises	33.275	No.	Phy.	24.96	249.60	124.80	124.80	124.80	124.80	124.80	124.80	124.80	124.80	124.80	124.80	124.80	124.80	124.80	124.80	124.80	19200
Medium enterprises	242	No.	Phy.	181.50	2722.5	1815	1815	1815	1815	1815	1815	1815	1815	1815	1815	1815	1815	1815	1815	1815	65
Sectoral total - Investment credits			Fin.	36865.10	20964.80	14394.80	10132.92	9112.80	13497.80	8455.80	11307.80	9037.92	7792.42	5341.92	4859.07	6023.88	6223.30	5341.92	6023.88	6223.30	17839.17
<b>D. MSME - services working capital</b>																					
i) Micro enterprises	6.655	No.	Phy.	5.32	2128	1862	1117.4	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	1064	850
ii) Small enterprises	33.275	No.	Phy.	26.62	266.20	55.24	55.24	55.24	55.24	55.24	55.24	55.24	55.24	55.24	55.24	55.24	55.24	55.24	55.24	55.24	422.00
iii) Medium enterprises	133	No.	Phy.	106.48	2662	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	2129.6	1251.14
Sectoral total services working capital			Fin.	3460.2	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	2448.84	27684.80
<b>SECTORAL TOTAL MSME</b>																					33457.94
<b>III. EXPORT CREDIT</b>																					507259.58
i) Freshment / packing credit	2662.00	No.	Phy.	2395.80	7187.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
ii) Post shipment	1996.50	No.	Phy.	1796.85	5390.55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Sectoral Total Export credit			Fin.	12577.95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17359.55

## Annexure-I

Activity	Unit Cost	Unit Size	Phy. / Fin.	Bank Loan	Guntur/M angalgiri	Prathipadu	Tadikonda	Sattenapalli - I	Sattenapalli - II	Tenali - I	Tenali - II	Repalle	Ponnur	Baptla	Narasara pet	Pidugurala	Gurajala	Macherla	Vinukonda	Chilakaluri peta	Activity
<b>IV. Education</b>																					
i) Education Loan in India	16.500	No.	Phy.		200	200	200	200	200	200	200	200	100	150	150	100	100	100	100	100	2500
			Fin.	12.374	2475.00	2475.00	2475.00	2475.00	2475.00	2475.00	2475.00	2475.00	1237.50	1856.25	1856.25	1237.50	1237.50	1237.50	1237.50	1237.50	30937.50
sectoral Total Education					2475	2475	2475	2475	2475	2475	2475	2475	1237.5	1856.25	1856.25	1237.5	1237.5	1237.5	1237.5	1237.5	30937.50
<b>V. Housing</b>																					
i) Purchase/construction of new dwell	27.500	No.	Phy.		1000	500	500	250	500	500	500	500	250	200	200	250	250	250	250	250	6150
			Fin.	20.625	20625.00	10312.50	10312.50	5156.25	10312.50	10312.50	10312.50	10312.50	5156.25	4125.00	4125.00	5156.25	5156.25	5156.25	5156.25	5156.25	126843.75
ii) Repairs to damaged dwelling	6.600	No.	Phy.		500	250	250	250	250	250	250	250	200	200	200	200	200	200	200	200	3550
			Fin.	4.95	2475.00	1237.50	1237.50	1237.50	1237.50	1237.50	1237.50	1237.50	990.00	990.00	990.00	990.00	990.00	990.00	990.00	990.00	19057.50
sectoral Total Housing					23100.00	11550.00	11550.00	11550.00	11550.00	11550.00	11550.00	11550.00	6146.25	5115.00	5115.00	6146.25	6146.25	6146.25	6146.25	6146.25	145901.25
<b>VI. Renewable Energy</b>																					
i) Bio gas	0.231	No.	Phy.		20	20	15	15	10	10	10	10	20	20	20	20	20	20	20	20	270
			Fin.	0.12	2.4	2.4	1.8	1.32	1.20	1.20	1.20	1.20	2.40	2.40	2.40	2.40	2.40	2.40	2.40	2.40	32.40
ii) Solar off grid - home lightning sys	0.363	No.	Phy.		20.00	10.00	10.00	10	10	10	10	10	10	10	10	10	10	10	10	10	240
			Fin.	0.27	5.4	2.7	2.7	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	64.80
on grid - roof top solar systems	1.483	No.	Phy.		20	20	20	10	10	10	10	10	5	5	5	5	5	5	5	5	190
			Fin.	1.16	22	22	22	11	11	11	11	11	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	209.00
iv) Solar pumpsets 5HP	6.655	No.	Phy.		20.00	10.00	10	10	10	10	10	10	10	10	10	10	10	10	10	10	180
			Fin.	3.33	66.6	33.3	33.3	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	33.30	599.40
sectoral Total Renewable Energy					96.40	60.40	48.80	48.32	48.20	48.20	48.20	48.20	43.90	60.40	63.10	46.60	52.10	49.30	46.60	51.26	905.60
<b>VII. Others</b>																					
Loans to SHGs (overall)	5.000	No.	Phy.		2700	2600	3000	3000	3000	3500	3000	3000	3000	2500	2500	2000	2000	2000	2000	2000	41400
			Fin.	6.00	14850.000	14300.000	16500.000	16500.000	16500.000	19250.000	16500.000	16500.000	16500.000	13750.000	13750.000	11000.000	11000.000	11000.000	11000.000	11000.000	227700.00
Loans to SHGs (classified under Others (40%))	5.000	No.	Phy.		1080.00	1040.00	1200.00	1200.00	1200.00	1400.00	1200.00	1200.00	1200.00	1000.00	1000.00	800	800	800	800	800	16560
			Fin.	6.00	6480	6240	7200	7200	7200	8400	7200	7200	7200	6000	6000.00	4800.00	4800.00	4800.00	4800.00	4800.00	99360.00
Loans to JLGs	2.500	No.	Phy.		500	500	500	500	500	500	500	500	300	300	300	500	500	500	500	500	6700
			Fin.	3.00	1500	1500	1500	1500	1500	1500	1500	1500	900	900	1500.00	1500.00	1500.00	1500.00	1500.00	1500.00	20100.00
PMJDY loans	0.050	No.	Phy.		500.00	500.00	500	500	500	500	500	500	25	25	25	25	25	25	25	25	400.00
			Fin.	0.05	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	400.00
sectoral Total Renewable Energy					8005.00	7765.00	8725.00	8725.00	8725.00	9925.00	8725.00	8725.00	8125.00	7525.00	7525.00	6325.00	5425.00	5425.00	5425.00	5725.00	118860.00
<b>VIII. Social Infrastructure – Involving bank credit</b>																					
i) Construction / Improving schools	18.150	No.	Phy.		2.000	2.000	2.000	2.000	2.000	3.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	2.000	33
			Fin.	13.610	27.220	27.220	27.220	27.220	27.220	40.830	27.220	27.220	27.220	27.220	27.220	27.220	27.220	27.220	27.220	27.220	448.13
ii) Construction / Improving hospital	36.300	No.	Phy.		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	10
			Fin.	27.230	27.230	0.000	0.000	27.230	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	54.460	54.460	0.000	0.000	272.30
iii) RO waters plants (2000 LPD)	3.630	No.	Phy.		20.000	10.000	20.000	11.000	10.000	10.000	10.000	10.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	20.000	234
			Fin.	2.720	54.400	27.200	54.400	29.920	27.200	27.200	27.200	27.200	54.400	54.400	54.400	54.400	54.400	54.400	54.400	54.400	636.48
Sectoral Total social infrastructure					108.85	108.85	54.42	81.62	81.65	68.03	81.65	54.42	81.62	81.62	108.85	81.62	136.08	89.84	54.42	81.65	1357.91
<b>TOTAL PRIORITY SECTOR</b>																					2846420.69
<b>OF WHICH</b>																					
1. SHG		No.	Phy.		2700.000	2600.000	3000.000	3000.000	3000.000	3500.000	3000.000	3000.000	3000.000	2500.000	2500.000	2000.000	2000.000	2000.000	2000.000	2000.000	41400
			Fin.	5.500	14850.000	14300.000	16500.000	16500.000	16500.000	19250.000	16500.000	16500.000	16500.000	13750.000	13750.000	11000.000	11000.000	11000.000	11000.000	11000.000	227700.00
TOTAL SHG					14550.00	14300.00	16500.00	16500.00	16500.00	19250.00	16500.00	16500.00	16500.00	13750.00	13750.00	11000.00	11000.00	11000.00	11000.00	11000.00	227700.00



**Annexure II**  
**An Overview of Ground level Credit Flow-Agency wise and Sector wise(3 Years) and Target for 2021-22**  
 (₹. Lakh)

S.No.	Agency/Type of loan	2018-19		2019-20		2020-21		2021-22
		Target	Achievement	Target	Achievement	Target	Achievement	Target
1	<b>CropLoan</b>							
	CBs	690615.39	683737.78	743890.69	659790.14	810621.02	745463.63	1006000.00
	DCCB	155396.97	196796.03	171838.31	204384	227302.01	206763	224000.00
	RRB	123999.96	198370	224108.00	224807	242076.97	299278	270000.00
	<b>SubTotal</b>	<b>970012.32</b>	<b>1078903.81</b>	<b>1139837.00</b>	<b>1088981.14</b>	<b>1280000.00</b>	<b>1251504.63</b>	<b>1500000.00</b>
2	<b>Term Loan (MT+LT)</b>							
	CBs	253031.10	259076.3	278841.95	200070.58	286547.35	241042.86	312800.00
	DCCB	4961.47	4754.46	5665.05	4996	7990.65	43010.57	38000.00
	RRB	33323.06	63817	55471.00	53373	65462.00	84116	49200.00
	<b>SubTotal</b>	<b>291315.63</b>	<b>327647.76</b>	<b>339978.00</b>	<b>258439.58</b>	<b>360000.00</b>	<b>368169.43</b>	<b>400000.00</b>
3	<b>Total Agri. Credit (1+2)</b>							
	CBs	943646.49	942814.08	1022732.64	859860.72	1097168.37	986506.49	1318800.00
	DCCB	160358.44	201550.49	177503.36	209380.00	235292.66	249773.57	262000.00
	RRB	157323.02	262187.00	279579.00	278180.00	307538.97	383394.00	319200.00
	<b>SubTotal</b>	<b>1261327.95</b>	<b>1406551.57</b>	<b>1479815.00</b>	<b>1347420.72</b>	<b>1640000.00</b>	<b>1619674.06</b>	<b>1900000.00</b>
4	<b>Non-Farm Sector</b>							
	CBs	390092.89	389331.54	433893.82	311919	445879.51	369495.99	475800.00
	DCCB	835.51		1114.18		34423	3888.12	2200.00
	RRB	4074.78	16893	20900	13447	19697.49	20517	22000.00
	<b>SubTotal</b>	<b>395003.18</b>	<b>406224.54</b>	<b>455908.00</b>	<b>325366.00</b>	<b>500000.00</b>	<b>393901.11</b>	<b>500000.00</b>
5	<b>Other Priority Sector</b>							
	CBs	222891.14	65801.71	165955.56	85577.74	186199.13	180670.2	228000.00
	DCCB	4599.54	7309.97	5016.44	5477.26	5000.97	22017.74	10000.00
	RRB	6017.87	5385	15043	3783	8799.9	4541	12000.00
	<b>SubTotal</b>	<b>233508.55</b>	<b>78496.68</b>	<b>186015.00</b>	<b>94838.00</b>	<b>200000.00</b>	<b>207228.94</b>	<b>250000.00</b>
6	<b>Total priority sector</b>							
	CBs	1556630.52	1397947.33	1622582.02	1257357.46	1729247.01	1536672.68	2022600.00
	DCCB	165793.49	208860.46	183633.98	214857.26	274716.63	275679.43	274200.00
	RRB	167415.67	284465.00	315522.00	295410.00	336036.36	408452.00	353200.00
	<b>Grant Total (3+4+5)</b>	<b>1889839.68</b>	<b>1891272.79</b>	<b>2121738.00</b>	<b>1767624.72</b>	<b>2340000.00</b>	<b>2220804.11</b>	<b>2650000.00</b>
	<b>SHG</b>							
	CBs	106734.16	139651.96	102645.39	104392.8	102645.39	104392.8	104392.8
	DCCB	2530.78	1717.55	2726.7	1509.18	2726.7	1509.18	1509.18
	RRB	29238.36	60045	48229	51312	48229	51312	51312
	<b>Total</b>	<b>138503.3</b>	<b>201414.51</b>	<b>153601.09</b>	<b>157213.98</b>	<b>153601.09</b>	<b>157213.98</b>	<b>157213.98</b>

Annexure III  
Sub Sector-wise and Agency wise credit flow under agriculture and allied activities by all agencies during 2018-19, 2019-20 , 2020-21 and target for 2021-22  
(₹ lakh)

S.No.	Particulars Agencies/Activities	2018-19				2019-20				2020-21				2021-22 (Targets)			
		CBs	Coops.	RRBs	Total	CBs	Coops.	RRBs	Total	CBs	Coops.	RRBs	Total	CBs	Coops.	RRBs	Total
I	Crop Loans	683727.78	196796.03	198370.00	1078903.81	659790.00	204384.00	224807.00	1088081.00	745403.63	206763	299278	1251504.63	1006000	224000	270000	1500000.00
II	Term Loans																
1	MI	11219.00	0.00	1417.00	12636	6098.17	469.09	2814.54	9381.80	16765.89	2241.09	3735.15	22742.13	13141.15	1596.43	2066.96	16804.54
2	LD	13255.00	619.99	567.00	14441.99	6969.75	536.13	3216.81	10722.69	10186.36	2546.59	4244.32	16977.27	14932.52	1814.05	2348.72	19095.30
3	FM	15194.53	40.77	850.00	16085.3	7762.81	597.14	3582.84	11942.79	11437.00	2859.25	4795.42	19061.67	16765.89	2936.78	2637.09	21439.75
4	P&H	8646.58	196.36	2000.00	10842.94	5232.84	402.53	2415.15	8050.52	7007.80	1751.95	2919.92	11679.67	10272.96	1247.99	1615.82	13136.78
5	DD	86524.61	409.80	42500.00	129434.41	62465.44	4805.03	28830.20	96100.67	67199.24	20570.86	34284.77	122054.87	120622.10	14653.58	18972.52	154248.16
6	Poultry	15259.08	63.08	9000.00	24322.162	11737.95	902.92	5417.52	18058.39	15268.97	3817.24	6362.07	25448.28	22383.49	2719.30	3530.65	28923.13
7	S/G/P	6001.08	1210.05	4000.00	11211.13	5410.53	416.19	2497.17	8323.89	7968.84	1992.21	3320.35	13281.40	11679.69	1418.89	1837.09	14935.67
8	Fisheries	14831.00	200.00	1500.00	16531	7977.91	613.69	3682.11	12273.71	11126.06	2781.51	4635.86	18543.43	16310.06	1981.40	2565.39	20856.85
9	FWLD	292.45	0.00	0.00	292.45	141.14	10.86	65.14	217.14	191.41	47.85	79.75	319.01	280.59	34.09	44.13	333.81
10	SMY	73195.00	0.00	1500.00	74695	36048.03	2772.83	16637.55	55458.51	34068.66	8317.17	18251.28	60837.11	49942.39	6067.17	7855.39	63864.95
11	Renewable energy	12.00	0.00	0.00	12	5.79	0.45	2.67	8.91	7.90	1.97	3.28	13.15	11.53	1.40	1.81	14.74
12	Food and agro processing	7594.00	0.00	0.00	7594	3664.89	281.91	1691.49	5638.29	4977.34	1244.33	2073.86	8295.56	7296.44	886.40	1147.65	9330.49
13	Others	9145.38	310.00	94.00	9549.38	14471.38	1113.02	6678.11	22262.41	19833.47	28620.97	8263.00	56717.44	29161.41	3542.63	4586.77	37290.80
	Sub-Total II	261169.71	3050.05	63428.00	327647.76	167986.53	12921.89	77531.30	258439.72	206038.90	76993.00	92939.05	375970.95	312800.00	38000.00	49200.00	400000.00
	Grand Total (I-II)	944907.49	199846.08	261798.00	1406551.57	827776.53	217305.89	302338.30	1347420.72	951502.53	283756.00	392217.05	1627475.58	1318800.00	262000.00	319200.00	1900000.00

### Annexure IV Indicative Unit Costs (for Major Activities of the District) 2022-23

Sl.No.	Activity	Unit	Unit Cost (₹)	Sl.No.	Activity	Unit	Unit Cost (₹)
<b>I</b>	<b>Minor Irrigation</b>			<b>VI</b>	<b>Dairy Development</b>		
a.	Bore Well	No.	68300	a.	CBCs - 2 animals	No.	152000
b.	Pumpset	No.	55400-91000	b.	GMBs - 2 animals	No.	186000
c.	Dugwell	No.	47600-126400	c.	Mini Dairy 5 animals - CBCs	No.	454300
d.	Drip Irrigation Mango	Ha.	25948-41574	d.	Mini Dairy 5 animals - GMBs	No.	540000
e.	Drip Irrigation Banana/Papaya/Floriculture	Ha.	25984-134684	e.	Mini Dairy 10 animals - GMBs	No.	1186300
f.	Sprinkler Irrigation	Ha.	20300-43480	f.	Mini Dairy 10 animals - CBCs	No.	1067000
g.	Rainguns (90mm)	No.	65600	g.	Calf Rearing - CBCs	No.	35400
h.	Artificial recharge of dried borewell	No.	44000	h.	Calf Rearing - GMBs	No.	45100
<b>II</b>	<b>Land Development</b>			i.	Fodder Cultivation	Ac	33000
a.	Contour Bunding (slope 2-10%)	Ac	11000	j.	ZBNF Non-descript Cows	1+1	101500-110600
b.	Gully Plug with Stone (5 m)	No.	5700	<b>VII</b>	<b>Poultry Development</b>		
c.	Earthen Gully Plug with outlet (6m)	No.	3000	a.	Layer - 1000 Birds	No.	530000-570000
d.	Land Reclamation of saline soils	ac	16600	b.	Broiler - 1000 Birds	No.	303000-335000
e.	Tank Silt application	ac	24000	<b>VIII</b>	<b>Sheep, Goat and Piggery Development</b>		
f.	Farm Ponds (14 m x 14m 3m)	No.	74300	a.	Sheep (20+1 units) Nellore breed	No.	196600
g.	Mini Farm Ponds (10 m x 10 m x 2 m)	No.	17000	b.	Sheep (20+1 units) Deccani breed	No.	183900
h.	Barbed wire fencing cement poles	ac	84300	c.	Goat rearing (20+1 unit)	No.	165800
i.	NADEP Compost (10 x 6 x 3)	No.	16600	d.	Pig - Breeding unit (3+1)	No.	144100
j.	Vermi Compost Hatchery 260 TPA	No.	1353600	<b>IX</b>	<b>Bullocks &amp; Bullock Carts</b>		
k.	OFD works - 2% slope	ac	24800	a.	Bullocks (Pair)	No.	66000
l.	OFD works - 3% slope	ac	34000	b.	Bullock Carts	No.	47200
m.	Biofertilisers and Biopesticides Unit (200TPA)	No.	21238000	<b>X</b>	<b>Fisheries Development</b>		
<b>III</b>	<b>Farm Mechanisation</b>			a.	Composite Fish Culture (2 Ha.)	Ha.	566880
a.	Tractor with matching equipment and trolley (30-47 hp)	No.	500000-950000	b.	Intensive Fish Culture (Catla & Rohu)	Ha.	746900
b.	Combined Harvester	No.	As per make/HP	c.	Fresh Water Prawn Farming in Pond	Ha.	566000
c.	Power Tiller with matching equipment (12 hp)	No.	60000-200000	d.	Renovation of Ponds for Fish Culture	Ha.	300000
d.	Paddy Transplanters (self propelled)	No.	150000-300000	e.	Establishment of Stationary or mobile Aqua labs for fish and shrimp diseases diagnostics	No.	2500000-3500000
f.	Mini Tractor with equipments (15-24 hp)	No.	450000	f.	Fish Feed Mill (1-5 quintals)	No.	1000000
j.	Rotovator	No.	100000-115000	g.	Refrigerated Truck of 10 ton capacity	No.	2000000
k.	Turmeric Cooking Machine (4 drums)	No.	450000	h.	Mini-retail fish outlets	No.	130000
l.	Solar Fencing (5 line, 7 feet poles)	No.	60000	i.	Biofloc ponds for fish water	No.	1400000
m.	Groundnut Thresher	No.	130000	j.	Fishing craft and gill nets for riverine/reservoir fishing	No.	60000



## Annexure IV

n.	Groundnut Decorticator	No.	50000-150000	XI	Renewable Sources of Energy		
IV	Plantation & Horticulture			a.	Solar Water Heater (ETC)	Sq.m.	As per capacity/make
a.	Mango (High Density Planting(5x5m), 160 plants	Ac	133000	b.	Solar Water Heater (FPC)	Sq.m.	
b.	Mango (Ultra High Density Planting (4x3m), 440 plants	Ac	172000	c.	Solar Water Pumps	Watt	
c.	Mango Ultra High Density Planting (2.5 x 2.5 m), 640 plants	Ac	229000	d.	Solar PV Power Plant (1 MW)	No.	
d.	Citrus	Ac	76300	XII	Integrated Farming System	No.	200000
e.	Banana (Tissue Culture)	Ac	97500	a.	Mango+Vegetables+Cow (2)+Goatary(5+1)	2 ac	443260
f.	Dragon Fruit, 2.5x2.5, 1600 plants	Ac	626000	b.	Maize+Pulses+Sheep Rearing	20+1	329300
g.	Pomegranate	Ac	87600	c.	Paddy+Fishery+Poultry	1000 birds	706250
h.	Jasmine	Ac	68000	XIII	Storage Godowns		
i.	Guava (Ultra High Density Planting (3x3m), 440 plants	Ac	140200	a.	Rural Godown (50-1000 MT), Cost per MT	MT	3500
k.	Sapota	Ac	51900	b.	Rural Godown (50-1000 MT)	MT	3000
l.	Apple Ber, 5x5, 160 plants	Ac	55400	c.	Cold Storage	MT	11000
m.	Apple Ber, 4x4, 250 plants	Ac	69000	XIV	Forestry and Wasteland Development		
n.	Cashew	Ac	59500	a.	Teak	Ha.	72500
o.	Coconut	Ac	64000	b.	Bamboo	Ha.	65000
p.	Oil Palm (Drip)	Ac	98500	c.	Casurina	Ha.	71400
V	Sericulture			d.	Subabul	Ha.	66300
a.	Mulberry Cultivation	Ac	845000	e.	Eucalyptus (Clone)	Ha.	64500
b.	Twisting Unit (480 Spindles)	No.	974400				
c.	Multi end reeling unit (10 basins)	No.	1674800				

\*For item-wise unit costs based on specifications, NABARD's Unit Cost Booklet may be referred to.

**Annexure V**  
**Scales of finance of major crops in the district for 2021-22**

(₹ lakh)

S. No	Name of the crop	Irrigated / Rainfed	Scale of Finance /acre
1	Paddy	acre	0.350
2	SRI Paddy	acre	0.320
3	Ground nut	acre	0.270
4	Oil Seeds	acre	0.120
5	Pulses	acre	0.230
6	Cotton	acre	0.440
7	Tobacco	acre	0.730
8	Chillies	acre	0.990
9	Sugarcane	acre	0.690
10	Vegetables	acre	0.450
11	Turmeric	acre	0.850
12	Maize	acre	0.330
13	Other crops	acre	0.380

Note: SoF figures exclude both 30% increase (for maintenance and consumption) and 10% inflation.



## NABVENTURES Limited

Wholly owned subsidiary of NABARD

### Investment Focus

- › Sector Focus – Food/foodtech, Agritech, Agri/rural fintech and Rural enablers (Edutech, Health-tech, Ecommerce, etc.).
- › Stage- Pre-Series A (INR 5-20 crore) and Series A (INR 20-50 crore).
- › Pre-Series A deals have strong focus on Agtech, Healthtech & Edutech.
- › Sector of interest in Series A include consumer food brands, financial services, rural asset, light tech businesses.
- › The fund takes significant minority / minority positions.

**Registered Office:** NABARD, 2nd Floor A Wing,  
Plot No. C-24, G Block, BKC, Bandra (East), Mumbai 400051. India  
✉ e-mail : nabventure@nabard.org ☎ Phone: 91-22-26539357



## NABSAMRUDDHI FINANCE Limited

A Subsidiary of NABARD

"The objective of NABSAMRUDDHI is to provide credit facilities to individuals and legal entities in the off farm sector, microfinance, MSME and for the promotion, expansion, commercialization and modernization of agriculture and allied activities."

**Corporate Office:**  
NABARD, Gr. Floor, D Wing,  
C-24, G Block, BKC, Bandra East,  
Mumbai-400051  
Ph: 022- 26539486/9693  
✉ e-mail: nabsamruddhi@nabard.org

- › **MSME**
- › **Microfinance**
- › **Small Business**
- › **Transportation**
- › **Housing**
- › **Education**
- › **Livelihoods**
- › **Agriculture**

**Registered Office:**  
NABARD, Regional Office  
1-1-61, RTC 'X' Road, P.B. No. 1863  
Hyderabad- 500020, Telangana  
Ph: 040- 23241155  
🌐 Website: www.nabsamruddhi.in



## NABFOUNDATION

NABFOUNDATION is a wholly owned, not for profit, subsidiary of NABARD, established under Sec 8 of Companies Act, 2013. The young 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, 2nd Floor, B Wing, BKC, Bandra East, Mumbai-400051

✉ e-mail:nabfoundation@nabard.org ☎ Phone:(+91)-22-2653 9404/9054/9204







## NABKISAN Finance Limited

A subsidiary of NABARD

- › Largest lender in FPO space.
- › Present in 20+ States.
- › 700+ FPOs credit linked.
- › Collateral free lending at affordable rates.
- › Need Based Grant support.

- › Financing FPOs through.
  - Working Capital ■ Term loan
  - Pledge Financing (eNWR)
- › Term lending for Corporates/ NBFCs/ MFIs.
- › Soft loans for Agri Startups.

### Corporate Office

C/o NABARD, Mumbai

✉ e-mail:corporate@nabkisan.org

☎ Phone:022- 26539620/26539415

🌐 Website- www.nabkisan.org

### Registered Office

C/o NABARD, Tamil Nadu RO, Chennai

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☎ Phone:044- 28270138/28304658

🌐 Web-portal- krishimanch.nabkisan.org



## NABARD Consultancy Services Private Limited [NABCONS]

Wholly owned subsidiary of NABARD

ISO-9000:2015 & ISO-27001:2013

### OFFERS

**CONSULTANCY  
AND  
ADVISORY  
SERVICES**

Pan India  
Presence with  
offices in 31  
States/UTs

### AREAS OF OPERATION

- › Agriculture & Allied Activities
- › Off-farm Sector
- › Horticulture
- › Forestry
- › Corporate Social Responsibility
- › Watershed Development
- › Irrigation & Water Resources
- › Socio-economic Development
- › Natural Resource Management
- › Food Processing
- › Banking & Finance
- › Skills for Livelihood
- › International Business
- › Value Chain Development
- › Infrastructure Monitoring
- › Climate Change

### Registered Office

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✉ e-mail:headoffice@nabcons.in

### Corporate Office

NABARD Tower, 24 Rajendra Place,  
Nabard Building, New Delhi-110125  
Ph: 011- 25745101

🌐 Website:www.nabcons.com



## NABFINS Limited

A Subsidiary of NABARD

- › A Non Deposit taking Systemically Important NBFC – MFI with a vision to become a model MFI in the country.
- › 63% of shares held by NABARD, with other shareholders being Government of Karnataka and Public Sector Banks.
- › Mission - To be a trusted client centric financial institution advancing hassle free services to the low income households and the unorganised sector.
- › The company has a range of financial products and services including financing of SHGs in partnership with NGOs and JLGs directly through its branches.
- › Operating across in 16 States of India and touching lives of more than 5.50 lakh households with a commitment towards their socio-economic empowerment and furthering the cause for financial inclusion.

**Registered Office:** #3072, 14th Cross, K R Road, Banashankari 2nd stage, Bengaluru - 560 070, Karnataka, India

✉ e-mail: ho@nabfins.org

☎ Phone: 080 2697 0500

🌐 www.nabfins.org



## Trustee Private Limited

### Corporate Office

NABARD C-24,  
G Block, BKC, Bandra East,  
Mumbai-400051

Ph:022-26539410/26537039

- › Established to manage various credit guarantee funds of Government of India, State Government etc.
- › NABSanrakshan and multiple credit guarantee funds under its management housed in separate Trusts.
- › The Eligible Lending Institutions will extend formal credit to the borrowers and

e-mail:ho@nabsanrakshan.org

NABSanrakshan through various schemes of the Trusts will provide credit guarantee against a nominal fee.

- › NABSanrakshan manages Credit Guarantee Fund under Animal Husbandry Infrastructure Development Fund (AHIDF).