



संभाव्यतायुक्त ऋण योजना 2023-24

Potential Linked Credit Plan 2023-24

ज़िला : भंडारा

DISTRICT : BHANDARA

राष्ट्रीय कृषि और ग्रामीण विकास बैंक

National Bank for Agriculture and Rural Development

महाराष्ट्र क्षेत्रीय कार्यालय, पुणे

MAHARASHTRA REGIONAL OFFICE, PUNE



दृष्टि

ग्रामीण समृद्धि के लिए राष्ट्र का 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 participatory financial and non-financial interventions, innovations, technology and institutional development for securing prosperity

प्रस्तावना

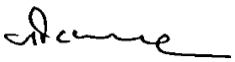
संभाव्यतायुक्त ऋण योजना (पीएलपी) अग्रणी बैंक योजना के तहत प्रत्येक जिले के लिए जिला ऋण योजना के मार्गदर्शन, नियोजन और उसे अंतिम रूप देने के लिए एक महत्वपूर्ण दस्तावेज है। यह दस्तावेज जिले में विभिन्न क्षेत्रों के लिए ऋण क्षमता का एक विस्तृत वैज्ञानिक आकलन प्रदान करता है और प्राथमिकता प्राप्त क्षेत्र के तहत उपलब्ध क्षमता का दोहन करने के लिए राज्य सरकार और बैंकों द्वारा आवश्यक क्षेत्र-विशिष्ट आधारभूत सुविधा ढांचे अंतराल और महत्वपूर्ण हस्तक्षेपों पर भी प्रकाश डालता है।

पीएलपी विभिन्न हितधारकों को शामिल करते हुए एक परामर्श प्रक्रिया के माध्यम से तैयार की जाती है और दीर्घकालिक भौतिक क्षमता, आधारभूत सुविधाओं की उपलब्धता, विपणन सुविधाओं, नीतियों / कार्यक्रमों और केंद्र और राज्य सरकार के प्राथमिकताप्राप्त क्षेत्रों और अर्थव्यवस्था में अन्य विकास को इसमें ध्यान में रखा जाता है।

दिशा-निर्देशों के अनुसार वर्ष 2023-24 के लिए संभाव्यतायुक्त ऋण योजना (पीएलपी) समय पर तैयार की गई है। किसानों के उत्पादक समूहों के तहत छोटे और सीमांत किसानों के सामूहिकीकरण के माध्यम से कृषि मूल्य श्रृंखला को बढ़ावा देने के लिए स्थायी कृषि प्रथाओं, डिजिटल प्रौद्योगिकी के उपयोग, खेती के नए तरीकों और कृषि के आधुनिकीकरण में निवेश पर जोर दिया गया है।

मुझे आशा है कि यह दस्तावेज यथार्थवादी और कार्यान्वयन योग्य जिला ऋण योजना तैयार करने के लिए उपयोगी स्रोत दस्तावेज के रूप में काम करेगा और जिले के वंचित, अनछूए क्षेत्रों और संभावित क्षेत्रों में संस्थागत ऋण प्रवाह को बढ़ाएगा।

मैं जिला कलेक्टर, अग्रणी जिला अधिकारी, भारतीय रिजर्व बैंक, अग्रणी जिला प्रबंधक, राज्य सरकार के विभागों, बैंकों, कृषि विश्वविद्यालयों / संस्थानों, नागरिक समाज संगठनों और अन्य सभी हितधारकों को संभाव्यतायुक्त ऋण योजना (पीएलपी) तैयार करने के लिए दिए गए मार्गदर्शन, इनपुट और सहायता के लिए धन्यवाद देता हूं। मैं इस दस्तावेज को प्रकाशित करने में किए गए प्रयासों के लिए नाबार्ड के जिला विकास अधिकाधिकारियों को भी बधाई देता हूं।



(जी एस रावत)
मुख्य महाप्रबंधक
15 सितंबर 2022

FOREWORD

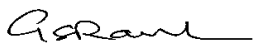
Potential Linked Credit Plan (PLP) is a vital document for guidance, planning and finalising the District Credit Plan for each district under Lead Bank Scheme. The document provides a detailed scientific assessment of credit potential for various sectors in the district and also highlights the sector-specific infrastructural gaps and critical interventions required by the State Government and banks for harnessing the potential available under priority sector.

PLP is prepared through a consultative process involving various stakeholders and take into account the long term physical potential, availability of infrastructure support, marketing facilities, policies/programmes and priority areas of central and state government, and other developments in the economy.

Potential Linked Credit Plan (PLP) for the year 2023-24 have been prepared on time as per the guidelines. The emphasis is on investments in sustainable agriculture practices, use of digital technology, new methods of cultivation and modernizing agriculture, promoting agri value chain through collectivisation of small and marginal farmers under Farmers' Producers Groups.

I hope that the document will serve as a useful resource document for preparation of realistic and implementable District Credit Plan and enhance the institutional credit flow to underserved, uncovered areas and potential sectors of the district.

I am thankful to the District Collector, Lead District Officer, Reserve Bank of India, Lead District Manager, State Government Departments, Banks, Agriculture Universities/ Institutions, Civil Society Organizations and all other stake holders for their guidance, inputs, and support in preparing the PLP. I also compliment DDM, NABARD for the efforts made in bringing out this document.



(G S Rawat)
Chief General Manager
15th September 2022

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EXECUTIVE SUMMARY

1. District characteristics

Bhandara district is situated in the Eastern part of Maharashtra. It has 07 blocks with a total geographical area of 4087 sq. km. Out of 4.087 lakh ha of the total area, the cultivable land is 2.08 lakh ha. The average rainfall of the district is 1439.8 mm per annum. The district population (2011 Census) is 12 lakh with 9.66 lakh (80.5 %) in rural areas. Of the total land holders, 91% are small and marginal farmers (with land size less than 2 ha) holding only 67% of the total agricultural land indicating disparity in distribution of land. The major crops grown during Kharif are Paddy, Soyabean, Tur, Sugarcane, Vegetables and those during Rabi are Soyabean and Vegetables. The cropping intensity is 130%. The Credit Deposit (CD) ratio as on 31-03-2022 was 38%.

2. Sectoral trends in credit flow

Total Ground Level Credit of the district under priority sector was Rs.1080.65 Crore during 2019-20, Rs.1138.50 Crore during 2020-21 and Rs.1268.06 Crore during 2021-22. The total agricultural loans issued during the last three years were Rs.532.00 crore, Rs.676.17 Crore and Rs.704.16 Crore respectively. The disbursements under MSME and other priority sectors during the above period were Rs.323.31 crore, Rs.319.12 Crore & Rs.360.11 Crore and Rs.225.34 crore, Rs.143.21 Crore & Rs.203.79 Crore respectively. The share of agriculture in Ground Level Credit (Priority Sector Lending) was 55.53% during 2021-22.

3. Sector/Sub-sector wise PLP projections for 2023-24

The potential for institutional credit under Priority Sector for the year 2023-24 has been assessed at Rs.2,328.58 Crore as against Rs.2,230.16 Crore projected for the year 2022-23 resulting in 4.4 % growth over the previous year.

The three most prominent sub-sectors with highest projections are Crop Loan at Rs.1,099.93 Crore (47% of total) since cultivation is the main occupation of majority of the population. This is followed by projection of Rs.363.00 Crore (16% of total) for service sector working capital loans under MSME since the available workforce have to resort to self employment. The third highest projections at Rs.130.05 Crore (6% of total) have been made for housing sector as aspirations of the population for better living standards are increasing. For the year 2022-23, the potential for crop loans has been assessed at Rs.1,071.35 Crore and that for total agriculture loans is Rs.1,350.52 crore. The percentage of credit potential for Agriculture to total Priority Sector loans projected is 58%, while that of MSME is 22%. The potential for other priority sector consisting of Export Credit, Education, Housing, Social Infrastructure, Renewable Energy and Others is projected at 20% of total Priority Sector loans.

4. Developmental initiatives -

One project on formation and credit linkage of 2000 Joint Liability Groups (JLGs) is being implemented by Vidarbha Konkan Gramin Bank through five NGOs. Various training programmes are being conducted on digital & financial literacy, entrepreneurship development, skill development and Self Help Groups (SHG) Bank linkage.

5. Thrust areas for 2023-24

The thrust areas in Bhandara district for Financial Year 2023-24 are collectivisation of Agricultural produce, High Tech Agriculture, sustainable agricultural practices, timely and adequate Crop Loan disbursement, Capital Formation and Productivity growth in agriculture & allied sectors, Financial Inclusion/ Literacy, Post-Harvest infrastructure, Food and Agro Processing, Skills and Marketing, Producers Organizations and on innovative projects. Storage of agricultural produce and value addition needs to be strengthened to enhance farmers' income. For a balanced economic growth, an appropriate combination of the strategies linking credit disbursement to the potential available in various sectors of the district as envisaged in the Priority Sector Lending norms is required.

6. Major constraints and suggested action points

Inadequate infrastructure facilities like poor connectivity, irrigation, marketing facilities, storage, power supply, health care and education have adversely affected the rural economy and development of various sectors. Capital formation in agriculture and manufacturing sectors as well as skill development of the rural youth on a large scale are need of the hour for utilizing the resources available for prosperity of the district. Agricultural infrastructure viz. crop management and weather advisories, testing laboratories, farm mechanization, storage, sorting, grading, transportation, marketing tie-ups, etc. need to be promoted. Working capital is critical for small and medium enterprises. Banks may extend adequate working capital for these enterprises. Capacity building of small and marginal farmers for exports and enhancing bank finance to infrastructure and post-harvest technology on cluster based approach need attention.

7. Way forward

The district has good potential for sorting, grading, packaging, transportation, storage, processing and marketing of agricultural produce. Adoption of proper package of sustainable agricultural practices, integrating farming systems and developing good infrastructure facilities would accelerate flow of credit to priority sectors. Infusion of latest technology, skills and investments, improving the capabilities of people through technical education and bridging the gaps in agriculture and industrial infrastructure would help in increasing the farm productivity and farmers' income. Banks may play an active role in financing the critical infrastructure projects through private investment. There is a need for a coordinated approach by all the stakeholders along with strengthening the reporting system by banks under the LBS and regular monitoring and review in Block Level Bankers' Committee (BLBC) and District Level Co-ordination Committee (DLCC) meetings.

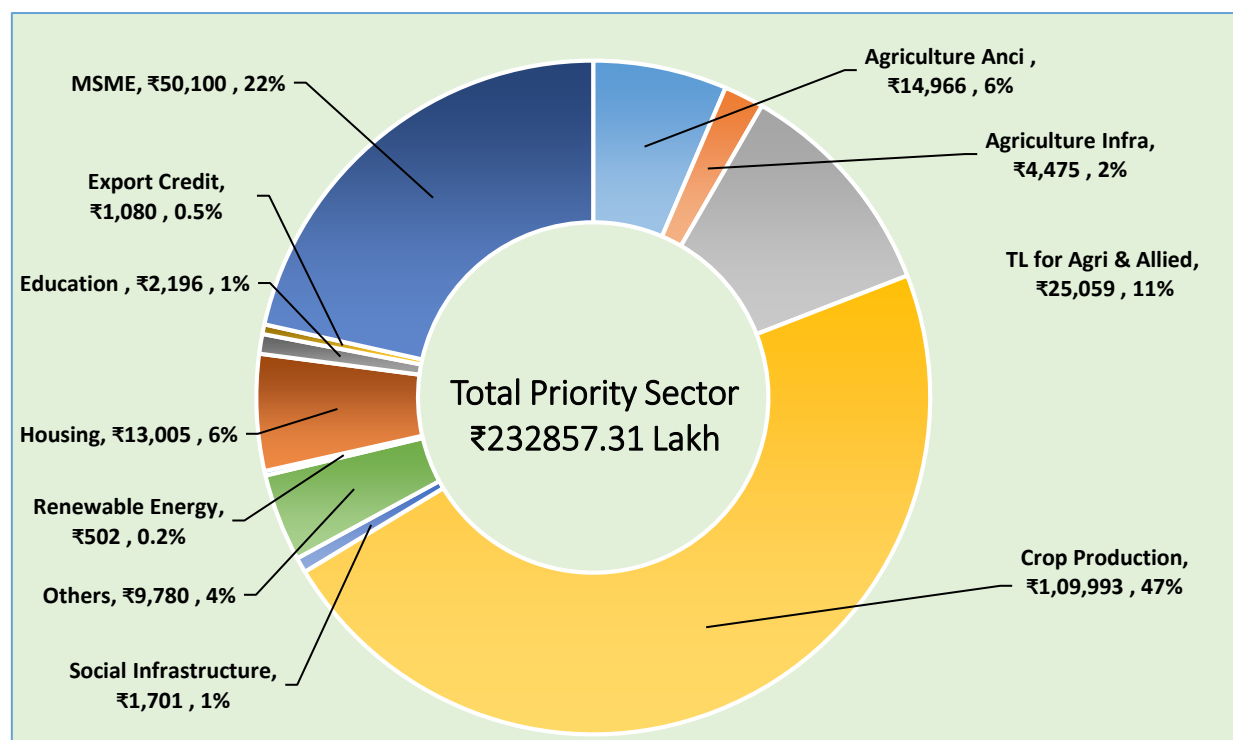
Appendix A

BROAD SECTOR-WISE PLP PROJECTIONS – 2023-24

(Amount in Rs. Lakh)

Sr. No.	Particulars	PLP 2023-24 Projections
1	Crop Production, Maintenance and Marketing	109992.68
2	Term Loan for agriculture and allied activities	25059.36
3	Agriculture Infrastructure	4475.05
4	Ancillary activities	14965.76
	Total Agriculture and Allied Activities (1+2+3+4)	154492.85
5	Credit Potential for Micro, Small and Medium Enterprises	50100.00
6	Potential for Export Credit	1080.00
7	Credit Potential for Education	2196.00
8	Credit Potential for Housing	13005.00
9	Credit Potential for Renewable Energy	502.46
10	Credit Potential for Others	9780.00
11	Social Infrastructure involving bank credit	1701.00
	Total Priority Sector	232857.31

Figure 1.1. Broad Sector-wise PLP Projections for 2023-24 (₹Lakh)



Appendix B**SUMMARY OF SECTOR / SUB-SECTOR-WISE PLP PROJECTIONS – 2023-24**

(Amount in Rs. Lakh)

Sr. No.	Particulars	PLP 2023-24 Projections
I	Credit Potential for Agriculture	
A	Farm Credit	
i	Crop Loans	109992.68
ii	Water Resources	5260.01
iii	Farm Mechanisation	3480.00
iv	Plantation & Horticulture	1194.80
v	Forestry & Wasteland Development	344.75
vi	Animal Husbandry - Dairy Development	9317.24
vii	Animal Husbandry - Poultry	1228.80
viii	Animal Husbandry - Sheep / Goat / Piggery	2307.34
ix	Fisheries	1806.72
x	Other – Bullock, Bullock-carts, Loans to FPOs, etc.	119.70
	Sub-Total	135052.04
B	Agriculture Infrastructure	
i	Storage Godowns and Market Yards	3027.75
ii	Land Development, Soil Conservation and Wasteland Development	627.85
iii	Others (Vermicompost, NADEP Compost tank etc.)	819.45
	Sub-Total	4475.05
C	Ancillary Activities	
i	Food & Agro Processing	12575.76
ii	Others (ACABC, Loans to PACS etc.,)	2390.00
	Sub-Total	14965.76
	Total Agriculture	154492.85
II	Micro, Small & Medium Enterprises	
i	MSME – Investment Credit – Term Loan	4500.00
ii	MSME – Service Sector – Term Loan	3675.00
iii	MSME – Working Capital	41925.00
	Total MSME	50100.00
III	Export Credit	1080.00
IV	Education	2196.00
V	Housing	13005.00
VI	Social Infrastructure involving Bank Credit	1701.00
VII	Renewable Energy	502.46
VIII	Informal Credit Delivery System	9780.00
	Total Priority Sector	232857.31



District Profile								
District - Bhandara		State - Maharashtra	Division - Nagpur					
1. PHYSICAL & ADMINISTRATIVE FEATURES		2. SOIL & CLIMATE						
Total Geographical Area (Sq.km)	4087	Agro-climatic Zone	Eastern Vidarbha High Rainfall Zone					
No. of Sub Divisions	2	Climate	Hot and Humid					
No. of Blocks	7	Soil Type	Soil derived from parent rock granite, brown to red in colour					
No. of Villages (Inhabited)	771							
No. of Panchayats	552							
3. LAND UTILISATION [Ha]		4. RAINFALL & GROUND WATER						
Total Area Reported	408700	Rainfall [in mm]	Normal	2020	2021	2022		
Forest Land	136449		1439.8	Actual	1217.4	1246.3	1226.9	
Area Not Available for Cultivation	50000		Variation from Normal		-15%	-13%	-15%	
Permanent Pasture and Grazing Land	14800	Availability of	Net annual recharge		Net annual draft		Balance	
Land under Miscellaneous Tree Crops	3000	Ground Water [Ham]	53101		17450		35651	
Cultivable Wasteland	18023	5. DISTRIBUTION OF LAND HOLDING						
Current Fallow	4463	Classification of Holding	Holding		Area			
Other Fallow	9729		Nos.	% to Total	Ha.	% to Total		
Net Sown Area	208080	>0 to <=2 Ha	198992	91%	139129	67%		
Total or Gross Cropped Area	271207	>2 to <=5 Ha	17494	8%	51914	25%		
Area Cultivated More than Once	63126	>5 Ha	2034	1%	15742	8%		
Cropping Intensity [GCA/NSA]	130%	Total	218520	100%	206785	100%		
6. WORKERS PROFILE [in '000]		7. DEMOGRAPHIC PROFILE [in '000]						
Cultivators	123	Category	Total	Male	Female	Rural	Urban	
Of the above, Small/Marginal Farmers	85	Population	1200	605	595	966	234	
Agricultural Labourers	312	Scheduled Caste	200	100	100	NA	NA	
Workers engaged in Household Industries	17	Scheduled Tribe	89	49	44	NA	NA	
Workers engaged in Allied Agro-activities	10	Literate (%)	83.80	90.40	77.10	82.10	90.70	
Other workers	145	BPL	NA	NA	NA	120.00	10.00	
8. HOUSEHOLDS [in '000]		9. HOUSEHOLD AMENITIES [Nos. in '000 Households]						
Total Households	244531	Having brick/stone/concrete	NA	Having electricity supply	240			
Rural Households	208432	Having source of drinking water	NA	Having independent toilets	110			
BPL Households (2002)	120	Having access to banking	NA	Having radio/tv sets	NA			
10. VILLAGE-LEVEL INFRASTRUCTURE [Nos]		11. INFRASTRUCTURE RELATING TO HEALTH & SANITATION [Nos]						
Villages Electrified	771	Anganwadis	1197	Dispensaries	219			
Villages having Agriculture Power Supply	771	Primary Health Centres	33	Hospitals (including Mat.)	118			
Villages having Post Offices	129	Primary Health Sub-Centres	193	Hospital Beds	1412			
Villages having Banking Facilities	153	12. INFRASTRUCTURE & SUPPORT SERVICES FOR AGRICULTURE						
Villages having Primary Schools	742	Fertiliser/Seed/Pesticide Outlets	825	Agriculture Pumpsets[Nos]	16260			
Villages having Primary Health Centres	33	Total N/P/K Consumption [MT]	86320	Pumpsets Energised [Nos]	42704			
Villages having Potable Water Supply	709	Certified Seeds Supplied [MT]	32.60	Agro Service Centres [Nos]	922			
Villages connected with Paved Approach Roads	771	Pesticides Consumed [MT]		Soil Testing Centres [Nos]	5			
13. IRRIGATION COVERAGE [Ha]		Agriculture Tractors [Nos]	6253	Plantation nurseries [Nos]	5			
Total Area Available for Irrigation (NIA + Fallow)	128200	Power Tillers [Nos]	15	Farmers' Clubs [Nos]	142			
Irrigation Potential Created	82433	Threshers/Cutters [Nos]	3200	Krishi Vigyan Kendras[Nos]	1			
Net Irrigated Area(Total area irrigated at least once)	142040	14. INFRASTRUCTURE FOR STORAGE, TRANSPORT & MARKETING						
Area irrigated by Canals / Channels	84900	Rural/Urban Mandi/Haats [Nos]	70	Wholesale Market [Nos]	5			
Area irrigated by Wells	32126	Length of Pucca Road [Km]	6566	Godown [Nos]	225			
Area irrigated by Tanks	38000	Length of Railway Line [Km]	140	Godown Capacity[MT]	47480			
Area irrigated by Other Sources	11900	Public Transport Vehicle [Nos]	130628	Cold Storage [Nos]	2			
Irrigation Potential Utilized (Gross Irrigated Area)	61817	Goods Transport Vehicle [Nos]	14492	Cold Store Capacity[MT]	200			
15. AGRO-PROCESSING UNITS		16. AREA, PRODUCTION & YIELD OF MAJOR CROPS						
Type of Processing Activity	No of units	Cap.[MT]	2017-18		2021-22		Avg. Yield	
Food (Rice/Flour/Dal/Oil/Tea/Coffee)	350		Area (Ha)	Prod. (MT)	Area (Ha)	Prod. (MT)	[Kg/Ha]	
Sugarcane (Gur/Khandsari/Sugar)	0		190671	198188	176400	359200	2035	
Fruit (Pulp/Juice/Fruit drink)	20		12348	96800	11546	14490	1255	
Spices (Masala Powders/Pastes)	20		9442	539	1999	632	316	
Dry-fruit (Cashew/Almond/Raisins)	4		36036	18545	23442	16626	709	
Cotton (Ginning/Spinning/Weaving)	0		1116	252785	330	22000	66666	
Milk (Chilling/Cooling/Processing)	8		- - -	- - -	1032	528	512	
Meat (Chicken/Motton/Pork/Dryfish)	20							
Animal feed (Cattle/Poultry/Fishmeal)	25		Production of Cotton(lint), Jute, Mesta & Sanhemp are in Bales(177.8 kg per bale in					
17. ANIMAL POPULATION AS PER CENSUS 2007		18. INFRASTRUCTURE FOR DEVELOPMENT OF ALLIED ACTIVITIES						
Category of animal	Total	Male	Female	Veterinary	79	Animal Markets [Nos]	2	
Cattle - Cross bred	120026	9976	110050	Disease Diagnostic Centres	6	Milk Collection Centres [Nos]	212	
Cattle - Indigenous	93010	46373	46637	Artificial Insemination Centers	85	Fishermen Societies [Nos]	136	
Buffaloes	106861	8789	98072	Animal Breeding Farms [Nos]	-	Fish seed farms [Nos]	1	
Sheep - Cross bred	181	NA	181	Animal Husbandry Tng Centres	-	Fish Markets [Nos]	5	
Sheep - Indigenous	1128	NA	1128	Dairy Cooperative Societies	485	Poultry hatcheries [Nos]	--	
Goat	39415	39415	NA	Improved Fodder Farms [Nos]	-	Slaughter houses [Nos]	3	
Pig - Cross bred	84	36	48	19. MILK, FISH, EGG PRODUCTION & THEIR PER CAPITA AVAILABILITY				
Pig - Indigenous	83	NA	NA	Fish	Production [MT]	6415	Per cap avail. [gm/day]	30
Horse/Donkey/Camel	23	16	7	Egg	Production [Lakh	NA	Per cap avail. [nos/p.a.]	26
Poultry - Cross bred	8882	4763	4119	Milk	Production ['000 Lit]	14315	Per cap avail. [gm/day]	248
Poultry - Indigenous	91852	28743	63109	Meat	Production [MT]	NA	Per cap avail. [gm/day]	NA
Sources (if not mentioned against the respective item):		Item Nos. 1, 6, 7, 9 & 10 - Census 2001/Dir. of Eco. & Stat.; Item Nos. 2, 3, 5, 12, 13 & 14 - Dept. of Agr/Dir. of Eco. & Stat.; Item No. 4 - Dept. of Agr./Water Resources; Item No. 8 - BPL Survey 2002; Item No. 15 - District Ind Centre/Dir. of Eco. & Stat. 2020; Item No. 16 - DACNET; Item No. 17 - AH Census 2003/2019; Item Nos. 18 & 19 - Dir. of Animal Hus./Dir. of Eco. & Stat.						

District Profile

1. Predominant economic activities prevalent in the district

The geographical area of Bhandara district is 4087 sq. km. and it is divided into two revenue sub divisions viz, Bhandara and Sakoli. The population of the district as per 2011 census was 12 lakh, of which the share of rural and urban population was at 81% and 19% respectively. Agriculture continues to be the main occupation of the district as 45% of rural population depends on agriculture. There are 2.19 lakh land holders of which 67 % of land belongs to small & marginal farmers and the average land holding in the district is 0.95 ha. The district is covered by alluvial soils with portions of black regur soil and has an annual average rainfall of 1439.8 mm. The net sown area is 208080 ha. with net irrigated area at 142040 ha, forming 68% of the net sown area. Major crops in terms of area are Paddy, Soyabean, Wheat, Tur, Sugarcane. The climate of the district is suitable for horticulture and plantation crops like Mango, Guava, Banana, Custard Apple, etc.

2. Other economic activities in the district

The other economic activities in the district (dairy, poultry, goatry and fishery) have very good potential with market support from nearby districts (Nagpur, Gondia, Chandrapur). The Wainganga river flows through the district. There are 6 small rivers, a major irrigation project Gose khurd, 4 medium irrigation projects and 59 small irrigation projects which offer very good potential for fresh water fish and prawn culture. The district is rich in manganese. The district has 5 MIDCs but it has not developed industrially. The major industrial production in the district is fine quality of steel, manganese and automobiles.

3. Factors affecting the rural economy and development of various sectors

The drought like situation in the district in the past years has adversely affected the rural economy and development of various sectors. Inadequate infrastructure facilities like poor connectivity, irrigation, marketing facilities, storage, power supply, health care and education have adversely affected the rural economy and development of various sectors. Capital formation in agriculture and manufacturing sectors as well as skill development of the rural youth on a large scale are need of the hour for utilising the resources available for prosperity of the district.

4. Economic condition

The Gross State Domestic Product (nominal) at current prices for 2020-21 was Rs.27,11,685 Crore and the same is estimated for 2021-22 at Rs.31,97,782 Crore. The per capita state income for the year 2020-21 was Rs.1,93,121/- and the same is estimated for the year 2021-22 at Rs.2,25,073/-. The Nominal Gross District Domestic Product (GDDP) at current prices for the year 2020-21 for the district is Rs.18,492 Crore, whereas the per capita nominal Net District Domestic Product at current prices for the year 2020-21 for the district is Rs.1,28,175/-.

(Source : Economic survey of Maharashtra 2021-22)

5. Cooperatives in Bhandara district

a. Status

The block wise, sector wise distribution of cooperative societies in the district is as under:

Sr. No	Type	Number of Societies in the district
A. Details of Non-Credit Cooperative Societies		
1	AH Sector (Milk/Fishery/ Poultry etc.)	428
2	Consumer Stores	6
3	Housing Societies	54
4	Weavers	4
5	Marketing	7
6	Labour Societies	10
7	Industrial Societies	164
8	Agro Processing and Sugar	16
9	All others	2
	Total	691

Sr. No	Type	Number of Societies in the district
B. Details of Credit Cooperative Societies		
10	Primary Agriculture Credit Societies	368
C. Details of Multi State Cooperative Societies		
11	No. of MSCS	0
<i>Source: District RCS office/Bhandara</i>		

Bhandara district has a good number of co-operatives in the agriculture and animal husbandry sector.

b. Potential for formation of Cooperatives: There is a fair potential for cooperative activity in the animal husbandry (Dairy/Fishery/Poultry), marketing of agriculture produce, agro-processing sector and industrial sector in the district, as indicated in the relevant chapters.

The distribution of co-operative societies is not uniform across the blocks in the district. The Bhandara, Tumsar and Pauni blocks have good presence of co-operative societies in agriculture, animal husbandry and industrial sectors. There is potential for creation of cooperative societies in agriculture and animal husbandry sectors in Lakhandur and Sakoli blocks. This can have immense multiplier effect in giving a fillip to economic activities in these areas.

Banking Profile

State -	Maharashtra	District -	Bhandara	Lead Bank -	Bank of India
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1. NETWORK & OUTREACH (As on 31-03-2022)

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	11	82	50	32	0		6840	76	10	88603
Regional Rural Bank	1	21	17	4	0		2896	50	41	19810
District Central Coop. Bank	1	46	39	7	0		6037		19	10667
Private Banks	4	12	5	7	0				145	83200
Primary Agr. Coop. Soc.	368	368	368	0	0					
Others	6	12	1	11	0					
All Agencies	391	541	480	61	0		15773			

2. DEPOSITS OUTSTANDING

Agency	No. of accounts					Amount of Deposit [Rs. Lakh]				
	31-Mar-20	31-Mar-21	31-Mar-22	Growth(%)	Share(%)	31-Mar-20	31-Mar-21	31-Mar-22	Growth(%)	Share(%)
Commercial Banks	NA	NA	NA	NA	NA	453123	549657	595240	8%	76%
Regional Rural Bank	NA	NA	NA	NA	NA	43219	44693	46612	4%	6%
Cooperative Banks	NA	NA	NA	NA	NA	126952	134451	134775	0%	17%
Others	NA	NA	NA	NA	NA	0	1870	3138	---	0.4%
All Agencies	NA	NA	NA	NA	NA	623294	730671	779765	7%	100%

3. LOANS & ADVANCES OUTSTANDING

Agency	No. of accounts					Amount of Loan [Rs. Lakh]				
	31-Mar-20	31-Mar-21	31-Mar-22	Growth(%)	Share(%)	31-Mar-20	31-Mar-21	31-Mar-22	Growth(%)	Share(%)
Commercial Banks	NA	NA	NA	NA	NA	155976	178656	212001	16%	72%
Regional Rural Bank	NA	NA	NA	NA	NA	10982	12954	16383	21%	6%
Cooperative Banks	NA	NA	NA	NA	NA	43770	67887	44948	-51%	15%
Others	NA	NA	NA	NA	NA	0	5944	21141	72%	7%
All Agencies	NA	NA	NA	NA	NA	210728	265441	294473	9.86%	100%

4. CD-RATIO

Agency	CD Ratio		
	31-Mar-20	31-Mar-21	31-Mar-21
Commercial Banks	34.42	32.50	35.62
Regional Rural Bank	25.41	28.98	35.15
Cooperative Banks	34.48	50.49	33.35
Others	0.00	317.86	673.71
All Agencies	33.81	36.33	37.76

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	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 31-03-2022)

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	73137	58%	30876	44%	NA	NA	NA	NA	NA	NA
Regional Rural Bank	7433	6%	3133	4%	NA	NA	NA	NA	NA	NA
Cooperative Banks	41345	33%	36406	53%	NA	NA	NA	NA	NA	NA
Others	4890	4%	0	0%	NA	NA	NA	NA	NA	NA
All Agencies	126805	100%	70415	100%	NA	NA	NA	NA	NA	NA

7. AGENCY-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS

Agency	2019-20			2020-21			2021-22			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	83727.00	61468.30	73%	89118.00	65163.00	73%	118559.00	116824.00	99%	82%
Regional Rural Bank	6930.00	7717.81	111%	7587.00	8363.00	110%	10768.00	8924.00	83%	101%
Cooperative Banks	33530.00	38878.90	116%	35942.00	36368.00	101%	39540.00	41345.00	105%	107%
Others				1788.00	3955.00	221%	1958.00	4890.00	250%	235%
All Agencies	124187.00	108065.01	87%	134435.00	113849.00	85%	170825.00	171983.00	101%	91%

8. SECTOR-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS

Broad Sector	2019-20			2020-21			2021-22			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	43890.00	42722.00	97%	45545.00	57752.00	127%	50000.00	51575.00	103%	109%
Term Loan (Agr)	15895.00	10478.00	66%	16769.00	9865.00	59%	17699.00	18841.00	106%	77%
Total Agri. Credit	59785.00	53200.00	89%	62314.00	67617.00	109%	67699.00	70416.00	104%	101%
Non-Farm Sector	33645.00	32331.00	96%	35476.00	31912.00	90%	54115.00	44516.00	82%	89%
Other Priority Sector	30757.00	22534.00	73%	36645.00	14320.00	39%	24510.00	11873.00	48%	54%
Total Priority Sector	124187.00	108065.00	87%	134435.00	113849.00	85%	146324.00	126805.00	87%	86%

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	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cooperative Banks	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Others	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All Agencies	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Sources : Lead Bank & SLBC

Banking Profile

The district has good banking network with 106 branches of Commercial Banks (Nationalised, Private and Small Finance banks), 21 branches of Vidharbha Kokan Gramin Bank, 46 branches of Bhandara DCCB (totalling to 173 branches) and 368 Primary Agriculture Credit Societies (PACS). The concentration of branches of the banks is more in rural areas (112 branches i.e. 65%) than in semi-urban areas. The per branch population coverage in the district is 2282 compared to the state average of 7343.

Still majority of the district remains poorly covered in terms of branch network. Also, most of the rural branches of the banks are having inadequate staff (1 officer and 1 cashier/staff) due to which the quality of services rendered to the public fall short of their expectations. The other financial intermediaries that also play an important role in channelizing the financial resources are Non-banking financial institutions and Non-agriculture Cooperative Credit Societies. These institutions also supplement the banking sectors in meeting the increasing financial needs of the various sectors. Bank of India functions as the lead bank of the district.

The achievement of Annual Credit Plan targets during the last three years are :

Sr. No.	Year	Targets (Rs. Lakh)	Achievements (Rs. Lakh)	% ach.
1	2019-20	124187.00	108065.00	87%
2	2020-21	134435.00	113850.00	85%
3	2021-22	146324.00	126805.00	86%

The size of the Annual Credit Plan (ACP) for Priority Sector Lending for the year 2022-23 is Rs.1,862.06 Crore which includes Rs.997.00 Crore for agriculture (53.54%). The share of District Central Cooperative Bank (DCCB) in ACP for the year 2022-23 for total Priority Sector being Rs.586.70 Crore stood at 31.51%.

CD Ratio

The total deposits held by the banks as on 31-03-2022 were Rs.7,797.65 Crore whereas the total advances were Rs.2,944.73 Crore. Thus, the CD Ratio of the district was 38% as on 31 March 2022.

Financial Inclusion

In addition to 160 brick and mortar bank branches, various financial services are rendered through 167 BCs and 177 customer service points.

Prime Minister Jan Dhan Yojana (PMJDY)- A beneficiary can open zero balance account in any of the bank and avail the facilities stipulated in the PMJDY scheme. In Bhandara district, 6,61,694 accounts were opened cumulatively under the scheme as on 31 March 2022.

Pradhan Mantri Jeevan Jyoti Bima Yojna (PMJJBY) – A beneficiary may buy life insurance of Rs.2 Lakh by paying a premium of Rs.330/- per year. Maximum age limit is 40 years. In Bhandara district 3,08,214 individuals have subscribed to the scheme as on 31 March 2022. The premium rate has been revised to Rs.436/- per year.

Pradhan Mantri Suraksha Bima Yojna (PMSBY) – A beneficiary may buy accidental insurance of Rs.2 lakh by paying a premium of Rs.12/- per year. Maximum age limit is 70 years. In this district 3,80,016 accounts were opened as on 31 March 2022. The premium rate has been revised to Rs.20/- per year.

Atal Pension Yojna (APY) – A beneficiary may avail a pension facility by participating in the scheme. One may participate in the scheme at the age of 18 years and upto the age of 40 years and pay monthly sum till he/she attain the age 60 year. After attending the age of 60 years, pension will start. As on 31 March 2022, total 53,610 accounts were opened in Bhandara district.

Direct Benefit Transfer- (DBT)- All Commercial banks, private banks and Gramin bank are participating in the direct benefit transfer except Bhandara DCCB.

Core Banking Solutions (CBS) project in Bhandara District Central Cooperative Bank - The bank is running on CBS platform and all 46 branches are connected to the Head Office. The bank has started RTGS, NEFT operation. The bank has installed 20 ATMs in the district.

Micro Units Development and Refinance Agency (MUDRA)- Under the Pradhan Mantri Mudra Yojna, all the banks of Bhandara district put together have disbursed Rs. 121.26 Crore Mudra loans to 8621 beneficiaries.

Methodology for 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 channeling 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 prioritise 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 endeavoring 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/subsector-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. N.	Sector	Methodology of estimation of credit potential
1	Crop loans	• Collection of data on Gross Cropped Area for a period of 10 years and data on land holdings • Distribution of Gross Cropped Area between Small 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. • Make assumption to cover 100% of Small/Marginal Farmers and 20% to 50% of Other Farmers; • Study the cropping pattern • Estimation of credit potential taking into account Scale of Finance and also the KCC guidelines in vogue • Block-wise allocation of potential taking into account credit absorption capacity in a particular block, cropping pattern, etc.
2	Water Resources	• MI potential is the area that can be brought under irrigation by ground and surface water; • Collection of data on ultimate irrigation potential, area already brought under irrigation and balance potential available under groundwater and surface water for the district • 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;

S. N.	Sector	Methodology of estimation of credit potential
		• 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. • Preference of farmers for different MI structures like dug wells, bore wells, DCBW, etc. is to be taken into account. • 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.
3	Farm Mechanisation	• 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; • Calculation of requirement of number of tractors assuming one tractor per 30 acres and 45 acres of irrigated and unirrigated cropped area; • Adjustment of tractor potential with land holdings • Based on the cropping pattern, topography etc similar assessment is made for power tillers, combine Harvesters etc
4	Plantation and Horticulture	• 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; • Feasibility and possibility of shifting from food crops to plantation crops; • Estimation of replanting by taking into account approximate economic life of a few plantation crops • Estimation of potential for rejuvenation of existing plantation
5	Animal Husbandry - Dairy	• Collection of data on number of milch animals as per the latest census • 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; • 1/6th 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 2nd and 3rd lactation. 50% of the number of animals so arrived are assumed to be animals available for bank finance.

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	i. Provides inputs/information on Exploitable potential vis-a-v-s credit available ii. Potential High Value Projects/Area Based schemes iii. Infrastructure support available which can form basis for their business/development plans.
2	Government Agencies/ Departments	i. Developmental infrastructure required to support credit flow for tapping the exploitable potential ii. Other support required to increase credit flow iii. Identification of sectors for Government sponsored programme
3	Individual/ Business entities	i. Private investment opportunities available in each sector ii. Commercial infrastructure iii. Information on various schemes of Govt & Banks.

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 and sub-sector-wise;
- Non-availability of data required for estimation of potential in some sectors with the line Depts.

Chapter 1

Important Policies and Developments

1.1 Policy Initiatives - Government of India

1.1.1 Union Budget of India- 2022-23

Agriculture and Food Processing

- The year 2023 has been announced as the 'International Year of Millets'. Support will be provided for post-harvest value addition, enhancing domestic consumption, and for branding millet products nationally and internationally.
- To reduce the dependence on import of oilseeds, a rationalized and comprehensive scheme to increase domestic production of oilseeds will be implemented.
- For delivery of digital and hi-tech services to farmers with involvement of public sector research and extension institutions along with private agri-tech players and stakeholders of agri-value chain, a scheme in PPP mode will be launched.
- Chemical-free Natural Farming will be promoted throughout the country, with a focus on farmers' lands in 5-km wide corridors along river Ganga, at the first stage.
- Use of 'Kisan Drones' will be promoted for crop assessment, digitization of land records, spraying of insecticides, and nutrients.
- A fund with blended capital, raised under the co-investment model, will be facilitated through NABARD to finance startups for agriculture & rural enterprise, relevant for farm produce value chain. The activities for these startups will include, inter alia, support for FPOs, machinery for farmers on rental basis at farm level, and technology including IT-based support.
- Implementation of the Ken-Betwa Link Project with an estimated cost of Rs.44,605 crore to provide irrigation benefits to 9.08 lakh hectare of farmers' lands, drinking water supply for 62 lakh people, 103 MW of Hydro, and 27 MW of solar power will be taken up.

MSME

- Udyam, e-Shram, NCS, and ASEEM portals will be interlinked for credit facilitation, skilling, and recruitment with an aim to further formalize the economy and enhance entrepreneurial opportunities for all.
- Emergency Credit Line Guarantee Scheme (ECLGS) will be extended up to March 2023 and its guarantee cover will be expanded by Rs. 50,000 crore to total cover of Rs. 5 lakh crore, with the additional amount being earmarked exclusively for the hospitality and related enterprises.
- Credit Guarantee Trust for Micro and Small Enterprises (CGTMSE) scheme will be revamped with required infusion of funds. This will facilitate additional credit of Rs.2 lakh crore for Micro and Small Enterprises and expand employment opportunities.
- Raising and Accelerating MSME Performance (RAMP) programme with an outlay of Rs.6,000 crore over 5 years will be rolled out. This will help the MSME sector become more resilient, competitive and efficient.

Skill Development

- Digital Ecosystem for Skilling and Livelihood (DESH-Stack) e-portal will be launched to empower citizens to skill, reskill or upskill through on-line training.
- Startups will be promoted to facilitate 'Drone Shakti' through varied applications and for Drone-As-A-Service (DrAAS). In select ITIs, in all states, the required courses for skilling, will be started.

Inclusive Welfare Focus

- A new scheme, Prime Minister's Development Initiative for North-East (PM-DevINE), will be implemented through the North-Eastern Council to fund infrastructure, in the spirit of PM Gati Shakti, and social development projects based on felt needs of the North-East.
- Border villages with sparse population, limited connectivity and infrastructure will be covered under the new Vibrant Villages Programme for construction of village infrastructure, housing, tourist centres, road connectivity, provisioning of decentralized renewable energy, direct to home access for Doordarshan and educational channels, and support for livelihood generation, etc.
- To mark 75 years of our independence, it is proposed to set up 75 Digital Banking Units (DBUs) in 75 districts of the country by Scheduled Commercial Banks.

Productivity enhancement and Investment

- Launching of Ease of Doing Business 2.0 and Ease of Living
- Expanding scope of Green Clearance portal PARIVESH
- Unique Land Parcel Identification Number for IT based management of land records

Sunrise opportunities and climate action

- Introducing Supportive policies, light-touch regulations, facilitative actions to build domestic capacities, and promotion of research & development in the field of Sunrise sector such as Artificial Intelligence, Geospatial Systems and Drones, Semiconductor and its eco-system, Space Economy, Genomics and Pharmaceuticals, Green Energy, and Clean Mobility Systems Opportunities, Energy Transition, and Climate Action, etc.
- Prioritizing transition to Carbon Neutral Economy, augmenting solar power generation to be given utmost importance.

Financing Public Investment

- Issue of sovereign Green Bonds for mobilizing resources for green infrastructure
- Promotion of thematic funds for blended finance for encouraging important sunrise sectors such as Climate Action, Deep-Tech, Digital Economy, Pharma and Agri-Tech, enhancing financial viability of projects including PPP, with technical and knowledge assistance from multi-lateral agencies.
- Introduction of Digital Rupee by RBI starting 2022-23.

1.1.2 Strengthening of Cooperative Sector

A cooperative is defined as 'an autonomous association of persons united voluntarily to meet their common social, economic and cultural needs as well as their aspirations through a jointly owned and democratically controlled enterprise'.

A cooperative is governed by seven major principles, i.e. voluntary and open membership; principle of democratic member control; principle of member economic participation; principle of autonomy and independence; principle of education, training and information; principle of cooperation and, principle of concern for community.

Cooperative enterprises help their members to collectively solve shared socio-economic problems. They strengthen bargaining powers of their members, help them get access to competitive markets and to capitalise on new market opportunities. As such, they improve income opportunities, reduce costs and manage risks of the members.

Sector-wise/ Activity-wise distribution Co-operatives is given in the Table.

Sr. No	Type	Number of Societies
A	Non Credit Cooperative Societies	
1	AH Sector (Milk/Fishery/ Poultry etc.)	185660
2	Consumer Stores	25207
3	Housing Societies	134798
4	Weavers	11521
5	Marketing	8875
6	Labour Societies	46692
7	Industrial Societies	19385
8	Agro Processing and Sugar	5872
9	All others	301572
	Total	739582
B	Credit Cooperative Societies	
10	Primary Agriculture Credit Societies	93978
C	Multi State Cooperative Societies (MSCs)	
11	MSCs	1469

Source: NCUI 2018

In addition, there are about 2,705 District Level Federations, 390 State Level Federations and 20 National Level Federations in the country.

Govt. of India has set up a separate Ministry for Cooperation on 06 July 2021, which will provide a separate administrative legal and policy framework for strengthening the cooperative movement in the country, to help deepen the presence of cooperatives, to streamline processes for 'Ease of doing business' for co-operatives and enable development of Multi-State Co-operatives (MSCS). In the words of the Hon'ble Prime Minister, "The Cooperative movement is such a model which can provide a successful alternative to socialism and capitalism"

In this direction, the Ministry of Cooperation (MoC) has, in consultation, coordination and partnership with State Governments, NABARD, National Level Federations, Training Establishments at State and National level and other stakeholders, initiated work on five major fronts:

a. Cooperative Credit Guarantee Fund: This is a new scheme being created for providing credit guarantee on loans of Primary Agriculture Cooperative Societies and other primary cooperative societies.

b. Co-operative Education: This scheme aims at introduction of cooperative education as a course curriculum and also as independent degree / diploma courses in Schools and Universities. This will also take care of research in the field of cooperation.

c. Cooperative Training: This scheme aims at revamping strengthening existing cooperative training structure in the country and modernize the training methods through a revamped scheme.

d. Computerization of Primary Agriculture Cooperative Societies: This scheme aims at computerization of 63,000 functional PACS leading to increase in efficiency, profitability, transparency and accountability in the working of PACS

e. Sahkar se Samridhhi: This scheme is an umbrella scheme with a number of sub-components as mentioned below with the aim of all round development of cooperatives in the country by providing them necessary support in terms of finance, technology and infrastructure and transform them into successful economic entities: (a) Recapitalization of PACS; (b) Seed money for new PACS; (c) Revival of defunct PACS; (d) Transformation of PACS into multi-role cooperatives on the lines of FPOs; (e) Assistance to cooperative societies in branding, marketing and trade; (f) Capital subsidy for creation of basic infrastructure.

All these initiatives will create immense business potential for the Cooperatives from **grassroots upward in times to come.**

1.1.3 Enhancing Credit Flow: Credit Guarantee Schemes

Credit Guarantees are risk sharing instruments for lenders and are aimed to improve flow of credit in borrowers' segment which are normally perceived to be risky by lenders. For the promotion of Agriculture and Allied Sector, GoI has announced two Credit Guarantee Schemes which are being managed by

Item	Credit Guarantee Scheme for FPOs	Credit Guarantee Scheme for Animal Husbandry and Dairying
Guarantee Cover	85% of the sanctioned amount max. ₹1.5 cr	25% of the Credit Facility
Annual Guarantee Fee	Upto 0.85% Of sanctioned amount	1.0% of the sanctioned amount
Eligible Lending Institutions	Scheduled Commercial Banks, Co-operative Banks, NEDFI, NABKISAN, etc.	Scheduled Banks
Eligible Borrower	FPOs (Agri based)	FPO, Pvt Company, Sec. 8 Company, Individual Entrepreneur, MSME, etc.

NABSanrakshan Trustee Private Limited, a wholly owned subsidiary of NABARD.

1.2 Policy Initiatives – Reserve Bank of India

The following important initiatives have been taken by the RBI in Agriculture and Rural Sector:

- Master circular on Lead Bank Scheme consolidating the relevant guidelines/ instructions issued by Reserve Bank of India on Lead Bank Scheme up to March 31, 2022, was issued vide circular FIDD.CO.LBS.BC.No.02/02.01.001/2022-23 dated 01 April 2022. It reemphasizes the focus of the Lead Bank scheme to inclusive growth and financial inclusion.

- ii. Master circular on SHG- Bank Linkage Programme consolidating the relevant guidelines/ instructions issued by Reserve Bank of India up to March 31, 2022, was issued vide circular FIDD.CO.FID.BC.No.1/12.01.033/2022-23 dated 01 April 2022. As per the circular, utmost priority should be given by banks in lending to SHGs and the same should also form an integral part of the bank's corporate credit plan.
- iii. **Kisan Credit Card Scheme - Eligibility criteria for farmers engaged in fisheries/ aquaculture**
RBI has issued modified instructions to all Commercial Banks including Small Finance Banks and excluding Regional Rural Banks, with regard to the eligibility criteria for inland fisheries and aquaculture. As per the modified instructions, the beneficiaries must own or lease any fisheries related assets such as ponds, tanks, open water bodies, raceways, hatcheries, rearing units, boats, nets and such other fishing gear as the case may be and possess necessary authorisation/certification as may be applicable in respective states for fish farming and fishing related activities and for any other state specific fisheries and allied activities. The detailed instructions were issued by RBI vide circular FIDD.CO.FSD.BC.No.6/05.05.010/2022-23 dated 18 May 2022.
- iv. **Lending by Commercial Banks to NBFCs and Small Finance Banks (SFBs) to NBFC-MFIs, for the purpose of on-lending to priority sector**
To ensure continuation of the synergies that have been developed between banks and NBFCs in delivering credit to the specified priority sector, RBI issued instructions to all Scheduled Commercial Banks including Small Finance Banks that Bank credit to NBFCs (including HFCs) for on-lending will be allowed up to an overall limit of 5 percent of an individual bank's total priority sector lending in case of commercial banks. In case of SFBs, credit to NBFC-MFIs and other MFIs (Societies, Trusts, etc.) which are members of RBI recognized 'Self-Regulatory Organisation' of the sector, will be allowed up to an overall limit of 10 percent of an individual bank's total priority sector lending. These limits shall be computed by averaging across four quarters of the financial year, to determine adherence to the prescribed cap.
SFBs are allowed to lend to registered NBFC-MFIs and other MFIs which have a 'gross loan portfolio' (GLP) of up to Rs.500 crore as on March 31 of the previous financial year, for the purpose of on-lending to priority sector. In case the GLP of the NBFC-MFIs/other MFIs exceeds the stipulated limit at a later date, all priority sector loans created prior to exceeding the GLP limit will continue to be classified by the SFBs as PSL till repayment/maturity, whichever is earlier. The detailed instructions were issued by RBI vide circular FIDD.CO.Plan.BC.No.5/04.09.01/2022-23 dated 13 May 2022.
- v. **Modified Interest Subvention Scheme for Short Term Loans for Agriculture and Allied Activities availed through Kisan Credit Card (KCC) during the financial year 2021-22**
Modified instructions on Interest Subvention Scheme for Short Term Loans for Agriculture and Allied Activities availed through Kisan Credit Card (KCC) during the financial year 2021-22 were issued by RBI to all Public Sector Banks, Private Sector banks and Small Finance Banks to extend the benefit of Interest Subvention vide circular FIDD.CO.FSD.BC.No.3/05.02.001/2022-23 dated 28 April 2022. As per the scheme, banks to submit their additional claim pertaining to the disbursement made during the year 2021-22 which is (i) not included in the claim as on 31 March 2022; and (ii) repaid promptly during 2022-23, latest by 30 June 2023.

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 agriculture sector, NABARD provides refinance to the cooperative banks and RRBs out of Long Term Rural Credit Fund, at a reasonable rate of interest. An amount of Rs.1,20,000.00 crore was allocated for the year 2021-22.

1.3.2 Short-Term Refinance

- NABARD provides Short Term refinance to Cooperatives & RRBs for their crop loan lending. The allocation for the year 2021-22 was Rs.1,20,727.66 crore.

1.3.3 Other Initiatives

(i) Special Refinance scheme for financing under Agriculture Infrastructure Fund (AIF) for RRBs, Cooperative Banks and subsidiaries of NABARD with a view to address the existing infrastructure gaps and to provide a fillip to the rural financial institutions for funding projects of other than PACS under AIF and also funding to eligible beneficiaries being covered under AIF. The scheme envisages investment in viable projects relating to post harvest management infrastructure and community farming assets.

(ii) To improve the flow of credit to priority sector by banks 25% of the corpus of the STRRB Fund and LTRCF, allocated for the RRBs in the credit starved districts.

(iii) Extension of both the Short Term and Long Term refinance to all RRBs, based on internal Risk Rating category of NABARD viz. NBD1 to NBD7.

(iv) NABARD has devised a new scheme for providing repayable financial assistance to State Governments for share capital contribution to RRBs under Section 38 read with section 39 of the NABARD Act, 1981 to facilitate release of proportionate share of the State Govt. to RRBs and to ensure uninterrupted credit flow to rural sector.

(v) Keeping in view the requirements of Cooperatives and RRBs under Short Term Refinance Scheme under ST(SAO) and ST(Others), NABARD has issued guidelines for the State Cooperatives and RRBs, wherein the banks have the option of choosing between fixed and floating rates for short term refinance sanction availed under ST(SAO) and ST(Others) limits.

1.3.4 Government Sponsored Programmes with Bank Credit

- Department of Food and Public Distribution (DFPD), Government of India has notified the "Scheme for extending financial assistance to project proponents for enhancement of their ethanol distillation capacity or to set up distilleries for producing 1st Generation (1G) ethanol from feed stocks such as cereals (rice, wheat, barley, corn & sorghum), sugarcane, sugar beet, etc." NABARD has been appointed as the Nodal Bank for interacting with DFPD and managing interest subvention under the Scheme. The operational guidelines have been issued to Cooperative Banks, RRBs, NCDC, PSBs, Commercial Banks, etc. for implementation of the scheme.
- Administrative approval conveying continuation of the following subsidy schemes for 2021-2022 (till 30 September 2022) has been received from the GoI :
 - Agri Clinics and Agri Business Centres (ACABC)
 - Agri Marketing Infrastructure (AMI) sub scheme of Integrated Scheme for Agricultural Marketing (ISAM)

1.3.5 Rural Infrastructure Development Fund (RIDF)

- The corpus under Rural Infrastructure Development Fund (RIDF) was Rs. 40,000 crores during FY 2021-22.
- During 2021-22, the total sanctions were to the tune of Rs. 46,072.70 crore and disbursements were to the extent of Rs. 33,883.18 crore to various State/UTs.
- Based on the requests received from State Governments, two new activities viz. Road Over Bridges on railway crossings and Ropeway were added in the list of eligible activities under RIDF.

Other Important Funds

i) Long Term Irrigation Fund (LTIF)

Under LTIF, NABARD has sanctioned a loan amount to the tune of Rs.800.78 crore and Rs.3196.97 crore was released during 2021-22. As on 31 March 2022, the cumulative loan sanctioned and disbursed under LTIF stood at Rs.85, 127.38 crore and Rs.55, 676.68 crore, respectively.

ii) Micro irrigation Fund (MIF)

Under MIF, an amount of Rs.256.25 crore was released during 2021-22. As on 31 March 2022, the cumulative loan sanctioned and released stood at Rs. 3970.17 crore and Rs.2083.72 crore, respectively. The sanctions made by NABARD till date under MIF envisages expansion of micro irrigation coverage by an area of 12.83 lakh Ha. Total area of 4.23 lakh Ha has been covered by the States up to 31 March 2021. (Source: MoA&FW, GoI)

iii) Pradhan Mantri Awas Yojana-Grameen (PMAY-G)

As on 31 March 2022, the cumulative loan sanctioned and released under PMAY-G stood at Rs.61,975.00 crore and Rs.48,819.03 crore, respectively. This has facilitated construction of 1.77 crore houses as on 31 March 2022 (*Source-MoRD, GoI website*).

1.3.6 Micro Credit Intervention

1. Committee to review the SHG-BLP grading norms for credit linkage

In order to bring about uniformity in SHG grading norms, a Committee was set up to review the existing sets of SHG grading norms for credit linkage and suggest revised norms for fresh credit linkage and repeat linkage of SHGs. The Committee recommended (a) adoption of NRLM norms universally for SHGs; (b) review of grading norms after six months of operation of the National Loan Portal for inclusion of additional parameters by NRLM; (c) RBI to review their guidelines on credit reporting to Credit Information Companies (CICs); (d) development of common technology platform for the banks for collection of the SHG member level data to ensure uniformity; and (e) use of Central KYC Registry for capturing the KYC details of members of SHGs for reporting to CICs.

2. Enhancement of collateral free loans to Self Help Groups (SHGs) under DAY-NRLM from Rs.10 lakh to Rs.20 lakh

Credit Guarantee Fund for Micro Units (CGFMU) is the Trust Fund set up by Government of India, managed by NCGTC as a Trustee, with the purpose of guaranteeing payment against default in Micro Loans extended to eligible borrowers by Banks/ NBFCs/ MFIs/ Other Financial Intermediaries. Consequent to the amendment in the CGFMU scheme, the collateral free loans to SHGs under DAY-NRLM were enhanced from Rs. 10 lakh to Rs.20 lakh and categorised as under.

- i. Loans up to Rs. 10 lakh -No collateral and no margin to be charged
- ii. Loans above Rs. 10 lakh and up to Rs. 20 lakh - No collateral and no lien to be marked against savings bank accounts of SHGs.

However, the entire loan (irrespective of the loan outstanding, even if it subsequently goes below Rs. 10 lakh) would be eligible for coverage under Credit Guarantee Fund for Micro Units (CGFMU).

1.3.7 Financial Inclusion

- **Positive Pay System:** In order to enhance the safety of cheque based transactions of Rs.50,000/- and above, the new scheme with maximum support of Rs. 5.00 lakh for implementation of Positive Pay System (PPS) by Rural Cooperative Banks (RCBs) has been introduced under FIF in September 2021. This enables an additional security layer to the cheque clearing process. As on 31 March 2022, out of 384 banks, more than 100 banks have already availed sanction under FIF for the scheme and during the year 2021-22 an amount of Rs.520.71 lakh has been sanctioned and Rs.241.03 lakh is disbursed under the scheme.
- A scheme under FIF for implementation of Green PIN facility at ATMs and/or micro ATMs for RuPay Kisan Card activation was launched under which maximum Rs.4.00 lakh one-time implementation and application development cost for enabling Green PIN facility is reimbursed. In order to bring digital financial literacy in the remote areas and to give further thrust to effective financial inclusion, the scheme for providing support for mobile vans was modified to support a maximum of five demo vans per district on a select basis. This has greatly helped in delivering banking services during the pandemic.
- Scaling up of the Centre for Financial Literacy (CFL) Project was launched in 2021-22. The pilot project of RBI being implemented in 80 blocks of the country is now up scaled to 200 CFLs. The scaled up project envisages that one CFL will cater to 3 blocks.
- A scheme under FIF for supporting onboarding to Bharat Bill Payment System (BBPS) is granted to encourage banks to provide facility of online utility payment services to their customers to enable rural customers to experience the benefits of online bill payments. Maximum Rs.2.00 lakh one time integration cost of the Bank with the Bharat Bill Payment Operating Unit (BBPOU) is reimbursed under the scheme.
- Support extended to RCBs in addition to CBs and RRBs for opening Kiosk outlets in unbanked villages of North Eastern States in order to augment the banking outlets through BCs for providing comprehensive financial services in unbanked villages with population less than 500.

1.3.8 Farm Sector Development – Important Initiatives

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

- JIVA: An agro ecological transformation programme, aimed at achieving long-term sustainability of interventions made in the completed NRM projects and promotion of sustainable farming was launched.
- Indo-German Technical Cooperation Project on Capacity enhancement for Sustainable Agriculture and Sustainable Aquaculture (C-SASA) was signed during the FY 2021-22.
- Nationwide exercise of Geo tagging of Wadis was initiated.

II. FPO Promotion

- NABARD, in collaboration with GiZ, developed a mobile application for conduct of baseline survey of FPOs and an automated rating tool for FPOs (FPO Manak tool).
- BIRD, Lucknow as the Nodal Training Institute for Central Sector Scheme of 10,000 FPOs developed five Basic training modules and eight advanced training modules for FPOs and other stakeholders.
- 417 FPOs were promoted under Central Sector Scheme on 10,000 FPOs during 2021-22. With this, the Cumulative number of FPOs promoted is 1096, of which 774 are registered.

III. IOT and ICT Interventions

- Deployment of IOT systems in the watershed for delivering advisories on improved agricultural practices (Himachal Pradesh).
- End-to-End ICT and IOT based solutions for farmers (Gujarat & Jharkhand)
- IOT based Soil & Weather Stations through Farmers Producer Company (Tamil Nadu).
- Application of IOT and Machine Learning for cultivation of Chillies (Telangana).
- Development of drone-based package of practices in direct seeded rice (Telangana) and demonstration of spraying pesticides and foliar application of nutrients using Drone (Tamil Nadu).
- Implementation of IOT in vegetable cultivation (Uttar Pradesh).
- Pilot project on encouraging rural youth in agriculture for agri-entrepreneurship development sanctioned in Rajasthan and Jharkhand.
- Agriculture Export Facilitation Centre (AEFC) to function as a 'One Stop Centre' for agri export services and capacity building of farmers in traceability, Good Agriculture Practices, etc. in Maharashtra (various export commodities) and Rajasthan (spices) was set up.

IV. Climate Action

- Under climate change initiatives, NABARD has released an amount of Rs.97.30 crore under various funding mechanisms viz. Adaptation Fund (AF), Green Climate Fund (GCF) and National Adaptation Fund for Climate Change (NAFCC).

1.3.9 Off Farm Sector Initiatives

- A total of 58 OFPOs, covering around 18,000 beneficiaries have been supported with grant assistance of ₹28.93 crore across 24 states. Of these, 45 OFPOs have been registered under Companies Act while 5 have been registered under the Societies Act and are undertaking business activities of aggregation, marketing and input distribution. Of the 58 OFPOs, 16 OFPOs are all-women OFPOs and are expected to empower 10,000 women weavers and artisans directly.
- Relaxations in norms for skill training providers in the NER, LWE affected states and islands.
- NABARD is the Connect Centre for Stand Up India Scheme for organizing pre and post disbursement handholding events at district level, to share best practices, review the programme, problem solving and guiding the potential borrowers.
- New scheme to support off-farm sector development projects in DPR Mode has been formulated to provide more flexibility to development project partners in designing and implementing projects cater to the vast off-farm sector development landscape that is differentiated by region, material, product, artisan, and a whole host of other factors.
- A scheme to extend assistance for formation and nurturing of mini-OFPOs comprising of less than 200 members was introduced to achieve wider regional spread particularly in North Eastern states, hilly and difficult areas, bring in sustainable development for the unreached and excluded sections, help reduce distress migration of artisans, increase incomes of the artisans, provide a market for products, help revive dying arts, crafts and weaves etc.

- ‘Stall in Mall’ scheme has been introduced to provide support for hiring and/ or setting up of temporary stalls for a period of between one to three months in a year in reputed malls, stores, market complexes, reputed hotels, and prominent premises (Govt. or private), places with good footfall.

1.3.10 Agriculture Credit Target during 2022-23

For the FY 2021-22, the ground level agricultural credit achievement was Rs.17.10 lakh crore, as against the target of Rs 16.50 lakh crore.

Agriculture credit target for the year 2022-23 has been fixed at Rs.18.50 lakh crore. In order to provide special focus to allied activities, separate sub targets of Rs. 37,800 crore for working capital and Rs. 88,200 crore for term loan towards allied activities under GLC targets have been fixed.

1.4 Policy Initiatives – State Government – Budgetary Announcement

Following important announcements have been made in the state budget 2022-23 for agricultural and rural welfare :

State Budget 2022-23 Outlay:

- Rs.1,15,215 crore is proposed for 5 elements of Panchasutri - Agriculture, Health, Human resource, Transport and Industry. Rs. 4 lakh crore will be provided for this programme in next three years.
 - Rs. 23,888 crore is proposed for agriculture and allied sectors,
 - Rs. 5,244 crore for health sector,
 - Rs. 46,667 crore for human development and human resources,
 - Rs. 28,605 crore for transportation infrastructure,
 - Rs.10,111 crore for development of Industry and Energy sectors.

Agriculture

1. An incentive grant of Rs. 50,000 to 20 lakh farmers who repay their crop loans regularly.
2. Rs. 964 crore has been earmarked for waiving loans taken from land development bank by 34,788 farmers.
3. Dr. Punjabrao Deshmukh Interest Concession Scheme: Crop loans at zero percent interest to farmers from kharif season of 2021. Rs. 911 crore will be made available to 43.12 lakh farmers in the year 2022-23.
4. Rs. 100 crore for Hon. Balasaheb Thackeray Agricultural Research Centre to be established at Basmat, Dist. Hingoli for research on increasing productivity of turmeric crop.
5. Rs 1000 crore will be provided in the next 3 years for a special action plan for Soyabean and cotton crops for enhancing the productivity and for value - chain development.
6. Farm ponds have been included under Mukhyamantri Shashwat Krishi Sinchan Yojana with increase in amount of farm ponds subsidy by 50% to Rs.75,000.
7. “CM Agriculture and Food Processing” scheme will be implemented for the next 5 years with special emphasis on Agro-processing and value addition on coarse grains.

Co-operation

8. Interest subvention scheme for loan taken by 306 APMCs for infrastructure upgradation with 100% repayment of interest. Rs. 2,000 crore had been provided in last year’s budget for strengthening 306 APMCs. It is expected to attract an investment of Rs. 10,000 crore in the next two years.
9. An amount of Rs.6,952 crore will be provided towards minimum support price for procurement of agricultural commodities.
10. Investment of Rs. 950 crore is proposed over the next 3 years for computerization of PACS to connect them to core banking system of District Central Co-operative Bank.

Water Resources

11. Nine out of 26 projects under Pradhan Mantri Krishi Sinchan Yojana have been completed, creating irrigation capacity of 2.86 lakh ha and water storage of 35 TMC. 11 projects are planned to be completed in 2022-23.

12. Under Baliraja Jal Sanjeevani Yojana, 28 out of 91 projects have been completed creating irrigation capacity of 20,437 ha. 29 projects are expected to be completed in 2022-23.
13. An amount of Rs.853.45 crore will be made available for Gosikhurd National project in 2022-23.

Soil and Water Conservation

14. Complete 4,885 Soil and Water conservation works in the next two years at a cost of Rs. 4,774 crore.
15. Revival of the irrigation facilities by converting the seepage ponds into storage ponds on the lines of Washim district, in other aspirational districts.

Animal Husbandry, Dairy Business and Fisheries

16. Upgrading and enhancing the capacity of Common Facility Centre for Goat Rearing at Pohra Dist. Amravati. One such project will be implemented in each revenue department of the state.
17. Three mobile laboratories for Indigenous Cows, Buffaloes - One each for Vidarbha, Marathwada and the rest of Maharashtra to increase the productivity of indigenous cows and buffaloes.
18. Share capital of Maharashtra Fisheries Development Corporation will be increased by Rs.50 crore for the maintenance and repair of 173 fishing centres

Skill Development

19. An innovation hub with an investment of Rs. 500 crore will be set up in every revenue region of the state to create skilled human resource in the field of fintech, nano, bio-technology, block chain etc. Skill upgradation center will be set up in Gadchiroli district with the help of private participation which will impart skill development training to 5,000 students every year.
20. Innovation and Incubation Ecosystem to encourage Start-ups along with Government seed capital supported by state Government Start-up fund of the size of Rs. 100 crore.
21. Installation of machines for sanitary napkins for girl students in government hostels.

Rural Development

22. Mission Mahagram to achieve sustainable development goals with focus on human development and raise Rs. 500 crore through CSR Fund.
23. Pradhanmantri Gramin Awas Yojana : Target for 2022-23 is set for construction of 5 lakh houses with an outlay of Rs. 6,000 crore).

Road Development

24. Mukhyamantri Gram Sadak Yojana Phase-II - Works of 10,000 km of roads costing about Rs. 7,500 crore have been sanctioned and will be completed in next 2 years.
25. Hybrid Annuity NABARD assistance - Strengthening and upgradation work of 3,675 km road length out of 8,654 km is completed under hybrid annuity scheme with an expenditure of Rs. 22,309 crore. Remaining works will be completed in the year 2022-23. NABARD assisted construction of 65 roads and 165 bridges will start in the year 2022-23.

Industry

26. Chief Minister Employment Generation Programme - More than 1 lakh candidates have submitted investment proposals under CM Employment Generation Programme. Out of this, 9,621 proposals have been approved by various banks, through which an investment of Rs. 1,100 crore has been made. In the coming year, more than 30,000 self-employment projects will create about 1 lakh direct and indirect employment opportunities.
27. Pandita Ramabai Smriti Shatabdi Mahila Udyojak Yojana for the women who became widow due to covid so as to assist them to start self-employment. 100% interest on capital loans will be repaid through the Maharashtra Economic Development Corporation.
28. Tribal Industrial Cluster at Dindori, District-Nashik to provide infrastructural facilities and support to start ups of the Tribal Community.

Energy

29. Solar Power Projects - A total capacity of 577 MW solar power projects will be set up at Mauje Kodgaon and Mauje Shindala (Dist. Latur), Mauje Sakri (Dist. Dhule), Washim, Mauje Kachrala (Dist. Chandrapur) and Yavatmal. Apart from this 2500 MW capacity solar energy park will be developed in the state.

Tourism

30. Ajanta, Ellora, Mahabaleshwar Tourism Development Plan with Modern community convention centers.
31. Preservation and conservation of the forts viz Rajgad, Torna, Shivneri, Sudhagad, Vijaydurg and Sindhudurg as also Sewri and St. George Fort in Mumbai.
32. Water Sports Tourism project of Rs. 50 crore in Shivsagar reservoir in Jawali taluka of Satara district in the vicinity of Koyna dam. Also at Gosikhurd project at Bhandara and Jayakwadi in Aurangabad district.
33. Development of shrines - Mahalakshmi Temple Development Plan at Kolhapur and Vitthal Rukmini Temple area at Vadha, Dist. Chandrapur.
34. Solar Fencing Scheme in all sensitive villages to avoid loss of crops by wild animals.
35. State River Conservation Scheme for rivers in the state with an estimated cost of Rs. 150 crores.

1.4.1 State Government Sponsored Programmes

1. Dr. Babasaheb Ambedkar Krishi Swavalamban Yojana
2. Birsa Munda Krishi Kranti Yojana
3. Bhausaheb Fundkar Orchard Planting Scheme
4. Agriculture Awards given by the Department of Agriculture
5. Horticulture mechanization – Incentive for financing machinery to farmers belonging to SC, ST, women, SF & MF.
6. Dr. Punjabrao Deshmukh Organic Farming Mission
7. Incentive to farmers making prompt repayment under MJPSKY

1.4.2 Central Government Sponsored Programmes with state govt. component

1. Benefit scheme of new wells for farmers belonging to Scheduled Castes and Scheduled Tribes under National Agriculture Development Plan
2. Orchard Plantation Scheme under Mahatma Gandhi National Rural Employment Guarantee Act
3. Establishment of National Horticulture Mission Protected Agricultural Greenhouse under Integrated Horticulture Development Mission
4. Crop Pest Surveillance and Advisory Project (CROPSAP)
5. National Food Security Campaign - Coarse Grain (Maize)
6. National Food Security Campaign- Cereal crops
7. Pradhan Mantri Krishi Sinchan Yojana - More crop per drop
8. Integrated Horticulture Development Campaign: Post-harvest project management Area Expansion
9. Agricultural Technology Management Agency- ATMA
10. Erection of onion storage structure with subsidy for construction
11. Pradhan Mantri Micro Food Industry Upgradation Scheme (PMFME) under Atmanirbhar Bharat Package
12. Central sector scheme of Financing facility under Agriculture Infrastructure Fund"
13. Traditional Agriculture Development Scheme (Organic Farming)
14. Dryland Area Development under National Sustainable Agriculture Mission (NMSA)

1.4.3 Other State Government Initiatives

Some of the schemes brought out by the State Govt. to impart thrust to agriculture that entail the need for bank finance in a supportive role suiting to the component/features of the scheme are listed below :

1. Project on Climate Resilient Agriculture (PoCRA)
2. State of Maharashtra's Agribusiness and Rural Transformation (SMART) Project
3. Jalyukta Shiwar Yojana
4. Maharashtra Agribusiness Network project (MagNet)
5. Mahatma Jotirao Phule Shetkari Karj Mukti Yojna 2019 (MJPSKY)
6. Digital India Land Records Modernization Programme (DILRMP)

7. Gopinath Munde Farmers Accident Insurance Scheme

1.5 Status of Cooperatives in the State

The banking outreach in Maharashtra comprises of 12 Public Sector Banks with a network of 7431 branches, 16 Private Sector Banks with 4052 branches, 8 Small Finance Banks with 699 branches, one Wholly Owned Subsidiary of Foreign Bank with 17 branches, 3 Payment Banks with 40 branches, two Regional Rural Banks with 737 branches. Cooperative Banks including the MStCB and 31 DCCBs with a branch network of 3573. Thus the total number of branches in the state are 16549 (*Data as on 31.03.2022, Source: SLBC*).

Maharashtra is recognised as one of the leading states in India in the field of cooperation. Apart from cooperative banks there is a successful network of sugar cooperatives in the state. The other cooperative network in the state includes cooperative spinning mills, cooperative poultrys, cooperative dairies, other agricultural processing cooperatives, cooperative sale and purchase unions, cooperative credit societies.

1.5.1 Sector-wise/Activity-wise distribution of Cooperatives

Sr. No	Type	Number of Societies in the state
A. Details of Non-Credit Cooperative Societies		
1	AH Sector (Milk/Fishery/ Poultry etc.)	18,013
2	Consumer Stores	2,431
3	Housing Societies	1,17,914
4	Weavers	745
5	Marketing	1,370
6	Labour Societies	11,171
7	Industrial Societies	6,352
8	Agro Processing and Sugar	1,151
9	All others	37,366
	Total	1,97,487
B. Details of Credit Cooperative Societies		
10	Primary Agriculture Credit Societies	20,897
C. Details of Multi State Cooperative Societies		
11	No. of MSCS	--

(Data as on 31.03.2021, Source: RCS Office, Pune)

The cooperative credit institutions purveying credit to unbanked segments of the State play a significant role in accelerating credit flow for agriculture and in financial inclusion. The cooperative credit structure in the State comprises the three-tier short term rural cooperative credit institutions (State Cooperative Bank, District Central Cooperative Banks and Primary Agricultural Credit Societies) and the Primary Urban Cooperative Banks.

There are 20,897 Primary Agriculture Cooperative Societies in the State affiliated to the DCCBs with a membership of 147 lakh and an outreach of 685 rural households per PACS. The Cooperative Banks have a network of 3573 branches with 2502 branches in rural areas, 592 in semi-urban areas and 479 in urban areas. With 41 Scheduled UCBs and 439 Non Scheduled UCBs, Maharashtra has the highest number of UCBs and accounted for the largest number of mergers.

As against the ACP target for the state under crop loans for the year 2021-22, the achievement of Co-operative banks in disbursement was 89%. With respect to share of agencies in crop loan disbursement, the share of co-operative banks was of Rs. 18,417 crore, which is 38% of the total crop loan disbursement. The CD ratio of cooperatives as on 31 March 2022 is 61% as against the State CD ratio of 88%.

1.5.2 Central Sector Scheme on PACS Computerisation

The State and District Central Cooperative Banks in the country are working on Core Banking Solutions (CBS) platform. So it is a next logical step that the Primary Agricultural Credit Societies (PACS), the ground level credit dispensing units of the STCCS, also be facilitated with the use of appropriate IT based technology. The computerisation of PACS and their operations integrated with the CBS platform of higher tiers shall enable the PACS;

- a. To bring in efficiency, accountability, transparency and achieve profitability.
- b. To bring in accuracy and uniformity in the conduct of business, accounting with entries originating at the transaction level and reporting thereof through standardization of processes, implementation of Common Accounting System (CAS) and Management Information System (MIS) and compliance to stipulations.
- c. To help transform PACS into Multi Service Organizations (MSO) offering to members in particular and the rural population in general, an array of services covering agriculture and allied activities; financial and non-financial products and literacy on related matters.
- d. To facilitate better implementation and purveying of schemes like; interest subvention and subsidy claims) and programs of Governments.

Keeping in view the priority and the benefits of PACS computerisation, Government of India has announced the Centrally Sponsored Project for Computerisation of PACS (CSP-PCP) with a budget of Rs.2516 crore. The project is sponsored by Ministry of Cooperation, Govt. of India. The project involves computerisation of about 63,000 PACS across India over a period of 5 years beginning from financial year 2022-23. The funding pattern will be Rs.1,528 crore by GoI, Rs.736 crore by state governments/ UTs and Rs.252 crore by NABARD. The project envisages computerisation of all the activities undertaken by the PACS mainly focussing on credit/ non-credit business related to agriculture and allied activities. Key components of the project are hardware, comprehensive ERP solution, state specific customisation in the common software & support system, maintenance and training.

NABARD is the implementing agency for the project. The implementation will be monitored by national/ state/ district level implementation & monitoring committees. The project will be implemented through the Project Monitoring Units (PMU) at national/ state/ district levels.

Government of Maharashtra has constituted the State Level Implementation & Monitoring Committee (SLIMC) and District Level Implementation & Monitoring Committees (DLIMC). There are 20,897 PACS affiliated to different DCCBs in Maharashtra which will be considered for computerisation over the period of implementation based on the selection criteria prescribed under the project.

Chapter 2 - Credit Potential for Agriculture

2.1 - Farm Credit

2.1.1 Crop Production, Maintenance and Marketing

2.1.1.1 Introduction

The district is part of rice bowl of Maharashtra. It produces 15% of the total rice produced in the State. Other important crops in the district are soyabean, tur, sugarcane, wheat, pulses, oilseeds, turmeric, chillies and vegetables. Of late, some farmers are shifting to cotton cultivation. The district has total geographical area of 4.087 lakh hectare of which 2.71 lakh ha is gross sown area and 2.08 lakh ha. is net sown area. Out of 2.08 lakh ha, 1.42 lakh ha is irrigated. Paddy is cultivated in 1,78,768 ha, Tur in 12554 ha and soyabean in 524 ha. Only Paddy and Soyabean are identified as notified crops for Pradhan Mantri Fasal Bima Yojna. With the availability of irrigation facilities, the farmers are also cultivating sugarcane, cotton, turmeric, chillies, garlic, and other vegetables during the year. The Cropping Intensity in the district is 130%.

The district received the rainfall of 596.4 mm (41.4%) during monsoon 2022 season (till 19-07-2022) as against the average annual rainfall of 1439.8 mm. Inadequate rains adversely affected sowing and growth of most of the crops.

A change in cropping pattern is perceptible in entire district as some farmers are switching from traditional paddy cultivation to different crops. Cultivation of Turmeric, Ginger, Chillies, Cotton and Sugarcane as well as organic farming are gaining momentum. Adopting High Tech practises would increase production and productivity in agriculture.

2.1.1.2 Infrastructure and linkage support available, planned and gaps

1. Total average annual requirement of seeds for various crops in the district is 44954 quintal and it is being procured from 35 companies including Government agencies like Mahabeej. There is a gap of around 13450 quintal which was met by the farmers by processing self prepared seeds. Requirement of fertiliser in the district on an average is 107007 quintal. Government and Private companies fulfill the demand of the district. Production and use of organic manure is gaining momentum over the years.
2. The Krishi Vigyan Kendra (KVK) at Sakoli in Bhandara district conducts extension programmes for improving yield in paddy, production of seed, fodder cultivation in view of scope for dairy in the district and Green Blocks technology of fodder.
3. Banks in the district are implementing Kisan Credit Card (KCC) scheme including its value added models covering term loans.
4. Pradhan Mantri Fasal Bima Yojna (PMFBY): The crop insurance scheme (PMFBY) is being implemented in the district since Khariff 2016. The non-loanee as well as all the loanee farmers are being covered. The crops covered under the scheme are paddy and soyabean. The farmers are being apprised of the scheme regularly by various agencies and through various forums / programmes.
5. The Scale of Finance approved by the District Level Technical Committee (DLTC) for the year 2022-23 are given in Annexure -V.
6. The ground level flow of credit for raising crops during the years 2019-20, 2020-21 and 2021-22 were Rs.42722.00 Lakh, Rs.57752.00 Lakh and Rs.51575.00 Lakh respectively.

2.1.1.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms)

The actual ground level credit flow in the form of crop loans depends upon a number of factors and is an area of concern. However, while estimating the potentials, the major factors viz. areas under different crops (as presented in the district kharif review) have been taken into consideration. The demand for loan is high in case of small and marginal farmers who cover 67% of the total agricultural land in the district. Further, the demand exists in case of other farmers as well. Thus, around 80% of the area under various crops has been taken as the physical potential. In view of the above as also other support systems and interventions under various schemes discussed in the preceding paras, the extension machinery available in public and private sector and other remaining factors, trends in ground level credit, etc., the potential in physical and financial terms for the year 2023-24 has been estimated as under :

(Amount in Rs. Lakh)

Sr. No.	Name of the Crop	Scale of Finance	Physical Unit (ha)	Bank Loan
1	Paddy	0.548	138000	75624.00
2	Wheat	0.300	1400	420.00
3	Sugarcane	0.900	1200	1080.00
4	Cotton	0.450	650	292.50
5	Soyabean	0.313	4000	1252.00
6	Pulses	0.200	10600	2120.00
7	Chilli	0.600	400	240.00
8	Spices	0.875	950	831.25
9	Vegetables	0.500	5500	2750.00
		Sub - Total	162700	84609.75
Post Harvest / Household / Consumption requirements			10% of Sub - Total	8460.98
Repairs and Maintenance expenses of farm assets			20% of Sub - Total	16921.95
			Total	109992.68

Block-wise details of physical and financial programme for the financial year 2022-23 is given in Annexure - I. The assessment of financial potential has increased due to increase in the Scale of Finance for paddy. The scale of finance for some crops have been aligned with that for the state wherever wide difference was observed. The physical units have been assessed keeping in view the shift in cropping pattern as also the extent of farmers availing bank credit as gathered from various sources in the district.

2.1.1.4 Critical interventions required for creating a definitive impact

1. Replacement of summer paddy by groundnut & moong crops in the area to reduce off-take of ground water.
2. Although the district is having irrigation facilities to the extent of 68%, the Malgujari water tanks and other water harvesting structures have accumulated silt over the years and desilting and bund construction under NREGA, etc. needs to be taken up for their optimum use.

2.1.1.5 Suggested Action Points

1. Credit dispensation under KCC should be as per the guidelines issued by RBI and NABARD to meet the credit requirement of the farmers adequately.
2. The shortage of fertiliser during June, July months is becoming a regular feature and the private dealers are taking advantage of this situation to push through sub-standard fertilizers at exorbitant rates. The situation is similar in respect of seeds. The Agriculture Department may ensure availability of adequate fertilizer and quality seeds through government agencies and the open market.
3. The DCCB may sanction credit limits to PACS for purchase of fertilizers.

2.1.2 Water Resources

2.1.2.1 Introduction

Water Resources projects can be classified into three categories a) Major Irrigation Projects where Culturable Command Area (CCA) is more than 10,000 ha; b) Medium Irrigation Projects where CCA is between 2,000 ha to 1,0000 ha and c) Minor Irrigation Projects where the CCA is below 2,000 ha.

The district forms part of Wainganga sub-basin. Most of the cultivable soils of the district belong to the Morand and Sihar types, both of which are light and slightly acidic. The Sihar are the best rice soils of the district while the Morand soils are devoted to rabi crops like wheat and linseed and kharif jowar. The net annual ground water availability in the district is 856.03 MCM. The total annual ground water draft for all

uses is estimated at 141.17 MCM with irrigation sector being the major consumer having a draft of 121.49 MCM. The allocation for domestic and industrial uses upto the year 2025 is worked out at 39.34 MCM.

The major source of water in the district is Wainganga river. It flows across the district covering 200 Kilometers through 5 out of 7 blocks. National Irrigation Project popularly known as Gose khurd dam (Indira Sagar Dam) situated in Gose village of Pauni block is on Wainganga river. It is earth fill dam having height of 22.5 meters above lowest foundation. Its length is 1135 meter and volume is $3.83 \times 10^8 \text{ m}^3$. The capacity of the dam is to irrigate 2,50,800 hectare of which 39,176 hectare is achieved. Apart from this, there are 4 other medium irrigation projects viz. Sarona, Betekar, Chandpur & Bagheda in the district having command area of 21,189 hectares and irrigating 14,872 hectares. Further sources of surface irrigation in the district are tanks, wells, ponds and the tributaries of Wainganga river viz. Bawanthadi and Chulband rivers. The net irrigated area under surface irrigation in the district was 70,550 ha. as on 31.03.2020.

Ministry of Water Resources, River Development and Ganga Rejuvenation (MoWR, RD&GR), GoI has constituted Long Term Irrigation Fund (LTIF) in NABARD with an initial corpus of Rs.20,000 Crore for funding and fast tracking of the incomplete 23 major and medium irrigation projects. Gose Khurd and Bawanthadi irrigation projects have been sanctioned Rs.583.398 Crore and Rs.91.80 Crore respectively under this fund. Government of India has been according lot of importance to irrigation through the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) with the vision of 'Har Khet Ko Pani' (water to every farm) i.e. extending the coverage of irrigation and 'Per Drop More Crop' i.e. improving water use efficiency. The scheme is to be implemented in a focused manner with end to end solution on source creation, distribution, management, field application and extension activities

The ground water availability for future irrigation is estimated at 345.21 MCM. The stage of ground water development varies from 15.85 % (Bhandara) to 51.05 % (Pauni). The overall stage of ground water development for the district is 28.66%. Entire Bhandara district comes under "Safe" category.

The various sources used for irrigation are wells (21,039), minor (203), medium (4) & major (2) irrigation systems, lift irrigation systems (5), and tanks/ponds (1169). In the district, 3378 diesel and 46695 electric pump sets are used for irrigation.

(Source : http://cgwb.gov.in/District_Profile/Maharashtra/Bhandara.pdf and DES 2020 report)

The yearly actual annual rainfall (in mm) in Bhandara district for the past 10 years is as under :

Normal	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1439.8	1691.2	799.9	1078.3	927.9	850.5	1029.6	1251.5	1217.4	1246.3	1226.9*

(Source : www.mausam.imd.gov.in)

* Till 06-09-2022.

The ground level credit flow to the private irrigation activities were Rs.935.00 Lakh, Rs.1,067.00 Lakh and Rs.2,197.00 Lakh during the years 2019-20, 2020-21 , and 2021-22 respectively.

2.1.2.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms)

(Amount in Rs. Lakh)

Sl. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Units	TFO	Bank Loan
1	Dug well	No.	1.730	160	276.80	249.12
2	Bore well / Tube well	No.	0.393	250	98.25	88.43
3	Pump sets Diesel /Electric (5 HP)	No.	0.440	1400	616.00	554.40
4	Pump house	No.	0.150	1400	210.00	189.00
5	Sprinkler Sets	No.	0.300	1000	300.00	225.00
6	Pipeline (100 m)	No.	0.300	4500	1350.00	1215.00
7	Drip sets	No.	1.000	2550	2550.00	1912.50
8	Repair/ renovation of wells	No.	0.820	1120	918.40	826.56
	Total				6319.45	5260.01

1. Block- wise details of physical and financial programme for the financial year 2023-24 are given in annexure-I. The higher projections for pipelines are due to use of hired pipes on canals and *nalas* by small and marginal farmers for irrigating their farms during dry spells of kharif and rabi.
2. The potential for pipeline is estimated on the basis of availability of canal, river, nalla water sources during kharif and rabi and need of farmers for accessing water from these sources to their farms.
3. The increase in the height of the Indira Sagar (Gose Khurd) dam would increase the underground water table. Therefore, it is assessed that there will be increase in demand of loans for MI activities.

2.1.2.4 Availability of Infrastructure, critical gap and Infrastructure required

1. The annual ground water recharge and the net ground water availability in the district are 92323.75 Ham and 85539.63 Ham respectively which is sufficient for existing irrigation wells.
2. The issue of delayed electric connections as well as inadequate and erratic power supply needs to be addressed comprehensively. There is a need for promotion of solar pumping systems.
3. Focus should shift from providing more irrigation to better water management to cover a larger area with available water resources. Water-use efficiency of lift irrigation schemes needs to be increased by adopting micro irrigation and cultivating high value crops in their command.
4. Measures for artificial recharge of ground water may be promoted.

2.1.2.5 Suggested Action Points

1. MSEDCL/State Government may consider availing of financial assistance through RIDF for developing adequate infrastructure.
2. Flood irrigation for sugarcane and banana crops may be discouraged. At least 50 per cent of sugarcane fields has to be brought under micro irrigation. Cultivation of low water-intensive but high value crops should be encouraged.
3. As per the latest Ground Water estimates (2007-2008) of Groundwater Surveys and Development Agency (GSDA), both fluctuation of the groundwater table and stage of groundwater development are considered for categorizing the watershed into Safe, Critical, Semi-critical and Over Exploited. Application of this classification at the field level especially for bank finance may be difficult. Appropriate mechanism should be evolved wherein all new groundwater structures, irrespective of sources of finance, should be permitted only after GSDA accords approval.
4. Desilting of small / medium reservoirs may be taken up to increase storage capacity of the reservoirs. MNREGS funds may be used for the labour component. Zilla Parishad may introduce these in their plans.
5. Remotely located pumps may be run by use of solar energy.
6. More emphasis may be given to install water meters on MI water supply as well as Lift Irrigation Schemes so that lapses in flow measurements in these schemes will not distort the data on canal water use.
7. Due to the paucity of water in river, the existing Lift Irrigation schemes are facing acute water shortages. At such locations, Irrigation Department may construct suitable water conservation structures for which the State Govt. can consider availing loan from RIDF.

2.1.3 Farm Mechanization

2.1.3.1 Introduction:

Farm mechanization involves use of machines and technology in agriculture operations to increase productivity of land and labour through timeliness of operations, efficient use of inputs, improvement in quality of produce, safety & comfort of farmers and reduce loss of produce thus enhancing income of farmer. Due to intensive involvement of labour in different farm operations, the cost of production of many crops is quite high. In the present scenario, farm mechanization has become a necessity due to higher costs, paucity of farm labour and ever-increasing demand for agricultural products.

The farm mechanization facilitates use of inputs effectively and in reducing the drudgery in farm operations besides ensuring timeliness. The Indian farmers have adopted improved farm machinery irrespective of land holding size. Equipment for tillage, sowing, irrigation, plant protection and threshing have widely been

accepted by them. Farmers with small holdings utilize selected improved farm equipment through custom hiring to increase productivity and reduce cost of production.

About 300 improved agricultural equipment and technologies have been designed and developed for various pre and post-harvest operations operated by human, animal, mechanical and electrical power for timely field operation, facilitating timeliness, removal of farm drudgery, reducing post-harvest losses and addition of value to the agro-produce. Increased productivity does not mean additional income to the growers unless it is matched with appropriate postharvest technologies that minimize post-harvest losses and add value to the produce and by-products.

Major constraints in development of Farm Mechanization Sector are Fragmentation of land, large numbers of Small and Marginal Farmers (SF/MF), low purchasing power of SF/MF, Difficult Topography in some parts and higher charges of hiring.

Status of Farm Mechanization in Maharashtra State

The level of farm mechanization is being calculated in terms of average Farm Power Availability (kW /ha). The penetration of powered machines in various farm activities is assessed in the range of 40 to 45 per cent. The average farm power availability in Maharashtra is 1.185 kW/ha. It is 41.5% less than the national average of 2.025 kW/ha at the end of 2016-17. The FPA in Bhandara district is 0.957 kW/ha and it ranks 21st in Maharashtra.

2.1.3.2 Infrastructure and linkage support available, planned and gaps

1. KVK and ATMA are making field demonstration of modern and affordable farm equipment useful for paddy cultivation.
2. There are 22 tractors dealers who also provide after sale service of tractors in every taluka. The threshers, paddy transplanters and other farm equipment are also made available in the district as per demand. The use of tractors and farm machinery has been on the rise in the district during the past few years. Besides tractors, farmers in the district have adopted threshers as a major component of harvest management in their agricultural operations. Power tillers, a better option for the SF/MF, are yet to gain much popularity among the farmers.
3. As a result of completion of irrigation projects, new wells, lift irrigation schemes etc., the irrigation facilities have been extended to 102677 ha thereby creating further scope for use of tractors and power tillers in the own field of farmers as well as for custom hiring.
4. Credit disbursed to this sector has been Rs.3,827.00 Lakh (2019-20) and Rs.2,634.00 Lakh (2020-21) and Rs.1,990.00 Lakh (2021-22).

2.1.3.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms) :

Based on the infrastructure available, the potential has been assessed as under :

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Tractors	No.	7.00	500	3500.00	2625.00
2	Power Tiller	No.	1.00	350	350.00	262.50
3	Other Farm Equipment	No.	1.25	560	700.00	525.00
4	Paddy transplanter	No.	3.00	30	90.00	67.50
	Total				4640.00	3480.00

Block-wise details of physical and financial potentials for the financial year 2023-24 are given in Annexure I.

2.1.3.4 Critical interventions required for creating a definitive impact

1. The use of the tractor for custom hiring may be encouraged.
2. Small farm equipment designed by KVKs and progressive farmers which are fabricated locally need to be made eligible for bank finance.
3. There is need to increase the no. of repair / service stations for tractors and other farm equipment in the district.
4. To address the issue of mechanization of smaller holdings, the following possibilities may be explored :

- a. Cooperative management of farm machinery.
 - b. Financing of power tillers / second hand tractors for small farmers.
 - c. Devising smaller machinery suitable and cost effective for farm sizes less than 2 ha. Arranging demonstrations and advertisement of smaller machinery which are already been developed.
 - d. Promoting purchase of tractors / paddy transplanters by SHGs / JLGs.
5. There is need to revamp the tenancy legislation so that the land lease market is encouraged and the size of the tractor operated farms is increased to justify the existing farm machinery.

2.1.3.5 Suggested Action Points

1. More awareness camps / trainings may be conducted for the farmers, labourers and artisans regarding appropriateness of farm machinery and their proper use. (Agriculture Deptt., RSETI & ATMA)
2. Service units should be encouraged and mobile service units should be started. Adequate and soft loans for such purposes should be provided. (Banks)
3. Promote research for development of small tools which are viable on smaller holdings (Agriculture Universities, KVK, Agriculture Deptt. & ATMA).
4. Banks may take up financing new and replacement of farm machinery independent of tractors.

2.1.3.6 Digital technological Innovations in Agriculture

Indian Agriculture accounts for nearly 16% of the GDP employing 49% of the workforce. The Indian farmer faces myriad problems in cultivation and production which adversely impacts farming income. The major challenges of the agricultural sector are poor yield/ yield plateaus, degrading soil, water stress, inadequate market infrastructure, post-harvest losses, wastages, increasing number of climate change incidents etc., which contribute to poor income levels of farmers. There is therefore a need to bring in efficiencies in agricultural operations and marketing through digitization which will also bring about substantial increase in income of the farmers.

Innovations in Digital Agricultural technology facilitate improved efficiencies connectivity, knowledge sharing and various pivotal as well as supporting activities. In September 2021, the Ministry of agriculture and Farmers Welfare, GoI, announced the initiation of the 'Digital Agriculture Mission 2021–2025' which aims to transform the sector holistically by adopting a digital ecosystem. The initiative aims to leverage a wide range of technologies from AI, blockchain along with drone technology to improve the sector's overall performance. It aims to support and accelerate projects based on new technologies like Artificial Intelligence, Block Chain, Remote Sensing, GIS, Data Analytics, Machine learning, Internet of Things, Software as a service, Use of Drones and Robots etc. Extensive penetration of internet and smart phones, agri sector reforms, pro-start-ups policy changes, pandemic induce direct market access by farmers have enabled investors' interest in funding agri sector. NABARD has undertaken several initiatives in the field of digital technological innovations in agriculture.

Digital Agriculture Mission 2021-2025

A framework for creating Agristack is in process which will serve as a foundation to build innovative agri-focused solutions leveraging digital technologies. Under National e-Governance Plan in Agriculture, funds are released to the States/Union Territories for the projects involving use of modern information technologies and for customization/shifting of web & mobile applications. Various mobile applications including Kisan Suvidha have also been developed to facilitate dissemination of information to farmers on the critical parameters viz., Weather, Market Prices, Plant Protection, Agro-advisory, Extreme Weather Alerts, Input Dealers (of Seed, Pesticide, Fertilizer, Farm Machinery), Soil Health Card, Cold Storage & Godowns, Soil Testing Laboratories and Veterinary Centre & Diagnostic labs, Crop Insurance Premium Calculator and the Government schemes.

(Source: PIB post dated 05 April 2022 on Digital Agriculture Mission)

Some Initiatives supported by NABARD in Maharashtra for promoting Digital Technological Innovations in Agriculture

NABARD Maharashtra Regional Office, has been in the forefront of application of digital agriculture technologies under its various programme such as watershed and tribal development projects. Some of the recent applications of digital technologies in under watershed and tribal development projects are indicated below:

- i. Delineation and geo-tagging of watershed :** The delineation and geo-tagging of assets created under the watershed projects has been carried out through the BHUVAN portal developed by NABARD in collaboration with National Remote Sensing Cell. The watershed boundaries have been demarcated and georeferenced and further project-based MIS is uploaded for the projects through the portal.
- ii. Agro weather advisories:** Agro weather advisories are beneficial for the farmers to plan their cultivation practices, fertiliser and the spraying of weedicide, pesticides on the crops. To serve this purpose Automatic Weather Stations have been installed in 44 watershed projects in 15 districts of Maharashtra state. These weather stations communicate the weather data for a given watershed area and the same is correlated with the cropping systems which then is converted into crop-weather advisories with the help of SAUs, KVKs and other institutions like IFFCO Kisan Sanchar Limited. The advisories are mostly relayed through mobile phones in the form of text as well as voice messages.
- iii. Agriculture Produce Preservation Lifecycle Enhancement System(APPLE):** APPLE is basic system which uses the non-ionizing, germicidal UV-C light for decontamination of the fruit and vegetables as a whole or as fresh cut product. UV-C light inhibit the microbial growth and reduces various physiological process which increases the shelf life of the products and reduces the post-harvest losses by 20-30%. This AI based APPLE system is installed in the TDF Sakri project in Dhule district (Maharashtra). The system is being handled and managed by the Nisargraj FPC which procure the fruit and vegetables about 4 tonnes/day in the peak season. Similar system is also being installed by Global Fresh FPC in Junnar Block of Pune District.
- iv. Monitoring of TDF projects:** In order to ensure effective monitoring of TDF projects and enumeration of survival of orchards NABARD has deployed a digital solution which enable field level data collection for geotagged locations for individual wadi level measurements. The data on survival is collated on realtime basis from the enumerator's alongwith geotagged photographs.

Some of the Interventions in Maharashtra on digital technological innovations in Agriculture :

- i. Nandurbar - C-CFAT (Consortium for Carbon Financing and Disruptive Agricultural Technologies) for Climate Resilience in Agro-Forestry Value Chains - DronAcharya
- ii. Yavatmal – Weather stations in Pida village of Kalamb block, Sawarkheda & Shedi villages of Ralegaon block in Yavatmal district under climate proofing watershed projects supported by NABARD.
- iii. Nasik – Initiatives of IFFCO Kisan - Agri Mobile App with Image Recognition, Green SIM platform for timely advisories to farmers, Automated wireless weather stations (AWWS), IoT based automated drip irrigation systems, Soil Moisture Sensors promoting effective water utilization and wastage reduction.
- iv. Palghar & Thane: Use of Artificial Intelligence (AI) Technology in vegetable production in the Crops like – Chili, Okra, Bottle gourd, Bitter gourd, Cluster bean etc.
- v. Sangli – Use of Drones for spraying fertilizers by Wangi PACS in Sangli district with support under the Agriculture Infrastructure Scheme will not only help in reducing cost to the farmers but also in increasing production and quality of the crops.

The agriculture digital ecosystem is also getting a boost through the technology enabled agri start-ups ready to provide services to farmers riding on digital technology. While there is a long way to go in digitalisation of Indian agriculture the pace of change is encouraging with participation of all stakeholders in the digital agri value chain.

2.1.4 Plantation and Horticulture

2.1.4.1 Introduction :

National scenario

Horticulture sector that includes production, postharvest management, processing, marketing and export of wide range of crops such as fruits, vegetables, flowers, spices, plantation crops, medicinal and aromatic plants contributes significantly to the economy of the country. The percentage share of horticulture output in Agriculture has become 33%. Significant progress has been made in area expansion resulting in higher production. Over the last decade, the area under horticulture grew by 2.6% per annum and annual production increased by 4.8%. Area and Production of Horticulture Crops has estimated at 27.56 Million Hectare and 333.25 Million MT respectively in the year 2021-22 (First Advance Estimates). Growing plantation & horticulture crops is an ideal option to improve livelihood security, enhance employment generation, attain food & nutritional security and increase income through value addition. Projected Increase in Food Demand in India by 2030 is high in terms of percentage change relative to 2011 for fruits and vegetables i.e. 78% and 37% respectively. This phenomenon provides a good opportunity to the farmers for fetching higher income through high value horticultural crops. The sector also provides excellent opportunities to farmers in rainfed areas, where a significant shift towards horticulture is evident.

State Scenario

Agro climatic conditions (08) of Maharashtra is conducive for growing various horticulture crops. Average share of Crop sector is 63.7 per cent in Agriculture & allied activities sector of the State. Average share of horticulture in total crop production is about 28.4 per cent. Over a few decades, the State has significantly diversified its production base from coarse cereals to high value crops like cotton, sugarcane, soyabean, maize, fruits, vegetables and flowers. Area and production of horticulture crops is furnished as under :

A - Area M HA/ P - Production MMT

Particulars		Maharashtra	All India Total	State Share
Fruits	A	8.41	69.67	12.07%
	P	122.96	1029.24	11.95%
Vegetables	A	11.80	110.65	10.67%
	P	167.83	1998.82	8.40%
Plantation	A	2.24	42.71	5.25%
	P	3.57	158.52	2.25%
Medicinal and Aromatic Plants	A	0.01	6.50	0.13%
	P	0.02	7.67	0.20%
Flowers	A	0.11	2.67	4.24%
	P	(loose) 0.65	20.95	3.08%
		(cut) 0.00	7.91	0.04%
Spices	A	0.92	43.44	2.12%
	P	4.95	108.16	4.57%
Honey	P	0.02	1.25	1.48%
Total	A	23.50	275.63	8.53%
	P	299.99	3332.51	9.00%

Source: Area and production of horticulture crops for 2021-22 (First Advance Estimates) Published by Ministry of Agriculture and Farmer Welfare, GoI

The State is the major producer of horticulture crops and occupies a prominent place in the horticulture map of India. It accounts for 8.53 % of the total area under horticultural crops and 9.00% of national production. Horticulture area increased from 18.94 lakh ha in 2019-20 to 21.09 lakh ha in 2020-21, showing an increase of 11.4 per cent. As per first advance estimates, total area under fruit crops during 2021-22 was 8.41 lakh ha, of which area under mango was highest (1.68 lakh ha) followed by pomegranate (1.66 lakh ha), grapes (1.19 lakh ha), orange/mandarin (1.18 lakh ha), banana (0.84 lakh ha) and sweet orange (0.64 lakh ha) in the State.

GoI Policy for Development of Horticulture

Mission for Integrated Development of Horticulture during XII Five Year Plan :

The Mission for Integrated Development of Horticulture (MIDH) is a Centrally Sponsored Scheme for the holistic growth of the horticulture sector covering fruits, vegetables, root & tuber crops, mushrooms, spices,

flowers, aromatic plants, coconut, cashew, cocoa and bamboo. The MIDH has been brought under the umbrella of Krishi Unnati Yojana from the year 2016-17 with contribution of Central Government and State Government in the ratio of 60:40. The emphasis of MIDH is on production of quality seeds and planting material, production enhancement through productivity improvement measures along with support for creation of infrastructure to reduce post-harvest losses and improved marketing of produce with active participation of all stakeholders, particularly farmer groups and farmer producer organization. National Horticulture Mission (NHM) and National Horticulture Board (NHB) along with Maharashtra State Horticulture Mission are implementing subsidy schemes and other strategies to increase area, production, quality, marketing, promotional activities, extension services, etc.

The key strategy is to adopt an end-to-end holistic approach covering pre-production, post-harvest management, processing and marketing to assure appropriate returns to growers/ producers. Key elements of MIDH include involvement of PRIs, development of area based annual and perspective plans, demand driven production based on cluster approach, facilitate availability of quality seed and planting material, technology driven programmes to improve productivity and quality, capacity building of farmers and personnel, post-harvest management and cold chain, marketing infrastructure development

Maharashtra - Mission for integrated Development of Horticulture (MIDH) :

- The National Horticulture Mission (NHM) has been launched by GoI in 2005-06, with the main objective of increasing the area and productivity under horticulture and to promote post-harvest management such as controlling ripening, edible coating, temperature management, chemical treatment, etc.
- Maharashtra State Horticulture and Medicinal Plants Board (MSHMPB) was established in 2005 to implement schemes of NHM and National Medicinal Plants Board (NMPB). From 2015-16 the Mission for Integrated Development of Horticulture (MIDH) is implemented in 34 districts in the State and proportion of share of GoI & GoM is 60:40. Since inception of MIDH upto December, 2021 total expenditure incurred is ₹2,121 crore. Grapes, mango, pomegranate and bananas are the major fruits exported from the State.

MIDH - Promotion of Kitchen Garden in Tribal Districts :

The scheme is being implemented in 14 tribal districts viz. Thane, Pune, Nasik, Dhule, Nandurbar, Jalgaon, Ahmednagar, Nanded, Amravati, Yeotmal, Gadchiroli, Chandrapur, Palghar and Gondia which have been facing the problem of malnutrition. The scheme aims at providing balanced diet, rich in vitamin A & C and other essential minerals like iron and other nutrients, by promoting plantation of fruit trees and vegetables in the backyards of their residence. During 2018-19, an expenditure of ₹15.40 lakh was incurred. During 2019-20 upto December, ₹14.40 lakh grants are received and expenditure incurred is ₹4.30 lakh. During 2020-21, expenditure of ₹7.24 lakh was incurred.

National Horticulture Board

NHB implements Credit Linked Back ended Subsidy Schemes

Development of Commercial Horticulture through Production and Post-Harvest Management of Horticulture Crops.

Commercial Horticulture Development in open field conditions on project mode

Integrated commercial horticulture development projects in open field conditions on project mode, including components viz planting material, plantation, irrigation, fertigation, mechanization, precision farming, GAP etc. for projects covering area over 2.00 ha. (5 Acres). Pattern of assistance: Credit linked back-ended subsidy @ 40% of the total project cost limited to ₹30.00 lakh per project in general areas and @ 50% of project cost limited to ₹37.50 lakh in NE Region, Hilly States and scheduled areas.

Commercial Horticulture Development in protected cover on project mode.

Commercial horticulture development projects under protected cover on project mode including components viz planting material, plantation, irrigation, fertigation, mechanization, etc for projects having area over 2500 sq meter. Pattern of assistance: Credit linked back-ended subsidy @ 50% of the total project cost limited to ₹56.00 lakh per project as per admissible cost norms for green houses, shade net house, plastic tunnel, anti bird /hail nets & cost of planting material etc.

Integrated Post Harvest Management projects

Integrated Post Harvest Management projects relating to Pack House, Ripening Chamber, Refer Van, Retail Outlets, Pre-cooling unit, Primary processing etc. Credit linked back-ended subsidy @ 35% of the total project cost limited to ₹50.75 lakh per project in general area and @ 50 % of project cost limited to ₹72.50 lakh per project in NE Region, Hilly States and Scheduled areas.

Cluster Development Programme (CDP)

The Ministry of Agriculture and Farmers Welfare (MoA&FW), Government of India, has announced a new programme for Horticulture Cluster Development to enhance the global competitiveness of the Indian horticulture sector. The National Horticulture Board has been designated as the Nodal Agency for implementation of Cluster Development Programme as a component of Central Sector Scheme of NHB.

The Cluster Development Programme (CDP) is designed to leverage the geographical specialisation of horticulture clusters and promote integrated and market-led development of preproduction, production, post-harvest, logistics, branding, and marketing activities. MoA&FW has identified 55 horticulture clusters, of which 12 have been selected for the pilot launch of the Programme. Based on the learnings from the pilot project, the programme will be scaled up to cover all 55 clusters. The experiences gathered from the implementation of the pilot phase will provide policy insights and field level learnings that will help in better implementation of programme in all horticulture clusters across India. For the implementation of the CDP, a Government/Public Sector entity will be appointed as a Cluster Development Agency (CDA) based on the recommendations of the State/Central Government. This involvement of state government bodies through CDA will ensure institutionalisation of learnings which can be replicated in future for development of new clusters in the country.

On pilot basis 12 such clusters have been identified across the country. Maharashtra State Horticulture and Medicinal Plant Board, Pune (MSHMPB) is the Cluster Development Agency for Nashik and Solapur cluster in Maharashtra.

Capital Investment subsidy scheme for Construction/expansion/modernization of Cold Storage and Storage for Horticulture Products

Credit linked projects relating to Cold Storages including Controlled Atmosphere (CA) and their modernization are eligible for assistance under this component. The assistance will be given as subsidy @ 35% of the capital cost of project in general areas and 50% in case of NE, Hilly States & Scheduled Areas for a storage capacity above 5000 MT up to 10000 MT.

National Medicinal Plant Board

National Medicinal Plant Board (NMPB) has been implementing following schemes for the promotion and development of medicinal plants:

- Central sector scheme for conservation, development & suitable management of medicinal plants.
- Centrally sponsored scheme of National Mission on medicinal plants. Under the scheme, the department has proposed to set up model nurseries, drying sheds, storage godowns, processing units, testing laboratories, rural market yards, district market yards etc.
- Central sector scheme of AYUSH industry clusters.
- Promotion of Medicinal and Aromatic Plants Producer Company (MAPPC).

Orchard Plantation Scheme under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA):

This 100 per cent centrally sponsored scheme is being implemented in 34 districts of the State from 2011-12. Objectives of the scheme are enhancing income of MGNREGA job card holder farmers and employment generation by plantation of horticulture crops in their own productive or fallow land upto two ha. It is mandatory for a beneficiary to hire a MGNREGA job card holder as a labour for this work. Beneficiaries are selected by Grampanchayat & Gramsabha. Training for horticulture plantation is given under the scheme. During 2018-19, plantation was done on 12,183 ha and an expenditure incurred was ₹81 crore. During 2019-20, upto 30th January plantation was completed on 15,885 ha and an expenditure incurred was ₹55.10 crore. During 2021-22, upto December, orchard plantation was done on 40,621 ha area with expenditure of ₹119.05 crore.

Pradhan Mantri Fasal Bima Yojana:

This scheme is being implemented from kharif season 2016 in the State to provide insurance coverage and financial support to farmers in the event of failure of any of the notified crops as a result of natural calamities, pests & diseases. Under the scheme farmers have to pay insurance premium maximum upto five per cent of amount assured, depending on the type of crop. During 2020-21, in all 119.73 lakh farmers participated in the scheme, wherein area insured was 65.04 lakh ha with sum assured of ₹24,590.18 crore and gross premium paid was ₹5,806.19 crore. During 2020-21, compensation claims of ₹1,116.35 crore were proposed for 16.74 lakh beneficiary farmers. During 2021-22, in all 96.46 lakh farmers participated in the scheme,

wherein area insured is 57.16 lakh ha with sum assured of ₹21,888.51 crore and gross premium sanctioned is ₹5,187.21 crore. Compensation claims of ₹2,705.08 crore are proposed for 48.66 lakh beneficiary farmers.

Weather Based Crop Insurance Scheme for Fruit Crops:

Weather Based Fruit Crop Insurance Scheme is being implemented for grapes, mango, pomegranate, banana, orange, sweet orange, guava, sapota, lemon, cashew nut, custard apple and strawberry in the State. During 2020-21, in all 4.30 lakh farmers participated in the scheme, wherein area insured was 3.12 lakh ha with sum assured of ₹ 3,780.86 crore and gross premium paid was ₹ 686.51 crore. During 2020-21, compensation claims of ₹ 304.07 crore (progressive) were settled for 1.31 lakh beneficiary farmers. During 2021-22, in all 2.85 lakh farmers participated in the scheme, wherein area insured is 2.10 lakh ha with sum assured of ₹ 2,096.69 crore and gross premium paid is ₹ 730.39 crore.

Initiatives and Programmes of Government of Maharashtra

Bhausaheb Fundkar Falbaug Lagwad Yojana:

GoM is implementing this 100 per cent subsidy scheme from kharif season of 2018-19 in the State for farmers not registered under MGNREGA. The objectives of the scheme are (i) enhance income of the farmers, (ii) create employment for the young farmers, (iii) change the cropping pattern, (iv) create a sustainable source of income and (v) increase the production of raw materials required for the processing industries. This scheme covers plantation of 16 perennial horticulture crops. Since inception of the scheme upto January, 2022 in all 25,698 beneficiaries have undertaken fruit plantation on 23,527 ha area and expenditure of ₹ 73.33 crore is incurred.

Dr. Punjabrao Deshmukh Jaivik Sheti Mission:

For promotion of organic farming, this mission is being implemented in the State, through cluster approach (20 to 30 farmers in a cluster of 50 acre land) from 2019-20. Benefits of the scheme will be given in three consecutive years for each cluster. In the first phase, six distressed districts in the Vidarbha region viz. Buldhana, Akola, Washim, Amravati, Yavatmal and Wardha, are included in the programme. Since inception upto January, 2022 expenditure of ₹ 3.52 crore is incurred for in all 355 groups of 7,457 farmers covering 7,100 ha area.

Deregulation/ Delisting and Exemption of Market Fee on Fruits & Vegetables:

Fruits and vegetables are de-notified by way of Maharashtra Ordinance dtd. 5 July 2016 and incorporated in the APMC Act vide Government Gazette dated 12 January 2017. Marketing of Fruits & Vegetables and Condiments, Spices and others (ginger, garlic, coriander and chillies) by any person outside the market, shall not require any license or permission. If the trade takes place outside mandi yard there is no need to pay mandi fees. Under the Maharashtra Agricultural Produce Marketing (Development & Regulation) Act, the number of direct marketing licenses issued upto 19th November, 2018 was 981. Apart from these, 52 private market licenses have been issued.

The Maharashtra State Agriculture Export Policy:

The Agri Export Policy was announced last year with an objective of doubling the export and ensuring doubling of farmers' income. The Maharashtra State Agriculture Export Policy is framed with a focus on agriculture export oriented production, export promotion, better farmer realization and synchronization within policies and programs of Government of India and Government of Maharashtra. It is focused to have a "Farmers' Centric Approach" for improved income through active involvement of farmers in export. Operational recommendations suggested in State Agriculture Export Policy (Draft) pertained to Horticultural Export promotion are as follows:

Export - Support from Maharashtra State Agricultural Marketing Board (MSAMB):

MSAMB is a state level organization working in the field of export of various fresh fruits, vegetable & processed food products since last thirty-four years. MSAMB have experience of export of fruits & vegetable to Europe, USA, South East Asian Countries, Japan, and Middle East Countries etc. A separate section is operating at MSAMB comprising of trained manpower. The trained manpower is engaged in imparting training to farmers, guiding new exporters and maintain the facility centers etc. works in very planned and effective way of management.

Mango is an important fruit commercially grown in Maharashtra. The main strength of the Maharashtra state lies in the cultivation of the popular exportable varieties e.g. Alphonso, Kesar, etc., with substantial production and significant share in mango export. MSAMB has leading role in export of mangoes to various countries

across the globe. MSAMB has conducted the trials for exporting mangoes by CA containers to far distant markets with the help of APEDA, New Delhi and exported two containers of Alphonso and Kesar mangoes to UK and one container to Singapore in the year 1998. One more CA container of Kesar was exported successfully in the year 2000. MSAMB has exported Kesar mangoes to Hongkong, which is further exported to china. This is new opportunity to Kesar mango growers in the form of new market.

- In the last mango season 2018 about 1881 Mts of mangoes have been processed for the purpose of exports to various destinations.
- Irradiation Facility, Vashi, Navi Mumbai – from this facility 613.62 Mts mangoes were exported to USA and about 18.54 Mt to Australia in total 632.51 Mts mangoes were exported. Also in this season 0.352 Mts pomegranates have been exported to USA.
- Vegetable processing facility, Vashi , Navi Mumbai – from this facility 245.40 Mts to European union, 3.26 Mts to Russia, 1.00 Mts to Mauritius, and 153.52 Mt mangoes to USA (process) and 16.61 Mts Mangoes to Australia (process) were processed thus in total 419.79 Mts mangoes were processed.
- VHT Facility, Vashi, Navi Mumbai – from this facility 22.66 Mts mangoes were exported to EU, 24.21 Mts to Japan , 29.79 Mts to New Zealand , and 49.52 Mt to South Korea thus in total 126.18 Mts mangoes were exported.
- Mango export facility center, Ratnagiri, Dist- Ratnagiri - from this facility 1.20 Mts mangoes were exported to EU and about 4.25 Mt to Russia , 2.78 Mts for USA process and 30.90 Mts for domestic purpose processing thus in total 39.13 Mts mangoes were processed.
- Mango export facility center, Jamsande , Dist- Sindhudurg - from this facility 192 mts mango pulp and 35.67 Mts of mangoes for domestic market purpose thus all total 227.67 Mts mangoes were processed.
- Grape and Pomegranates export facility center, Baramati Dist Pune - from this facility 218.79 Mts mangoes were exported to EU and 217.64 Mts mangoes were processed for USA thus all total 436.43 Mts mangoes were processed.

MSAMB has promoted the partnership organization of primary co-operative societies named “Mahamango” for export promotion of mangoes.

Mahamango:

The MSAMB has promoted the organisation of Mango growers in the name of Mahamango. In order to boost the export of Alphonso mangoes as well as for domestic marketing, "MAHAMANGO", a co-operative partnership society has been established on 8th March, 1991. The head office of Mahamango located at Kudal, Dist. Sindhudurg. For export of mangoes, facilities like pre-cooling, cold-storage, pack house, grading packing line etc. are available at the facility centre of Mahamango. For erection of this facility, the financial assistance was given by APEDA, New Delhi and the Maharashtra State Agricultural Marketing Board, Pune. To motivate the activities of Mahamango, new body has been appointed on 13th February, 2002. In the Mango season - 2002, total 42 MTs Alphonso mangoes were processed by using this facility of Mahamango and supplied to the various exporters for export (Deemed Export). In the month of April 2004, the Chinese delegation had visited and inspected Mahamango Facility Center and agreed to import Alphonso Mangoes to China, which is an unique packhouse certified by the China delegation (AQSIQ department), the team has also visited the mango orchards in the Sindhudurg and Ratnagiri district. So it helps to export huge quantity of alphonso mangoes to China in the forthcoming Mango Season. This facility/pack house is also certified by APEDA for export purpose. Similarly the pack house of Jaikisan Bhajipala Utpadak Sahakari Sanstha, Aurangabad is also get permission for export of kesar mangoes to China. This year MSAMB has exported 6.5 MTs Kesar mangoes to Hong Kong. The mangoes were treat with Hot Water Treatment (48°C for 1Hr). The consignment was reached in good condition. Similarly, MANGROW association has been formed for export of Kesar mangoes from Aurangabad district.

Workshops for export promotion: For promoting export of agricultural produce from Maharashtra a workshop for all the stake holders viz. NPPO, APEDA, Agriculture Department, Exporter, Farmers group, co op federation, Processors etc. with the focus crops as Mango, Pomegranate, Onion, Banana and Vegetables is planned in Maharashtra. In the current year following workshops have been conducted in Maharashtra

Agri Export Zones in Maharashtra

Gol has so far approved and notified 48 Agri Export Zones (AEZs) for various crops/products all over the country. In Maharashtra, 8 Agri Export Zones have been notified and the details are given below:

Product	Districts/ Area Covered	State Nodal Agency
Grapes and grape wine	Nasik, Sangli, Pune, Satara, Ahmednagar, and Solapur	MIDC
Flowers	Pune, Nasik, Kolhapur and Sangli	MIDC

Alphonso Mango	Ratnagiri, Sindhudurg, Raigad and Thane	MSAMB
Kesar Mango	Aurangabad, Jalna, Beed, Latur, Ahmednagar and Nasik	MSAMB
Onion	Nasik, Ahmednagar, Pune, Satara, Solapur and Jalgaon	MSAMB
Pomegranate	Solapur, Sangli, Ahmednagar, Pune, Nasik, Osmanabad and Latur	MSAMB
Banana	Nanded, Parbhani, Jalgaon, Dhule, Nandurbar, Buldhana, Hingoli and Wardha	MSAMB
Mandarin (Nagpur Orange)	Nagpur and Amaravati	MSAMB

NABARD Initiatives:

(i) Signing of MoU between NABARD and APEDA

As per MoU entered between NABARD and APEDA during December 2020, the role of NABARD and APEDA would be: a. To work towards capacity development of various stakeholders; b. To organize outreach programs, awareness programs and workshops for stakeholders; c. To work together for doubling the farmers' income, as set out by the Government of India; and d. To strengthen FPOs for attaining the desired outcomes of Agri. Export Policy.

(ii) Agriculture Export Facilitation Centre (AEFC) by Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA)

NABARD has sanctioned grant assistance of ₹38.04 lakh to Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA) in March 2021 for setting up of Agriculture Export Facilitation Centre (AEFC) at Pune, which is a 'one-stop-shop' for exporters. The objectives of the AEFC are: a. Capacity building of Agri-food exporting and processing entrepreneurs; b. To be a knowledge centre and disseminate need-based information to all concerned to guide, accelerate the export and processing activities in the state; c. To provide instant service, guidance required by exporters exporting farmers; and d. To organize need-based training courses in different export-related issues. The beneficiaries of the center would be the existing exporters/importers, new aspirants, progressive farmers, FPOs, MSME in Agro food processing & commodity growers' association.

Sericulture

Silk farming business can be started at a very low cost and the available materials that the farmers already have. With the new style of Tuti plantation and silkworm cultivation, this business can be done with very fewer efforts and on a large scale. This business can be done with the help of all members of the family; big and small. In a month's period, the farmers can gain maximum profit in minimum time.

Tuti plantation can be done in any type of soil. If the plantation is done in a Striped pattern, it helps in growth of the final yield. Striped Pattern consumes very less water. For Eg: Thrice the amount of Tuti plantation can be done in the same amount of water that is required for 1 acre of sugarcane plantation. Once planted, Tuti lives for 15 years, and hence the cost of planting it every year is reduced to nil.

Tuti plants' immunity is quite good and so the expenses on insecticides are saved. The Government provides the silkworm eggs at very subsidized rates. Silkworm lives for 28 days, out of those, they only need to be fed on the Tuti leaves for 24 days. Out of those 24 days, the Govt. provides help to cultivate the silkworms for initial 10 days and farmers to take care of the silkworms for 14 days. This saves farmers' time, money, and labour and also they get 25% profit in production. In the agricultural field, there is no other source that can give an earning in 14 days. The educated unemployed youth, who do not have a job, can earn a monthly income through this business, and also enjoy a weekly, offs, like on Sundays. The Government has assured the purchase of cocoons through the farmers and has set up centers at various places to help them.

Sericulture is an agro-based industry which has high potential to generate employment opportunities in rural areas. Mulberry silk development programme is implemented in 24 districts of the State. Mulberry plantation and silk production is given below:

Intervention	Unit	2018-19	2019-20	2020-21	2021-22*
Area under plantation (new)	Ha	10377	12984	4780	3701
Area under plantation (old)	Ha	9,406	4901	11117	11828
Total area under plantation	Ha	19,783	17885	15897	15529
No. of farmers	No	18,160	16744	15073	15529
Supply of layings	Lakh	54.67	42.22	45.82	39.63
Cocoon production	MT	3,230.27	2655.76	2754.23	2589.87

Production of raw silk	MT	496.37	408.50	423.71	398.44
Procurement of cocoon by Govt	MT	0.477	0.093	0.00	0.00
Employment generated (mandays)	Lakh	54.60	44.93	46.60	43.83

* Up to January (Directorate of Sericulture, GoM)

Tasar silk development programme is implemented in four districts of the State viz. Bhandara, Chandrapur, Gadchiroli and Gondia. Area under plantation of Ain and Arjun trees (on which Tasar silkworms are grown) in these four districts is 18,866 ha. During 2020-21 production of raw Tasar silk was 4.44 MT, while during 2021-22 upto January, it was 6.88 MT.

Opportunities for Financing

- Rejuvenation of old orchards
- High density orchards
- Low cost poly houses/ Shade nets
- Horticulture nursery
- Medicinal and Aromatic Crops
- Plant health clinics
- Micro irrigation for horticulture crops
- Contract Farming Arrangements and Export
- Postharvest management of horticulture crops
- Horticulture Processing
- Private Market
- Value chain financing
- Dry land horticulture for climate change adaptation
- High value low volume horticultural crops

Thrust Areas for Promotion

Indian horticulture sector is characterized by small, segregated farms with low per-hectare yields and huge post-harvest losses, owing to agro-climatic, technological and management practices. The following thrust areas are identified to address the problems facing the sector and to harness the potential:

- a) Mixed cropping and high density planting of fruit crops
- b) Rejuvenation/ replanting of old and senile plantations
- c) Establishment of commercial horticulture nurseries
- d) Setting up of commercial tissue culture units
- e) Cultivation of cut flowers (Rose/ Gerbera/ Carnation etc.) and high value & exotic vegetable under poly houses.
- f) Vegetable and flowers F1 hybrid seed production under poly houses for export
- g) Cultivation of flowers and high value vegetables under shade nets
- h) Large scale cultivation of high value fruits & vegetables with marketing arrangements with processing and export houses.
- i) Contract farming of medicinal and aromatic crops. Major crops having potentials being, Aloe vera, Shatavari, Coleus forskolii, Ashwagandha and Patchouli
- j) Cold chains for grapes/ pomegranates and other crops mainly for export
- k) Organic farming of horticultural crops.
- l) Fruit and Vegetable processing
- m) Dry land horticulture with mango, sapota, amla, ber, custard apple, tamarind etc.
- n) Postharvest infrastructure: sorting, grading, packhouse, storage & marketing
- o) Horticulture clinics
- p) Value chain development
- q) Market led production
- r) Usage of drone
- s) Innovative technologies
- t) Adoption of new and advanced farm machinery and technologies
- u) GI registration of produce

2.1.4.2 Infrastructure and linkage support available, planned and gaps

1. With a view to giving focused attention of horticultural development in the country, Government of India has launched Mission for Integrated Development of Horticulture (MIDH), a Centrally Sponsored Scheme, for the holistic growth of the horticulture sector subsuming interventions under National Horticulture Mission (NHM), National Bamboo Mission, National Horticulture Board etc. The Mission emphasizes on area based regionally differentiated cluster approach for development of horticulture crops, having comparative advantage.
2. The total area under horticulture crops in Bhandara district is 6264 ha. The district has 14192 ha under fallow land which could be used for growing horticulture crops. The climatic condition of the district is suitable for cultivation of horticultural crops like guava, mango, custard apple, ramphal, lemon, banana, papaya, jamun, etc. can also be grown by the farmers. RBI has recognized agro /food processing activities under priority sector for the purpose of lending and plantation and horticulture sector can provide raw material to the agro-processing industry.
3. The capacity for supply of planting material from nurseries is Mango (1,00,000) Lime and Guava (6000), Custard apple (1000) others Jack fruit (1000), Amla (10000) taking the total to 141000 saplings. There is adequate demand for good quality planting material in the district.
4. **Tasar Cocoon Production :** The Central Silk Board has set up a Raw Material Bank at Bhandara and has become operational in the district from the year 2007-08. It procures the tasar cocoons from the farmers / rearers and provide the same to the reelers, weavers and handloom units at the Statutory Minimum Price so as to maintain uninterrupted supply of tasar cocoons to the handloom textile industry in the district throughout the year.
5. **Mulberry Silk Production :** A group of farmers has taken up plantation of Mulberry tree (plant known as Tutti) on 50 acres of land in Pauni taluka of Bhandara district.
6. **Government Schemes for promotion of Sericulture (applicable in the district) :**
 - a) Training and Exposure visit regarding plantation and maintenance of mulberry plantation.
 - b) Grant of RS.12,063/- per ha. for mulberry cultivation with RS.8,763/- towards wages from MGNREGA and planting material of RS.3,300/-.
 - c) Under the National Agriculture Technology Project (NATP), the Government of India is supporting sericulture activities through demonstrations, training, exposure visits, technology transfer, etc. Keeping in view the high prices of tasar cocoons and financial viability of its production, ATMA envisages raising the tassar plantation by another 200 ha. to 500 ha.
7. The ground level credit flow to the above activities during the years 2019-20, 2020-21 and 2021-22 was RS.10.00 Lakh, RS.7.00 Lakh and RS.270.00 Lakh respectively.

2.1.4.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms) :

Based on the infrastructure available and past experience of the banks in the district, the potential for horticulture and medicinal plants during 2023-24 is as under :

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit(No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Mango	ha	1.570	250	392.50	353.28
2	Guava	ha	1.080	250	270.00	243.00
3	Mulberry cultivation	ha	0.350	125	43.75	39.40
4	10 R Shadenet	ha	3.631	70	254.17	127.12
5	Tassar silk composite	ha	2.100	100	210.00	189.00
6	Med/Aromatic Plants	ha	0.750	360	270.00	243.00
	Total				1440.42	1194.80

The block-wise details of physical and financial projections for 2023-24 are given in Annexure –I.

2.1.4.4 Critical interventions required for creating a definitive impact

1. The available 36,321 ha land which is current fallow / cultivable wasteland can be used for plantation and horticulture purposes. Further, 7,357 ha. other fallow land can also be gainfully utilised with a minor treatment. Most of these areas are in the possession of Forest Department / Revenue Department / local bodies and need the respective clearances for their utilisation.

2. Promoting : a) Area expansion programme for premium fruit crops with adequate backward and forward linkages. b) High density planting for mango, orange, and guava for enhancing productivity and returns. c) Sericulture on cluster basis through training for skill up-gradation and FPO formation for backward & forward linkages.

2.1.4.5 Suggested Action Points

1. Banks may enhance their financing for floriculture, horticulture, medicinal / aromatic plants, mushroom, fruit processing units, etc.
2. Setting up / Promotion of Government / private nurseries and upgrading the present nurseries.
3. Creating awareness about contract farming and its promotion needs to be done on large scale. Tie-up arrangements with corporates may be explored.
4. Effective PPP model requires to be developed by leasing wasteland for cultivating economically important horticulture crops. Growers' Associations (Farmers' Clubs/ FPOs) may play a key role in identifying beneficiaries and coordinating with banks for encouraging institutional finance. They may also help the banks in ensuring recoveries of loans.
5. Soil testing, quality control laboratories and facilities for testing residues may be set up at one place at least at taluka level. The agriculture graduates may be motivated to take up such activities as self-employment ventures and bankers may support them through the ACABC subsidy scheme.

2.1.5 FORESTRY AND WASTE LAND DEVELOPMENT

2.1.5.1 Introduction

Forests are the lungs of the planet. The National Forest Policy 1988 recommends coverage of at least 33% of the geographical area under forest & tree cover to maintain the ecological balance of any region.

The National Agriculture Policy (July 2000) has also identified agro-forestry and social forestry as the prime requisites for maintenance of ecological balance and augmentation of bio-mass production in the agricultural systems.

India's Intended Nationally Determined Contribution (INDC), announced during October 2015, included creation of an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030. The total Carbon stock of forest in the State including the trees outside forest patches which are more than 1ha in size is 440.51 million tonnes (1,615.20 million tonnes of CO equivalent) which is 6.18 % of total forest carbon of the country.

Present Status

Situated in the western peninsular region of the country, Maharashtra has geographical area of 3,07,713 sq km, which is 9.36% of the geographical area of the country. Maharashtra, the third largest State in the country is ranked second among the States in terms of the recorded forest area. As per the India State of Forest Report 2021, the State has reported extent of recorded forest area (RFA) 61,952 sq km which is 20.13% of its geographical area, against the target of 33 per cent, set under the National Forest Policy (1988). Maharashtra accounts for 8 percentage of the total forest area in India.

As per the Champion & Seth Classification of Forest Types (1968), the forests in Maharashtra belong to six Forest Type Groups which are further divided into 17 Forest Types. The high rural population of the State depends on the forests considerably for livelihood and basic needs.

Recorded Forest Area (RFA) in the State is 61,952 sq km. The jurisdiction of the total forest area in the State is divided amongst Forest department (55,908.38 sq km), Forest Development Corporation of Maharashtra (FDCM) (3,462.25 sq km), private forest brought under possession of Forest department (1,182.78 sq km) and Revenue department (1,438.48 sq km).

As per the India State of Forest Report 2021, in terms of forest canopy density classes, the State has 8,733.75 sq km (17.20 %) under Very Dense Forest (VDF), 20,589.00 sq km (40.50 %) under Moderately Dense Forest (MDF) and 21,475.01 sq km (42.30 %) under Open Forest (OF). Forest Cover in the State has increased by 20.20 sq km as compared to the previous assessment reported in ISFR 2019.

Table 1. Forest Cover of Maharashtra (in sq km)

Class	Area	Percentage of GA
VDF	8,733.75	2.84
MDF	20,589.00	6.69
OF	21,475.01	6.98
Total	50,797.76	16.51
Scrub	4,247.39	1.38

Source: India State of Forest Report 2021

Table 2. Forest circlewise distribution of forest area

(as on 31st March, 2021)

Forest circle	Forest area (sq.km)				Percentage to total forest area
	Reserved	Protected	Unclassed	Total	
Gadchiroli	11,227.19	1,403.05	267.47	12,897.71	20.80
Nagpur	4,421.70	2,157.17	1,178.48	7,757.35	12.50
Dhule	6,148.12	57.06	222.90	6,428.08	10.40
Thane	4,439.97	1,160.33	268.94	5,869.24	9.50
Nashik	5,066.37	240.64	32.89	5,339.90	8.60
Amravati	5,051.00	15.81	14.04	5,080.85	8.20
Chandrapur	3,835.80	877.71	123.43	4,836.94	7.80
Kolhapur	3,379.73	412.78	739.77	4,532.28	7.30
Yavatmal	3,350.34	6.31	122.79	3,479.44	5.60
Aurangabad	2,873.42	87.84	202.76	3,164.02	5.10
Pune	2,432.01	0.03	174.04	2,606.08	4.20
State	52,225.65	6,418.73	3,347.51	61,991.89	100.00

Source: Office of the Principal Chief Conservator of Forest, GoM

District-wise Forest Cover in Maharashtra

District wise Forest Cover in Maharashtra is presented below. Out of the total forest cover in Maharashtra, Gadchiroli District accounts for the maximum forest cover followed by Ratnagiri and Chandrapur. Maximum area under 'Very Dense Forest' is in Gadchiroli followed by Chandrapur district. The State has 35 districts, amongst which 12 are tribal and 7 are hill districts.

Table 3. District-wise Forest Cover in Maharashtra

(Area in sq. km)

District	Geographical Area (GA)	2021 Assessment				% of GA	Change wrt 2019 assessment	Scrub
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
Ahmadnagar ^T	17,048	0.00	68.79	210.10	278.89	1.64	12.00	556.55
Akola	5,673	11.00	108.12	222.41	341.53	6.02	1.16	15.29
Amravati ^T	12,210	618.47	1,458.36	1,091.28	3,168.11	25.95	0.34	112.82

District	Geographical Area (GA)	2021 Assessment				% of GA	Change wrt 2019 assessment	Scrub
		Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
Aurangabad	10,131	20.00	105.70	444.52	570.22	5.63	2.29	168.98
Beed	10,693	0.00	12.32	149.23	161.55	1.51	-2.48	359.10
Bhandara	4,087	170.86	561.52	265.37	997.75	24.41	-1.17	18.57
Buldana	9,661	25.00	143.11	426.57	594.68	6.16	3.08	161.20
Chandrapur ^T	11,443	1,320.89	1,555.39	1,173.99	4,050.27	35.40	-4.19	44.06
Dhule ^T	7,195	0.00	68.57	233.09	301.66	4.19	0.39	112.54
Gadchiroli ^T	14,412	4,705.05	3,288.46	1,909.31	9,902.82	68.71	-14.12	17.35
Gondiya	5,234	895.40	739.26	310.95	1,945.61	37.17	7.02	27.18
Hingoli	4,827	0.00	9.09	102.91	112.00	2.32	1.99	48.88
Jalgaon ^T	11,765	51.00	347.31	754.44	1,152.75	9.80	5.91	97.55
Jalna	7,694	0.00	8.22	26.31	34.53	0.45	-1.95	50.11
Kolhapur ^H	7,685	64.00	1,019.47	702.11	1,785.58	23.23	-0.74	102.35
Latur	7,157	0.00	0.04	13.08	13.12	0.18	0.10	19.04
Mumbai	157	0.00	0.00	3.20	3.20	2.04	0.20	0.00
Mumbai Suburban	446	0.00	67.05	71.92	138.97	31.16	-0.89	0.04
Nagpur ^T	9,892	400.25	902.15	696.39	1998.79	20.21	-1.59	73.90
Nanded	10,528	58.00	442.07	438.72	938.79	8.92	2.03	122.06
Nandurbar ^T	5,955	0.00	403.68	791.61	1,195.29	20.07	-0.70	30.23
Nashik TH	15,530	0.00	346.45	733.31	1,079.76	6.95	3.21	348.82
Osmanabad	7,569	0.00	2.03	47.50	49.53	0.65	-0.13	45.93
Parbhani	6,214	0.00	3.51	36.31	39.82	0.64	-0.61	47.44
Pune TH	15,643	0.00	760.99	955.50	1,716.49	10.97	5.63	510.33
Raigarh ^H	7,152	13.00	1,254.21	1,683.80	2,951.01	41.26	11.55	86.23
Ratnagiri ^H	8,208	34.94	1,889.14	2,287.86	4,211.94	51.32	-0.96	3.28
Sangli	8,572	0.00	94.90	55.67	150.57	1.76	0.44	169.22
Satara ^H	10,480	117.00	569.68	591.51	1,278.19	12.20	-0.18	366.20
Sindhudurg ^H	5,207	90.93	1,383.88	1,348.87	2,823.68	54.23	-4.30	29.04
Solapur	14,895	0.00	4.98	41.88	46.86	0.31	-2.81	64.54
Thane ^T	9,558	0.00	1,293.03	1,699.91	2,992.94	31.31	-5.15	259.03
Wardha	6,309	9.97	409.91	444.41	864.29	13.70	2.34	56.21
Washim	4,901	5.00	101.51	189.88	296.39	6.05	-0.37	30.60
Yavatmal ^T	13,582	122.99	1,166.10	1,321.09	2,610.18	19.22	2.86	92.72
Total	307,713	8,733.75	20,589.00	21,475.01	50,797.76	16.51	20.20	4247.39

Source: India State of Forest Report 2021

Forest Produce in Maharashtra

As per the Economic Survey of Maharashtra 2021-22, the real GSV of 'Agriculture & allied activities' sector is expected to grow at 4.4 per cent. The real GSV of the 'Crops' sector is expected to grow by 3.0 per cent. 'Livestock', 'Forestry & Logging' and 'Fishing & Aquaculture' sectors are expected to grow at 6.9 per cent, 7.2 per cent and 1.6 per cent respectively.

Forest provides major products like timber & firewood and minor products like bamboo, tendu leaves, gum, grass, etc. All these forest produces are of great value in terms of generating revenue and providing livelihood to local people. As per the Economic Survey of Maharashtra, 2021-22, the production and value of forest produce in Maharashtra is as follows:

Table 4. Production and value of forest produce (in Rs. Crore)

Unit of Forest produce production		2019-20		2020-21		2021-22 [@]	
		Production	Value	Production	Value	Production	Value
(A) Major forest produce							
Timber	LCM	1.11	338.69	1.00**	309.47**	1.18	346.08
Firewood	LCM	1.79	45.20	1.50**	37.10**	1.87	43.60
Total (A)	LCM	2.90	383.89	2.50	346.57	3.05	389.68
(B) Minor forest produce							
Bamboo	LMT	0.1	10.50	12.11**	16.96**	6.70	15.73
Tendu leaves	LSB	2.24	38.48	1.76*	36.50*	2.24	52.13
Grass	MT	495	0.11	253.00*	0.10*	NA	NA
Gum	Quintal	2,675	0.16	3,285.50*	0.15*	NA	NA
Others (<i>Lac, Hirda, Shikekai, etc.</i>)	-	NA	0.51	NA	5.81*	NA	NA
Total (B)			49.76		59.52		67.86
Total (A + B)			433.65		406.09		457.54

* Provisional @ expected NA Not available ** Data of FDCM included LCM -

Lakh Cubic Metre LMT - Lakh Metric Tonne

LSB - Lakh Standard Bags (1 Bag is 1,000 bundles of 50 tendu leaves)

Source: Office of the Principal Chief Conservator of Forest, GoM

Tree Plantation

Tree plantation programme is mainly implemented through Forest Department, FDCM and Directorate of Social Forestry.

Initiatives to increase Forest Cover

The State has a Recorded Forest Area of 61.952 sq. Km which is 20.13 per cent of the total geographical area which is less as envisaged in the State Forest Policy, 2008. To increase the forest cover in the State, the State has initiated massive tree plantation drive, soil conservation and natural rejuvenation programmes. After a successful drive of 2.81 crore sapling plantation on 1st July, 2016 the State had taken up a massive plantation programme of planting 50 crore saplings during a period of three years i.e from 2017 to 2019. The State Forest department encourages the village communities and other stakeholders to participate in plantation activities. Several initiatives have been undertaken by the State Forest Department like training the farming communities; the concept of easy farming through 'Maharashtra Green Tube Channel' wherein the farmers could learn the advance technologies of agriculture and forestry related activities through online media.

In a first of its kind, a 24-hour toll free helpline number 1926 called 'Hello Forest' has been set up to provide information regarding plantations, protection and mass awareness. The Forest Department has created a mobile application called 'My Plants' to record details of the plantations such as numbers, species and location into the Forest Department's data base. To encourage public participation, the SFD has initiated the

'Maharashtra Harit Sena or Green Army, which is a body of dedicated volunteers to participate in the plantation, protection, and related activities.

Tree plantation programme is mainly implemented through Forest Department, FDCM and Directorate of Social Forestry. An amount of Rs.116.19 crore was spent on plantation activity during 2020-21. Area under tree plantation and expenditure incurred is given in Table 5.

Table 5. Area under tree plantation and expenditure incurred

Year	Forest Department		FDCM		Social Forestry		
	Area (ha)	Expenditure Incurred (in crore)	Area (ha)	Expenditure Incurred (in crore)	Area (ha)	Expenditure Incurred (in crore)	Plants supplied (crore)
2017-18	26,405	99.46	3,577	13.80	3,985	60.46	0.50
2018-19	51,724	200.88	4,633	22.79	12,620	210.56	15.89
2019-20	1,02,987	388.35	8,987	89.72	21,032	521.94@	35.14@
2020-21	7,234	46.70	2,361	17.57	3,302	51.92@@	35.14@@

@ includes plantation of 17,858 km along road side @@ includes plantation of 1,224 km along road side

Source: Office of the Principal Chief Conservator of Forest, GoM

Joint Forest Management (JFM) in Maharashtra

Joint forest management is a concept of developing partnerships between fringe forest communities and the forest department on the basis of mutual trust and jointly defined roles and responsibilities with regard to forest protection and development. Under this scheme of Government of India (GoI), degraded forest areas and block plantation raised under social forestry are to be taken up. Net proceeds from the final harvest are shared between government and members of JFM committee in a 1:1 ratio. The income received from the block plantation schemes of the social forestry is distributed between the village panchayat and the government in ratio of 9:1. The Ministry of Environment and Forest (MoEF) has given certain guidelines for JFM like providing legal status of JFM's, extension of their activities involving women on a larger scale and formation of Forests Protection Committee (FPCs). In Maharashtra the JFM process was initiated in 1992 and currently it covers 6,86,688 ha managed by 2,153 FPCs. About 1.5 % of Maharashtra's Forest cover comes under the purview of JFM activities.

Sant Tukaram Vangram Yojana is launched to create awareness about the importance of forest & wild life, to protect the forest from illegal tree cutting, encroachments, etc. Under the scheme 12,081 Joint Forest Management Committees (JFMC) are formed in 15,500 villages. The JFMCs manage 27.04 lakh ha of forest area.

Mangroves conservation

As per India State of Forest Report - 2021, about 324 sq km area is under mangrove cover in the State. For conservation of mangroves, more than 9,781 ha of mangroves have been declared as reserved forests under section 20 of the Forest Protection Act.

The State is implementing Mangrove Conservation and Livelihood Generation Scheme since 2017 with the participation of local communities across coastal stretch of the State covering over 120 villages from Palghar, Thane, Raigad, Ratnagiri and Sindhudurg districts. During 2021-22, the State has allocated funds of Rs.5.22 crore for upscaling various livelihood activities such as Mud Crab Farming, Fish Cage Culture, Oyster & Mussel Farming, Ornamental Fish Culture, Eco-tourism and mangrove plantation under this scheme. These activities can be taken up as group activity or as an individual beneficiary. The group activity is entitled with 90 per cent subsidy, while individual beneficiary (land owners with more than one acre of mangroves) is entitled to get 75 per cent subsidy. During 2020-21, a profit of Rs.35.83 lakh was earned by beneficiaries under the scheme. During 2020-21, about 161.47 ha of mangrove plantation was undertaken.

Social Forestry

Various social forestry schemes are being implemented in the State. Under social forestry, seedlings are planted on community land & along roads/railways/canals, etc. Seedlings are also provided to various institutions, Grampanchayats & individuals for plantations. Area of plantations under major schemes is given in Table 6.

Table 6. Area of plantation under major schemes

Schemes	Units	2019-20	2020-21	2021-22*
Seedlings planted on community land	Lakh seedlings	539.12	18.49	88.40
a) Block Plantation	ha	18,178.00	951.00	5,234.00
b) Road / railway/ canal side Plantation	km	17,725.20	1,385.00	6,257.00
Seedlings supplied to institutions/ individuals and <i>Grampanchayat</i>	Lakh seedlings	17.12	5.74	0.75
MGNREGA Scheme	Lakh seedlings	0.20	0.86	0.42
a) Farm bund plantation unit				
b) Agroforestry Plantation	Lakh seedlings	15.05	11.49	13.52
<i>Kanya Vansamruddhi</i> Scheme	Lakh seedlings	5.49	0.20	0.13

Source: Office of the Principal Chief Conservator of Forest, Social Forestry, GoM + upto November

Potential for Development

- As per the Wasteland Atlas of India prepared by NRSC, MoRD, GoI (2019), out of the total geographic area of 3,07,690 sq. km in Maharashtra, 36,075.15 sq.km is under wastelands accounting for 11.72% of the geographical area of the State. Land with open scrub is the major wasteland category, accounting for an area of 12,381.81 sq. km. Noticed net decrease in wasteland area by 92.39 sq.km during the period 2008-09 – 2015-16. The district with the highest percentage of wastelands is Raigad with 26.98% while Latur district with 3.88%, has the least percentage of wastelands. The cultivable wastelands can be considered as potential area for raising forest tree crops for commercial purposes under the purview of farm/ agro-forestry, if appropriate forward and backward linkages are developed at the ground level.
- The potential trees that can be raised for commercial purpose include Eucalyptus, Bamboo, Melia, Silver Oak, Simarouba, Pongamia, Acacia, Subabul, Casuarina, Neem, Jatropha, etc.
- There is a good potential for financing pulpwood plantation especially clonal plantations. There is a good potential of financing for pulpwood plantations viz. Eucalyptus, Acacia hybrid, Bamboo, Subabul and Casuarina.
- Bamboo has immense potential and can be an important commercial plantation. The present level of production of bamboo from the forest is unable to meet the requirement of green bamboo. Besides, there is potential for setting up industries for new generation bamboo products such as pre-fabricated rural housing, flooring, panels, corrugated sheets, bamboo shoots, etc. for domestic and export market. Thus, there is a huge gap in demand and supply for bamboo which could be tapped by commercial plantations on private wastelands in the State.
- There is a good potential for raising 'energy plantations' for meeting the biomass requirement of power generation units in the State, which are understood to be running below installed capacity due to inadequate raw material availability. Suitable species include Eucalyptus, Subabul, Melia, Casuarina etc.
- There is good potential for setting up 'forest clonal nursery' for production of superior clonal ramets of commercial forest species, particularly Eucalyptus and Acacia hybrids, in association with the wood-based company(s) to meet the growing demand for raw material.
- Maharashtra is a drought prone State. Agro forestry/ farm forestry is the best means to sustainably develop these lands and add to the agricultural income of the farmer.
- Consider the example of Mendha-Lekha a village situated in the Gadchiroli District of the Maharashtra. On 28th August 2009, Mendha became one of the first villages in India whose rights and responsibilities to use, manage and conserve the 1800 ha of forests falling within its traditional boundary were legally recognized as Community Forest Resource (CFR) under the Schedule Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act of 2006. The gram sabha has taken numerous decisions to

strengthen ecological, food, water, livelihoods and social security, and to eliminate poverty. With enough cultivable land and water security for all, the farmers ensure good harvests every year. And, in case of crop failure, the village has a Grain Bank that can loan grains to families to ensure food security. The Grain Bank is maintained through a voluntary contribution by each family at the end of each harvest. Loans taken are also returned with a small interest at the end of a good harvest. Each family contributes 10% of its income in a gram sabha account. This account is used to provide interest free or low interest loans to villagers when needed, eliminating dependence on money lenders, which is a major cause of distress and farmers suicides in many parts of India. Taking advantage of the government National Employment Guarantee Act (NREGA) the village has linked all village development and forest management activities to NREGA activities, ensuring that all villagers have employment throughout the year and eliminating out migration – a serious problem faced by many poverty-stricken villages across India.

- This proven example of sustainable management of forest can be incorporated with the existing JFM programme for its strengthening.
- The potential for forming FPOs / OFPOs of NTFP collectors / artisans dealing with Bamboo products can be exploited for addressing the whole value chain.

Initiatives taken by banks/ State Government/ Various agencies

- **'Centrally Sponsored Scheme of National Bamboo Mission'** has been launched by the Govt. of India in Dec. 2006, for holistic development of Bamboo sector in the country. The scheme offers assistance to Govt., public as also private undertakings for R&D, plantation development, handicrafts, marketing and exports etc
- **National Mission on Bamboo Application (NMBA)**, has been established under the TIFAC (Technology Information, Forecasting and Assessment Council), Department of Science and Technology, New Delhi. The Institute supports technological upgradation, development of indigenous capacities/enterprise and linkages with markets with an aim to promote bamboo sector in the country.

Indicative Cost of Development of Some Species

Sl. No	Crop	Spacing	Plant population per ha	Approx. Cost (₹)
1	<i>Melia dubia</i>	3 m x 3 m	1111	111100
2	Teak	2 m x 2m	2500	126000
3	Mahogany	4.57 m x 4.57 m	478	85000
4	Silver Oak	3 m x 3 m	1111	110000

2.1.5.2. Infrastructure and linkage support available, planned and gaps

In Bhandara district, the land covered by forests has reduced by 7% points from 1353.36 sq.km (33.11 % of the total reported geographical area) to 998.92 sq. km (24.44% of RGA) during the period from 2016-17 to 2018-19. The total waste land area reported to be 18023 ha (180.23 sq.km) is available for development. This land is with the forest department, revenue department, gram panchayat or local bodies and reserved for grazing and other purposes. The paper industries located in Chandrapur and Nagpur district itself have huge requirement for forest produce. The entrepreneurs and farmers need to consider farm forestry on degraded lands as a viable option. There is potential for developing / financing farm forestry, agro forestry, commercial forestry and also setting of Commercial Nurseries.

(Source : District Socio Economic Review 2020 for Bhandara published by Directorate of Economic and Statistical Review, Planning Department, Government of Maharashtra)

Recommended Tree species :

Eucalyptus (clonal varieties), Acacia, Terminalia, Tamarind, Aonla, Prosopis, Ber, Babul, Cashew, Salvadoria, Casuarina, Neem, Jojoba, Jatropha, Subabul, Sissoo, Siris, Teak, Gamar, Melia, Cassia, Bamboo, etc. Besides, Poplar can be raised under Agro-forestry Plantations. The program under forestry development is mostly undertaken with Government sponsored subsidy oriented schemes.

The ground level credit flow to the above activities during the years 2019-20, 2020-21 and 2021-22 was nil.

2.1.5.3. Assessment of potential for the financial year 2023-24 (in both physical and financial terms)

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Farm forestry	ha	0.37	700	259.00	194.25
2	Bamboo plantation	ha	0.30	660	198.00	150.50
	Total				457.00	344.75

Block-wise details of physical and financial programme for 2023-24 are given in Annexure – I.

2.1.5.4. Critical interventions required for creating a definitive impact

1. The **Social Forestry department** has implemented following projects :

Particulars	Area	Amount (Rs. Lakh)
Roadside Plantation under MREGS (800 plants per km.)	34 Kms	6.57
Block Plantation under RSVY	37 ha.	8.45
Plantation on private land	46.01 ha.	7.87
Kisan Nurseries	2.20 lakh saplings	2.87

2. In addition to above, the department is also working on nala bunding, recharge, farm ponds, *Van Talao*, etc. the Social Forestry Department is implementing following four schemes for facilitating growth of the social forestry and farm forestry sector :

- a) Plantation on public and private land
- b) Maharashtra Rural Employment Guarantee Scheme (MREGS).
- c) Integrated Watershed Development Programme in watersheds Nos.WGG-7 and WGG-3 in Tumsar tehsil. It has also identified watershed in Sakoli tehsil.
- d) Central nurseries and van mahotsav nurseries for sale and departmental utilisation.

3. **Bamboo Development**

Government of India has also launched National Bamboo Mission and is being implemented by Directorate of Social Forestry for promoting bamboo nursery and plantation both in public and private land.

2.1.5.5. **Suggested Action Points**

For Banks :

1. Bank should make concerted efforts to identify potential borrowers/ entrepreneurs for financing farm forestry, development of wasteland as also for social forestry activities.
2. A tripartite agreement can be considered between banks, paper mills and farmers whereby banks can extend loan to farmer to grow eucalyptus, bamboo etc. which can be purchased by paper mill at pre-decided price and credit the amount in loan account of farmers.
3. Promoting development of forestry on private wastelands with institutional credit support to ensure ecological balance and meet increasing demand for fodder, timber, fuel wood and other forest produce.

For Development Department:

1. The State Government particularly the Forest Department should open up a public-private partnership programme for singling of bamboo in the forest areas for creating commercial value and availability of raw material to craftsman.
2. The Forest Department should encourage the Joint Forest Management Committee members to utilise the available trees of Yen and Arjun for rearing of Tassar silk cocoons. There is also a large scope for taking up the lac cultivation in forest areas all across the Bhandara district. These activities will ensure that the villagers will protect the forest for their own livelihood (for tassar cocoons and lac production) and development of a sustainable source of income for the tribals living in forest areas.

2.1.6 Animal Husbandry- Dairy Development

2.1.6.1 Introduction :

Agriculture & allied activities sector is the predominant activity in the State as more than 50 per cent of population is dependent on this sector for livelihood. Animal Husbandry plays an important role in the rural economy. It is a supportive occupation which not only supplements farm income but also generates gainful employment. It provides essential nutrients at low cost to the livestock rearing families. The Government is framing and implementing policies for genetic upgradation of livestock for sustainable production to enhance livestock sector and also to reduce the regional disparity in production of livestock products.

20th Livestock census 2019

- As per the 20th Livestock Census, Maharashtra has a total livestock population of 33 million showing a rise of 1.61% over 19th Livestock census, 2012, comprising of
 - 13.9 million cattle (decrease of 10.07% over previous census),
 - 5.6 million buffaloes (increase of 0.17% over previous census),
 - 2.7 million sheep (increased by 3.87%),
 - 10.60 million goats (increased by 25.72 %)
 - 74.3 million poultry (decreased by 4.49%).
- The State ranks seventh at national level with total livestock of about 3.31 crore.
- The State ranks fifth at national level with poultry birds population of about 7.43 crore.

Bhandara district is major milk producing district of Vidarbha. The average daily milk production has reached to 23.23 thousand litre. The district has livestock population of 213036 cattle and 106861 buffaloes as per Livestock Census 2019. The breedable population as per Livestock census 2019 consisted of 57400 CB breedable cows, 23302 indigenous breedable cows and 53979 female buffaloes. Buffaloes accounted for about 44% of total milk production in the district followed by Cross bred Cows (40%) and indigenous cows (12%) and goats (4%). The estimated per capita per day milk availability in the district is 248 gm against the State average of 256 gm and recommended intake of 300 gm per day.

(Sources : District Socio-Economic Review of Bhandara 2020, www.nddb.coop, Economic Survey of Maharashtra 2019-20, www.planningcommission.nic.in)

2.1.6.2 Infrastructure and linkage support available, planned and gaps

1. There are 85 veterinary institutions (37 Grade-I and 48 Grade-II Dispensaries) providing necessary animal health services to livestock population in the district including artificial insemination facility at all centres.
2. Fodder is available in the form of crop residue (dry grass). However, the dept. is supporting fodder development through centrally sponsored mini kits testing program, special component plan for SC farmer and normal state plan. Fodder cultivation can be taken as commercial individual activity for generating more income by selling the surpluses. Seed was distributed under mini kits programme to beneficiaries for raising improved fodder. There is a scope for taking up this activity by SHG members along with mini dairy activity.
3. In addition to the existing milk processing capacity of 1.05 lakh litres per day, the District Cooperative Milk Union has set up a milk processing plant of 1.20 lakh litres per day for manufacturing products like pasteurised milk, paneer, khoya, butter and buttermilk, etc. and the entire capacity is being fully utilised.
4. There are 8 major players in managing milk business in the district. The biggest is Bhandara District Cooperative Milk Federation followed by 7 private players. The Bhandara Cooperative Milk federation is paying better prices to milk societies.
5. The Bhandara District Cooperative Milk Producers' Union, implementing Clean Milk Policy of the Union Agriculture Ministry, is the highest procurer and processor of the milk in Vidarbha. It is the only district level union which is selling milk and milk products under its own brand name viz. Kisan. The branded

products include milk, curd, butter milk, khoya, ghee, paneer, etc. The total milk procured and processed by cooperative sector in Vidarbha is 1.00 lakh liters per day out of which 60% (0.65 lakh litres) is from Bhandara district alone. Bhandara district has been honored by Government of India with Skimmed milk powder plant under Clean Milk Production scheme and it has started its operation in the premises of Bhandara Milk Union complex.

6. There are 507 registered societies in the district out of which 275 are operative. The milk collection is being done by District Union through 26 milk routes.
7. The cattle markets are very vibrant in the district particularly at Kondha on Wednesday and at Bhandara on Sunday.
8. District Dairy Development Office has implemented Vidarbha Vaidhanik Vikas Package for dairy with 50% subsidy (Rs.14,000/- per cow) against purchase of CB cows from outside the State.
9. The necessary training is available free of cost in RSETI, Bhandara.
10. The ground level credit flow to the above activities during the years 2019-20, 2020-21 and 2021-22 were Rs.1324.00 Lakh, Rs.2496.00 Lakh and Rs.2972.00 Lakh respectively.

2.1.6.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms) :
(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Dairy (1+1)	No.	1.37	3150	4315.50	3668.21
2	Buffalo – 2 animals	No.	1.58	3150	4977.00	4230.45
3	Milk Processing Unit	5000 LPD	33.20	6	199.20	179.28
4	Bulk Milk Coolers	5000 LPD	18.00	14	252.00	226.80
5	Working capital - KCC	Per animal	0.15	7500	1125.00	1012.50
	Total				10868.70	9317.24

Block-wise details of physical and financial projection for the year 2023-24 are given in Annexure –I.

2.1.6.4 Critical interventions required for creating a definitive impact :

1. Government support is required for setting up of Breeding Farm in the district so that good quality animals can be made available to the farmers.
2. Animal Husbandry department may promote high yielding animal and fodder varieties.
3. The banks have to ensure that mini dairy units are financed with availability of green fodder.
4. The banks should finance cattle shed construction for the borrowers maintaining quality animals without proper shed.

2.1.6.5 Suggested Action Points

1. Promoting fodder development programmes in areas available in reservoirs and big water tanks where water recedes after a couple of months of monsoon so that the surplus can generate more income for the cultivators. These areas can be allotted to dairy societies for fodder cultivation. Except in Mohadi block, the farmers are not cultivating fodder for sale in the open market. There is a need for Awareness Programmes on Fodder Development. Zilla Parishad can take a lead in this regard in coordination with District Cooperative Milk Union.
2. There is a need for strengthening of ZP Programmes on animal health, AI, fodder cultivation, subsidy on the animal supply. They need to be more broad-based for increasing their reach.
3. Calf rearing programme should be taken up on priority in coordination with Milk Union.
4. There is a need for organising EDPs for dairy / milk processing entrepreneurs followed by credit linkage.

2.1.7 Animal Husbandry - Poultry

2.1.7.1. Introduction :

Poultry is the upcoming commercial activity in the district. According to the Livestock census 2012 there are 10270 layer birds, 23220 broilers and 235629 backyard poultry in the district. The young generation farmers are coming forward to undertake the activity due to tie-up / buy back arrangement from Indian Broiler, Saguna, Venkateswara Hatcheries, Venky's, etc. However, keeping in view the additional income generation, the development agencies may have to promote poultry units and backyard poultry units in tribal blocks of the district in a major way. The per capita egg availability in the district / year is estimated to be 26 as compared to the State average of 41 eggs and the nutritional requirement of 180 eggs per annum.

(Sources : District Socio-Economic Review of Bhandara 2021, www.nddb.coop, Economic Survey of Maharashtra 2021-22, www.planningcommission.nic.in)

2.1.7.2 Infrastructure and linkage support available, planned and gaps

1. The Animal Husbandry Departments of State Government as well as Zilla Parishad are providing health care services & trainings. The Rural Self Employment Training Institute (RSETI) provides technical as well as entrepreneurship development trainings.
2. The AH deptt has implemented NCDC project (Gulshan Poultry Farm) at Kharabi village in Bhandara block with 35000 layers. There is no hatchery in the district. The chicks can be procured from private hatcheries in Pune, Sangali, Nasik districts and Central Hatchery of AH Department at Nagpur.
3. Feed manufacturing units may be set up by private entrepreneurs to cater to the local demand.
4. The ground level credit flow to the above activities during the years 2019-20, 2020-21 and 2021-22 were RS.57.00 Lakh, nil and RS.121.00 Lakh respectively.

2.1.7.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms) :

Poultry units of a minimum capacity of 50,000 birds are viable/ profitable in the present economic scenario. However, owing to the low credit absorption capacity of the rural population in Bhandara district, they are unable to set up large poultry units. Besides, the rural population here prefer setting up small / backyard poultry units which require less capital. Therefore, projections have been made for poultry units with only 1000 birds.

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Broiler farming (1000 birds)	No.	3.726	175	652.07	554.26
2	Layer farming (1000 birds)	No.	9.920	80	793.60	674.54
	Total				1445.67	1228.80

Block-wise details of physical and financial programme for 2023-24 are given in Annexure -I.

2.1.1.4 Critical interventions required for creating a definitive impact :

1. Promoting backyard poultry for the SHGs would increase their income levels since there is huge local demand for eggs and culled birds/ broilers.
2. Tie-up arrangements have to be established with private companies for sustainability of poultry farms.

2.1.7.5 Suggested Action Points :

1. The banks may encourage poultry entrepreneurs to upscale their units and provide working capital for self-financed units.
2. Damaged foodgrains from FCI could be made available to all types of poultry units to help them in reducing their feed cost.
3. Experts from Animal Husbandry Department may be invited as faculty by RSETI during conduct of training programmes on poultry.
4. Advisories by poultry experts from Animal Husbandry Departments on bird health and treatment/ prevention of diseases would be very helpful in growth of the poultry sector in the district.

2.1.8 Animal Husbandry - Sheep, Goat, Piggery

2.1.8.1. Introduction

Small Ruminants have been a major source of economic sustenance and financial cushioning, especially for economically weaker section of society. A variety of products are produced from sheep & goat farming ranging from wool/woolen products from sheep, meat, leather, manure and milk from sheep & goats. Approximately one lakh families are depending upon sheep rearing business, whereas 48 lakh families are engaged in goat rearing in the state. Both these occupations are mainly carried out by weaker sections of the society; however, due to local demand, consistent increase in the price of goat meat, low investment and assured market throughout the year, several businessmen, progressive farmers have taken up goat rearing on commercial scale in the state.

As per the 2019 Livestock Census, the Sheep, Goat, Pig population of the district is 3169, 199183 and 83 respectively. The activities are mainly taken up by the small and marginal farmers and the rural poor including the SHG members. Goatery is the most popular activity in the district whereas piggery is the least preferred.

2.1.8.2 Infrastructure and linkage support available, planned and gaps

The ground level credit flow to the above activities during the years 2019-20, 2020-21 and 2021-22 were Rs.76.00 Lakh, Rs.68.00 Lakh and Rs.478.00 Lakh respectively.

2.1.8.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms) : (Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Sheep Rearing (10+1)	No.	0.89	1525	1357.25	1153.67
2	Goat Rearing (10+1)	No.	0.89	1525	1357.25	1153.67
	Total				2714.50	2307.34

Block-wise details of physical and financial programme for 2023-24 are given in Annexure - I.

2.1.8.4 Critical interventions required for creating a definitive impact:

1. The area under permanent pastures and grazing lands is 4209 ha constituting 1.03% of geographical area of the district. However, grazing in forest land should be arrested / reduced.
2. The Animal Husbandry Department of State Government and Zilla Parishad guide farmers regarding the sheep/ goat development activities through workshops under Assistance to States for Control of Animal Diseases (ASCAD) at the village and Block levels. These workshops cover housing, breeding, management, disease control, vaccination, etc. of the livestock.
3. The Government Sheep and Goat Development Corporation is having sheep and goat farm at Pohara in Amaravati district for giving support to this activity since the feed and fodder is locally available.
4. There is no organized slaughter house in the district. There is no organized skin / leather processing unit in the district and the banks can consider financing the same.

2.1.8.5 Suggested Action Points

1. Banks may have to finance this activity as potential exists for goat farming. Adequate provision may be made in Annual Credit Plan for this sector.
2. SHGs could be encouraged further to take up Goatary activity.
3. Government may strengthen their extension services and organise, training camps, exposure to other units etc. for perspective beneficiaries. The number of programmes under Assistance to States for Control of Animal Diseases (ASCAD) may be increased to cover the entire district by the Animal Husbandry Department.
4. The AH department and Sheep & Goat Corporation may make necessary arrangements identifying sources for purchase quality goats/ sheep and strengthen the sources for vaccination facilities.

2.1.9 Fisheries

2.1.9.1. Introduction

Fisheries sector plays a strategic role in Bhandara's economy in terms of contribution towards food security, meeting nutritional challenges and employment generation in the rural areas as also in semi urban areas. Vainganga river flows 200 km across the district and also there are 6020 water bodies which together form 12473 ha area for fisheries activity. However, during the year 2016-17 only 97.8% of water bodies were utilised for the activity. There are 9633 fisherman households in the district involved in the activity. Fish production in the district during the year 2016-17 stood at 13,744 MT and earned revenue of Rs.101.94 Crore.

2.1.9.2 Infrastructure and linkage support available, planned and gaps

1. Based on the average Water Spread Area and the Management System e.g. semi-intensive, extensive, extensive with partial feeding, etc., fish production potential works out to 32,967 MT. However there is huge gap between present production and potential. The exploitation of the potential has been to the extent of 37% only and the balance potential of 63% is still under utilized.
2. All of the 116 Cooperative Fisheries Societies are functional and in relatively good financial health. The fish seed production activity is picking up in the district with a subtle shift from bund breeding to *mograbandh*. This has given good financial results to the societies. The fish seed production center at Shivani bandh has been renovated and its capacity increased by the State Government under Rashtriya Sam VikasYojna and Vidarbha Development Package.
3. The ground level credit flow to the above activities during the years 2019-20, 2020-21 and 2021-22 were Rs.660.00 Lakh, Rs.613.00 Lakh and Rs.593.00 Lakh respectively.

2.1.9.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms):

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Pond Development	Ha	7.000	100	700.00	630.00
2	Fish Farming through Renovation of Ponds/ Fish Seed Rearing	Ha	4.000	100	400.00	360.00
3	Nursery Pond	Ha	1.762	50	88.11	79.30
4	Rearing Pond	Ha	1.762	70	123.35	111.02
5	Hatchery	Ha	20.000	2	40.00	36.00
6	Others - Shrimp Farming	Ha	14.000	40	560.00	504.00
7	Working capital - KCC	Ha	1.600	60	96.00	86.40
	Total				2007.46	1806.72

The Block-wise details of physical and financial programme for 2023-24 are given in the annexure-I.

2.1.9.4 Critical interventions required for creating a definitive impact :

1. The wild growth of "Eichhornia crassipes" weed in storage side of Gose Khurd dam and along Wainganga river has adversely effected fish production to a large extent since past three to four years. This weed needs to be eradicated for utilizing the vast potential of fish production available.
2. Identification of reservoir fisheries for scientific stock management and development.
3. Encouraging fishermen to undertake fresh water prawn farming.
4. Strengthening of inland fish marketing by providing infrastructure facilities.
5. Encourage private farmers for construction of new fish ponds in low lying area for providing employment and providing self-employment to them
6. The projects on Mograbandh for breeding of fish and their storage in tanks needs to be promoted.

2.1.9.5 Suggested Action Points

1. State Government has to facilitate the creation of infrastructure for ice making, processing of fish and packaging of fish in ice boxes. This will increase the level of income to the fisherman as also the entrepreneurs. Development of cage fishery as well as prawn culture for export
2. The banks have to identify the fisherman who are purchasing fish from the Fisheries Societies and finance them so that they can approach markets in district headquarters or nearby big markets like Nagpur.

3. Some of the ponds in the district are 50 years old and need renovation. Fishries department/ Irrigation department/ Zilla Parishad/ Gram Panchyat may take up this work. Supply of carp seed (fry, fingerlings) to fish farmers and owners of existing fish ponds and tanks may taken up by DFDO.
4. Presently, Shivni Bandh and Chandpur reservoirs are producing large quantities of fish. However, the financial needs of the fisherman / contractors for feed and other fishing material is being met through the informal sources of credit. The banks need to explore the potential for providing working capital to the entrepreneurs.
5. Inadequate extension services due to limited number of staff with FFDA/District Fisheries Office.
6. A programme on availability of suitable area for development of fresh water fish farming on cluster development basis need to be worked out, along with hatchery.
7. There is a need to establish more hatcheries and ensure adequate seed stocking in ponds, tanks and reservoir sites.
8. Fisheries Department may take initiative for preparing inland pond fish proposals involving subsidy, bank loan and forward such cases to the financing banks for loan.

2.1.10 Farm Credit - Others – Bullocks, carts, Loans to FPOs, etc.

2.1.10.1. Introduction

Despite modernisation of agriculture and increased use of mechanisation, the use of bullocks and carts by SF/MF and medium farmers is still in vogue. There are 117704 bullocks in use on the farms and for other conventional agricultural and allied activities. Being the traditional agro-economy the main vehicular arrangement for on farm transport continues to be the traditional animal driven cart in the rural areas. There has been nil disbursement for this activity during the past three years.

Under the Central Sector Scheme on Formation and Promotion of 10,000 FPOs, NABARD is one of the implementing agency and NABARD has appointed MCDC as CBBO in Bhandara district. Accordingly, four FPOs have been formed; one each in Mohadi, Pauni, Lakhani and Sakoli blocks. During the financial year 2022-23, one more FPO has been sanctioned to be formed in Tumsar block.

2.1.10.2 Infrastructure and linkage support available, planned and gaps

1. Veterinary services are available from AH clinics and health centres for bullocks at village and taluka level.
2. Market for bullocks are available at Kondha and Bhandara in the district.
3. There is an authorised fabrication unit at Bhandara besides MSSIDC to provide steel carts to farmers.

2.1.10.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms):

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Bullocks	Pair	0.80	140	112.00	100.80
2	Loans to FPOs	No.	3.00	7	21.00	18.90
	Total				133.00	119.70

Block- wise details of physical and financial programme for 2023-24 are given in annexure-I.

2.1.10.4 Critical interventions required for creating a definitive impact :

1. The bullock markets available at Kondha and Bhandara may be modernised for making them vibrant.
2. Adequate credit to FPOs for catering to their business requirements and venturing into new areas of service and marketing are critical for their growth and sustainability.

2.1.10.5 Suggested Action Point

1. The banks should finance farmers for purchase of bullocks / steel carts so that dependence of the farmers on rental bullocks / bullock-carts gets reduced and the agricultural operations can be performed economically and well on time.

2. In view of the focus being given by Government of India for formation and nurturing the FPOs, banks should adequately finance FPOs so that they can take up business activities for benefit of the farmers.

Chapter 2.2 Agriculture Infrastructure

2.2.1 Construction of Storage and Marketing Infrastructure – (warehouses/ godowns, market yards, silos, cold storage units / cold chains)

2.2.1.1 Introduction

Indian agriculture sector, despite its high potential is constrained by supply chain inefficiencies and huge post-harvest losses arising out of inadequate storage. Storage godowns and market yard facilities play an important role in ensuring remunerative prices to the producers. The rural-urban supply chain is very crucial for food security and minimizing post-harvest losses.

2.2.1.2 Infrastructure and linkage support available, planned and gaps

In Bhandara district, average food / agricultural production, its market arrivals as also consumption of seeds & fertilizer is estimated at around 334000 MT, 26501 MT, and 45490 MT respectively. The district is having about 175 Rice Mills and they need godowns. Similarly, the FPOs, progressive farmers and PACS require godowns for storage of paddy. Hence, there is a good demand for rural godowns in the district. There are 235 godowns with storage capacity of 50280 MT in the district. Actual number of godowns presently in use is reported to be 170 only. There are in all 5 APMCs at 5 taluka headquarters and other 2 talukas viz. Sakoli and Mohadi have no APMCs. Keeping in view the agriculture production and the existing capacity of godowns, the required additional capacity of godowns is for 50000 MT. Besides, cold storages required for fish, prawns, vegetables and other perishable items in the district is estimated at about 14000 MT. The ground level credit flow to the above activities was not available.

2.2.1.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms):

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Cold Storage	MT	0.090	10000	900.00	675.00
2	Rural Godown	MT	0.080	37000	2960.00	2220.00
3	Market Yard	No.	7.500	14	105.00	78.75
4	Godown for milk collection	MT	0.040	1800	72.00	54.00
	Total				4037.00	3027.75

Block-wise physical and financial projections for 2023-24 are given in Annexure -I.

2.2.1.4 Critical interventions required for creating a definitive impact

1. Finance construction of warehouses, godowns, cold storages, cold chains and market yards in coordination with line departments and DIC for creation of agri-infrastructure.
2. Finance against pledge of stored commodities/ Negotiable Warehouse Receipts.
3. The Fisheries Department of State Government should work in coordination with banks, NABARD and Farmers for propagating importance of scientific storage facilities.
4. APMCs in the district should consider setting up commodity trading terminals to enable farmers to avail of the benefits of price discovery, etc.
5. Information regarding market arrivals, prices of various commodities, etc. should be made available to the farming community by establishing adequate number of information kiosks at strategic places.
6. There is a need to improve the power supply position to facilitate cold storage in the district.

2.2.2 Land Development, Soil Conservation & Watershed Development

2.2.2.1. Introduction

Soil and water are the two basic natural resources in agriculture. Therefore, they must be conserved well and used scientifically to ensure sustained level of production and productivity. Any agriculture production program can be successful only if the soil maintains fertility and has sufficient moisture to support plant growth. Land development include all activities undertaken to improve productivity of land, to prevent erosion of soil and to improve land quality, which include, soil conservation measures, land reclamation, on farm development, rain water harvesting, farm pond, etc. On-farm development activities are measures for increasing water use efficiently and avoiding ill effects of excess water in case of irrigation projects. One of the recommendations of National Commission on Farmers headed by Dr. M S Swaminathan is enhancement of soil health and productivity.

2.2.2.2 Infrastructure and linkage support available, planned and gaps

1. The district has 18023 ha of cultivable wasteland which can be reclaimed for plantation/cultivation of crops. The agronomic productivity of land is highly dependent on effective soil and plant nutrition management. In addition to suitable climatic conditions, plants require a suitable medium for physical support and anchoring of the root system as also availability of water and essential nutrients. While crop yield depends on the complex interaction of plant growth and all other development factors, the role of prudent soil and plant nutrient management is particularly important to ensure a sustained level of productivity for any given cropping system.
2. Land Development aims at restoring the productivity through land levelling, bunding, drainage, water harvesting, soil / water conservation, soil fertility restoration / enhancement (reclamation), organic farming techniques (use of bio-fertilisers and bio-pesticides), improved agronomic practices, etc. Continuous depletion of land resources and quality of land due to various factors like soil erosion caused mainly due to shifting cultivation, large scale deforestation, reckless mining activities, overgrazing, general mismanagement, etc. are leading to degradation of soils' physical properties and loss of plant nutrients. Prudent soil and plant nutrition management is particularly important to ensure a sustained level of productivity for any given cropping system. Under "Hariyali" programme, work are in progress in 9 watersheds covering area of about 5,000 ha. District Social Forestry Office is the nodal agency for this project.
3. Agriculture Department has identified 231 watersheds covering 183 villages in the district for intensive development with financial outlay of Rs.1113.60 lakhs. The banks can tap the potential of this watershed developed area of 0.82 lakh ha for providing various credit facilities like KCC, land development, farm bunding, etc.
4. The Government is providing subsidy of Rs.1000/- per unit for bio compost units and Rs.25,000/- per unit for vermi culture units. The Government is also providing subsidy of 25% or a maximum of Rs.2.00 lakh for soil and water testing labs in the private sector. The nodal agency is Deputy Superintending Agriculture Officer.
5. The Agriculture Department has identified 1600 farmers in the district for organic farming. Similar effort has also been made in respect of 1500 farmers by National Institute of Organic Farming. The process involves making them available organic fertilizers and pesticides and certification of land. There is need for preparing a banking plan for these farmers by banks and creation of more such groups of farmers on the above lines by Agriculture Department.
6. The ground level credit flow to the above activities during the past three years 2019-20, 2020-21 and 2021-22 was negligible.

2.2.2.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms):

The exploitable potentials for various land development activities are as under :

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Units	TFO	Bank Loan
1	Land Levelling & Shaping	ha	0.155	740	114.70	86.05
2	Contour Bunding	ha	0.157	700	109.90	82.46
3	Water harvest tank	ha	1.750	175	306.25	229.67
4	Drainage, Farm ponds	ha	1.750	175	306.25	229.67
	Total				837.10	627.85

The Block-wise physical and financial potentials for the year 2023-24 is indicated in Annexure-I.

2.2.2.4 Critical interventions required for creating a definitive impact

1. The Organic Farming needs to be promoted in various forums / programmes .
2. In order to make optimum use of in-situ moisture, polythene mulching would be useful.

2.2.2.5 Suggested Action Points

1. The On Farm Development works need to be started in a focussed manner on the irrigation command areas of Bawanthadi, Chulband and Gose Khurd irrigation projects.
2. Banks may train branch level staff on formulation of Land Development Schemes, in consultations with Govt. Depts., NGOs and farmers by employing PRA techniques.
3. Banks may finance OFD works in command areas of completed irrigation projects.
4. Bio pesticides may be popularised amongst the farmers as efficient tool of Integrated Pest Management (IPM).
5. Data of the completed watersheds may be provided to banks for formulation of suitable schemes / banking plan for harvesting the benefits of watershed development and enhancing credit flow to the sector.
6. Adequate publicity regarding completed watershed, information on technology package for the watershed development project needs to be given to farmers for improving productivity and credit flow to the sector.
7. There is a need to popularise drip /sprinkler irrigation systems and use of Solar Pumps for irrigation.
8. Government departments may form Joint Liability Groups/User Groups in completed command area and train them to take responsibility of distribution network and maintenance.
9. Banks may formulate schemes for farmers to take up On Farm Development Works such as land leveling, bunding, field channels and drainage, etc. and extend financial assistance.
10. Create awareness for adopting integrated watershed management and land development practices for the benefit of farmers.
11. Krishi Vigyan Kendra may prepare Farm Models for different crops using wells, Micro Irrigation and Ponds.

2.2.3 Agri. Infrastructure - Others

2.2.3.1 Introduction

Biotechnology is modern technology that encompasses techniques such as molecular biology, plant tissue culture, animal tissue culture, microbial and enzyme biotechnology, agri-biotechnology, genetic engineering/Molecular Biology for developing better plant varieties, superior livestock, quality seed production, process and product development. Biological processes and product development for benefit of mankind is the focus of this science. Hence commercialization, business development, environment concerns and Intellectual Property Right (IPR) are key features of biotechnology. Further, use of bio-fertilisers, bio-pesticide, rhizobium biotechnology, bio-control agents, etc. needs to go up to replace use of chemicals.

2.2.3.2 Infrastructure and linkage support available, planned and gaps

1. The district falls under High Rainfall Zone with Soils derived from parent material of different crops. There are four subzone based on climate, soils and crop pattern. Soils are derived from parent rock granite, gneisses, and schists. They are Brown to Red in colour and have Ph from 6 to 7. Paddy is the major crop in the district. It is followed by Pulses and Oilseeds.
2. The district has 23000 ha of uncultivable wasteland which can be reclaimed for plantation/cultivation of crops. The agronomic productivity of land is highly dependent on effective soil and plant nutrition management.

2.2.3.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms):

The physical potential that could be tapped under bank finance during the year 2023-24 are as under. Block-wise bifurcation of potential is given in Annexure-I.

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Seed production plot /expansion	Ha	1.00	300	300.00	270.00
2	Compost making	Ha	0.40	735	294.00	264.60
3	Tissue culture labs	Ha	62.50	3	187.50	168.75
4	Soil testing labs	Ha	1.00	10	10.00	9.00
5	Bio-fertilizer / Bio-pesticides units	Ha	25.00	3	75.00	67.50
6	Others- Vermi-Compost, micro-units of bio-pesticides/ compost	Ha	0.55	80	44.00	39.60
	Total				910.50	819.45

2.2.3.4 Critical interventions required for creating a definitive impact

1. KVK has a full fledged soil testing laboratory and two soil testing mobile vans.
2. Laboratories for certifying and arrangement of marketing facilities for organic farming products needs to be developed.
3. To educate farmers for use of organic fertilizers.
4. The Seed Replacement Rates for major crops in the district are 48% for Paddy, 33% for Soyabean, 35% for Wheat and 35% for Tur.

2.2.3.5 Suggested Action points

1. Adequate training regarding organic farming, vermi-compost, seed production and sustainable agricultural practices may be organized.
2. Promote setting up bio-fertilizer and bio-pesticides production units, vermi compost units, coir pith composting units, etc. by individual farmers/ entrepreneurs, SHGs, JLGs, FPOs.
3. Organic farming and export of fruits/vegetables (organically grown) are good business propositions and banks may reach out to these farmers for meeting their credit requirements.

2.3 Agriculture – Ancillary Activities

2.3.1 Food and Agro Processing

2.3.1.1 Introduction

Agro processing is a vast sector comprising of food processing (production of food items) and agro industries (production of non-food items). NABARD defines agro processing as any industry, which uses agriculture and allied products as raw materials. This sector is of strategic importance for rural development since it directly benefits the farmers.

The agro processing activities having large scale potential in Bhandara district are :

1. Processing of food grains (rice, wheat, maize, Jowar, etc.), pulses (lentil, tur/ urad/ mug dal, etc.), oilseeds (soybean, flake, groundnut).
2. Processing of seed, fruits and vegetables, plantation crops, spices, condiments, medicinal and aromatic plants products, sugarcane, cotton, etc.
3. Processing of milk and milk products.
4. Processing fish, meat and other animal products.
5. Processing of silk cocoons and making yarn (silk) out of it is a major agro-processing activity which has tremendous potential as there are Arjun and Yen plantations in over 560 ha in the district.

2.3.1.2 Infrastructure and linkage support available, planned and gaps

A. Status of Production of various crops :

(Area in ha / production in MT)

Sr. No.	Type of Crop	Area sown	Annual production	Produce consumed / marketed in Raw form	Produce Available for Processing
1	Paddy	170900	325055	1100	323955
2	Pulses	28474	19960	600	19360
3	Oilseeds	9299	803	60	743
4	Fruits				
a	Mango	148	2340	1500	840
b	M. Orange	39	352	150	202
c	S. Orange	95	1316	1000	316
d	Guava	230	5085	2500	2585
e	C. Apple	106	1696	800	896
5	Vegetables				
a	Onion	625	12500	10000	2500
b	Tomato	912	14814	9926	4888
c	Brinjal	1824	51575	20630	30945
d	Cauliflower	100	1500	1000	500
e	Cabbage	300	6000	4000	2000
f	Peas	2000	8000	5000	3000
g	Turmeric	450	4500	500	4000

(Source : Agriculture Department)

It can be observed from the table that though paddy is the main crop here, the district has good crop diversity in fruits, pulses, oilseeds, vegetables and fruits. The support for various activities under National Horticulture Mission would also provide boost to the horticulture crops. However, the processing of these items is still to take place in the district in a significant manner, except for rice milling.

2.3.1.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms):

Term Loan and working capital requirements for agro processing activities are estimated as under :

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Agro-Processing	No.	15.000	420	6300.00	4725.00
2	Oil Mills	No.	25.000	21	525.00	393.75
3	Spice processing Unit	No.	2.500	1000	2500.00	1875.01
4	Dal Mills	No.	15.000	100	1500.00	1125.00
5	Fish Processing	No.	2.000	370	740.00	555.00
	Total - term loans				11565.00	8673.76
	Total working capital loans				3902.00	3902.00
	Total Agro Processing				15467.00	12575.76

Working capital worked out @ 45% of bank loan. The Block-wise details of physical and financial potentials for 2023-24 are given in the annexure-I.

2.3.1.4 Critical interventions required for creating a definitive impact

1. The rice milling is the major food processing activity in the district with 150 existing rice mills. About 20% of the rice mills in the district are procuring of paddy directly from farmers through the 05 APMCs in the district. The paddy for mills at Tumsar is also arriving from adjoining districts of Madhya Pradesh like Seoni and Balaghat. About 30 Rice Milling Units have extensive facilities of processing like sorting, grading, milling, polishing, sizing and packaging. These rice mills sell rice under their brand name and some sells to Food Corporation of India for PDS purposes.
2. The Dal Mills and Oil Mills procure raw pulses and oilseeds from the market through the *arathiyas* and process the same. These mills mostly cater to requirements of the local market. There is huge scope for processing of spices, particularly, turmeric and chillies.
3. The dairy activity in Bhandara has emerged as a major source of subsidiary income after agriculture to the farmers. The upgradation of technology in dairy activity is need of the hour.

4. Fisheries : Fish production was estimated at 12048 metric tonnes during 2015-16. Although there are good natural endowments, lack of cold storage and processing facilities are the major impediments in realising full potential of this sector. There is also scope for setting up fish and fish seed market.
5. The mango processing can also be a viable activity in the district as plantation of mango is on 234 ha of land with an annual production of about 2340 metric tonnes.

2.3.1.5 Suggested Action Points

1. There is need for conducting orientation programs for banks for looking into the food and agro processing other than rice mills as an economically viable activity. There is also a need for preparing model schemes at the district level for commodity specific projects.
2. The Agriculture, Fisheries department in Bhandara are required to supply the right kind of varieties of seed, saplings for respective activities so that the agro-processing becomes financially viable.
3. The Food Park established by the State Government at Butibori (Nagpur) has advanced facilities (cold storage, warehousing, processing, advanced packaging, tetrapacking and food testing laboratory). To cater to requirements of the units being set up in this Food Park, there is a need to promote primary level processing at the farm level to aggregate and supply of the raw material for final processing. Farmers Producer Organisation can play a critical role in this sector to tap its vast potential.

Chapter 2.3.2 Ancillary Activities - Others

2.3.2.1 Introduction

In terms of the revised RBI guidelines on priority sector lending, the following classification have been made under this category.

- Loans up to Rs.5 Crore to co-operative societies of farmers for disposing of the produce of members.
- Loans for setting up of Agriclincs and Agribusiness Centres.
- Loans for Food and Agro-processing up to an aggregate sanctioned limit of Rs.100 Crore per borrower from the banking system. (Covered separately in Chapter 3.3.1).
- Bank loans to Primary Agricultural Credit Societies (PACS), Farmers' Service Societies (FSS) and Large-sized Adivasi Multi-Purpose Societies (LAMPS) for on-lending to agriculture.
- Loans sanctioned by banks to MFIs for on-lending to agriculture sector as per the conditions specified in RBI circular.

2.3.2.2 Infrastructure and linkage support available, planned and gaps

1. Bhandara district has a very good network of The Bhandara District Central Cooperative Bank Ltd., Bhandara comprising of its 46 branches, 368 Primary Agriculture Cooperative Societies (PACS), 507 milk cooperatives, 136 fishermen societies, etc. Hence, there is good scope for financing these institutions in view of their primary objectives of facilitating farmers' financing for agriculture and allied activities, aggregation and marketing of their produce, providing remunerative price to farmers' produce, etc.
2. The Agri Clinic Agri Business Center (ACABC), envisaged to be set up by agricultural graduates, provides self employment opportunities to them and also provides timely advisories on farm level issues faced by the farmers.
3. Agriculture graduates have immense opportunities for providing consultancy services like soil and water testing, application of appropriate seeds, fertilizers, pesticides, etc. along with sale of these agri related inputs, farm equipments, etc. Thus, there is scope for ACABC finance.
4. Keeping in view the rural population and existing credit linkage of SHGs in the district, there is still a potential of formation of 1655 new SHGs. Further, there is ample scope for financing to existing SHGs which have been doing good work by starting their own micro-enterprises activities.

2.3.2.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms)

The details of activity wise projections are furnished below :

(Amount in Rs. Lakh)						
Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan

1	ACABC	No.	20.000	105	2100.00	1890.00
2	Loans to PACS/FSS/LAMPS	No.	500.000	1	500.00	500.00
	Total				2600.00	2390.00

2.3.2.4 Critical interventions required for creating a definitive impact

Micro-level survey through cooperative department, NGOs, BCs, etc. to identify the category wise requirement of loans of these cooperative institutions would help banks in tapping the activity wise potential and enhance their financing in the district.

2.3.2.5 Suggested Action Points

1. The Cooperation Department may sensitize cooperatives (PACS/FSS/LAMPS) to identify potential business activities and avail finance from Banks as per priority sector guidelines.
2. The concerned departments may organize block / village level camps periodically to popularize their schemes for the benefit of weaker sections and minority communities.
3. Banks may organize awareness camps for financing under ACABC Scheme in view of good potential in the district.

2.3.2.5 Other issues

Financing Farmers' Producers' Organizations (FPOs) : Indian producers are unable to realize optimal value from their produce due to fragmentation of land holdings and lack of organization. It is not economically viable for the farmers not only to adopt latest technology but also to use high yielding varieties of seeds and fertilizers. They are also unable to realize good value from their marketable surplus by individually selling their produce. Through better organization, producers can procure inputs at a lower price and gain more selling power for their produce/product. Forming a producer organization can also provide access to timely and adequate finance, build capacity and provide linkages to markets. Typically, the producer organization refers to any registered legal entity of primary producers engaged in farm/ off-farm economic activities. They work for the benefits of shareholder members and share portion of profits among the members.

NABARD Support to Producer Organizations : NABARD has been extending support to producer organizations adopting a flexible approach to meet the credit and other supporting needs of producers. In order to give a special focus, the "Producers Organization Development Fund" (PODF) was set up w.e.f. 01 April 2011, with an initial corpus of Rs.50 Crore. Credit cum grant support is being extended to POs for meeting their investment as well as working capital requirements. Grant support is mainly being used as accompanying measures for capacity building & market interventions. NABARD has entered into MoU with SFAC to promote new and vibrant FPOs, strengthen the existing FPOs and leverage the benefits of its equity grant and credit guarantee scheme to extend credit facility to Farmer Producer Companies eligible under SFAC scheme.

New Initiatives of Govt. of India/ NABARD : Promotion of Farmers' Producer Organizations (FPOs) was a step towards collective marketing of inputs and farm produce for enhancing farmers' income. It also provided new business opportunities for financing institutions, to support them with credit. In order to further boost the flow of bank credit to FPOs, the RBI has included lending to FPO by commercial banks and Regional Rural Banks as lending under Priority Sector. In the Union Budget 2019-20, Government of India has set a target for promotion of 10,000 new Farmers' Producer Organizations to ensure that farmers save on their inputs cost and realise higher price for their produce.

Chapter 3

Credit Potential for Micro, Small and Medium Enterprises (MSME)

3.1 Introduction

Majority of people living in rural areas draw their livelihood from agriculture and allied sectors. However, the growth of other sectors such as manufacturing and services is also necessary to sustain the balanced development of the economy. Development of MSME helps in capital formation, growth of entrepreneurship among local people, reduced migration and ensures inclusive growth. Post Covid-19, Government has taken a number of initiatives under AatmaNirbhar Bharat Abhiyan to support the MSME Sector in the country especially in Covid-19 pandemic.

Classification of MSME:

The Central Government has notified the following criteria for classification of micro, small and medium enterprises w.e.f 1st July 2020:—

- (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.

Description of eligible categories under the priority sector of MSME:

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 /06.02.31/2020-2 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.

Other Finance to MSMEs as per the RBI's Master Directions on PSL (4 September 2020):

- (i) 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.
- (ii) Loans to entities involved in assisting the decentralized sector in the supply of inputs and marketing of output of artisans, village and cottage industries. In respect of UCBs, the term "entities" shall not include institutions to which UCBs are not permitted to lend under the RBI guidelines / the legal framework governing their functioning.
- (iii) Loans to co-operatives of producers in the decentralized sector viz. artisans, village and cottage industries (Not applicable for UCBs).
- (iv) 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 the Master Directions (not applicable to RRBs, SFBs and UCBs)
- (v) Loans to registered NBFCs (other than MFIs) for on-lending to Micro & Small Enterprises as per conditions specified in the Master Directions (not applicable to RRBs, SFBs and UCBs)
- (vi) Credit outstanding under General Credit Cards (including Artisan Credit Card, Laghu Udyami Card, Swarojgar Credit Card and Weaver's Card etc. in existence and catering to the non-farm entrepreneurial credit needs of individuals).
- (vii) Overdraft to Pradhan Mantri Jan-Dhan Yojana (PMJDY) account holders as per limits and conditions prescribed by Department of Financial Services, Master Directions - Priority Sector Lending – Targets and Classification - 2020 12 Ministry of Finance from time to time, will qualify as achievement of the target for lending to Micro Enterprises.
- (viii) Outstanding deposits with SIDBI and MUDRA Ltd. on account of priority sector shortfall.

CHAMPIONS:

An ICT based system called CHAMPIONS was also launched by the Ministry of MSME. The portal is not only helping and handholding MSMEs, but is also providing guidance to grab the new business opportunities and in the long run, become national and international Champions.

Three basic objectives of the CHAMPIONS portal are as follows:

1. To help the MSMEs in this difficult situation in terms of finance, raw materials, labour, permissions, etc.
2. To help the MSMEs capture new opportunities including manufacturing of medical items & accessories.
3. To identify the sparks, i.e., the bright MSMEs who can withstand at present and become national and international champions.

Raising and Accelerating MSME Performance” (RAMP)

The scheme as announced during the Union Budget for 2022-23 would support various Corona Virus Disease 2019 (COVID) Resilience and Recovery Interventions of the Ministry of Micro, Small and Medium Enterprises (MoMSME). The programme aims at improving access to market and credit, strengthening institutions and governance at the Centre and State, improving Centre-State linkages and partnerships, addressing issues of delayed payments and greening of MSMEs. In addition to building the MoMSME's capacity at the national level, the RAMP program will seek to scale up implementation capacity and MSME coverage in States.

Special Credit Linked Capital Subsidy Scheme (SCLCSS) for Services Sector:

The scheme will help in meeting the technology related requirements of enterprises in the services sector and has a provision of 25% capital subsidy for procurement of Plant & Machinery and service equipment through institutional credit to the SC-ST MSEs without any sector specific restrictions on technology upgradation.

Priority Sector Lending guidelines for MSMEs:

As per the revised Priority Sector Lending guidelines by the RBI, all the loans to MSME would be classified as priority sector lending by banks. All the loans to units in the Khadi and Village Industries sector are classified under the sub-target of 7.5% prescribed for the micro enterprises. Loans to entities involved in assisting the decentralized sector, in the supply of inputs to and marketing of outputs of artisans, village and cottage industries form part of MSME. The priority sector guidelines also state that in order to ensure that the MSMEs do not remain Small or Medium units merely to claim eligibility for priority sector status, the MSME units will continue to enjoy the priority sector lending status up to three years, even after they grow out of the MSME category concerned.

Government of India has announced major schemes like Start up India, MUDRA, Stand up India, Make in India and Skill India to develop much required entrepreneurship in the country. For ease of access to credit for MSMEs, Government has introduced providing of loans up to Rs. 1 crore for MSMEs within 59 minutes through a dedicated online portal, www.psbloansin59minutes.com.

Retail and Wholesale trades as MSMEs:

As per the Circular number 5/2 (2)/2021-E/P & G/Policy (E-19025) of Ministry of Micro, Small and Medium Enterprises (Policy Division) of Gol, on the subject “Activities (NIC code) under MSMED Act, 2006 for Udyam Registration - Addition of Retail and Wholesale Trade”, it has been decided to include “Retail and Wholesale trades as MSMEs” and they are allowed to be registered on Udyam Registration Portal. However, benefits to Retail and Wholesale MSMEs are to be restricted to Priority Sector Lending only.

Loans up to ₹50 Crore to Start-ups, NBFC-MFIs and other MFIs (societies, trusts, etc.) will also be classified as PSL by banks, as per the revised priority sector guidelines issued by RBI on 4th September 2020.

Critical Interventions and Suggested Action Points:

- Banks may take cognizance of inclusion of Retail and Wholesale trades in MSMEs for the purpose of financing to them.
- Motivation of entrepreneurs and availability of expertise / technical manpower in banks may synergetically result in better outcome.
- Common Facility Centres may be established and job oriented training programmes for skill development need to be conducted.

- Awareness may be created by various agencies amongst the entrepreneurs about the opportunities in the MSME sector and about the government incentives for promoting this activity.
- Banks to consider the credit requirement of traditional sub-sectors of handlooms, handicrafts, village artisans, KVI units to protect the livelihood of the sector and their employment generation potential.
- Working capital is critical for the small enterprises. Assessment of working capital requires data on production capacity, annual turn-over, operating expenditure, production cycle, etc. Banks may extend adequate working capital for the small scale enterprises. Adequate and timely availability of working capital is the most important factor for successful working of any enterprise.
- Finance to MSME units in credit starved district of Gadchiroli and aspirational districts of the State may be focused by Banks.
- Banks may set up exclusive offices for appraisal and sanction of projects under micro and small industries sector in the district.
- An Integrated infrastructure package for rural tourism with all the necessary components such as travel, transport, lodging, boarding, communication, power supply, advertisement, security, sight- specific characteristic facilities for exploration/ trek/ adventure/ sports etc. would impart a thrust to service sector
- Private participation in creating infrastructure facilities may enhance opportunities in manufacturing sector
- Banks / Govt Depts may provide information to the customers about various schemes / facilities provided under service sector
- For facilitating the Stand-up India scheme, an interactive portal www.standupmitra.in has been developed through which borrowers can submit applications. Handholding support is available through various institutions listed in the portal. The concerned banks and agencies should offer the necessary support to the prospective entrepreneurs. The banks and the branches of Commercial Banks and Regional Rural Banks should keep the target of Stand-Up India in focus to cover one SC/ST and one Woman per bank branch through provision of loans from ₹10 lakh to ₹100 lakh and sanction the cases.

For detailed paper, visit <https://www.nabard.org/plp-guide.aspx?id=698&cid=698> .

3.2 Infrastructure and linkage support available, planned and gaps

Industrially and economically, Bhandara is one of the most backward districts in Maharashtra. There are 175 rice mills in the district out of which some are very old and need technology upgradation. Bhandara is also known for tasar silk handloom units concentrated in Mohadi taluka. There are active individual weavers in Mundhri, Ekodi, Adyal, Pauni, etc. villages. Although most of the handloom cooperative societies are dormant, there is scope for financing master craftsman, entrepreneurs and weaver SHGs for new handlooms, block printing, reeling of silk yarn, dyeing yarn as also the shops and emporia.

Brass work is the specialty of the district and the industry needs finance for shifting its product base from utensils to building hardware and others. Bhandara Zilla Dudh Utpadak Sangh which set up a milk processing plant and a Skimmed Milk Powder plant. Sunflag Steel Ltd., Ashok Leyland, and Hindustan Composite Ltd. are some big established industrial units in the district.

There is a wide scope for development of artisans and employment generating NFS activities in the district. Following location specific activities have wide potential for further expansion :

Sr. No.	Activity	Area/block	Block
1	Brass utensils making	Bhandara	Bhandara
2	Tassar Silk Handloom	Tumsar, Mohadi, Ekodi, Adyal, Pauni	Tumsar, Mohadi, Pauni
3	Agro processing	All 7 blocks	All 7 blocks
4	Dhabas /restaurants	All major cities and along national highway.	Tumsar, Bhandara, Lakhani, Sakoli

The ground level credit extended by the various agencies for the last three years is as under :

Year	2019-20	2020-21	2021-22
Bank Loan (Rs. Lakh)	32331.00	31912.00	30611.00

3.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms) :
(Amount in Rs. Lakh)

Sr No	Activity	Unit Cost	Physical Units	Total Financial Outlay	Bank Loan
A	Term Loans				
(a)	Manufacturing sector enterprises				
1	Micro Enterprises	50.00	30	1500.00	1125.00
2	Small enterprises	500.00	5	2500.00	1875.00
3	Medium enterprises	2000.00	1	2000.00	1500.00
	Sub Total		36	6000.00	4500.00
(b)	Service sector enterprises				
1	Micro enterprises	40.00	40	1600.00	1200.00
2	Small enterprises	300.00	6	1800.00	1350.00
3	Medium enterprises	1500.00	1	1500.00	1125.00
	Sub Total		47	4900.00	3675.00
	Term loan- total			10900.00	8175.00
B	Working Capital (@ 25 % of term loans)				
(a)	Manufacturing sector enterprises				
1	Micro Enterprises	20.00	160	3200.00	2400.00
2	Small enterprises	100.00	23	2300.00	1725.00
3	Medium enterprises	500.00	4	2000.00	1500.00
	Sub Total		187	7500.00	5625.00
(b)	Service sector enterprises				
1	Micro enterprises	10.00	3000	30000.00	22500.00
2	Small enterprises	80.00	180	14400.00	10800.00
3	Medium enterprises	400.00	10	4000.00	3000.00
	Sub Total		3190	48400.00	36300.00
	Working Capital- total			55900.00	41925.00
	MSME Grand total			66800.00	50100.00

In view of the lending by commercial banks, the projections have been suitable modified. Block-wise details of physical and financial programme for 2023-24 are given in annexure-I.

Chapter 4

Credit Potential for EXPORT CREDIT, EDUCATION and HOUSING

4.1 Export Credit

India's export basket is a diversified mix led by rice, marine products and meat, which together constitute 52% of its total agri exports. While India occupies a leading position in global trade of aforementioned agri products, its total agri export basket accounts for little over 2% of world agri trade, estimated at US\$ 1.37 trillion.

India has remained at the lower end of the global agri export value chain given that majority of its exports are low value, raw or semi-processed and marketed in bulk. The share of India's high value and value added agri produce in its agri export basket is less than 15% compared to 25% in US and 49% in China.

Banks play an important role in providing the much needed credit for financing exports. Export credit by banks is an eligible item in the revised priority sector guidelines issued by the RBI since 2015-16. Bank assistance as an export credit is mainly under two categories.- 1 Pre-shipment credit, also known as 'Packing credit', is a loan granted to an exporter for financing the purchase, processing, manufacturing or packing of goods prior to shipment. Packing credit can also be extended as working capital assistance to meet expenses such as wages, utility payments, travel expenses etc; to companies engaged in export or services. 2. 'Post-shipment credit' refers to any loan or advance granted or any other credit provided by a bank to an exporter of goods and services from India from the date of extending credit after shipment of goods / rendering of services to the date of realization of export proceeds.

Further, as per RBI directives on Priority Sector Lending-Targets And Classification, Export credit includes pre-shipment and post-shipment export credit (excluding off-balance sheet items) as defined in Master Circular on Rupee / Foreign Currency Export Credit and Customer Service to Exporters issued by the RBI and in case of Domestic Banks incremental export credit over corresponding date of the preceding year, up to 2 per cent of ANBC or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher, effective from April 1, 2015 subject to a sanctioned limit of up to ₹40 Crore per borrower will be classified as priority sector lending.

Export credit under agriculture and MSME sectors are allowed to be classified as PSL in the respective categories viz. agriculture and MSME. Export Credit (other than in agriculture and MSME) will be allowed to be classified as priority sector. For domestic banks, the Incremental export credit over corresponding date of the preceding year, up to 2 per cent of ANBC or CEOBE whichever is higher, subject to a sanctioned limit of up to ₹40 crore per borrower will be classified as priority sector lending.

Signing of MoU between NABARD and APEDA

As per MoU entered between NABARD and APEDA during December 2020, the role of NABARD and APEDA would be: a. To work towards capacity development of various stakeholders; b. To organize outreach programs, awareness programs and workshops for stakeholders; c. To work together for doubling the farmers' income, as set out by the Government of India; and d. To strengthen FPOs for attaining the desired outcomes of Agri. Export Policy.

Agriculture Export Facilitation Centre (AEFC) by Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA)

NABARD has sanctioned grant assistance of ₹38.04 lakh to Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA) in March 2021 for setting up of Agriculture Export Facilitation Centre (AEFC) at Pune, which is a 'one-stop-shop' for exporters.

The objectives of the AEFC are: a. Capacity building of Agri-food exporting and processing entrepreneurs; b. To be a knowledge centre and disseminate need-based information to all concerned to guide, accelerate the export and processing activities in the state; c. To provide instant service, guidance required by exporters exporting farmers; and d. To organize need-based training courses in different export-related issues.

The beneficiaries of the centre would be the existing exporters/ importers, new aspirants, progressive farmers, FPOs, MSME in Agro food processing & commodity growers' association. The AEFC has started online consultations with prospective exporters and has started compiling an extensive depository of information on export of 15 commodities.

Gol Reforms to promote agri exports

The Agriculture Export Policy was announced by Government of India in 2018 with a focus on agriculture export oriented production, export promotion, better farmer realization and synchronization with the policies and programmes of Govt. of India. The AEP lays emphasis on farmer-centric approach. During the course of implementation of AEP, considerable progress has been made in giving Farmer-Produce Organizations (FPOs) and farmers a stake in the export of their produce. In order to provide direct export market linkage to farmers/FPOs and to encourage export oriented production, AEP advocates a cluster-based approach for promoting agriculture exports. The following clusters in Maharashtra have shown good results and value realizations for farmers have increased in these clusters: Nagpur cluster (Orange), Kolhapur, Solapur & Jalgaon cluster (Banana), Sangli, Nasik & Pune cluster (Grapes)

Government of Maharashtra - Agriculture Export Policy 2022

Cluster Development Programme – Identified Clusters

Sr.No.	Product	Districts
1	Banana	Jalgaon, Nanded, Nandurbar, Akola, Pune, Solapur, Dhule, Parbhani, Buldhana, Wardha, Kolhapur, Hingoli
2	Pomegranate	Nasik, Solapur, Ahmednagar, Pune, Sangli, Osmanabad, Washim, Buldhana, Latur
3	Grapes	Nasik, Sangli, Solapur, Pune, Osmanabad, Ahmednagar
4	Onion	Nasik, Ahmednagar, Pune, Solapur, Jalgaon, Dhule
5	Vegetable	Nasik, Ahmednagar, Pune, Jalgaon, Nagpur, Thane, Palghar
6	Red chillies	Nandurbar, Buldana, Nagpur
7	Alphonso Mango	Ratnagiri, Sindhudurg, Raigad
8	Cashews	Ratnagiri, Sindhudurg, Raigad, Kolhapur, Palghar, Thane
9	Fish material	Mumbai Suburbs, Mumbai City, Thane, Raigad, Ratnagiri, Sindhudurg
10	Kesar Mango	Beed, Ahmednagar, Aurangabad, Nasik, Latur, Jalna, Parbhani, Hingoli, Osmanabad, Nanded
11	Sweet Lime	Aurangabad, Jalna, Nagpur, Jalgaon, Amravati, Wardha, Beed, Nanded, Parbhani
12	Orange	Amravati, Nagpur, Akola, Wardha, Washim, Buldhana
13	Flowers	Pune, Satara, Nasik, Kolhapur
14	Raisins	Sangli, Nasik
15	Jaggery	Kolhapur, Sangli, Satara, Pune, Solapur, Latur
16	Dairy Products	Ahmednagar, Pune, Satara, Sangli, Kolhapur, Solapur
17	Non – Basmati Rice	Chandrapur, Pune, Gondia, Bhandara, Gadchiroli, Nagpur, Palghar, Thane, Raigad
18	Meat products	Nasik, Jalgaon, Ahmednagar, Pune, Solapur, Yavatmal, Amravati, Chandrapur, Gadchiroli Buldana, Nagpur,
19	Pulses	Amravati, Yavatmal, Buldana, Akola, Wardha, Nagpur, Nanded, Latur, Osmanabad, Chandrapur, Parbhani, Jalgaon, Dhule, Nasik, Ahmednagar, Jalna, Pune, Satara, Sangli, Beed, Aurangabad.
20	Turmeric	Washim, Yavatmal, Sangli, Parbhani, Satara Wardha, Hingoli, Nanded
21	Oilseeds	Naded, Latur, Buldana, Washim, Yavatmal, Amravati, Hingoli, Parbhani, Akola, Kolhapur, Satara, Wardha, Jalna, Sangli, Nasik, Nagpur, Beed, Jalgaon

Critical Interventions and Suggested Action Points

- Availability of infrastructure for exports like grading and packing units, quality testing labs, certification issuance at local level, packing houses, pre-cooling units, cold storages, etc., need to be ensured.
- Agriculture Department / APEDA may arrange sensitization workshops for agri-exporters to make them aware about current export regulations/policies of importing countries, domestic and international demand

and supply situation, price competitiveness, quality concerns, various certifications required, Sanitary & Phytosanitary (SPS) requirements, etc.

- Settling the Pre-shipment credit within the stipulated time after the dispatch of goods or converting them into Post Shipment credit may be ensured.
- The banks should put in place a control and reporting mechanism to ensure that the applications for export credit are disposed of within the prescribed time frame.
- Exporters may be encouraged to avail the export credit insurance facilities extended by ECGC.
- Micro, Small and Medium Exporters should be properly trained by MSME / export organizations with technical assistance from banks regarding correct filling up of forms.
- APEDA/ Regional centres may be established at more places which can function for developing agro products and agro industries having export potential, fixing of standards and specifications for the scheduled products for the purpose of exports, training in various aspects of industries connected with the scheduled products, updating exporters regarding various central government schemes.
- A nodal agency for exports needs to be created which can disseminate trade related useful information to exporters, identify buyers' market and take up exporters' queries.
- Lack of awareness about overseas buyers is one of main reasons for fewer exports from various districts despite the potential. There are more traders and less number of direct exporters. There is very little awareness about international exhibitions. In many districts, only a few bank branches have forex facility, as a result of which exporters at times have to rush to bigger cities for getting their formalities done.
- Industries may be set up for value added product of agricultural produce (like Soyabean, e.g. Soya Papad, Soya chips, Soya instant mix, Soya flour, Soya milk, Tofu etc.).
- Incentives in various forms will enable exporters to reduce their cost and sustain competition from other countries.
- Training institutes should be set up to provide training and guidance so as to develop adequate manpower in the sector.
- Cluster based approach in financing by bankers for enhancing exports.
- There is a need for diversification of export products as the present range is mostly limited to rice, marine products, buffalo meat and cotton.
- There is a need for transition from low value unprocessed/semi-processed and bulk material (which has 85% share in the total agricultural exports) to sophisticated value added products.
- There is a need for diversification of export destinations as 40% of agri-exports are only to US and Vietnam.
- Capacity building of SF & MF for exports.
- Enhancing bank finance towards infrastructure and post-harvest technology, development of Mega Food Parks and promotion of various clusters.
- Need for financing commodity specific MSMEs.

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

The item of Export Credit has been included in the Priority Sector from the year 2015-16. Rice, green chilli, spices, vegetables, aggarbatti, etc. produced/ manufactured in Bhandara district are being exported since last few years. However, financing for the same is done by specialised bank branches in Nagpur. As per SLBC data, export credit extended during 2019-20, 2020-21 and 2021-22 was Rs.782.00 Lakh, Rs.6.00 Lakh and Rs.526.00 Lakh respectively.

4.2 Assessment of potential for the financial year 2023-24 (in both physical and financial terms)

The details of activity wise projections are furnished below :

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Export Credit	No.	150.000	9	1350.00	1080.00
	Total				1350.00	1080.00

The Block-wise Activity-wise projections for the sector during the year 2023-24 are indicated at Annexure-I.

4.2.1 Education

Education is one of the factors that ensures sustainable rise in the standard of living of the people. Right to education, is one of the fundamental rights guaranteed by the constitution of our country. However, the availability of quality professional education is not only scarce, but also costly. In order to address this problem, the banks have been encouraged to lend for education purpose.

In terms of RBI guidelines on Priority Sector advances (RBI/FIDD/2020-21/72 Master Directions FIDD.CO.Plan.BC.5/04.09.01/2020-21 Updated on 26 October 2021), loans to individuals for educational purposes, including vocational courses, not exceeding ₹ 20 lakh will be considered as eligible for priority sector classification. Loans currently classified as priority sector will continue till maturity.

Gol has developed a portal known as Vidya Lakshmi (www.vidyalakshmi.co.in) which is a first of its kind portal for students seeking Education Loan developed by Gol. Students can view, apply and track the education loan applications to banks anytime, anywhere by accessing the portal. The portal also provides linkages to National Scholarship Portal for the benefit of deserving students.

In order to standardize the loan facilities for this sector, the IBA has formulated a model educational loan scheme which is being implemented by all the banks. Interest subsidy during the moratorium period is also available.

To provide financial support to meritorious students who secure admission in institutes for pursuing higher education, including vocational courses in India or abroad, education loan is available from financial institutions.

Central Sector Interest Subsidy (CSIS) Scheme

This scheme was launched by Ministry of Human Resource Development (MHRD) on 1st April, 2009. Under the Scheme, full interest subsidy is provided for the education loan taken from Scheduled Banks under the Model Education Loan Scheme of Indian Banks' Association. Under the Scheme, the interest payable on the Educational Loan for the moratorium period i.e., Course Period plus one year will be borne by the Government of India. After the period of moratorium, the interest on the outstanding loan amount shall be paid by the student, in accordance with the provisions of the existing Model Educational Loan Scheme of Banks and as may be amended from time to time. This scheme is made available for all the professional / technical courses (only from NAAC accredited Institutions or professional / technical programmes accredited by NBA or Institutions of National Importance or Central Funded Technical Institutions) in India and students with annual gross parental / family income up to ₹4.5 Lakh are eligible. Those Professional institutions / programmes, which do not come under the ambit of NAAC or NBA, would require approval of the respective regulatory body viz, approval of Medical Council of India for Medical courses, Nursing Council of India for Nursing courses, Bar Council of India for Law etc. The loans are disbursed without any collateral security and third-party guarantee and for a maximum amount of ₹ 7.5 Lakh.

Credit Guarantee Fund for Education Loans (CGFEL) Scheme

This scheme come into force vide notification dated 16 September 2015 of Government of India. New education loans sanctioned on or after the date of notification of the scheme with features as under will be eligible for the coverage under the scheme. The scheme provides guarantee for the education loan under the Model Education Loan Scheme of Indian Banks' Association, disbursed by the banks without seeking any collateral security and third-party guarantee, for a maximum loan amount of ₹7.5 Lakhs. The eligible borrower under this scheme means new or existing borrower with Indian Nationality who meets eligibility criteria prescribed under "IBA Model Educational Loan Scheme for pursuing Higher Education in India and Abroad" and executed loan documents with the

Bank to avail education loan. Parents/guardians will be the co-borrowers/joint borrowers. In case of a married person, joint borrower can be either spouse or the parent(s)/parents-in-law.

National Education Policy 2020

The National Education Policy 2020 proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st century education, including SDG4, while building upon India's traditions and value systems with particular emphasis on the development of the creative potential of each individual. It is based on the principle that education must develop not only cognitive capacities - both the 'foundational capacities' of literacy and numeracy and 'higher-order' cognitive capacities, such as critical thinking and problem solving – but also social, ethical, and emotional capacities and dispositions.

Economic Survey of Maharashtra 2021-22 – Education

The Economic Survey of Maharashtra 2021-22 covers the Social Sector of Education with the detailed scenario in the State encompassing School education, Samagra Shiksha, Inclusive Education for Divyang, Schemes to encourage education, Girls education, Sports education, Higher and Technical education, Self-financed Universities, Rashtriya Uchchatar Shiksha Abhiyan (RUSA), Technical Education Quality Improvement Programme (TEQIP), RCSI tuition fees scholarship scheme etc.

Action Points

- Proper coordination between college management and bankers in the district will help in guiding /assisting students to enrol for professional courses. This will help students avail hassle free timely education loan.
- Conducting campus recruitment drives/ensuring maximum placement of students graduating from specialised/vocational institutions, etc will encourage many students for availing education.
- Banks may conduct awareness camps in schools and colleges to make students aware of the facilities available in terms of education loans, subsidies, scholarships etc.
- Banks may assess the employability and expected remuneration attached to the course and also the institution's standing in a realistic manner to ensure that repayment of loan is ensured.
- There is a mismatch between the higher cost of education and the potential income levels of students after completion of education in some professional courses, which needs to be addressed.

While the banks may pro-actively finance new cases to deserving candidates, a mechanism may have to be worked out to address the concerns of NPAs in the previous cases, if any, expressed by bankers. Awareness on financial discipline may be created by Banks among college students towards prompt repayment of loans.

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

4.2.2 Infrastructure and linkage support available, planned and gaps

1. The district has 995 Primary Schools, 196 Middle schools, 140 Secondary Schools, 112 degree colleges and 5 professional colleges. The literacy rate is 83.8% in the district (Male : 90.4%, Female : 77.1%).
2. The ground level credit flow to the above activities during the years 2019-20, 2020-21 and 2021-22 were Rs.886.00 Lakh, Rs.489.00 Lakh and Rs.640.00 Lakh respectively.

4.2.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms)

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Education Loan in India	No.	10.00	160	1600.00	1440.00
2	Education Loan Overseas	No.	20.00	2	40.00	36.00
3	Others - Education Loan	No.	5.00	160	800.00	720.00
	Total				2440.00	2196.00

The Block-wise Activity-wise projections for the sector during the year 2023-24 are indicated at Annexure-I.

4.2.4 Critical interventions required for creating a definitive impact

1. The quality of education in professional institutes needs to be improved for addressing the issue of employability of students graduating from technical and business institutions.
2. The sector has been hampered by larger number of defaults, primarily arising out of frequent change of address by the students and therefore it has been advocated the loan under this category be securitized

to give quantitative and qualitative push to the sector. Parents can be taken as co-guarantor to bring down incidence of defaults in “Education loan”.

4.2.5 Suggested Action Points

1. Government may set up good education institutions / upgrade the existing ones in the district so as to make the students graduating therefrom ready for absorption by the respective industries.
2. Awareness may be created on a continuous basis amongst the potential students about the educational loan scheme and need for its prompt repayment.

4.3.1 Housing

The housing sector is one of the prime engines of economic growth as it satisfies the social needs, generates employment and stimulates economy with its spill-over effects.

As per the RBI guidelines on Priority Sector Lending (RBI/FIDD/2020-21/72 Master Directions FIDD.CO.Plan.BC.5/04.09.01/2020-21 Updated on 26 October 2021):

- a. Bank loans to Housing sector as per limits prescribed below are eligible for priority sector classification:
 - (i) Loans to individuals up to ₹35 lakh in metropolitan centres (with population of ten lakh and above) and 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. Existing individual housing loans of UCBs presently classified under PSL will continue as PSL till maturity or repayment.
 - (ii) Housing loans to banks' own employees will not be eligible for classification under the priority sector.
 - (iii) Since Housing loans which are backed by long term bonds are exempted from ANBC, banks should not classify such loans under priority sector. Investments made by UCBs in bonds issued by NHB / HUDCO on or after April 1, 2007 shall not be eligible for classification under priority sector.
- b. Loans up to ₹10 lakh in metropolitan centres and up to ₹6 lakh in other centres for repairs to damaged dwelling units conforming to the overall cost of the dwelling unit as prescribed above para (a).
- c. Bank loans to any governmental agency for construction of dwelling units or for slum clearance and rehabilitation of slum dwellers subject to dwelling units with carpet area of not more than 60 sq.m.
- d. Bank loans for affordable housing projects using at least 50% of FAR/FSI for dwelling units with carpet area of not more than 60 sq.m.
- e. Bank loans to HFCs (approved by NHB for their refinance) for on-lending, up to ₹20 lakh for individual borrowers, for purchase/construction/ reconstruction of individual dwelling units or for slum clearance and rehabilitation of slum dwellers, subject to conditions specified.
- f. Outstanding deposits with NHB on account of priority sector shortfall.

As per RBI Circular No.RBI/2022-23/68 (DOR.CRE.REC.42/09.22.0110/2022-23) dated 08 June 2022 (Statement on developmental and regulatory policies (para 1) –

“ Taking into account the increase in housing prices since the limits were last revised and considering the customer needs, it has been decided to increase the existing limits on individual housing loans by cooperative banks. Accordingly, as regards RCBs (State Cooperative Banks and District Central Co-operative Banks), the limits shall increase from Rs.20.00 lakh to Rs.50.00 lakh for RCBs with assessed net worth less than Rs.100.00 crore, and from Rs.30.00 lakh to Rs.75.00 lakh for other RCBs. A detailed circular will be issued separately”.

The Economic Survey of Maharashtra 2021-22 covers the Social Sector of Housing with the detailed scenario in the State encompassing Urban and Rural Housing featuring Pradhan Mantri Awaas Yojana, State Schemes for ST/ SC. Assistance for purchase of land, etc. The schemes include Pradhan Mantri Awaas Yojana (Gramin), Revised Rajiv Gandhi Gramin Niwara Yojana-II, Yashawantrao Chavan Mukut Vasahat / Vaiyaktik Gharkul Yojana, Pandit Deendayal Upadhyay Gharkul Jaga Kharedi Arthasahayya Yojana, Ramai Awaas Yojana, Shabari Adivasi Gharkul Yojana, etc. The details can be referred at <http://mahades.maharashtra.gov.in>.

Banks may adopt a flexible approach in relation to credit appraisal and ensure speedy processing of the loan applications. While the banks may proactively finance new deserving cases, a mechanism may have to be worked out to address the concerns of NPAs in the previous cases.

Action Points:

1. Banks may adopt a flexible approach in relation to credit appraisal and ensure speedy processing of the loan applications.
2. Lending by banks has been mainly restricted to urban areas and salaried class. Housing needs of rural people needs to be addressed. Banks to finance buyers from economically weaker sections.
3. The Central and State Nodal Agencies viz. HUDCO, NHB, MHADA, DRDA may arrange block level campaigns for popularizing various schemes.
4. The synchronization of central and state government schemes, uniformity in guidelines in terms of rate of interest, administrative charges, quantum of loan, etc., and coordination amongst Central and State Nodal Agencies would help in boosting the housing loan finance.

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

4.3.2 Infrastructure and linkage support available, planned and gaps

1. The materials, technical know-how and labour for construction of houses are readily available in the district.
2. Banks are available for financing purchase, construction and renovation of dwelling units.
3. Banks may finance various Government schemes for construction of houses.
4. The ground level credit flow to housing during the years 2019-20, 2020-21 and 2021-22 were Rs. 8368.00 Lakh, Rs.5626.00 Lakh and Rs.7936.00 Lakh respectively.

4.3.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms)

The potentials for the year 2023-24 are as under. Block-wise potentials are given in Annexure-I.

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Rural Housing	No.	15.000	420	6300.00	5670.00
2	Semi Urban Housing	No.	20.000	320	6400.00	5760.00
3	Renovation of House	No.	10.000	175	1750.00	1575.00
	Total				14450.00	13005.00

4.3.4 Critical interventions required for creating a definitive impact

1. There is a felt need for the State Government, Local Bodies, Development Authorities to periodically update the Master Plans and Zoning Plans to adequately provide for housing and basic services, especially Housing, for all.
2. Creating adequate housing stock both on rental and ownership basis with special emphasis on improving the affordability of the vulnerable and economically weaker sections of society through appropriate capital or interest subsidies.
3. Innovative spatial incentives like relaxation of Floor Area Ratio (FAR) for ensuring that 20-25% of the FAR are reserved for Economically Weaker Section (EWS)/ Low Income Groups (LIG) and issuance of Transferable Development Rights (TDR) for clearance of transport bottlenecks in the inner-city areas and availability of additional FAR in Outer Zones with a view to meet the needs of these groups.
4. Rapid urbanization resulting from continuous migration of the rural population in search of better working opportunities, poor affordability and even increasing cost of housing in the city have degraded the housing conditions resulting in growth of slums.
5. Promote innovative financial instruments like development of Mortgage Backed Securitization Market (MBSM), and Secondary Mortgage Market. Accordingly, the the financing strategies need to be reassessed with a view to make housing finance more inclusive in terms of EWS and LIG segments.

4.3.5 Suggested Action Points

1. Promote innovative financial instruments like development of Mortgage Backed Securitization Market (MBSM), and Secondary Mortgage Market. Accordingly, the the financing strategies need to be reassessed with a view to make housing finance more inclusive in terms of EWS and LIG segments.
2. Demand for housing finance in rural areas especially by non-salaried professionals/farmers may be tapped.

CHAPTER 5

Credit Potential for Infrastructure

5.1 Infrastructure – Public investments

Physical infrastructure investments are important determinants of economic growth and are one of the main United Nations Sustainable Development Goals (SDGs). However, estimating the causal effects of infrastructure on the local economy is often very challenging especially when it comes to rural, remote, and low-income households, where the effects of infrastructure is especially complicated. Growth of rural infrastructure is important from the perspective of agriculture and agro-based industries, poverty alleviation and better access to markets and job opportunities in rural regions.

5.1.1 Rural Infrastructure Development Fund (RIDF)

The Rural Infrastructure Development Fund (RIDF) which was set up within NABARD by way of deposits from Scheduled Commercial Banks operating in India, to the extent of shortfall in their agricultural lending / priority sector/ weaker sections started with initial corpus of Rs.2000 crore. The scheme has been continued with substantial allocations in the successive Union Budgets and NABARD has partnered with various State Governments in the creation of rural infrastructure. Initially, the mandate under the Fund was to support projects in the irrigation sector where substantial investments had been made but which could not be completed owing to resource constraints of the State Governments. In successive budget announcements, further contributions were made to the corpus and with the allocation of Rs.40,000 crore for FY 2021-22 under RIDF XXVII, the cumulative allocation has reached Rs.4,18,408.73 crore including Rs.18,500 crore under Bharat Nirman.

Over the years, the coverage under RIDF has been made more broad based in each tranche and at present, a wide range of 37 sectors under RIDF are being financed. RIDF has emerged as NABARD's major partnership with the state government for creation of variety of rural infrastructure covering activities under rural connectivity (roads & bridges), irrigation (micro, minor, medium and major), kharland development, warehouses and fisheries (fish jetties).

5.1.2 Status of RIDF in Maharashtra

The cumulative purpose wise number of projects against which RIDF loan sanctioned and disbursed from Tranche I to XXVI are given below :-

Sector/ Activities/ Projects	Projects sanctioned	RIDF loan sanctioned (₹ crore)	RIDF loan disbursed (₹ crore)
Irrigation (MI, Checkdams, etc.)	875	9683.53	7502.02
Rural Water Supply Schemes	240	304.34	279.98
Anganwadi	5000	170.00	126.70
Salinity Reclamation Kharland	104	84.55	76.19
Watershed	30	162.80	88.04
Fisheries	43	408.41	236.05
Roads and Bridges	15587	9022.44	7420.66
Warehousing	634	698.03	404.69
Waste Water Management	21	67.48	47.65
Total	22534	20601.58	16181.98

As may be observed, for the State of Maharashtra, the cumulative sanctions under RIDF were ₹20,601.58 Crore and the utilisation accounted for 78.54% of the sanctions.

5.1.3 Status of RIDF in the district

The cumulative purpose wise number of projects and amount sanctioned, projects completed and amount disbursed in respect of **ongoing tranches** (i.e., RIDF XXI to XXVII) in the **district** is as given below :

(₹ Crore)

Sl. No.	Sector	RIDF Loan Sanctioned			Loan Disbursed
		No. of Projects	Loan	% share in total	
1	Roads (PWD)	8	11.12	6	5.77
2	Bridges (PWD)	24	42.73	23	14.81
3	Rural Roads (Rural Dev Deptt)	6	18.43	10	16.43
4	Irrigation (WRD)	1	56.99	30	44.76
5	Grain Godowns (FCSD)	18	57.98	31	15.55
	Total	57	187.25		97.32

5.1.4 RIDF Projects - Action Points at District Level

State Govt:

- Regular review may be undertaken at the district level to ensure timely completion of the projects and accrual of benefit to the expected beneficiaries / farmers.
- Projects prioritized under RIDF, LTIF and NIDA may be completed as per phasing and to ensure the same, implementing departments may ensure that adequate budgetary allocation may be provided for completion of the projects to ensure benefits at the right time.
- Budgetary allocation for maintenance of assets may also be ensured so that the infrastructure projects can be put to use for a longer period of time.
- Critical infrastructure gap may be identified by the implementing departments and may be taken up for implementation on priority basis. This aspect may be discussed in the relevant district level meetings, i.e., DPC, BLBC, etc.
- People's participation under irrigation projects by creation of Water Users Association (WUA) has not gathered momentum, resulting in low utilisation of irrigation potential and non-maintenance of the field channels. Efforts may be made to strengthen WUAs under irrigation projects to ensure effective functioning of WUAs, wherever formed, so that benefits reach the community.

Banks

- NABARD has sanctioned majority of connectivity and irrigation projects under RIDF, LTIF and NIDA. These projects are expected to create accelerated benefits and credit potential in the areas where it is sanctioned. Banks may increase their lending presence in these areas.

Potential sectors for support under RIDF

The potential sectors in the district needing support under RIDF are upgradation of rural connectivity, drinking water supply schemes, minor irrigation, godowns, primary health centers, sanitation and primary education.

5.1.5 Long Term Irrigation fund (LTIF)

Under the Long Term Irrigation Fund (LTIF) set up in NABARD under PMKSY, 26 projects in the State were prioritized and targeted for completion, through availability of Central Assistance and State share. In Maharashtra, State Government was sanctioned a state share of Rs.18021.31 Crore under the AIBP (headworks) component for completion of 25 projects. Of these 9 projects have been reported as complete. NABARD has so far released Rs.11360.35 Crore for implementation of these projects. Out of these 25 projects, or command area development of 22 projects, an amount of Rs.112.07 Crore was also released. It is expected that the projects, when completed, would bring an additional area of 8.50 lakh ha under irrigation.

Loan of Rs. 583.39 Crore under LTIF was sanctioned on 17-11-2017 for completing the AIBP (CAD) works of **Gosekhurd Irrigation Project** which has been revised to **Rs. 6656.26 Crore** on 02-08-2019. Total release under this project was **Rs. 2693.39 Crore** Further, **Bawanthadi Irrigation Project** has been sanctioned the loan of

Rs.62.03 Crore under LTIF and the entire amount has been released. On completion, this project is envisaged to irrigate an additional 25062 ha of agricultural land.

5.1.6 NABARD Infrastructure Development Assistance (NIDA)

NABARD Infrastructure Development Assistance (NIDA), a new window of funding support opened by NABARD is designed to fund directly to State Governments /State owned institutions/ corporations on both on-budget as well as off-budget for creation of rural infrastructure outside the ambit of RIDF borrowing. NIDA offers customized long-term loans to state governments/well-managed state entities for financing infrastructure in rural areas and benefitting rural people.

Aligning with the state government requirements to complete the irrigation projects under the special scheme of Baliraja Jal Sanjeevani Yojana, 68 identified projects were sanctioned under NIDA during 2018-19 with an aggregate term loan of ₹6655.00 crore. Loans amounting to ₹ 2563.70 Crore has been disbursed so far.

5.2 Social Infrastructure involving Bank Credit (2023-24)

The provision of drinking water, sanitation, education, and health defines the quality of life of an individual. These services affect day-to-day life of people and have long-term impact in terms of longevity and earning capacity. Qualitative services through public participation provide the best results in the social sector development. In addition to the public investment, these infrastructure covering schools, health care facilities, drinking water and sanitation can also be improved by people's participation in convergence with govt schemes and bank credit. Therefore, RBI has, in its Priority Sector Lending Master Direction issued by RBI on 7 April 2016, stipulated that bank loans up to a limit of Rs. 5.00 Crore per borrower for building social infrastructure for activities namely schools, health care facilities, drinking water facilities and sanitation facilities in Tier II to Tier VI centres have now been brought under the ambit of PSL norms.

5.2.1 Assessment of potential for the financial year 2023-24 (in both physical and financial terms)

The potential physical numbers that could be covered under bank finance during the year 2023-24 are as under. Block-wise bifurcation of potential is given in Annexure-I.

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit	Unit Cost	Phy Units	TFO	Bank Loan
1	Upto Secondary Schools – New	No.	10.00	42	420.00	378.00
2	Modernisation of existing infrastructure in schools	No.	10.00	56	560.00	504.00
3	Health Care	No.	2.00	210	420.00	378.00
4	Sanitation	No.	0.20	2450	490.00	441.00
	Total				1890.00	1701.00

5.3.1 Renewable Sources of Energy and Waste Management

Renewable energy has become a major focus area of the government with the ambitious target of achieving 40 percent cumulative electric capacity from non-fossil fuel-based energy resources by 2030. India is currently undertaking the largest renewable capacity expansion programme in the world. The total renewable energy capacity target has been increased to 175 GW by the year 2022, out of which 100 GW is to be from solar, 60 GW from wind, 10 GW from biomass and 5 GW from small hydro power subjects.

Apart from its programmes to harness wind energy and Small Hydro Power (SHP), another ambitious programme of the Government is the Development of Solar Cities Programme under which 56 Solar City projects have been approved. The Government has also approved a scheme for setting up 25 solar parks, each with the capacity of 500 MW and above, and ultra-mega solar power projects to be developed in the next five years in various states (upto 2022).

Promoting renewable energy resources also has a positive impact on the net creation of jobs. Rough estimates indicate that a 4000 MW ultra-mega power project (thermal power) would create employment for approx. 300 people. 1 MW of RE necessitates the employment of minimum 5 people thereby implying that about 20,000 people would get employment through 4000 MW of Renewable energy.

5.3.2 Infrastructure and linkage support available, planned and gaps

1. The Jawaharlal Nehru National Solar Mission aims to generate 20,000 MW of solar power by 2022, creating a positive environment among investors keen to tap into India's potential.
2. Higher capital cost of Solar Pumpsets deter the farmers from replacing existing electric / diesel pumpsets.

5.3.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms)

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Bio-Gas units	No.	0.150	350	52.50	47.25
2	Solar water heating system	No.	0.500	350	175.00	157.50
3	Solar Pump sets	No.	3.150	105	330.75	297.71
	Total			805	558.25	502.46

Block-wise bifurcation of the potentials are given in Annexure-I.

5.3.4 Critical interventions required for creating a definitive impact:

The creating awareness among the farmers and promotional efforts from the various agencies and banks is needed to boost the growth of the very important sector. The initial cost of the solar equipment is generally very high this necessitates providing efficient and cost effective design of the solar equipment at an affordable cost. The general awareness about the State and Central government agencies for new and renewable sources of energy and their programmes needs to be widely popularized.

5.3.5 Suggested Action Points

1. The Implementing agencies may initiate necessary steps to motivate people and propagate the use of this alternative source of energy.
2. Banks may consider financing this activity along with Dairy units so as to enable better use of animal dung and creation of additional source of energy.
3. Defunct Bio Gas plants need repair for which necessary training/ awareness to the concerned beneficiaries is essential.
4. Mahaurja/Maharashtra Energy Development Agency (MEDA) may organise training programme for enterprising villagers to promote use of solar unit and biogas plants (in association with milk cooperatives). List of eligible farmers may be sent to banks for financing.
5. Industry Association may persuade all service units to use solar power for water heating.
6. SHGs may be trained in repairing of solar units and bio gas units.

Chapter 6

INFORMAL CREDIT DELIVERY SYSTEM

6.1. Introduction

The importance of the microfinance sector as an effective tool for policymakers to reach out to the grassroots level cannot be overemphasized. It has been consistently playing a pivotal role in complementing the efforts of the Government of India and various state governments in addressing issues like financial exclusion, creation of livelihood and empowerment of people in general, and women in particular. The bank led SHG-BLP, pioneered and orchestrated by NABARD over more than two decades, has grown from a small pilot programme of 500 SHGs in 1992 to the largest microfinance programme of the world, with an outreach covering more than 12.4 Crore rural households. It is the most cost-effective and fast-growing microfinance initiative positively touching the socio-economic lives of millions of people in rural hinterland of the country.

6.2 Infrastructure and linkage support available, planned and gaps

Status of SHG BLP : All India vis-a-vis Maharashtra

As on 31 March 2021, there are more than 112 lakh SHGs with aggregate bank deposits of about ₹37,477 Crore and loans outstanding at nearly ₹1,03,000 Crore in the country whereas in Maharashtra, there are 12.13 lakh SHGs with savings of ₹3,295 Crore which accounts for 8.80% of total SHGs in the country.

During 2020-21, 1,46,378 SHGs were disbursed loan to the extent of ₹2,136 Crore in Maharashtra which accounts for 3.67% of the total loans disbursed in the country. Women Self Help Group Programme (WSHG) was implemented in 6 districts of the State viz., Nandurbar, Gadchiroli, Chandrapur, Dhule, Nanded and Gondia since June 2012. The interest subvention scheme under NRLM for eligible women SHGs in identified districts is being implemented by NABARD for RRBs and Cooperative banks.

A comparative position of SHGs formed in the district vis-à-vis Maharashtra is as given in under :

Position as on	No. of SHGs in Maharashtra	No. of SHGs in Bhandara	Share of to Maharashtra position (%)
31-03-2019	1083811	11232	1.04
31-03-2020	1167156	11608	0.99
31-03-2021	1213093	15773	1.30

(Source : Status of Microfinance in India published by NABARD & MSRLM)

In Bhandara District, the total number of SHGs as on 31-03-2021 were 15773. It has been planned to form 800 SHGs as to include the entire rural poor women population under the SHG - BLP programme. Efforts are being concentrated on their credit linkage by all the agencies viz. banks, MAVIM and DRDA (MSRLM). Bhandara is under intensive implementation of MSRLM since 2018-19.

On-going Initiatives- Micro Finance Profile in the District :

The intensive implementation of MSRLM has strengthened the microfinance movement in the district.

Financial Literacy programmes : Financial & Digital Literacy programmes, village level programmes for SHGs and training programmes for SHG Leaders were conducted during the year aiming at imparting financial literacy to the rural women and empowering them to prioritize their needs and use the available resources effectively for taking up income generating activities.

Micro Finance Profile of the district

Total No. of blocks in the district	7
No. of blocks where SHGs exist	7
No. of blocks where SHGs are credit linked	7
No. of NGOs in the district (Sizeable participation)	12

No. of NGOs participating in credit linkage programme	5
No. of NGOs who can be roped in during the year	3
Total No. of Bank branches in the district	CBs 93 RRBs 21 Coops. 46
No. of branches participating in linkage programme	CBs 93 RRBs 21 Coops. 46
No. of additional branches proposed to be roped in	0
No. of banks acting as SHPIs	1
No. of Government/other agencies participating	2
No. of Govt./other agencies likely to participate	0

The salient features of SHG- BLP in the district are as under

The SHG Bank linkage programme is being implemented in the district successfully and as many as 3500 availed bank credit and set up their own enterprises. The major banks conveying credit to SHGs are BOI, DCCB, SBI, BOM, etc. As on 31 March 2022, the total outstanding loans are Rs. 5,578.00 lakh granted to 6479 SHGs. The average loans extended by banks stood at Rs. 0.86 lakh per SHG. The bankers are considering it as business opportunity as the timely repayment is happening in the district.

Financing of Joint Liability Groups

Extending bank loans through Joint Liability Groups (JLGs) is a major initiative of NABARD for purveying collateral free credit through the banking system in the rural areas. Despite the scheme being in vogue for more than a decade, the progress has not been very heartening. However, during the last 2-3 years, there has been some progress mainly due to the participation of some Private Sector Banks.

JLG guidelines of November 2014 had specifically provided for and clearly suggested that “incentive to banks will now be available for using BCs / BFIs also in promotion and financing of JLGs. By availing of services of BCs / BFIs in financing JLGs, the banks can not only increase the credit flow to the targeted population, but also improve their overall asset quality in JLG financing.” Still, only few PSU banks and RRBs are utilizing the services of BCs as BF (JLGPI) for deepening their JLG portfolio with good results.

It is felt that the RRBs due to their sheer rural presence and penetration in backward areas are at an advantageous position and can easily scale up financing of JLGs if the required thrust and focus is provided. A huge opportunity is available with RRBs to easily rope in BCAs/ CSPs for taking on a business facilitator role and persuade them for formation, monitoring and extending hand-holding support to the JLGs as an add-on function. This will not only externalize some of the bank's functions viz., mainly of monitoring, ensuring hand-holding and following up for timely repayments but will also enable the BC Agents to get additional income from managing the JLGs.

In order to scale up the JLG performance NABARD has entered into an MOU with RRBs with assured support to such banks from NABARD, where the concerned bank shall take the onus of extending credit support to JLGs on terms and conditions mutually decided. Besides the grant assistance to banks for passing on to Corporate BC/ NGO-JLGPIs for formation, nurturing and financing of new JLGs @ Rs.4,000 per JLG, NABARD would also consider extending capacity building support to bank staff, the CSP/ or NGO and may also consider provision of hand-holding support from professionals for a period of up to 1 year.

In cases where it is convenient to engage identified NGOs to act as JLGPI, a tripartite agreement between bank, NGO and NABARD may be entered into. It may be kept in mind that the intention of this initiative is to rope in RRBs to replicate the successful business model of Private Banks with suitable modifications on a sustainable basis. 100% refinance support is available to banks for JLG financing.

The JLG mode of financing serves as collateral substitute for loans provided to the small, marginal, tenant farmers, oral leasees, share croppers, etc. It enables the banks to reach poorest of the poor through group / cluster approach, facilitates education and credit discipline. Hence, banks in the district may increase JLG financing. Considering an estimated number of 234548 farmers in the district with less than one hectare of

land farmers, there is potential for formation / promotion of 46909 JLGs which can be credit linked in a phased manner in the district.

Issues related to Micro finance

- Overall the SHG movement in the district got the momentum after introduction of SHG BLP / SHG-2 projects in the district.
- The NPA level of SHGs formed under SGSY was a matter of concern; hence the bankers are reluctant to finance the SHGs.
- Under NRLM, the introduction of interest subvention for the BPL groups has created some comparison in the minds of the women under other SHG project that the benefits will also come to them from govt. scheme.
- Poor training, absence of proper exposure to the groups is set back to the entrepreneur skills.
- Banks are not able to supervise the SHGs financed due to staff constraints.
- Banks are not able to rate the SHGs by themselves due to paucity of time at their end. However, they have to depend upon the rating done by NGOs. Monitoring mechanism of SHGs by NGOs has to be strengthened.
- Credit appraisal of SHGs is missing while doing the financing of DAY-NRLM cases.

SHG Linkage Programme - Goals and Strategy for the year 2022-23

NABARD as a corporate goal has set for itself a target of formation of 82,300 groups, Credit linkage of 1,60,000 SHGs and Credit linkage of 3,75,000 JLGs in the state during the year 2021-22.

Future Strategy

- While continuing with its goal of spreading its outreach, SHG-BLP needs to re-invent itself to cover more poor people so that the programme may be an effective platform to expand their economic activities and improve their income levels. This calls for identification of appropriate livelihood opportunities, improvement of their skills, mentoring, market development and many such development initiatives.
- Skill development is an important tool for improving the employability and enhancing productivity of the working poor and thereby reducing poverty and exclusion. Rural poor women typically face difficulties or discrimination in accessing good quality training. Keeping the above in view, NABARD continued with Micro Enterprise Development Programme (MEDP) to nurture the entrepreneurial talents of members of mature SHGs.
- NABARD has introduced another initiative viz., Livelihood and Enterprise Development Programme (LEDP) with a view to creating sustainable livelihoods among SHG members. These programmes are implemented in small batches for a maximum of 150 SHG members in a cluster of contiguous villages on a project basis covering 15 to 30 SHGs. The programme provides for livelihood creation in agricultural & allied activities as well as rural off-farm sector activities.

Enhancement in credit flow – capital formation

The setting up micro units by SHGs members in clusters will translate into investment credit business of banks thereby increasing capital formation in agriculture and non farm sector. This will enhance the credit flow for priority sector and empowerment of women. The small and micro units will create employment opportunities for women in villages itself leading to arrest migration of rural poor to cities for employment.

Areas of Concern and Suggested strategies for improving quality of SHGs

- Poor quality of accounts maintenance in some of the SHGs.
- Imbalance among commercial banks in credit linkage of SHGs.
- There is need for DCCB to step up credit linkage of SHGs to bring about balanced spread and growth of credit linkage in the district as they have good network of branches spread over entire district.
- Encouraging SHGs to meet and save on weekly basis.
- More emphasis on training and capacity building programmes for all SHG members.
- Regular grading of SHGs and audit of the accounts maintained by them.

- Facilitation for graduation of SHGs from micro credit to micro enterprise.

6.3 Assessment of potential for the financial year 2023-24 (in both physical and financial terms)

A rough estimate of number of SHGs required to be formed and credit linked so as to achieve the mission that every household in rural areas is covered under SHG is worked out as under :

1	Population of the district	1200334
2	Rural population (81% of Sr.No.1)	966503
3	No. of households (2 above / 5*)	193301
4	No. of SHGs required (3 above / 12**)	16108
5	No. of SHGs already formed	15773
6	Balance (4-5)	335

*average members per household **average members per SHG

Considering the total poor rural population of the district (as per 2011 census), it is estimated that there is total potential for promotion and saving linkage of 16108 SHGs in the district. So far 15773 have been promoted in the district, thereby leaving a gap for promotion of 335 SHGs. However, as the population has increased in the past 10 years, the actual potential available for promotion of SHGs is much more.

(Amount in Rs. Lakh)

Sr. No.	Activity	Unit (No./ Ha)	Unit Cost	Phy Unit	TFO	Bank Loan
1	Loans to Matured SHGs	No.	2.00	3500	7000.00	6300.00
2	Loans to New SHGs	No.	0.50	700	350.00	315.00
3	Loans to JLGs	No.	2.00	1700	3400.00	3060.00
4	PMJDY Loans	No.	0.05	2100	105.00	105.00
	Total				10855.00	9780.00

The block-wise details of potentials for promotion and savings linkage of SHGs are given in Annexure VI.

6.4 Pilots on Digitization of SHG books of accounts

Efforts are being made by NABARD to leverage technology to bring qualitative change in SHG-BLP and transparency in SHG book-keeping. The Mobile based e-book keeping for SHGs is a web/SMS based book keeping product using mobile phone as the front end for SHGs and personal computer as back end for NGOs/Federations, government and banks. The application helps SHGs to maintain their financial transaction electronically in the local language and allows ease of monitoring to all stakeholders. All stakeholders can monitor the progress through separate login IDs in website created for this purpose. The daily attendance register, loan ledger, pass book etc. can be printed from the website. The SHG is given a copy of the reports at the next meeting.

Initially, this project has been taken up on a pilot basis in two districts of the State viz. Dhule in phase I and Wardha in phase II in Maharashtra. In phase III another five districts will be covered. Under the project, the base data of all SHGs in the district and their members had been captured and subsequently updated at regular intervals. The base data will have socio-economic details of each of the members for all SHGs, including family income, family size, source of income, livelihood activities undertaken, bank account number, savings, details of meetings held, internal loaning, repayment, etc., and will help facilitate effective account keeping. It is expected that the intervention will enable the policy makers, banks, financial institutions, government departments, etc., to identify those SHGs and members who require assistance. It will also enable effective monitoring of the SHGs, help in main-streaming of SHG members access wider range of financial services, increase bankers' comfort in credit appraisal and linkage of SHGs, facilitate transfer of social benefits and Direct Benefit Transfer (DBT) through Aadhaar linked accounts and convergence with other Government benefits, facilitate suitable interventions and convergence of other programmes for social and financial empowerment, identify suitable interventions and support for proper nurturing and strengthening of SHGs, etc. The data is being captured on the website on regular basis, viz., www.eshakti.nabard.org, created by NABARD. The various MIS reports generated has been of help to the bankers in taking faster credit decisions.

Annexure - I

Activity wise/ Block wise Physical and Financial projection - 2023-24

State : MAHARASHTRA

District : BHANDARA

(Rs. Lakh)

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
I	Credit Potentail for Agriculture											
A	Farm Credit											
2.1.1	Crop Production, Maintenance, Marketing											
1	Paddy	0.548	Ha	Phy	18,000	15,000	21,000	26,000	22,000	13,000	23,000	1,38,000
				BL	9,864.00	8,220.00	11,508.00	14,248.00	12,056.00	7,124.00	12,604.00	75,624.00
2	Wheat	0.300	Ha	Phy	200	200	200	200	200	200	200	1,400
				BL	60.00	60.00	60.00	60.00	60.00	60.00	60.00	420.00
3	Sugarcane	0.900	Ha	Phy	0	0	200	100	100	400	400	1,200
				BL	0.00	0.00	180.00	90.00	90.00	360.00	360.00	1,080.00
4	Cotton	0.450	Ha	Phy	100	0	50	100	400	0	0	650
				BL	45.00	0.00	22.50	45.00	180.00	0.00	0.00	292.50
5	Soyabean	0.313	Ha	Phy	1,200	0	200	0	2,500	0	100	4,000
				BL	375.60	0.00	62.60	0.00	782.50	0.00	31.30	1,252.00
6	Pulses	0.200	Ha	Phy	1,500	700	3,000	1,500	2,500	700	700	10,600
				BL	300.00	140.00	600.00	300.00	500.00	140.00	140.00	2,120.00
7	Chilli	0.600	Ha	Phy	100	0	100	100	100	0	0	400
				BL	60.00	0.00	60.00	60.00	60.00	0.00	0.00	240.00
8	Spices	0.875	Ha	Phy	100	100	200	100	200	100	150	950
				BL	87.50	87.50	175.00	87.50	175.00	87.50	131.25	831.25
9	Vegetables - Other	0.500	Ha	Phy	800	800	800	800	800	700	800	5,500
	Crops			BL	400.00	400.00	400.00	400.00	400.00	350.00	400.00	2,750.00
	Sub-Total CROP LOAN			BL	11,192.10	8,907.50	13,068.10	15,290.50	14,303.50	8,121.50	13,726.55	84,609.75
1	Post-harvest/ household consumption (10% of crop loan)			BL	1,119.21	890.75	1,306.81	1,529.05	1,430.35	812.15	1,372.66	8,460.98
2	Repairs and maintenance expenses of farm assets (20% of crop loan)			BL	2,238.42	1,781.50	2,613.62	3,058.10	2,860.70	1,624.30	2,745.31	16,921.95
	Sub-Total crop loan as per KCC			BL	3,357.63	2,672.25	3,920.43	4,587.15	4,291.05	2,436.45	4,117.97	25,382.93
	Total CROP LOAN (Short Term)			BL	14,549.73	11,579.75	16,988.53	19,877.65	18,594.55	10,557.95	17,844.52	1,09,992.68
B	Agriculture Term Loan											
3.1.2	Water Resources											

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
1	Dugwells	1.730	No.	Phy	20	20	20	30	20	20	30	160
				BL	31.14	31.14	31.14	46.71	31.14	31.14	46.71	249.12
2	Borewells/Tubewell	0.393	No.	Phy	50	40	30	30	30	40	30	250
				BL	17.69	14.15	10.61	10.61	10.61	14.15	10.61	88.43
3	Pump Sets (Diesel/Electric)	0.440	No.	Phy	200	200	200	200	200	200	200	1400
				BL	79.20	79.20	79.20	79.20	79.20	79.20	79.20	554.40
4	Pump house	0.150	No.	Phy	200	200	200	200	200	200	200	1400
				BL	27.00	27.00	27.00	27.00	27.00	27.00	27.00	189.00
5	Sprinkler Irrigation System	0.300	No.	Phy	150	150	100	150	150	150	150	1000
				BL	33.75	33.75	22.50	33.75	33.75	33.75	33.75	225.00
6	Pipe line	0.300	100 m	Phy	700	600	600	600	700	700	600	4500
				BL	189.00	162.00	162.00	162.00	189.00	189.00	162.00	1,215.00
7	DRIP irrigation	1.000	No.	Phy	350	400	350	400	350	350	350	2550
				BL	262.50	300.00	262.50	300.00	262.50	262.50	262.50	1,912.50
8	Repair/ renovation of wells	0.820	No.	Phy	160	160	160	160	160	160	160	1120
				BL	118.08	118.08	118.08	118.08	118.08	118.08	118.08	826.56
	Sub Total of Water Resources			BL	758.36	765.32	713.03	777.35	751.28	754.82	739.85	5260.01
3.1.3	Farm Mechanisation											
1	Tractors	7.000	No.	Phy	80	60	60	60	80	80	80	500
				BL	420.00	315.00	315.00	315.00	420.00	420.00	420.00	2,625.00
2	Power Tillers	1.000	No.	Phy	50	50	50	50	50	50	50	350
				BL	37.50	37.50	37.50	37.50	37.50	37.50	37.50	262.50
3	Other Farm Equipments	1.250	No.	Phy	80	80	80	80	80	80	80	560
				BL	75.00	75.00	75.00	75.00	75.00	75.00	75.00	525.00
4	Paddy transplanter	3.000	No.	Phy	6	2	5	3	6	3	5	30
				BL	13.50	4.50	11.25	6.75	13.50	6.75	11.25	67.50
	Sub Total of Farm Mechanisation			BL	546.00	432.00	438.75	434.25	546.00	539.25	543.75	3480.00

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
3.1.4	Plantation / Horticulture / Sericulture											
1	Mango	1.570	ha	Phy	35	35	40	35	35	35	35	250
				BL	49.46	49.46	56.52	49.46	49.46	49.46	49.46	353.28
2	Guava	1.080	ha	Phy	35	35	40	35	35	35	35	250
				BL	34.02	34.02	38.88	34.02	34.02	34.02	34.02	243.00
3	Mulbury cultivation	0.350	Ha	Phy	5	5	10	25	30	25	25	125
				BL	1.58	1.58	3.15	7.88	9.45	7.88	7.88	39.40
	Sub Total of Plantation / Horticulture / Sericulture				85.06	85.06	98.55	91.36	92.93	91.36	91.36	635.68
	Floriculture											
1	Veg. Shadenet House	3.631	Ha	Phy	10	10	10	10	10	10	10	70
				BL	18.16	18.16	18.16	18.16	18.16	18.16	18.16	127.12
2	Tassar silk composite	2.100	Ha	Phy	10	10	10	20	20	10	20	100
				BL	18.90	18.90	18.90	37.80	37.80	18.90	37.80	189.00
	Sub Total of Floriculture				37.06	37.06	37.06	55.96	55.96	37.06	55.96	316.12
	Medicinal /Aromatic Plants											
1	Others-Medicinal /Aromatic Plants	0.750	Ha	Phy	50	50	50	50	60	50	50	360
				BL	33.75	33.75	33.75	33.75	40.50	33.75	33.75	243.00
	Sub Total of Medicinal / Aromatic Plants			BL	33.75	33.75	33.75	33.75	40.50	33.75	33.75	243.00
	Total of Plantation / Horticulture / Sericulture /Floriculture/Medicinal /Aromatic Plants			BL	155.87	155.87	169.36	181.07	189.39	162.17	181.07	1194.80
3.1.5	Forestry & Wasteland Development											
1	Bamboo plantation	0.300	Ha	Phy	80	100	100	100	100	80	100	660
				BL	20.00	22.50	22.50	22.50	22.50	18.00	22.50	150.50
2	Farm Forestry	0.370	Ha	Phy	100	100	100	100	100	100	100	700
				BL	27.75	27.75	27.75	27.75	27.75	27.75	27.75	194.25
	Sub Total of Forestry & Wasteland Development				47.75	50.25	50.25	50.25	50.25	45.75	50.25	344.75

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
	Total				16057.71	12983.19	18359.92	21320.57	20131.47	12059.94	19359.44	120272.24
3.1.6	Animal Husbandry - Dairy											
1	Dairy (1+1) - Cow	1.370	No.	Phy	450	450	450	450	450	450	450	3150
				BL	524.03	524.03	524.03	524.03	524.03	524.03	524.03	3,668.21
2	Buffaloes-2 Animals	1.580	No.	Phy	450	450	450	450	450	450	450	3150
				BL	604.35	604.35	604.35	604.35	604.35	604.35	604.35	4,230.45
3	Milk Processing Unit	33.200	5000 LPD	Phy	1	1	0	1	1	1	1	6
				BL	29.88	29.88	0.00	29.88	29.88	29.88	29.88	179.28
4	Bulk Milk Coolers	18.000	5000 LPD	Phy	2	2	2	2	2	2	2	14
				BL	32.40	32.40	32.40	32.40	32.40	32.40	32.40	226.80
5	Working Capital - KCC	0.150	No.	Phy	1,100	1,000	1,100	1,000	1,100	1,100	1,100	7,500
				BL	148.50	135.00	148.50	135.00	148.50	148.50	148.50	1,012.50
	Sub Total of Animal Husbandry – Dairy			BL	1339.16	1325.66	1309.28	1325.66	1339.16	1339.16	1339.16	9317.24
3.1.7	Animal Husbandry - Poultry			BL								
1	Broilers(1000 Birds)	3.726	1000 birds	Phy	25	25	25	25	25	25	25	175
				BL	79.18	79.18	79.18	79.18	79.18	79.18	79.18	554.26
2	Layers Farming Birds (1000 Birds)	9.920	1000 birds	Phy	12	12	10	10	12	12	12	80
				BL	101.18	101.18	84.32	84.32	101.18	101.18	101.18	674.54
	Sub Total of Animal Husbandry - Poultry			BL	180.36	180.36	163.50	163.50	180.36	180.36	180.36	1228.80
3.1.8	Sheep/ Goat and Piggery Development											
1	Sheep	0.890	10+1	Phy	180	250	250	225	180	180	260	1525
				BL	136.17	189.13	189.13	170.21	136.17	136.17	196.69	1,153.67
2	Goat(10+1)	0.890	10+1	Phy	180	250	250	225	180	180	260	1525
				BL	136.17	189.13	189.13	170.21	136.17	136.17	196.69	1,153.67

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
	Sub Total of Animal Husbandry - Sheep/ Goat and Piggery Development			BL	272.34	378.26	378.26	340.42	272.34	272.34	393.38	2307.34
	Total of Animal Husbandry			BL	1791.86	1884.28	1851.04	1829.58	1791.86	1791.86	1912.90	12853.38
3.1.9	Fisheries											
1	Pond Development	7.000	Ha	Phy	10	15	15	15	15	15	15	100
				BL	63.00	94.50	94.50	94.50	94.50	94.50	94.50	630.00
2	Fish Farming through Renovation of Ponds/Fish Seed Rearing	4.000	Ha	Phy	10	15	15	15	15	15	15	100
				BL	36.00	54.00	54.00	54.00	54.00	54.00	54.00	360.00
3	Nursery Pond	1.762	Ha	Phy	5	5	5	10	10	10	5	50
				BL	7.93	7.93	7.93	15.86	15.86	15.86	7.93	79.30
4	Rearing Pond	1.762	Ha	Phy	10	10	10	10	10	10	10	70
				BL	15.86	15.86	15.86	15.86	15.86	15.86	15.86	111.02
5	Hatchery	20.000	Ha	Phy	0	0	0	0	1	1	0	2
				BL	0.00	0.00	0.00	0.00	18.00	18.00	0.00	36.00
6	Others	14.000	Ha	Phy	5	5	5	5	10	5	5	40
				BL	63.00	63.00	63.00	63.00	126.00	63.00	63.00	504.00
7	Working Capital - KCC	1.600	Ha	Phy	10	0	10	10	10	10	10	60
				BL	14.40	0.00	14.40	14.40	14.40	14.40	14.40	86.40
	Sub Total of Fisheries			BL	200.19	235.29	249.69	257.62	338.62	275.62	249.69	1806.72
3.1.10	Others - Bullock, Bullock carts, etc											
1	Bullocks	0.800	Pair	Phy	20	20	20	20	20	20	20	140
				BL	14.40	14.40	14.40	14.40	14.40	14.40	14.40	100.80
1	Loans to FPOs	3.000	No.		1	1	1	1	1	1	1	7
					2.70	2.70	2.70	2.70	2.70	2.70	2.70	18.90
	Sub Total of Others - Bullock, Bullock carts, etc			BL	17.10	17.10	17.10	17.10	17.10	17.10	17.10	119.70
	Total Term Loan/ Investment Credit				3517.13	3540.11	3489.22	3547.22	3684.50	3586.57	3694.61	25059.36
	Total Farm Credit (A + B)				18066.86	15119.86	20477.75	23424.87	22279.05	14144.52	21539.13	135052.04

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
3.2	Agriculture Infrastructure											
3.2.1	Storage facilities											
	Cold Storage/ Rural Godowns											
1	Cold Storage	0.090	MT	Phy	2000	1000	1000	1000	1500	1500	2000	10000
				BL	135.00	67.50	67.50	67.50	101.25	101.25	135.00	675.00
2	Rural Godown	0.080	MT	Phy	6000	5000	5000	5000	5000	5000	6000	37000
				BL	360.00	300.00	300.00	300.00	300.00	300.00	360.00	2,220.00
3	Market Yard	7.500	No.	Phy	2	2	2	2	2	2	2	14
				BL	11.25	11.25	11.25	11.25	11.25	11.25	11.25	78.75
4	Others – Godown for milk collection	0.040	MT	Phy	300	250	250	250	250	250	250	1800
				BL	9.00	7.50	7.50	7.50	7.50	7.50	7.50	54.00
	Total of Storage facilities			BL	515.25	386.25	386.25	386.25	420.00	420.00	513.75	3027.75
3.2.2	Land Development, Soil Conservation, Watershed Development											
1	Land Levelling and shaping	0.155	Ha	Phy	110	100	110	100	100	110	110	740
				BL	12.79	11.63	12.79	11.63	11.63	12.79	12.79	86.05
2	Contour Bunding	0.157	Ha	Phy	100	100	100	100	100	100	100	700
				BL	11.78	11.78	11.78	11.78	11.78	11.78	11.78	82.46
3	Water Harvest Tank	1.750	Ha	Phy	25	25	25	25	25	25	25	175
				BL	32.81	32.81	32.81	32.81	32.81	32.81	32.81	229.67
4	Drainage, Farm ponds	1.750	Ha	Phy	25	25	25	25	25	25	25	175
				BL	32.81	32.81	32.81	32.81	32.81	32.81	32.81	229.67
	Total of Land Development, Soil Conservation, Watershed Development			BL	90.19	89.03	90.19	89.03	89.03	90.19	90.19	627.85
3.2.3	Others											
1	Seed Production	1.000	Ha	Phy	60	40	40	40	40	40	40	300
				BL	54.00	36.00	36.00	36.00	36.00	36.00	36.00	270.00
2	Compost making	0.400	No.	Phy	105	105	105	105	105	105	105	735
				BL	37.80	37.80	37.80	37.80	37.80	37.80	37.80	264.60

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
3	Tissue Culture Labs	62.500	No.	Phy	1	0	0	0	0	1	1	3
				BL	56.25	0.00	0.00	0.00	0.00	56.25	56.25	168.75
4	Soil Testing Lab	1.000	No.	Phy	2	1	1	1	2	1	2	10
				BL	1.80	0.90	0.90	0.90	1.80	0.90	1.80	9.00
5	Bio-fertiliser/ pesticides	25.000	No.	Phy	1	0	0	0	0	1	1	3
				BL	22.50	0.00	0.00	0.00	0.00	22.50	22.50	67.50
6	Others-Others	0.550	No.	Phy	20	10	10	10	10	10	10	80
				BL	9.90	4.95	4.95	4.95	4.95	4.95	4.95	39.60
	Total of Others			BL	182.25	79.65	79.65	79.65	80.55	158.40	159.30	819.45
	Total of Agriculture Infrastructure			BL	787.69	554.93	556.09	554.93	589.58	668.59	763.24	4475.05
3.3	Ancillary Activities-Agro & Food Processing											
1	Agro-processing-units	15.000	No.	Phy	60	60	60	60	60	60	60	420
				BL	675.00	675.00	675.00	675.00	675.00	675.00	675.00	4,725.00
2	Oil Mill	25.000	No.	Phy	3	3	3	3	3	3	3	21
				BL	56.25	56.25	56.25	56.25	56.25	56.25	56.25	393.75
3	Spice processing Unit	2.500	No.	Phy	150	125	150	125	150	150	150	1000
				BL	281.25	234.38	281.25	234.38	281.25	281.25	281.25	1,875.01
4	Dal Mill	15.000	No.	Phy	15	10	15	15	15	15	15	100
				BL	168.75	112.50	168.75	168.75	168.75	168.75	168.75	1,125.00
5	Fish Processing	2.000	No.	Phy	60	50	50	50	60	50	50	370
				BL	90.00	75.00	75.00	75.00	90.00	75.00	75.00	555.00
	Working Capital			BL	572.00	519.00	565.00	544.00	572.00	565.00	565.00	3,902.00
	Total of Ancillary Activities – Agro & Food Processing			BL	1843.25	1672.13	1821.25	1753.38	1843.25	1821.25	1821.25	12575.76
3.5	Others											
1	Agri-clinic Agri business Centers	20.00	No.	Phy	15	15	15	15	15	15	15	105
				BL	270.00	270.00	270.00	270.00	270.00	270.00	270.00	1,890.00
2	Loans to PACS/FSS/LAMPS	500.00	No.	Phy	1	0	0	0	0	0	0	1

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
				BL	500.00	0.00	0.00	0.00	0.00	0.00	0.00	500.00
	Total of Others			BL	770.00	270.00	270.00	270.00	270.00	270.00	270.00	2390.00
	Total of Ancillary Activities			BL	2613.25	1942.13	2091.25	2023.38	2113.25	2091.25	2091.25	14965.76
	Total Agriculture			BL	21467.80	17616.92	23125.09	26003.18	24981.88	16904.36	24393.62	154492.85
II	Micro, Small and Medium Enterprises (MSME)											
	Manufacturing Sector											
a	Term Loan											
1	Micro Enterprises	50.00	No.	Phy	5	2	5	3	5	5	5	30
				BL	187.50	75.00	187.50	112.50	187.50	187.50	187.50	1,125.00
2	Small Enterprises	500.00	No.	Phy	1	0	1	0	1	1	1	5
				BL	375.00	0.00	375.00	0.00	375.00	375.00	375.00	1,875.00
3	Medium Enterprises	2000.00	No.	Phy	1	0	0	0	0	0	0	1
				BL	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00	1,500.00
	Sub Total of Manufacturing Sector Term Loan			BL	2062.50	75.00	562.50	112.50	562.50	562.50	562.50	4500.00
b	Manufacturing Sector- Working Capital											
1	Micro Enterprises	20.00	No.	Phy	25	20	25	20	25	20	25	160
				BL	375.00	300.00	375.00	300.00	375.00	300.00	375.00	2,400.00
2	Small Enterprises	100.00	No.	Phy	5	2	2	2	5	2	5	23
				BL	375.00	150.00	150.00	150.00	375.00	150.00	375.00	1,725.00
3	Medium Enterprises	500.00	No.	Phy	1	0	1	0	1	0	1	4
				BL	375.00	0.00	375.00	0.00	375.00	0.00	375.00	1,500.00
	Sub Total of Manufacturing Sector Working Capital			BL	1125.00	450.00	900.00	450.00	1125.00	450.00	1125.00	5625.00
c	Service Sector – Term Loan											
1	Micro Enterprises	40.00	No.	Phy	6	5	6	5	6	6	6	40
				BL	180.00	150.00	180.00	150.00	180.00	180.00	180.00	1,200.00
2	Small Enterprises	300.00	No.	Phy	1	0	1	1	1	1	1	6
				BL	225.00	0.00	225.00	225.00	225.00	225.00	225.00	1,350.00
3	Medium Enterprises	1500.0	No.	Phy	1	0	0	0	0	0	0	1
				BL	1,125.00	0.00	0.00	0.00	0.00	0.00	0.00	1,125.00
	Sub Total of Service Sector			BL	1530.00	150.00	405.00	375.00	405.00	405.00	405.00	3675.00

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
	Term Loan											
d	Service Sector – Working Capital											
1	Micro Enterprises	10.00	No.	Phy	500	400	400	400	400	400	500	3000
				BL	3,750.00	3,000.00	3,000.00	3,000.00	3,000.00	3,000.00	3,750.00	22,500.00
2	Small Enterprises	80.00	No.	Phy	30	20	30	20	30	20	30	180
				BL	1,800.00	1,200.00	1,800.00	1,200.00	1,800.00	1,200.00	1,800.00	10,800.00
3	Medium Enterprises	400.00	No.	Phy	2	1	1	1	2	1	2	10
				BL	600.00	300.00	300.00	300.00	600.00	300.00	600.00	3,000.00
	Sub Total of Service Sector Working Capital			BL	6150.00	4500.00	5100.00	4500.00	5400.00	4500.00	6150.00	36300.00
	Total MSME			BL	10867.50	5175.00	6967.50	5437.50	7492.50	5917.50	8242.50	50100.00
III	Export Credit											
1	Export Credit	150.000	no.	Phy	2	1	1	2	1	1	1	9
				BL	240.00	120.00	120.00	240.00	120.00	120.00	120.00	1,080.00
	Total of Export Credit				240.00	120.00	120.00	240.00	120.00	120.00	120.00	1080.00
IV	Education											
1	Educational Loan in India	10.000	No.	Phy	25	20	20	25	25	20	25	160
				BL	225.00	180.00	180.00	225.00	225.00	180.00	225.00	1,440.00
2	Educational Loan Overseas	20.000	No.	Phy	1	0	0	0	0	0	1	2
				BL	18.00	0.00	0.00	0.00	0.00	0.00	18.00	36.00
3	Others-Education	5.000	No.	Phy	25	20	20	25	25	20	25	160
				BL	112.50	90.00	90.00	112.50	112.50	90.00	112.50	720.00
	Total of Education			BL	355.50	270.00	270.00	337.50	337.50	270.00	355.50	2196.00
V	Housing Loan											
1	Rural Housing	15.000	No.	Phy	60	60	60	60	60	60	60	420
				BL	810.00	810.00	810.00	810.00	810.00	810.00	810.00	5,670.00
2	Semi Urban Housing	20.000	No.	Phy	60	35	35	35	60	35	60	320
				BL	1,080.00	630.00	630.00	630.00	1,080.00	630.00	1,080.00	5,760.00

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
3	Renovation of House	10.000	No.	Phy	25	25	25	25	25	25	25	175
				BL	225.00	225.00	225.00	225.00	225.00	225.00	225.00	1,575.00
	Total Housing Loan			BL	2115.00	1665.00	1665.00	1665.00	2115.00	1665.00	2115.00	13005.00
VI	Renewable Energy											
1	Bio gas unit	0.150	No.	Phy	50	50	50	50	50	50	50	350
				BL	6.75	6.75	6.75	6.75	6.75	6.75	6.75	47.25
2	Solar water heating system	0.500	No.	Phy	50	50	50	50	50	50	50	350
				BL	22.50	22.50	22.50	22.50	22.50	22.50	22.50	157.50
3	Solar Pump Sets	3.150	No.	Phy	15	15	15	15	15	15	15	105
				BL	42.53	42.53	42.53	42.53	42.53	42.53	42.53	297.71
	Total of Renewable energy			BL	71.78	71.78	71.78	71.78	71.78	71.78	71.78	502.46
VII	Others											
	Loans to Matured SHGs	2.000	No.	Phy	500	500	500	500	500	500	500	3500
				BL	900.00	900.00	900.00	900.00	900.00	900.00	900.00	6,300.00
	Loans to New SHGs	0.500	No.	Phy	100	100	100	100	100	100	100	700
				BL	45.00	45.00	45.00	45.00	45.00	45.00	45.00	315.00
	Loans to JLGs	2.000	No.	Phy	300	200	300	200	300	200	200	1700
				BL	540.00	360.00	540.00	360.00	540.00	360.00	360.00	3,060.00
	PMJDY Loans	0.050	No.	Phy	300	300	300	300	300	300	300	2100
				BL	15.00	15.00	15.00	15.00	15.00	15.00	15.00	105.00
	Total of Others VII			BL	1500.00	1320.00	1500.00	1320.00	1500.00	1320.00	1320.00	9780.00
VIII	Social Infrastructure											
1	New infrastructure up to secondary schools	10.000	No.	Phy	6	6	6	6	6	6	6	42
				BL	54.00	54.00	54.00	54.00	54.00	54.00	54.00	378.00
2	Modernization of existing infrastructure in schools	10.000	No.	Phy	8	8	8	8	8	8	8	56

Sr. No	Activity	Unit Cost	Unit Size		Bhandara	Lakhni	Lakhandur	Mohadi	Pauni	Sakoli	Tumsar	Total
				BL	72.00	72.00	72.00	72.00	72.00	72.00	72.00	504.00
3	Health Care	2.000	No.	Phy	30	30	30	30	30	30	30	210
				BL	54.00	54.00	54.00	54.00	54.00	54.00	54.00	378.00
4	Sanitation	0.200	No.	Phy	350	350	350	350	350	350	350	2450
				BL	63.00	63.00	63.00	63.00	63.00	63.00	63.00	441.00
	Total of Social Infrastructure			BL	243.00	243.00	243.00	243.00	243.00	243.00	243.00	1701.00
	TOTAL PRIORITY SECTOR			BL	36860.58	26481.70	33962.37	35317.96	36861.66	26511.64	36861.40	232857.31

Annexure - II
An Overview of Ground Level Credit Flow- Agency-wise and Sector-wise

State : MAHARASHTRA**District : BHANDARA****(Amount in Rs Lakh)**

Sr No	Agency / Category	2019-20		2020-21		2021-22		2022-23
		Target	Achievement	Target	Achievement	Target	Achievement	Target
1	Crop Loan							
	CBs	14390.00	14054.00	14745.00	22083.00	15857.00	13072.00	24701.00
	CCB / StCB	26000.00	25356.00	27200.00	32362.00	30191.00	35433.00	48500.00
	RRB	3500.00	3312.00	3600.00	3307.00	3952.00	3070.00	7000.00
	Sub-Total (1)	43890.00	42722.00	45545.00	57752.00	50000.00	51575.00	80201.00
2	Term Loan (MT + LT)							
	CBs	14595.00	8270.00	15469.00	9621.00	20939.00	17805.00	18040.00
	CCB / StCB	700.00	1594.00	700.00	244.00	948.00	973.00	768.00
	RRB	600.00	614.00	600.00	0.00	812.00	63.00	693.00
	Sub-Total (2)	15895.00	10478.00	16769.00	9865.00	22699.00	18841.00	19501.00
3	Total Agriculture Credit							
	CBs	28985.00	22324.00	30214.00	31704.00	36796.00	30877.00	42741.00
	CCB / StCB	26700.00	26950.00	27900.00	32606.00	31139.00	36406.00	49268.00
	RRB	4100.00	3926.00	4200.00	3307.00	4764.00	3133.00	7693.00
	Total Agriculture Credit (3) = (1+2)	59785.00	53200.00	62314.00	67617.00	72699.00	70416.00	99702.00
4	Non - Farm Sector							
	CBs	30945.00	26897.00	32746.00	28194.00	34614.00	31750.00	38363.00
	CCB / StCB	1500.00	2828.00	1500.00	668.00	1586.00	1150.00	1725.00
	RRB	1200.00	2606.00	1230.00	3050.00	1300.00	3111.00	1415.00
	Total (4)	33645.00	32331.00	35476.00	31912.00	37500.00	36011.00	41503.00
5	Other Priority Sector							
	CBs	23797.00	12247.00	27946.00	9221.00	31344.00	15401.00	34313.00
	CCB / StCB	5330.00	9101.00	6542.00	3094.00	7024.00	3789.00	7677.00
	RRB	1630.00	1186.00	2157.00	2006.00	2757.00	1189.00	3013.00
	Total (5)	30757.00	22534.00	36645.00	14321.00	41125.00	20379.00	45003.00
6	Grand Total							
	CBs	83727.00	61468.00	90906.00	69119.00	102754.00	78028.00	115417.00
	CCB / StCB	33530.00	38879.00	35942.00	36368.00	39749.00	41345.00	58670.00
	RRB	6930.00	7718.00	7587.00	8363.00	8821.00	7433.00	12121.00
	Grand Total (3+4+5)	124187.00	108065.00	134435.00	113850.00	151324.00	126806.00	186208.00

Annexure - III

Sub-sector-wise and Agency-wise Credit Flow under Agriculture and Allied Activities

State : MAHARASHTRA

District : BHANDARA

(Amount in Rs Lakh)

		2019-20				2020-21				2021-22				Target for 2022-23			
		CBs	Coop.	RRB	Total	CBs	Coop.	RRB	Total	CBs	Coop.	RRB	Total	CBs	Coop.	RRB	Total
I	Crop Loans	14054.00	25356.00	3312.00	42722.00	22083.00	32362.00	3307.00	57752.00	15857.00	30191.00	3952.00	50000.00	24701.00	48500.00	7000.00	80201.00
II	Term Loan																
1	MI	935.00	0.00	0.00	935.00	1067.00	0.00	0.00	1067.00	2978.00	0.00	34.00	3012.00	1958.00	0.00	34.00	1992.00
2	LD	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
3	FM	3827.00	14.00	0.00	3841.00	2634.00	0.00	0.00	2634.00	2458.00	17.00	76.00	2551.00	2458.00	17.00	76.00	2551.00
4	P&H	10.00	0.00	0.00	10.00	7.00	0.00	0.00	7.00	395.00	0.00	47.00	442.00	395.00	0.00	47.00	442.00
5	DD	859.00	327.00	138.00	1324.00	2496.00	0.00	0.00	2496.00	3869.00	72.00	173.00	4114.00	5208.00	72.00	228.00	5508.00
6	Poultry	57.00	0.00	0.00	57.00	0.00	0.00	0.00	0.00	131.00	0.00	0.00	131.00	529.00	0.00	0.00	529.00
7	S/G/P	76.00	0.00	0.00	76.00	68.00	0.00	0.00	68.00	612.00	0.00	43.00	655.00	2749.00	0.00	56.00	2805.00
8	Fisheries	23.00	548.00	89.00	660.00	613.00	0.00	0.00	613.00	518.00	126.00	18.00	662.00	518.00	126.00	18.00	662.00
9	SMY	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
10	F/WLD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	84.00	0.00	0.00	84.00
11	BG	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
12	Sericulture	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
13	Others	2483.00	705.00	387.00	3575.00	2736.00	244.00	0.00	2980.00	9978.00	733.00	421.00	11132.00	4141.00	553.00	234.00	4928.00
	Sub totals	8270.00	1594.00	614.00	10478.00	9621.00	244.00	0.00	9865.00	20939.00	948.00	812.00	22699.00	18040.00	768.00	693.00	19501.00
III	MSME	26897.00	2828.00	2606.00	32331.00	28194.00	668.00	3050.00	31912.00	34614.00	1586.00	1300.00	37500.00	38363.00	1725.00	1415.00	41503.00
IV	OPS	12247.00	9101.00	1186.00	22534.00	9220.00	3094.00	2006.00	14320.00	31344.00	7024.00	2757.00	41125.00	34313.00	7677.00	3013.00	45003.00
	Grand Total (I+II+III+IV)	61468.00	38879.00	7718.00	108065.00	69118.00	36368.00	8363.00	113849.00	102754.00	39749.00	8821.00	151324.00	115417.00	58670.00	12121.00	186208.00

Annexure IV

Indicative unit costs for various agricultural activities as arrived at by NABARD/Unit Cost Committee

Sr.No.	Item	Unit Cost (Rs)
A	Minor Irrigation	
1	Dug well	133100-173030
2	Bore well	39300
3	Submersible Pump sets 3-5 HP	44000-60500
4	Electric Pump sets 5 HP	30000
5	Diesel Pump sets 5 HP	35000
6	Drip Irrigation Systems in Grape ,Sugarcane, Cotton, Ginger, Vegetable Rose, Strawberry, Other flowers (Rs./ha)	100000
7	Drip in Banana (1.5 m*1.5 m)	85000
8	Drip in other fruit crops (Rs./ha)	25000-60000
9	Sprinkler in pulses, oilseeds, other field crops (Rs./ha)	25000-30000
B	Plantation and Horticulture (Rs/ha)	
1	Mango (10 x 10 m)	157000-165000
2	Guava (5 x 5 m)	108000
3	Grapes	1054000
4	Pomegranate	205000
5	Mandarin orange	176000
6	Sweet orange	161000
7	Acid lime	167000
8	Aonla	79000
9	Sapota	129000
10	Custard apple	114000
11	Cashew nut	94000-96000
12	Fig	158000
13	Drumstick	148000
14	Champaca (Sonchapha)	353000
15	Bamboo plantation	30000
16	Shade net for flowers and vegetables 10 R	363100
17	Shade net for flowers and vegetables 20 R	627400
C	Land Development	
1	Farm bunding (4% slope, medium soil, 1 SqM c/s 200 m/ha)	7000-17000
2	Graded bunding (0.95 Sq.mt c/s, 210 m l/ha)	5800-24900
3	Land levelling and shaping slope 1-2%	15500
4	Fencing (running mts) (barbed 1.8 m)	145
5	Field drainage for wet lands	29600
D	Animal Husbandry	
1	2 CB Cows	137000
2	2 Graded Murrah Buffaloes	158000
3	Goat rearing (10+1) (Osmanabadi/Sangamneri)	89000
4	Goat rearing (10+1) Non-descript	78000
E	Fisheries	
1	Composite pond new	700000
2	Composite pond renovation	400000
3	Shrimp Farming	1400000

For details please refer to the NABARD website www.nabard.org .

ANNEXURE V
Scale of Finance for major crops fixed by SLTC for 2022-23

SR.No.	CROP	Amount in Rs			
		Mini	Maxi	Mini	Maxi
		Ha	Ha	Acre	Acre
	KHARIP				
1	KHARIP PADDY/IMPROVED	50000	62500	20000	25000
2	PADDY SUMMER CROP/BASMATI	54750	62500	21900	25000
3	KHARIP PADDY	42000	50000	16800	20000
4	KHARIP JAWAR (I)	22500	29000	9000	11600
5	KHARIP JAWAR (U)	20000	27000	8000	10800
6	BAJRA (I)	20000	30000	8000	12000
7	BAJRA (U)	22000	24000	8800	9600
8	BAJRA SUMMER	24000	26000	9600	10400
9	MAIZE (I)	32500	40000	13000	16000
10	MAIZE (U)	27500	30000	11000	12000
11	MAIZE (SWEET CORN)	28000	28000	11200	11200
12	TUR (I)	40000	47500	16000	19000
13	TUR (U)	32500	37500	13000	15000
14	MUNG (U)	20000	29250	8000	11700
15	MUNG (SUMMER)	17000	21000	6800	8400
16	UDID(U)	20000	29750	8000	11900
17	GROUNDNUT (I)	37500	44000	15000	17600
18	GROUNDNUT (U)	30000	38000	12000	15200
19	SOYABIN	31250	52750	12500	21100
20	SUNFLOWER (I)	27000	46000	10800	18400
21	SUNFLOWER (U)	20000	43000	8000	17200
22	SEASAME (U)	20000	36000	8000	14400
23	LINSSEED (I)	18750	39250	7500	15700
24	COTTON (I)	45000	75000	18000	30000
25	COTTON (U)	37500	57500	15000	23000
26	SUGARCANE (ADSALI)	97500	132000	39000	52800
27	SUGARCANE (PRE-SEA)	92500	126000	37000	50400
28	SUGARCANE (SURU)	81750	126000	32700	50400
29	SUGARCANE (RATOON)	62500	99000	25000	39600
	RABBI/SUMMERCROP			0	0
30	RABBI JAWAR (I)	20000	33000	8000	13200
31	RABBI JAWAR (U)	22500	31000	9000	12400
32	WHEAT (I)	27500	42500	11000	17000
33	GRAM (I)	25000	42500	10000	17000
34	GRAM (U)	20000	36250	8000	14500
35	SAFFLOWER	30000	46000	12000	18400
	VEGETABLE CROP			0	0
36	CHILLI	60000	108250	24000	43300
37	TOMATTO	50000	90000	20000	36000
38	KHARIP ONION	47500	75000	19000	30000
39	RABBI ONION	55000	97750	22000	39100
40	POTATO	56250	85000	22500	34000
41	TURMERIC	72500	120000	29000	48000
42	JINJER	52500	120000	21000	48000
43	KOBI CLASS CROPS	22500	72500	9000	29000
44	GARLIC	62500	62500	25000	25000
	FLOWER CROP			0	0
45	ASHTER	30000	36000	12000	14400
46	CHRYSANTHEMUM	30000	107500	12000	43000

47	ZENDU	30000	79500	12000	31800
48	ROSE	40000	47000	16000	18800
49	JASMINE	30000	42000	12000	16800
50	MOGRA	30000	38000	12000	15200
51	NISHIGANDHA	0	0	0	0
	FRUIT CROPS			0	0
52	GRAPES	320000	320000	128000	128000
53	CASHEW	100000	121000	40000	48400
54	PAMOGGRANET	130000	130000	52000	52000
55	CHIKKU	60000	70000	24000	28000
56	GAVA	37500	66000	15000	26400
57	LIME	63750	100000	25500	40000
58	COCONUT	70000	75000	28000	30000
59	CUSTARD APPLE	55000	55000	22000	22000
60	BANNANA	75000	100000	30000	40000
61	BANNANA (TISSU CULTURE)	105000	140000	42000	56000
62	ORANGES / CITRUS LIME	63750	118750	25500	47500
63	MANGO	62500	155000	25000	62000
64	BOR	40000	40000	16000	16000
65	AMLA	40000	40000	16000	16000
66	ANJEER	0	0	0	0
67	PAPAYA	55000	70000	22000	28000
	FODDER CROP			0	0
68	GAJARAJ	20000	32000	8000	12800
69	GARLIC GRASS	25000	63000	10000	25200
70	WIND GRASS	25000	64000	10000	25600
71	MAIZE (GREEN GRASS)	20000	32000	8000	12800
72	BAJRA (GREEN GRASS)	10000	16000	4000	6400
73	JAWAR (GREEN GRASS)	12500	22000	5000	8800
	OTHER CROPS			0	0
74	SILK MULBERRY	90000	90000	36000	36000
75	PANMALA	50000	55000	20000	22000
‡	FODDER CROP(Sr.No.68 to 73)				

As decided in SLTC Meeting FODDER CROPS Rates suggested by Animal Husbandary Dept. Maharashtra State,Pune.

ANNEXURE V(A) and V(B)**Scale of Finance for Working Capital for Animal Husbandry and Fishery Activities decided by SLTC for FY
2022-23****(Amount in ₹)**

Sr.No.	Name of Activity	Scale of Finance
1	2	3
1	Recurring Expenditure for Dairy	
	Unit 1 Cow	20,000
	Unit 1 Buffalo	25,000
2	Recurring Expenditure for Goat / Sheep Rearing	
	Unit 10+1	25,000
3	Recurring Expenditure for Poultry	
	Unit 100 Birds	
i	Broiler	10,000
ii	Layer	25,000
iii	Local (Indigenous)	25,000
4	Recurring Expenditure for Fishery – Management Cost	
i	Working Capital for Fishery (per ha)	2,20,000
ii	Working Capital for fish farming by small boat in river/pond	7,500
iii	Working Capital (per ha) for fishery activities in brackish water	62,500
iv	Working Capital for prawn farming with fish farming in brackish water (per ha)	2,00,000
v	Taller Fish Capturing Boat	2,00,000
vi	Parsisin Fish Capturing Boat	2,00,000
vii	Gill Netor Fish Capturing Boat	1,50,000
viii	Fish Capturing Boat (Non-Mechanical)	25,000
ix	Backyard ornamental fish farming (Rs.3 Lakh Capital Cost)	50,000
x	Medium ornamental fish farming (Rs.8 Lakh Capital Cost)	1,30,000
xi	Large ornamental fish farming (Rs.25 Lakh Capital Cost)	3,00,000

List of Abbreviations

ACP	Annual Credit Plan	FLCC	Financial Literacy and Credit Counselling Centres
ACABC	Agri Clinic and Agri Business Centre	FM	Farm Mechanization
ADS	Area Development Scheme	FPF	Food Processing Fund
AEZ	Agri. Export Zone	FPO	Farmer Producers' Organization
AH	Animal Husbandry	FSPF	Farm Sector Promotion Fund
AIF	Agriculture Infrastructure Fund	GCA	Gross Cropped Area
APMC	Agricultural Produce Market Committee	GCF	Green Climate Fund
APY	Atal Pension Yojana	GIA	Gross Irrigated Area
APEDA	Agricultural and Processed Food Products Export Development Authority	GLC	Ground Level Credit
AI	Artificial Insemination	GoI	Government of India
ATMA	Agricultural Technology Management Agency	HYV	High Yielding Variety
BC	Business Correspondent	ICT	Information and Communications Technology
BF	Business Facilitator	IWMS	Integrated Watershed Management Scheme
BLBC	Block Level Banker's Committee	JLG	Joint Liability Group
BPL	Below Poverty Line	KCC	Kisan Credit Card
BSBDA	Basic Savings Bank Deposit Account	KVIB/KVIC	Khadi and Village Industries Board/ Khadi and Village Industries Commission
CAT	Capacity Building for Adoption of Technology	KYC	Know Your Customer
CBs	Commercial Banks	KVK	Krishi Vigyan Kendra
CBS	Core Banking Solution	LBR	Lead Bank Return
CCF	Climate Change Fund	LDM	Lead District Manager
CDR	Credit Deposit Ratio	LEDP	Livelihood and Enterprise Development Programmes
CGTMSE	Credit Guarantee Fund Trust for Micro and Small Enterprises	LWE	Left Wing Extremism
CISS	Capital Investment Subsidy Scheme	MEDP	Micro Enterprise Development Programme
CRAR	Capital to Risk weighted Asset Ratio	MFI	Micro Finance Institution
DAP	Development Action Plan	MIDH	Mission for Integrated Development of Horticulture
DBT	Direct Benefit Transfer	MI	Minor Irrigation
DDD-GKY	Deen Dayal Upadhyaya-Grameen Kaushal Yojana	MNRE	Ministry of New and Renewable Energy
DCCB	District Central Cooperative Bank	MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
DCC	District Consultative Committee	MSME	Micro, Small and Medium Enterprises
DDM	District Development Manager	MoRD	Ministry of Rural Development
DIDF	Dairy Processing and Infrastructure Development Fund	MSC	Multi Service Centre
DLRC	District Level Review Committee	NABARD	National Bank for Agriculture and Rural Development
DLTC	District Level Technical Committee	NDDDB	National Dairy Development Board

DRDA	District Rural Development Agency	NEFT	National Electronic Fund Transfer
e-NAM	e-National Agriculture Market	NFDB	National Fisheries Development Board
FIF	Financial Inclusion Fund		
FLC	Financial Literacy Centre	NAFCC	National Adaptation Fund for Climate Change
NBFC	Non-Banking Financial Company		
NIDA	NABARD Infrastructure Development Assistance	RBI	Reserve Bank of India
NIA	Net Irrigated Area	RIDF	Rural Infrastructure Development Fund
NRLM	National Rural Livelihood Mission	RNFS	Rural Non-Farm Sector
NRM	Natural Resources Management	RKBY	Rashtriya Krishi Bima Yojana
NSA	Net Sown Area	RKVY	Rashtriya Krishi Vikas Yojana
NSSO	National Sample Survey Organisation	RRB	Regional Rural Bank
NWR	Negotiable Warehouse Receipt	RUDSETI	Rural Development & Self Employment Training Institute
NHB/ NHM	National Horticulture Board/ National Horticulture Mission	RSETI	Rural Self Employment Training Institute
OPPF	Off-Farm Promotion Fund	SAMIS	Service Area Monitoring and Information System
OPS	Other Priority Sector	SAO	Seasonal Agriculture Operation
PACS	Primary Agricultural Cooperative Society	SCARDB	State Cooperative Agriculture & Rural Development Bank
PPP	Public Private Partnership	SDI	Skill Development Initiative
P & H	Plantation & Horticulture	SF/MF	Small Farmer / Marginal Farmer
PKVY	Paramparagat Krishi Vikas Yojana	SFAC	Small Farmers' Agri-Business Consortium
PMFBY	Pradhan Mantri Fasal Bima Yojana	SHG	Self Help Group
PMJDY	Pradhan Mantri Jan Dhan Yojana	SHPI	Self Help Group Promotion Institution
PMJJBY	Pradhan Mantri Jeevan Jyoti Bima Yojana	SIDBI	Small Industries Development Bank of India
PMKVY	Pradhan Mantri Kaushal Vikas Yojana		
PMMY	Pradhan Mantri Mudra Yojana	SLBC	State level Banker's Committee
PMRY	Prime Minister's Rozgar Yojana	SRI	System of Rice Intensification
PMSBY	Pradhan Mantri Suraksha Bima Yojana	SRLM	State Rural Livelihood Mission
PMKSY	Prime Mantri Krishi Sinchayee Yojana	StCB	State Cooperative Bank
PODF	Producer Organisation Development Fund	TDF	Tribal Development Fund
POPI	Producer Organisation Promoting Institution	WDF	Watershed Development Fund
POS	Point of Sale	WDRA	Warehousing Development and Regulatory Authority
PRI	Panchayati Raj Institution	WIF	Warehouse Infrastructure Fund
PWCS	Primary Weavers Cooperative Society	WSHG	Women Self Help Group

List of the District Development Managers of Maharashtra

S.N.	District	Name of the DDM	Mobile No.	E – mail address
1	Ahmednagar	Shri Sheelkumar B Jagtap	9828647823	ahmednagar@nabard.org
2	Akola	Shri Sharad P Walke	7415403877	akola@nabard.org
3	Amravati	Shri Rajendra B Rahate	8269009950	amravati@nabard.org
4	Aurangabad	Shri Suresh R Patwekar	9575390390	aurangabad@nabard.org
5	Beed	Shri Tatyasaheb L Markad	8668649552	beed@nabard.org
6	Bhandara	Shri Sandeep M Deogirkar	7073350545	bhandara@nabard.org
7	Buldhana	Shri Vikram B Pathare	7028755522	buldhana@nabard.org
8	Chandrapur	Shri Trunal T Fulzele	9168106384	chandrapur@nabard.org
9	Dhule	Shri N J Suryawanshi	8290044055	dhule@nabard.org
10	Gadchiroli	Shri Trunal T Fulzele	9168106384	gadchiroli@nabard.org
11	Gondia	Shri Avinash Lad	8208487647	gondia@nabard.org
12	Jalgaon	Shri Shrikant K Zambre	8160363418	jalgaon@nabard.org
13	Jalna	Shri Tejal Kshirsagar	7709981977	jalna@nabard.org
14	Kolhapur	Shri Ashutosh Jadhav	9414037647	kolhapur@nabard.org
15	Latur	Shri Pramod S Patil	9089851389	latur@nabard.org
16	Nagpur	Shri Sachin M. Sonone	9805070077	nagpur@nabard.org
17	Nanded	Shri Dileep Damayywar	8779098545	nanded@nabard.org
18	Nandurbar	Shri Pramod D Patil	9987667891	nandurbar@nabard.org
19	Nasik	Shri Amol Lohakare	9946932508	nasik@nabard.org
20	Osmanabad	Shri Chaitanya Gokhale	9881494520	osmanbad@nabard.org
21	Parbhani / Hingoli	Shri S K Navsare	9425606076	parbhani@nabard.org
22	Pune	Shri Rohan R More	9021804727	ddm.pune@nabard.org
23	Raigad	Shri Pradip S Apsunde	9921504001	raigad@nabard.org
24	Ratnagiri	Shri Mangesh S Kulkarni	9426601865	ratnagiri@nabard.org
25	Sangli	Shri Nilesh D Chaudhari	9769353117	sangli@nabard.org
26	Satara	Shri R G Chaudhari	9890404589	satara@nabard.org
27	Sindhudurg	Shri Ajay A Thute	9007607414	sindhudurg@nabard.org
28	Solapur	Shri N B Shelke	9906384941	solapur@nabard.org
29	Thane / Palghar	Shri Sudhanshu K Ashwini	9650019511	palghar@nabard.org
30	Wardha	Shri Sushant Patil	7972961846	wardha@nabard.org
31	Washim	Shri Shankar Kokadwar	9423101925	washim@nabard.org
32	Yavatmal	Shri D B Pendam	9907433101	yeotmal@nabard.org
33	Mumbai Sub.	Shri Elangaivendhan A.	8277390537	elangaivendhan.a@nabard.org
34	Mumbai City	Shri Senthilvel Balasubramanian	9962256223	senthilvel.balasubramanian@nabard.org



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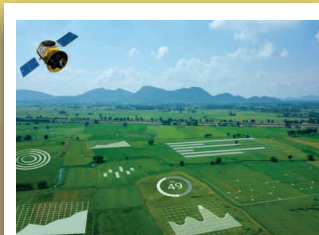
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- › The company has a range of nancial products and services including nancing of SHGs in partnership with NGOs and JLGs directly through its branches
- › Operating across in 16 States of India and touching lives of more than 5.50 lakh households with a commitment towards their socio-economic empowerment and furthering the cause for nancial 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.nabns.org



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Building Trust for Rural Prosperity

Corporate Oce

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Ph:022-26539243/26539241

e-mail:ho@nabsanrakshan.org

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 - › Under Animal Husbandry Infrastructure Development Fund (AHIDF)
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