



संभाव्यतायुक्त ऋण योजना 2022-23

Potential Linked Credit Plan 2022-23

सोलापूर ज़िला
SOLAPUR DISTRICT

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 राष्ट्रीय विकास बैंक

ध्येय

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

Vision

Development Bank of the Nation for fostering rural prosperity

Mission

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

प्रस्तावना

वर्ष 2022-23 के लिए संभाव्यता युक्त ऋण योजना प्रस्तुत करते हुए मुझे अपार प्रसन्नता हो रही है. यह दस्तावेज़ जिले में विभिन्न क्षेत्रों के लिए ऋण क्षमता का एक विस्तृत वैज्ञानिक मूल्यांकन प्रदान करता है. साथ ही ग्रामीण अर्थव्यवस्था के इन क्षेत्रों के अंतर्गत अधोसंरचनात्मक कमियों को भी दस्तावेज़ में इंगित किया गया है, जिन्हें राज्य सरकार द्वारा पूर्ण किया जा सकता है. यह दस्तावेज़ सभी हितधारकों द्वारा आवश्यक क्षेत्र-विशिष्ट हस्तक्षेपों पर भी प्रकाश डालता है.

यह दस्तावेज़ जिला स्तर पर सभी हितधारकों को सहभागी करते हुए एक परामर्श प्रक्रिया के माध्यम से तैयार किया गया है और इसमें केंद्र और राज्य सरकार द्वारा किये गये विभिन्न प्राथमिकता-प्राप्त क्षेत्रों, नीति परिवर्तनों और अर्थव्यवस्था में हुई प्रगति को समाविष्ट किया गया है.

मैं जिला कलेक्टर, भारतीय रिजर्व बैंक, राज्य स्तरीय बैंकर्स समिति, अग्रणी जिला प्रबंधक, राज्य सरकार के विभागों, बैंकों, कृषि विश्वविद्यालयों / संस्थानों, नागरिक समाज संगठनों और अन्य सभी हितधारकों का, उनके सुझाव, समर्थन और योगदान के लिए आभार व्यक्त करता हूं. इस प्रकाशन के लिए जिला विकास प्रबंधक, नाबार्ड भी विशेष सराहना के पात्र हैं.

मुझे विश्वास है कि यह संभाव्यता युक्त ऋण योजना बैंकों, योजनाकारों और नीति निर्माताओं के लिए एक संसाधन दस्तावेज़ के रूप में उपयोगी होगा और जिले में प्राथमिकता प्रदत्त क्षेत्रों में ऋण प्रवाह को बढ़ाएगा.

(गोवर्धन सिंह रावत)

मुख्य महाप्रबंधक

राष्ट्रिय कृषि और ग्रामीण विकास बैंक (नाबार्ड)

महाराष्ट्र क्षेत्रीय कार्यालय

पुणे

15 सितंबर 2021

FOREWORD

It gives me immense pleasure to present the Potential Linked Credit Plan for the year 2022-23. The document provides a detailed scientific assessment of credit potential for various sectors in the district and also indicates the infrastructural gaps which can be bridged by the State Government for harnessing the potential identified under these sectors of the rural economy. The document also highlights the sector-specific interventions required by all stakeholders.

This document has been prepared through a consultative process involving all the stakeholders at the district level and also incorporates various priority areas identified by central and state government, policy changes and other recent developments that have taken place in the economy.

I express my sincere thanks to the District Collector, Reserve Bank of India, State Level Bankers' Committee, Lead District Manager, State Government Departments, banks, Agriculture Universities/ Institutions, Civil society organisations and all other stake holders for their inputs, suggestions and support in bringing out this document. District Development Manager, NABARD also deserves special appreciation for bringing out this publication.

I am sure that the PLP will serve as a useful resource document for the banks, planners and policy makers and enhance the credit flow in the identified sectors in the district.

(Govardhan Singh Rawat)

Chief General Manager

National Bank for Agriculture and Rural Development (NABARD)

Maharashtra Regional Office

Pune

15 September 2021

INDEX

	Particulars	Page No
-	Foreword	1
-	Index	3
-	Executive Summary	4
-	Sector/ Sub-sector wise projections – 2022-23 (Appendix A & B)	7
-	District Profile along with the map of the district	9
-	Banking Profile	12
-	Methodology of preparation of Potential Linked Credit Plans (PLPs)	14
Chapter 1	Important Policies & Developments	17
Chapter 2	Credit Potential for Agriculture	
2.1	Farm Credit	
2.1.1	Crop production, Maintenance and Marketing	30
2.1.2	Water Resources	34
2.1.3	Farm Mechanization	38
2.1.4	Plantation and Horticulture including Sericulture	42
2.1.5	Forestry and Waste Land Development	45
2.1.6	Animal Husbandry - Dairy	50
2.1.7	Animal Husbandry - Poultry	54
2.1.8	Animal Husbandry - Sheep, Goat, Piggery, etc.	56
2.1.9	Fisheries	59
2.1.10	Farm Credit- Others – Bullocks , carts, two wheelers etc.	62
2.1.11	Integrated Farming Systems for sustainable income and climate resilience	63
2.2	Agriculture Infrastructure	
2.2.1	Construction of storage and Marketing Infrastructure	65
2.2.2	Land development, Soil conservation and Watershed development	67
2.2.3	Agri. Infrastructure- Others	70
2.3	Agriculture - Ancillary Activities	
2.3.1	Food and Agro Processing	71
2.3.2	Agri Ancillary Activities- Others	75
Chapter 3	Credit Potential for Micro, Small and Medium Enterprises (MSME)	77
Chapter 4	Potential for Export Credit, Education and Housing	82
Chapter 5	Credit Potential for Infrastructure	
5.1	Infrastructure – Public Investments	92
5.2	Social Infrastructure involving bank credit (2022-23)	96
5.3	Renewable Energy	97
Chapter 6	Informal Credit Delivery System	99
Annexures		
I	Activity-wise & Block-wise Physical and Financial Projections-2022-23	106
II	An Overview of Ground Level Credit Flow – Agency-wise and Sector-wise 2018-19, 2019-20, 2020-21 and target for 2021-22	120
III	Sub-Sector-wise and Agency-wise Credit Flow Under Agriculture and Allied Activities 2018-19, 2019-20, 2020-21 and target for 2021-22	121
IV	Indicative Unit Cost (for major activities of the district) as arrived at by NABARD for its internal use for 2021-22	122
V	Scale of Finance for major crops fixed by District Level Technical Committee (DLTC) for 2021-22	123
V (A)	Scale of Finance for working capital requirements under Animal Husbandry Sectors – Dairy, Goat/Sheep rearing & Poultry fixed by District Level Technical Committee (DLTC) for 2021-22	125
V (B)	Scale of Finance for working capital requirements under Fisheries Sector fixed by District Level Technical Committee (DLTC) for 2021-22	125
	List of NABARD District Development Managers (DDMs) of Maharashtra State	126

Executive Summary

The Theme of the PLP:

NABARD prepares Potential Linked Credit Plans (PLPs) to project credit potential under the priority sectors covering Primary, Secondary and Tertiary sectors. These projections are based on the parameters such as technical feasibility, availability of infrastructure, availability of exploitable resources, cropping pattern, agriculture practices and other developmental indices such as access to markets, etc. PLPs also take into account the factors such as the changes in the Government's priorities and policies, redefined MSME constituents, strengthening of rural infrastructure, market forces, cost escalation etc. The PLP for 2022-23 has been prepared in tune with the revised Priority Sector guidelines of Reserve Bank of India, with the chapters covering Agriculture, MSME, Export Credit, Education, Housing, Social Infrastructure, Renewable Energy and Other Priority sectors.

1. District characteristics:

- Solapur District is **located in western part** of Maharashtra State.
- The district has total **11 blocks** with total geographical area **14845 sq. km.**
- Total geographical area** and the **cultivable area** are **14.85 lakh ha** and **11.71 lakh ha**. The average rainfall of the district **488 mm per annum**.
- The **total population** of the district was **43.18 lakh** as per 2011 Census and population in **rural areas** was **29.19 lakh**.
- Small and marginal farmers** out of the total land holders are **4.50 lakh (67%)** and their **land holding** out of the total agricultural land is **34%**.
- The major crops grown during **Kharif** are **Bajra, Maize, Tur (Arhar), Moong, Urad and Soyabean** and **Jowar, Wheat, Maize** during **Rabi** season.
- The **cropping intensity** of the district is **126 %**.
- The **CD ratio** is **84.26%** as on 31.3.2021.
- Solapur district is identified for Textile industry, agricultural & horticultural produce. **Solapur Chaddar & Mangalwedha Jowar** are two **Geographical Indications (GI) products** in the district. Jowar is cultivated & produced on large scale. Horticultural crops of export quality such as **Pomogrenate, Banana & Grapes** are also produced on large scale. Solapur district is having higher area under cultivation of **Sugarcane** and it also **higher nos. of Sugar Mills** in the Maharashtra State. **Vegetables** such as Chilli, Tomato, Onion, Brinjal, Bittle Gourd, etc. are grows in good quantity. **Dairy activity** is also one of major economic activity in the district and Solapur is in **top five rank** for its **milk production**. **Beedi manufacturing** industries is also available in the district.

2. Sectoral trends in credit flow

- Total **GLC** of the district under priority sector during the last three financial years were **Rs. 5897 crore** during 2018-19, **Rs. 5092 crore** in 2019-20 and **Rs. 5738 crore** in 2020-21.
- The **total agricultural loans** issued during the last three financial years were **Rs. 3238 crore** during 2018-19, **Rs. 2631 crore** in 2019-20 and **Rs. 3750 crore** during 2020-21.
- The disbursements under **MSME** during the last three financial years were **Rs. 2215 crore** during 2018-19, **Rs. 1946 crore** in 2019-20 and **Rs. 1527 crore** during 2020-21 and that under **Other Priority Sectors (OPS)** during the last three financial years were **Rs. 444 crore, Rs. 514 crore** and **Rs. 461 crore** respectively for the same period.
- The **share of agriculture** in GLC (PSL) during 2020-21 was **65.35%**.
- GLC flow** under priority sector was increased by **13%** during last FY 2020-21 against last FY 2019-20. **Agriculture Sector** still have **major share (60 to 65%)** in priority sector lending in the district. **Crop loan** disbursements was **58%** of total priority sector lending during last FY due to change in cropping pattern increase in cultivated area during Kharif season during past 3-4 years.

3. Sector/Sub-sector wise PLP projections for 2022-23

- The potential for institutional credit under Priority Sector for **FY 2022-23** has been assessed as **Rs. 10,109 crore**.
- **Growth** over the previous year is **4%** due to increase in major sectors such as crop loans, total agriculture sector, MSME & Export credit. Agriculture Term loans are not picked up during past five years as compare to crop loan disbursements. Further, District has huge potential for MSME & Export sectors due to availability good numbers of industries in the district.
- Potential under **crop loan** and **total agriculture loan** for the year 2022-23 are **Rs. 4215 Crore** and **Rs. 7274 crore** respectively.
- Potential for three most prominent sub-sectors with highest projections are **Crop loan, Plantation & Horticulture** and **Animal Husbandry (Dairy, Polutry & SGP)**. The credit potential assessed under the above sub-sector are **Rs. 4215 Crore, Rs. 792 Crore** and **Rs. 688 crore** respectively. Crop loan disbursements account for more than 50% of total priority sector lending during previous years due to change in cropping pattern & increase in area under cultivation during Kharif season has witnessed. Fruits crops such as Pomegrante, Banana & Grapes of export quality are produced on large scale and area under their cultivation are also increasing in the district and these horticultural crops require capital investments. Animal Husbandry is one of the major economic activity in the district and the same has huge potential for capital investments.
- Credit potential for **Agriculture** to total Priority Sector loans and **MSME** to total Priority Sector loans are **72%** and **20%** respectively.
- Potential for **other priority sectors** such as **Export Credit, Education, Housing, Social Infrastructure, Renewable Energy** and **Other-OPS** out of total Priority Sector loans are **0.21%, 1.23%, 5.10%, 0.20%, 0.17%** and **0.66%** respectively. Potential for **total Other Priority Sectors (OPS)** is **7.57%** out of total priority sector potential.

4. Developmental initiatives:

In Solapur district, total **six (06) Farmers Producers Organizations (FPOs)** are being promoted. Activities of these FPOs are **Dairy, Fruits & vegetable trading & processing**. Out of these FPOs, 05 FPOs are having total women SHG members. All FPOs are registered as Farmers Producer Companies (FPCs) under Comapanies Act.

5. Thrust areas for 2022-23:

Thrust areas identified for Solapur district are **Timely-adequate and hassle-free crop loan disbursement**, due to increase in cultivated area under Kharif season, **Capital formation and productivity growth in agriculture & allied sectors** especially in Dairy sector, because of good network of dairy & demand of milk & milk products in the district and adjacent districts. This sector is playing a significant role in improving rural economy of the district by **providing gainful employment** to it. Also, increasing the abilities to face failures during droughts and flood situations. **Horticultural production** is also required **holistic development** due to its export potential & processing activities. **Export credit expansion** is also one of the thrust areas, which requires boost for activities such as Textile industries & agro products. Another thrust activity is skills & marketing due to good network of industries available in the district.

6. Major constraints and suggested action points:

Agricultrue Term Lending is not picking up well in the district. Concerted efforts are reuired to be made at ground levels by all the stakeholders such as government line departments of Agriculture, Animal husbandry, Water resource department, Agriculture Research Institutions working in the district, all the banks and other concerned stakeholders. Government deparatments & research institutes are required to **create proper awareness about Hi-Tech & improved agricultural & horticultural practices among farmers. Aggreagation of farmers**, especially **small & marginal farmers** into groups in the renoved form of **Farmers Producers Organisations**

(FPOs) for taking agricultural & horticultural activities on large scales. Banks are required to provide **timely & adequate credit requirements under agriculture sector.**

Suggested Action Points:

- Needs to encourage farmers to adopt double cropping system covering high value cash crops in irrigated area.
- Promotion of agro-processing units, rural godowns and cold storage may be ensured which can lead to quality and value addition leading to better farm gate price to the farmers.
- Financing through group activities viz, SHG/ JLGs and FPO model need to be developed.
- Need to encouraged and proper implementation of subsidy based schemes announced by Central / State Govt. Schemes from time to time.
- Focus to be given for popularizing DRIP irrigation in sugarcane crop which has the highest water requirements and causes salinity on account of flood irrigation / excessive irrigation which is normally practiced.

7. Way forward

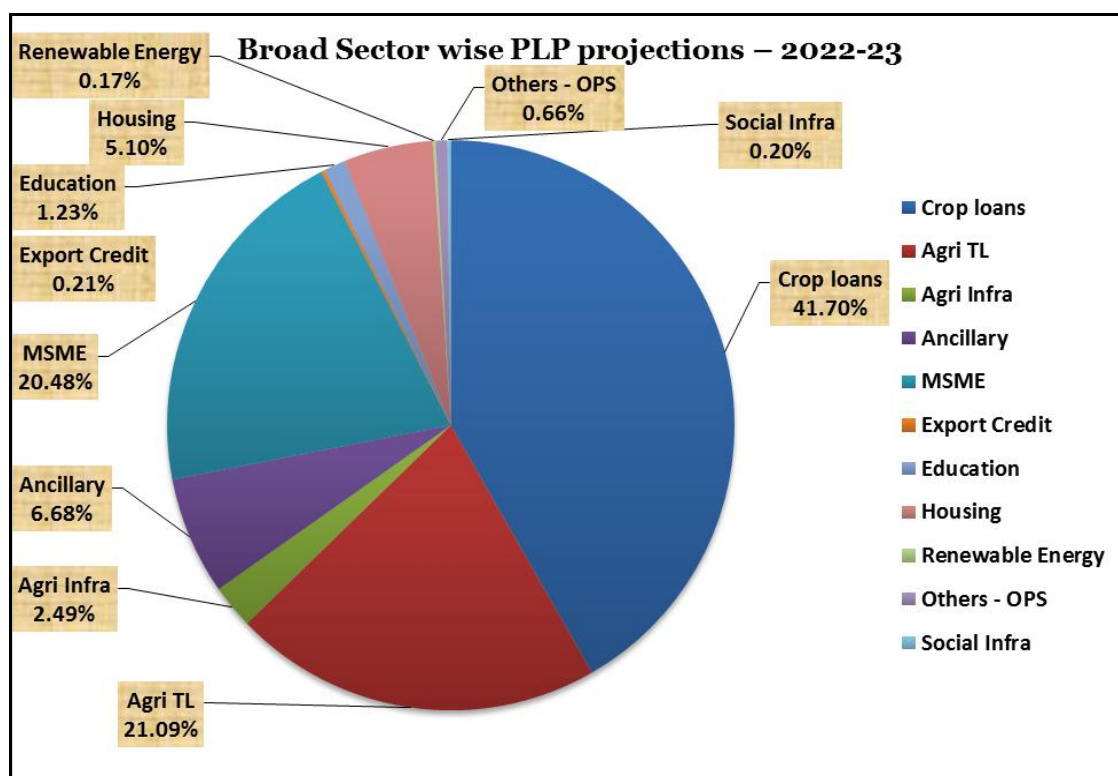
The district has **good potential for horticultural activities.** Adoption of proper package of sustainable agricultural practices, integrating farming systems and developing good infrastructure facilities would accelerate flow of credit to priority sectors. Infusion of latest technology, skills and 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 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 BLBC and DLCC meetings.

Appendix A

Broad Sector wise PLP projections – 2022-23

(Rs lakh)

Sr. No	Particulars	PLP Projections
A	Farm Credit	
i	Crop Production, Maintenance and Marketing	4,21,499.84
ii	Term Loan for agriculture and allied activities	21,3,188.00
	Sub Total	6,34,687.84
B	Agriculture Infrastructure	25,139.57
C	Ancillary activities	67,543.80
I	Credit Potential for Agriculture (A+B+C)	7,27,371.21
II	Micro, Small and Medium Enterprises	2,07,000.00
III	Export Credit	2,160.00
IV	Education	12,438.00
V	Housing	51,532.20
VI	Renewable Energy	1,716.11
VII	Others	6,671.10
VIII	Social Infrastructure involving bank credit	2,015.45
	Total - Other Priority Sectors (III to VIII)	76,532.86
	Total Priority Sector (I to VIII)	10,10,904.07



Appendix B

Summary of Sector / Sub-sector wise PLP projections – 2022-23

(Rs lakh)

Sr. No.	Particulars	PLP Projections
I	Credit Potential for Agriculture	
A	Farm Credit	
i	Crop Production, Maintenance and Marketing	4,21,499.84
ii	Water Resources	30,961.46
iii	Farm Mechanization	31,361.04
iv	Plantation and Horticulture (including sericulture)	79,249.20
v	Forestry and Waste Land Development	975.84
vi	Animal Husbandry – Dairy	44,202.65
vii	Animal Husbandry – Poultry	14,212.87
viii	Animal Husbandry – Sheep, Goat, Piggery, etc.	10,401.03
ix	Fisheries	340.71
x	Others – Bullock, Bullock cart, etc.	1,483.20
	Term loans for agriculture & allied activities (ii to x)	2,13,188.00
	Total - Farm credit (i to x)	6,34,687.84
B	Agriculture Infrastructure	
i	Construction of storage facilities (Warehouses, Market yards, Godowns, Silos, Cold storage units/ Cold storage chains)	7,914.24
ii	Land development, Soil conservation, Watershed Development	10,150.53
iii	Others (Tissue culture, Agri bio-technology, Seed production, Bio pesticides/ fertilizers, Vermi composting)	7,074.80
	Sub Total	25,139.57
C	Ancillary activities	
i	Food and Agro processing	58,039.80
ii	Others (Loans to Cooperative Societies of farmers for disposing of their produce, Agri Clinics/ Agri Business Centres, Loans to PACS/ FSS/ LAMPS, Loans to MFIs for on lending)	9,504.00
	Sub Total	67,543.80
I	Total Agriculture (A+B+C)	7,27,371.21
II	Micro, Small and Medium Enterprises	
i	MSME – Investment capital	54,900.00
ii	MSME – Working capital	1,52,100.00
	Total MSME	2,07,000.00
III	Export Credit	2,160.00
IV	Education	12,438.00
V	Housing	51,532.20
VI	Renewable Energy	1,716.11
VII	Others (Loans to SHGs/ JLGs, loans to distressed persons to prepay non-institutional lenders, PMJDY, loans to state sponsored organizations for SC/ ST)	6,671.10
VIII	Social Infrastructure involving bank credit	2,015.45
	Total - Other Priority Sectors (III to VIII)	76,532.86
	Total Priority Sector (I to VIII)	10,10,904.07

Map of Solapur District



District Profile

District Profile			
District -	Solapur	State -	Maharashtra
Division -	Pune		
1. PHYSICAL & ADMINISTRATIVE FEATURES		2. SOIL & CLIMATE	
Total Geographical Area (Sq.km)	14844.60	Agro-climatic Zone	Western Plateau and Hill Region
No. of Sub Divisions	3	Climate	Max. Temp. - 43 °C, Min. Temp. - 15.9 °C. Agro climatically entire district comes under Rain Shadow Area. Rainfall is uncertain and scanty. The monsoon period is from second fortnight of June to end of September bringing rains from south-west monsoon.
No. of Blocks	11	Soil Type	Broad categories - Black, Coarse Grey & Reddish. Eastern Zone : This comprises of Barshi, North Solapur, South Solapur and Akalkot Talukas. The soil is medium to deep black and of rich quality. Jawar, Bajra and Pulses are the main crops of this zone. Central or Transitional Zone : Mohol, Mangalwedha, eastern part of Pandharpur and Madha Taluka are covered by this zone. Like to moderate soil and uncertain rainfall marks this zone. Both Kharif and Rabi crops are grown in this part. Western Zone : Karmala, Sangola and Malshiras Talukas and western parts of Pandharpur comes under this zone. Shallow and poor type of soil, not retentive of moisture marks this part. Scanty and uncertain rainfall. Rabi crops mainly grown in Karmala, Pandharpur and Madha Talukas while Kharif crops like Bajra and Groundnut are grown in Sangola and parts of Malshiras talukas.
No. of Villages (Inhabited)	1150	4. RAINFALL & GROUND WATER	
No. of Panchayats	1028		
3. LAND UTILISATION [000Ha] - 2019-20			
Total Area Reported	1488		
Forest Land	42		
Area Not Available for Cultivation	18		
Permanent Pasture and Grazing Land	77		
Land under Miscellaneous Tree Crops	7		
Cultivable Wasteland	40		
Current Fallow	150		
Other Fallow	128		
Net Sown Area	929		
Total or Gross Cropped Area	1171		
Area Cultivated More than Once	243		
Cropping Intensity [GCA/NSA]	126%		
6. WORKERS PROFILE [in '000]		5. DISTRIBUTION OF LAND HOLDING (as per Agricultural Census 2015-16, Agri. Commissionerate, Pune)	
Cultivators	667910		
Of the above, Small/Marginal Farmers	214138		
Agricultural Labourers	287362		
Workers engaged in Household Industries	349628		
Workers engaged in Allied Agro-activities	636990		
Other workers	47913		
8. HOUSEHOLDS [in '000]		7. DEMOGRAPHIC PROFILE [in '000] (As per Census 2011)	
Total Households (No)	873		
Rural Households (No)	594		
BPL Households (No)	345		
10. VILLAGE-LEVEL INFRASTRUCTURE [Nos]			
Villages Electrified	1150		
Villages having Agriculture Power Supply	435		
Villages having Post Offices	533		
Villages having Banking Facilities	547		
Villages having Primary Schools	1028		
Villages having Primary Health Centres	429		
Villages having Potable Water Supply	829		
Villages connected with Paved Approach Roads	1139		
13. IRRIGATION COVERAGE [Ha]		9. HOUSEHOLD AMENITIES [Nos. in '000 Households]	
Total Area Available for Irrigation (NIA + Fallow)	807883		
Irrigation Potential Created	NA		
Net Irrigated Area (Total area irrigated at least once)	366261		
Area irrigated by Canals / Channels	31400		
Area irrigated by Wells	188500		
Area irrigated by Tanks	5000		
Area irrigated by Other Sources	26000		
Irrigation Potential Utilized (Gross Irrigated Area)	375457		
15. AGRO-PROCESSING UNITS		11. INFRASTRUCTURE RELATED TO HEALTH & SANITATION (Nos)	
Type of Processing Activity	No of units		
Food (Rice/Flour/Dal/Oil/Tea/Coffee)	45		
Sugarcane (Gur/Khandsari/Sugar)	40		
Fruit (Pulp/Juice/Fruit drink)	500		
Spices (Masala Powders/Pastes)	NA		
Dry-fruit (Cashew/Almond/Raisins)	157		
Cotton (Ginning/Spinning/Weaving)	19		
Milk (Chilling/Cooling/Processing)	96		
Meat (Chicken/Mutton/Pork/Dry fish)	2		
Animal feed (Cattle/Poultry/Fishmeal)	12		
17. ANIMAL POPULATION AS PER LIVESTOCK CENSUS 2019 [in '000]		12. INFRASTRUCTURE & SUPPORT SERVICES FOR AGRICULTURE	
Category of animal	Total		
Cattle - Cross bred	511987		
Cattle - Indigenous	233417		
Buffaloes	496454		
Sheep - Cross bred	NA		
Sheep - Indigenous	496454		
Goat	962504		
Pig - Cross bred	10457		
Pig - Indigenous	NA		
Horse/Donkey/Camel	NA		
Poultry - Cross bred	120		
Poultry - Indigenous	884		
19. MILK, FISH, EGG PRODUCTION & THEIR PER CAPITA AVAILABILITY		14. INFRASTRUCTURE FOR STORAGE, TRANSPORT & MARKETING	
Fish	Production [MT]		
Egg	Production [Lakh Nos]		
Milk	Production [000 MT]		
Meat	Production [MT]		
Sources :		16. AREA, PRODUCTION & YIELD OF MAJOR CROPS	
Census 2011, Department of Agriculture/ Directorate of Economics and Statistics, Dept of Agr/water resources, BPL survey 2002, AH Census 2019, INTEGRATED SAMPLE SURVEY SCHEME Report On Estimation of Milk, Egg, Wool, Meat Production and Livestock & Poultry Keeping Practices in Maharashtra State for the Year 2017-18, District Social & Economic Survey , Solapur 2014			

20. Predominant economic activities:

The geographical area of the district is 14,895 sq. km and is divided into 11 tehsils/blocks. The population of the district as per 2011 census was 43.18 lakh of which, the share of rural population was at 68%. Agriculture continues to be the main occupation of the district as more than 68% of population depends on agriculture and allied activities. Out of the total operational holdings, 67% are Small & Marginal farmers, occupying 34% of operational area.

The Gross State Domestic Product (nominal) at current prices for 2019-20 was Rs. 28,18,555 crore and the same is estimated for 2020-21 at Rs. 26,61,629 crore. The per capita state income for the year 2019-20 was Rs. 2,02,130 crore and the same is estimated for the year 2020-21 at Rs. 1,88,784. The Gross District Value Added (GDVA) at current prices for the year 2019-20 for the district is Rs. 83,072 crore, whereas the per capita GDVA at current prices for the year 2019-20 for the district is Rs. 1,78,227/-.

(Source: Economic survey of Maharashtra 2020-21).

The predominant economic activity of the Solapur district is Agriculture. About 34 % population of the district are engaged in agriculture & allied activities. Gross cropped area and net sown area of the district are 11.71 lakh ha and 9.29 lakh ha respectively with a cropping intensity of 126%. Major crops in terms of cultivated area are Jowar, Maize, Bajra, Soyabean, Tur (Arhar), Moong, Urad, Wheat and Sugarcane, etc. The major horticultural crops like Pomegranate, Banana, and Grapes are also cultivated on large area of land due to suitability of climate and these fruits are exported in large scale. Large amount of vegetables such as Chilli, Onion, Tomato, etc. are grown in the district. Sugarcane is cultivated on large area i.e. about 1.71 lakh ha. The Jowar of Mangalwedha block has GI tagged product.

The other economic activities of the district are Dairy/Poultry, Textile industries with adequate infrastructure available in the form of connectivity to major cities like Hyderabad, Pune and Mumbai market support. The district has total nine MIDC areas. The major industrial production in the district is textile, garments etc. Solapur is the home of powerlooms weaving industries. There are around 2500 powerlooms industries. The main productions are Chadders, Towels and Napkins, which are also exported to various countries. Solapur Chaddar is also another GI tagged product of the district. With 115 no. of units, Bidi making is another important activity in the district.

21. Factors/infrastructure contributing or inhibiting the growth in Ground Level Credit (GLC):

GLC under total agriculture sector was about 65% of total GLC flow under priority sectors. The crop loan disbursements has major share of about 58% in overall GLC flow. MSME sector has also contributed in increase in GLC flow and the same has share of about 27%.

22. Critical interventions required in the district under major sectors for harnessing the potential estimated under PLP 2022-23:

- Besides crop loans, there is huge potential for capital investments under **Plantation & Horticulture** crops such as Pomegranate, Banana and Grapes in the district. Cultivated area under these major fruit crops have been increased in recent years. These fruits are having large potential international & domestic export.
- There is potential for investments in **Food & Agro Processing** infrastructures, but also for **export credit**.
- The Irrigation Intensity of the district is about 39% and there are gaps in critical irrigation infrastructures. There is huge potential for capital investments under various **Minor Irrigation** sectors such as Drip & Sprinkler micro irrigation systems for horticultural crops & Sugarcane cultivation and Lift irrigation systems (small & big), etc.

Banking Profile

Banking Profile										
District - Solapur		State - Maharashtra				Lead Bank - Bank of India				
1. NETWORK & OUTREACH (position as on 31.03.2021)										
Agency	No. of Banks/Soc.	No. of Branches				No. of non-formal agencies assoiated			Per Branch Outreach	
		Total	Rural	Semi-urban	Urban & Metro	mFIs/mFOs	SHGs/JLGs	BCs/BFs	Villages	Households
Commercial Banks (PSBs + Pvt.)	25	324	117	109	98	NA	1492	471	1243	NA
Regional Rural Bank	1	35	21	11	3	NA	2000	92	181	NA
District Central Coop. Bank	1	208	23	142	43	NA	800	0	1260	NA
Primary Agr. Coop. Society	1265	1265	1265	Nil	Nil	NA	NA	NA	NA	NA
Other Banks (SFB)	5	34	9	8	17	NA	NA	NA	NA	NA
All Agencies	1297	1866	1435	270	161	NA	4292	563	NA	NA
2. DEPOSITS OUTSTANDING										
Agency	No. of accounts					Amount of Deposit [Rs lakh]				
	31-Mar-19	31-Mar-20	31-Mar-21	Growth(%)	Share(%)	31-Mar-19	31-Mar-20	31-Mar-21	Growth(%)	Share(%)
Commercial Banks	NA	NA	NA	NA	NA	1280142	2013769	2284237	13.43	87.88
Regional Rural Bank	364577	391667	422105	7.77	#VALUE!	389	44118	47351	7.33	1.82
Cooperative Banks	1649691	1803935	2214360	22.75	#VALUE!	247441	243293	229203	-5.79	8.82
Others (SFBs)	NA	NA	NA	NA	NA	0	39112	38338	-1.98	1.48
All Agencies	NA	NA	NA	#VALUE!	#VALUE!	1527972	2340292	2599129	11.06	100.00
3. LOANS & ADVANCES OUTSTANDING										
Agency	No. of accounts					Amount of advances [Rs. lakh]				
	31-Mar-19	31-Mar-20	31-Mar-21	Growth(%)	Share(%)	31-Mar-19	31-Mar-20	31-Mar-21	Growth(%)	Share(%)
Commercial Banks	NA	NA	NA	NA	NA	987312	1675724	1900597	13.42	86.79
Regional Rural Bank	26197	24862	30517	22.75	#VALUE!	437	41983	47896	14.08	2.19
Cooperative Banks	15980	26629	32054	20.37	#VALUE!	225616	227765	184503	-18.99	8.42
Others (SFBs)	NA	NA	NA	NA	NA	0	47559	56961	19.77	2.60
All Agencies	NA	NA	NA	#VALUE!	#VALUE!	1213365	1993031	2189957	9.88	100.00
4. CD-RATIO					5. PERFORMANCE UNDER FINANCIAL INCLUSION (No. of A/cs under PMJDY, PMJJBY, PMSBY & APY)					
Agency	CD Ratio			Agency	During FY 2019-20		Cumulative			
	31-Mar-19	31-Mar-20	31-Mar-21		Deposit	Credit	Deposit	Credit		
Commercial Banks (excluding SFBs)	77.13%	83.21%	83.20%	Commercial Banks	582961	128.70	1325251	373.58		
Regional Rural Bank	112.34%	95.16%	101.15%	Regional Rural Bank	194320	42.90	NA	NA		
Cooperative Banks	91.18%	93.62%	80.50%	Cooperative Banks	NA	NA	NA	NA		
Others (SFBs)	0.00%	121.60%	148.58%	Others	NA	NA	NA	NA		
All Agencies	79.41%	85.16%	84.26%	All Agencies	777281	171.60	1325251	373.58		
6. PERFORMANCE TO FULFILL NATIONAL GOALS (during FY 2020-21)										
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 (including SFBs)	517039	90.11	320860	85.57	182792	95.52	NA	NA	NA	NA
Regional Rural Bank	16576	2.89	13912	3.71	8569	4.48	NA	NA	NA	NA
Cooperative Banks	40194	7.00	40194	10.72	Nil	Nil	NA	NA	NA	NA
Others	Nil	Nil	Nil	Nil	Nil	Nil	NA	NA	NA	NA
All Agencies	573809	100.00	374966	100.00	191361	100.00	NA	NA	NA	NA
7. AGENCY-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS (Priority Sector)										
Agency	2018-19			2019-20			2020-21			Average Ach[%] in last 3 years
	Target [Rs. lakh]	Ach'ment [Rs. lakh]	Ach'ment [%]	Target [Rs. lakh]	Ach'ment [Rs. lakh]	Ach'ment [%]	Target [Rs. lakh]	Ach'ment [Rs. lakh]	Ach'ment [%]	
Commercial Banks (including SFBs)	770903	NA	#VALUE!	800967	466323	58%	863043	517039	60%	#VALUE!
Regional Rural Bank	36219	NA	#VALUE!	34610	11377	33%	28266	16576	59%	#VALUE!
Cooperative Banks	80632	NA	#VALUE!	86839	31526	36%	43528	40194	92%	#VALUE!
Others	Nil	NA	#VALUE!	Nil	Nil	Nil	Nil	Nil	Nil	Nil
All Agencies	887754	589665	66%	922416	509226	55%	934837	573809	61%	61%
8. SECTOR-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS										
Broad Sector	2018-19			2019-20			2020-21			Average Ach[%] in last 3 years
	Target [Rs. lakh]	Ach'ment [Rs. lakh]	Ach'ment [%]	Target [Rs. lakh]	Ach'ment [Rs. lakh]	Ach'ment [%]	Target [Rs. lakh]	Ach'ment [Rs. lakh]	Ach'ment [%]	
Crop Loan	392654	254384	65%	403250	217377	54%	405101	335491	83%	67%
Term Loan (Agr)	253521	69380	27%	259973	45804	18%	269557	39475	15%	20%
Total Agri. Credit	646175	323764	50%	663223	263141	40%	674658	374966	56%	48%
Non-Farm Sector	176405	221457	126%	191315	194638	102%	191628	152746	80%	102%
Other Priority Sector	65174	44444	68%	67878	51447	76%	68551	46097	67%	70%
Total Priority Sector	887754	589665	66%	922416	509226	55%	934837	573809	61%	61%
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 (including SFBs)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Regional Rural Bank										
Cooperative Banks	175830	53709	31%	186360	84028	45%	185916	76343	41%	39%
Others	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All Agencies	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Source : Maharashtra State Level Bankers'Committee (SLBC) and Lead District Manager (LDM), Solapur district.										

Source : Maharashtra State Level Bankers' Committee (SLBC) and Lead District Manager (LDM), Solapur district.

The district has banking network with 324 branches of Commercial Banks, 35 branches of Vidarbha Konkan Gramin Bank (VKGB), 208 branches of Solapur DCCB and 1265 Primary Agriculture Credit Societies (PACS). Population served per branch is 2273 person. Per branch business is Rs. 78.64 crore in the district.

(Source: SLBC website)

The bank network of brick and motor branches is provided in most of the villages having population of 2000 & above. In the villages, which are remotely located and where it is not feasible for brick and motor branches, the same are covered by BC and other modes like banking outlets. Almost all the villages having population of 2000 & more are covered by the BC. Thus, the branch network is found to be adequate. There is good network of Urban Cooperative Banks in the district which are catering to the needs of the people living in urban & Semi-urban areas. However, concentration of branches (more than 40%) is in semi-urban and urban areas excluding PACS. Bank of India is functioning as lead bank in the district.

The ACP targets in r/o agriculture credit during the last three years are given below:

(Rs lakh)

Year	Targets			Achievements			% ach of total agriculture
	Crop Loan	Term loan	Total Agriculture (Crop loan + Term loan)	Crop loan	Term Loan	Total Agriculture (Crop loan + Term loan)	
2018-19	392654	253521	646175	254384	69380	323764	50.10%
2019-20	403250	259973	663223	217337	45804	263141	39.68%
2020-21	405101	269557	674658	335491	39475	374966	55.58%

(Source: SLBC website)

It may be observed from the above table that the crop loan disbursements were increased during last three FYs due to change in cropping patterns & increase in cultivated area under Kharif season, which has direct impact on increase in GLC flow towards total agriculture sector. Agriculture term loans are not increased as compared to the crop loans. Total agriculture sector GLC flow was more than 50% of Total Priority Sector lending in the district.

CD Ratio:

The **total deposits** of the banks stood at **Rs 25,99,129 lakhs** whereas, the **total advances** stood at **Rs 21,89,957 lakh**. Thus, the **CD Ratio** of the district was **84.26%** as on 31st March 2021. During the last two years as on 31st March 2020 and 31st March 2019, the CD ratio was 79.41% and 85.16% respectively. The agency wise CD ratio as on 31st March 2021 during last FY 2020-21 are Commercial Banks – 83.20%, RRB – 101.15%, Solapur DCCB – 80.50% and other banks (Small finance banks – SFBs) – 148.58%.

(Source: SLBC website)

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.

Sr. No.	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; • 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 Mechanization	• 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.

Objectives of PLP:

The objectives of PLP are

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

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-viz 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 from the line Depts.

Chapter 1

Important Policies and Developments

1.1 Policy Initiatives - Government of India

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

- ❖ Health and Wellbeing
- ❖ Physical & Financial Capital and Infrastructure
- ❖ Inclusive Development for Aspirational India
- ❖ Reinvigorating Human Capital
- ❖ Innovation and R&D
- ❖ Minimum Government and Maximum Governance

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

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

Proposals relating to Fisheries sector:

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

Tax Proposals on Agriculture Products:

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

Achievements and Milestones during the COVID-19 pandemic

- **Pradhan Mantri Garib Kalyan Yojana (PMGKY):**
 - Valued at **Rs.2.76 lakh crore**
 - Free food grain to **80 crore people**
 - Free cooking gas for **8 crore families**
 - Direct cash to over **40 crore farmers, women, elderly, the poor and the needy**

- **Aatma Nirbhar Bharat package (ANB 1.0):**
 - Estimated at **Rs.23 lakh crore** – more than **10% of GDP**
 - PMGKY, three ANB packages (ANB 1.0, 2.0 and 3.0), and announcements made later were like **5 mini-budgets** in themselves
 - **Rs.27.1 lakh crore** worth of financial impact of all three ANB packages including RBI's measures – amounting to **more than 13% of GDP**
- **Structural reforms:**
 - One Nation One Ration Card
 - Agriculture and Labour Reforms
 - Redefinition of MSMEs
 - Commercialisation of the Mineral Sector
 - Privatisation of Public Sector Undertakings
 - Production Linked Incentive (PLI) Scheme
 - 2 Made-in-India vaccines – medically safeguarding citizens of India and those of 100 plus countries against COVID-19 & 2 or more new vaccines expected soon

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

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

1. NABARD extended additional re-finance support of Rs.30,000 crore, in addition to Rs.90,000 already being provided, for meeting crop loan requirement of Rural Cooperative Banks and RRBs.
2. Rs.2 lakh crore credit boost to 2.5 crore farmers under Kisan Credit Card Scheme.
3. Rs.1 lakh crore under Agri Infrastructure Fund for creation of farm-gate infrastructure for farmers.
4. Rs.10,000 crore towards the scheme for Formalisation of Micro Food Enterprises (MFE) to be implemented over a period of five years from 2020-21 to 2024-25.
5. Rs.20,000 crore for fishermen through Pradhan Mantri Matsya Sampada Yojana (PMMSY). Rs.11,000 crore for activities in Marine, Inland fisheries and Aquaculture along with Rs.9000 crore for Infrastructure i.e. Fishing Harbours, Cold chain, Markets, etc.
6. To support private investment in Dairy Processing, value addition and cattle feed infrastructure, an Animal Husbandry Infrastructure Development Fund (AHIDF) of Rs.15,000 crore was set up.
7. 10,00,000 ha to be covered under Herbal cultivation in next two years with outlay of Rs.4,000 crore to lead to Rs.5,000 crore income generation for farmers.
8. "Operation Greens" run by Ministry of Food Processing Industries (MOFPI) will be extended from Tomatoes, Onion and Potatoes (TOP) to ALL fruit and vegetables. 50% subsidy on transportation from surplus to deficient markets and 50% subsidy on storage, including cold storages, to be provided. This will lead to better price realisation to farmers, reduced wastages and affordability of products for consumers.
9. Rs.65,000 crore to be provided to ensure increased supply of fertilizers to farmers to enable timely availability of fertilisers in the upcoming crop season.
10. The GoI, launched the Pradhan Mantri Garib Kalyan Yojana (PMGKY) for ensuring food security through public distribution system, direct benefit transfers to widows, pensioners and women.
11. Besides, the cash support, for better price realisation on farmers' produce during the ongoing pandemic, GoI has substantially increased the MSP vis-à-vis the cost of cultivation and enhanced the number of commodities to be procured through the state agencies.

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

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

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

1.1.4 SWAMITVA (Survey of Villages and Mapping with Improved Technology in Village Areas)

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

Objectives

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

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

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

1.2 Policy Initiatives – Reserve Bank of India

The following major initiatives have been taken by the RBI:

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

accounts had become due or shall become due between March 1, 2020 and May 31, 2020, vide circular dated 21 April 2020.

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

1.3 Policy Initiatives - NABARD

1.3.1 Long-Term Refinance

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

1.3.2 Short-Term Refinance

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

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

Initiatives taken during the year (2020-21)

- Disbursement of Rs.25500 crore was made under Special Liquidity Facility (SLF-1) to Cooperative Banks, RRBs and NBFCs (Rs.16800 crore to Cooperative Banks, Rs.6,700 crore to RRBs and Rs.2,000 crore to NBFCs) for unhindered flow of credit to banks and farmers in the wake of the lockdown due to COVID-19 pandemic.
- Additional SLF of Rs.1,567 crore was provided to NBFCs/ NBFC-MFIs with asset size less than Rs.500 crore.

- SLF to SCARDBs of Rs.783 crore was provided as front ended liquidity support from NABARD's own funds.
- Allocation of 25% of STRRB and LTRCF was made to aspirational and credit starved districts.
- Preliminary eligibility criteria for RRBs for availing refinance was revised and set on the basis of internal risk rating by NABARD.

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

- i. PACSs as Multi Service Centers (MSCs)** - NABARD introduced Special refinance scheme to saturate all the potential PACS for conversion as Multi Service Centres, over a period of three years commencing from the year 2020-21. The scheme intends to develop all the potential PACS as Multi Service Centres (MSCs) over a period of three years commencing from the year 2020-2021 by providing concessional refinance to StCBs at 3% to support PACS to create quality infrastructure (capital assets) and increase their business portfolio in tune with needs of members. Under this line of credit, NABARD has envisaged transformation of 35,000 PACS in three years commencing with the transformation of 5,000 PACS in FY21. During 2020-21, 3055 PACS were given in-principle sanction by NABARD with estimated Project cost of Rs.1,760.82 crore and estimated loan of Rs.1,568 crore.
- ii. Scheme for beneficiaries of Watershed and Wadi project areas** - The objectives of the scheme are to promote sustainable economic activities, livelihood and employment opportunities for the beneficiaries in NABARD supported watershed and wadi project areas by encouraging banks to lend at concessional rate to these beneficiaries to address the issue of rural migration and to give boost to the agriculture and rural sector in the post COVID era. Refinance is available to all the eligible banks/FIs at 3% for maximum period of 5 years. The ultimate lending rate to be charged by banks/FIs under the scheme is revised as 06 months MCLR+1% or EBLR+2.5%, whichever is lower. NABARD has earmarked refinance amount of Rs.5,000 crore during 2020-21 to 2022-23. During FY 2020-21, refinance of Rs.126.80 crore has been disbursed under this product.
- iii. Scheme for promoting Micro Food Processing Activities** - The objective of the scheme is to encourage banks to lend micro-food processing activities and create sustainable livelihood and employment opportunities for rural youth as well as reverse migrants due to COVID-19 pandemic in the rural areas. The scheme also envisages modernization and enhancing the competitiveness of the existing individual micro enterprises and ensure their transition to formal sector in rural areas. The refinance scheme will give fillip to the recently launched "PM Scheme for Formalisation of Micro Food Processing Enterprises (PM FME)" under Aatmanirbhar Bharat Abhiyan by MoFPI, GoI. Concessional refinance at 4% is available to eligible financial institutions viz., commercial banks, SFBs, StCBs, RRBs and NABARD Subsidiaries.
- iv. Special refinance scheme on Water, Sanitation and Hygiene (WASH)** - A Model Refinance Scheme on WASH activities has been prepared keeping in view the need to protect human health during infectious disease outbreaks, especially in the times of on-going COVID-19 pandemic. WASH has been conceptualized by NABARD to enable banks to provide credit to entrepreneurs for building social infrastructure relating to drinking water facilities, sanitation facilities including construction/ refurbishment of household toilets and health care facilities.
- v. Extension of interest subvention benefits for extended period from March 2020 to 31 August 2020 and from March 2021 to June 2021**
- vi. COVID-19 deferment of loan instalments for client borrowers of NABARD.**

vii.KCC Saturation Drive to cover PM Kisan Samman Scheme beneficiaries who do not possess Kisan Credit Cards - Department of Agriculture, Cooperation and Farmers' Welfare, Ministry of Agriculture and Farmers' Welfare, Govt. of India, has launched a campaign from 08.02.2020 to cover all PM Kisan Samman Scheme beneficiaries under Kisan Credit Cards. Adequate publicity and awareness campaigns were conducted to ensure maximum coverage. Phase-II of KCC Saturation- As a part of the Atmanirbhar Bharat Package, the Government has announced to cover 2.5 crore farmers under the Kisan Credit Card (KCC) scheme with a credit boost of Rs.2 lakh crore through a special saturation drive. Department of Animal Husbandry and Dairying, Govt. of India also decided to simultaneously launch a special drive to provide KCC to 1.5 crore dairy farmers belonging to milk unions and milk producing companies and 1 crore fish farmers. As a result of concerted and sustained efforts by Cooperative Banks and RRBs in this direction of providing access to concessional credit to the farmers, the progress during the year is as under:

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

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

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

1.3.4 Rural Infrastructure Development Fund (RIDF)

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

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

8. Important Funds:

A. Micro Irrigation Fund (MIF)

- MIF with a corpus of Rs.5000 crore was operationalized in NABARD in 2019-20 with the Ministry of Agriculture and Farmers Welfare (MoA&FW), GoI being the Nodal

Ministry. The fund was fully utilised and the GoI announced additional allocation of Rs.5,000 crore in the Union Budget for 2021-22.

- MIF facilitated State Govts' efforts in mobilizing additional resources and incentivizing its adoption beyond provisions of Pradhan Mantri Krishi Sinchayee Yojana - Per Drop More Crop.
- During 2020-21, loan amount of Rs.1128.60 crore was sanctioned and Rs.1827.47 crore was released. As on 31 March 2021, the cumulative loan sanctioned and released under MIF was Rs. 3970.17 crore and Rs.1827.47 crore, respectively.

B. Long Term Irrigation Fund (LTIF)

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

C. Pradhan Mantri Aawas Yojna - Grameen (PMAY-G)

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

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

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

E. Rural Infrastructure Assistance to State Governments (RIAS)

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

1.3.5 Initiatives on micro Finance

- **Revision of grant support to JLGPIs:** To incentivise promotion of JLGs, the grant assistance to JLGPIs was enhanced from Rs.2,000/- to Rs.4,000/- per JLG.
- **MEDP/LEDP:** To strengthen NABARD's efforts at skilling SHG members, the grant assistance was enhanced for MEDPs to Rs. 1.00 lakh and for LEDPs to Rs. 8.80 lakh (Farm Sector) and to Rs. 7.15 lakh (Off Farm Sector).
- For 2020-21, the number of MEDPs has tripled and LEDPs doubled from previous year to augment supply for skills required for rural employment.
- **NABFINS as JLGPI:** NABFINS was sanctioned a pilot project as a JLGPI in five States of Assam, Chhattisgarh, Madhya Pradesh, Maharashtra and Jharkhand for a period of three years.

- **MY PAD MY RIGHT:** NABFOUNDATION, through LEDP channel, was sanctioned the Project 'My Pad My Right' for Rs.1.99 crore for sanitary pad making machine for producing/marketing the pads to provide livelihood opportunities to SHGs and improve menstrual hygiene of rural women. During 2020-21, an amount of Rs.1.59 crore has been utilized and machines have been installed in 33 districts.
- **EShakti:** As on 31 March 2021, the project was being implemented in 281 districts. The data pertaining to 12.33 lakh SHGs (140.91 lakh members in 1.67 lakh villages was on-boarded to EShakti portal). From 2021-22, the project will be implemented in 130 districts of 16 States/UTs for a focused approach to reduce the credit gap. EShakti portal was used for sending 40 lakh health advisory SMS to SHG members and during the pandemic, the SHGs were also engaged for making face masks, hand sanitizers, PPE kits, etc. for earning additional income.

1.3.6 Financial Inclusion

Availability of financial support for Standard Schemes under FIF: Financial support for the following activities was available from NABARD:-

Financial Literacy:

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

Banking Technology:

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

Regulatory requirements:

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

Connectivity and Power Infrastructure:

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

New initiatives taken during the year 2020-21:

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

1.3.7 Farm Sector Policy – Important Initiatives

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

- i. 101 new watershed projects were sanctioned, covering an area of 1 lakh ha and an amount of Rs.90.42 crore was disbursed.
- ii. A separate web portal and mobile 'app' was developed for uploading data on watershed projects.
- iii. 103 KfW Soil projects viz. SEWOH II & III (One World, No Hunger) were under implementation in 5 States.
- iv. An in-house Remote Sensing Cell was established to strengthen the monitoring of watershed projects at NABARD, HO and 39 on-going WDF projects were hosted on the NABARD Bhuvan portal.
- v. Under Tribal Development Programme, 51 projects were sanctioned. Out of the financial target of Rs.108.00 crore, an amount of Rs.93.08 crore was disbursed.
- vi. 04 agri-allied (non-wadi based) TDF projects were sanctioned in Chhattisgarh (apiculture), Tamil Nadu (animal husbandry), Telangana (micro-enterprise development) and West Bengal (pig and goat rearing) under Tribal Development Fund.
- vii. The exercise of GIS mapping of wadi projects was taken up with the support of GIZ.

II. FPO Promotion

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

III. FSPF – Innovations & Technology Transfer

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

IV. Fostering Partnership

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

V. Climate Action

- i. Under climate change initiatives, NABARD has released an amount of Rs.135.07 crore under the three funding mechanisms viz. Adaptation Fund (AF), Green Climate Fund (GCF) and National Adaptation Fund for Climate Change (NAFCC).

- ii. Under Climate Change Fund (CCF), an amount of Rs.0.97 crore was disbursed, for activities like co-sponsorship towards World Sustainable Development Summit 2021, installation of Customized Automated Weather Stations in Nagaland, etc.
- iii. Developed a Web Portal and Mobile App, for digitization of all data/information pertaining to physical & financial progress, monitoring observations along with photos of pre & post development scenarios in Climate Change adaptation /mitigation projects.

VI. COVID-19 Initiatives

- i. Status notes on major agri-allied sectors were prepared viz. Horticulture, Fisheries, Animal Husbandry and Water Resources.
- ii. Out of box solutions were provided by FPOs promoted by NABARD to restore disrupted supply chain using digital technologies, adoption of farm to home delivery mechanism, ensuring timely supply of critical inputs to farmer members, extending helping hand to migrant labour and sanitary workers, etc.

1.3.8 Off Farm Sector Initiatives

1. Initiatives during COVID-19

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

1.3.9 Agri- Market Infrastructure Fund (AMIF)

- A dedicated Agri Market Infrastructure Fund (AMIF) with a corpus of Rs.2,000 crore was established with NABARD to provide low cost funds to the State Governments for:
 - Upgradation of Rural Haats to Gramin Agriculture Markets (GrAMs)

- Creation of electronic display mechanism and linking of GrAMs with Agriculture Produce Market Committees (APMC); and
- Upgradation of 585 e-NAM enabled APMCs.
- MoA & FW GoI has issued the scheme guidelines to the State Governments

1.4 Policy Initiatives – State Government

Following important announcements have been made in the State Budget 2021-22 for agricultural and rural welfare:

- Zero percent interest on crop loans upto a limit of Rs. 3 lakhs for prompt repayment.
- Provision of Rs. 2,000 crore for strengthening of Agricultural Produce Market Committee (APMC).
- Electrical connection to agriculture pumps through conventional or solar power connection (MSEDCL will be given a share capital of Rs. 1,500 crore every year).
- Under 'Vikel Te Pikel' initiative, Rs. 2,100 crore has been earmarked for the implementation of Hon'ble Balasaheb Thackeray Agribusiness and Rural Transformation Project for the creation of markets and value chain projects.
- A provision of Rs.1000 crore has been made under the Maharashtra Agro Network Business Project (Magnet) to be implemented in the next 6 years to raise the income of the farmers.
- A state-of-the-art orange processing project at Varud Morshi, Amravati and Citrus Estate at Paithan, Aurangabad to enhance the quality and productivity of citrus crop in Marathwada and adjoining areas.
- About 500 new Punyashlok Ahilya Devi Holkar vegetable nurseries (so as to set up at least one new nursery in each taluka)
- Under the Chief Minister Agriculture Research Fund a provision of Rs. 600 crore for 3 years (Rs. 200 crore every year) for 4 agricultural universities.
- Sharad Pawar Gram Samrudhi Yojana for providing collective and individual infrastructure in rural areas (such as permanent cowsheds, goat rearing or poultry sheds and composting).
- A state-of-the-art biosafety laboratory at Pune for diagnosis of avian influenza (bird flu).
- Egg production center and other ancillary facilities at Chikhalthana, Aurangabad for promotion of sericulture.
- Undertaking 26 projects under Pradhan Mantri Krishi Sinchan Yojana
- 91 projects undertaken under Baliraja Jal Sanjeevani Yojana. (Out of these, 19 projects have been completed and 1.02 lakh hectares of irrigation capacity has been created. Other irrigation projects which are at the stage of completion in the Water Resources Department will be completed).
- A provision of Rs.1,000 crore for the Gosikhurd National Project, to be completed by the end of December 2023.
- Rehabilitation and improvement of 12 Dams under the World Bank assisted project on "Rehabilitation and Improvement of Dams", at a cost of Rs. 624 crores.
- Implementation of Lakdi-Nimbodi lift irrigation scheme.
- Repairs to existing water sources with irrigation potential up to 600 Hectares under Chief Minister Water Conservation Scheme.
- Financial Development Corporation under the PWD to raise funds for timely improvement and regular maintenance of 3,03,842 km of National/State Highways & other roads.
- Works of 10,000 km rural roads under the Rural Road Development Plan.
- Shivrajya Sundar Gram Abhiyan, to improve the rural solid-waste and sewerage management, cleanliness and sanitation works, tree plantations, environment conservation, child health care programme and improving the overall living conditions of the rural senior citizens, women and children.
- Under Chief Minister's Employment Generation Programme, investment of Rs.1,500 crores in 1 lac industry units to be established in next 5 years to generate direct and indirect employment of 8 to 10 lacs (30% women and 20% SC and ST beneficiaries)
- Honey production centre by MS-KVIB and Gandhi Smruti Nilay Kendra.

- 'One District – One Product' programme, for 2021-22 an outlay of Rs. 321 crores for scheme expenditure and Rs. 3,435 crores for Industry Promotion Grant.
- Non-conventional energy projects with a capacity to generate 25000 Megawatt to be undertaken till 2025, (of which the projects with a capacity of 9305 MW are operational and the projects of 2000 MW are in progress).
- International Funds for Agricultural Development (IFAD) funded "Nav-Tejaswini Maharashtra Gramin Mahila Udyam Vikas (Nav Tejaswini/ Tejaswini Part-2)" for six years with project cost of Rs. 522.98 crores for improving livelihood opportunities and value addition of businesses of the self-help group members.
- For Women and Child Empowerment Scheme, 3% funds from the District Annual Plan will be reserved and around Rs. 300 crores will be available every year.
- In association with NABARD, 280 new godowns are being constructed for storage of agriculture produce like wheat, rice, tur-dal & corn.
- Construction of jetty for tourism at Kashid, Taluka -Murud, Raigad and Cruise Terminal at Bhagwati Port, Ratnagiri.
- Allocation of Rs. 101 crores for Preservation and Conservation of eight ancient temples.
- Integrated colony for the Katkari tribe in Jambhulpada, Tq. Sudhagadh, Raigad, Kolam and Madia Gond primitive tribes with provision of houses, education, health facilities and skill development for employment opportunities for the tribal beneficiaries.
- For developing tourism, fisheries and micro industries in Ratnagiri and Sindhudurg, an outlay of Rs. 100 crores under the Sindhuratna Samruddha Yojana every year for the next three years.
- Under the Human Resource Development project for the empowerment of the female SHGs, SC/ST and for employment generation in 125 underdeveloped talukas in 23 districts of state a total of Rs. 250 crores has been allocated (Rs. 2 crores every taluka). For the improvement in the livelihood of tribals in the aspirational districts of Nandurbar and Gadchiroli, the "Amchur" and "Mohaphul" projects have been sanctioned.
- An allocation of Rs. 1231 crores for the Jawahar wells, horticulture, farm ponds, water conservation works, Panand roads in farm under the Employment Guarantee Scheme.
- "Mazi vasundhara" programme for environment protection and conservation, with a public awareness programme for climate change and environmental problems.
- Aerial seeding and plantation with the help of experts especially on either side of Samruddhi Mahamarg for increasing the Forest Cover.
- Special fund for the development of Pilgrim Centres in Maharashtra.

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

1.5 State Government Sponsored Programmes with Bank Credit

Details of various state government sponsored schemes are given below:

- Dr. Babasaheb Ambedkar Krishi Swavalamban Yojana (100% state sponsored)
- Birsa Munda Krishi Kranti Yojana (100% state sponsored)
- Intensive Cotton Development Program under National Food Security Mission Commercial Crops- 2020-21
- Benefit scheme of new wells for farmers belonging to Scheduled Castes and Scheduled Tribes under National Agriculture Development Plan
- Orchard Plantation Scheme under Mahatma Gandhi National Rural Employment Guarantee Act
- Bhausaheb Fundkar Orchard Planting Scheme
- Establishment of National Horticulture Mission Protected Agricultural Greenhouse under Integrated Horticulture Development Mission
- Crop Pest Surveillance and Advisory Project (CROPSAP)
- National Food Security Campaign - Coarse Grain (Maize)
- Various Agriculture Awards given by the Department of Agriculture (State Sponsored Schemes)
- Horticulture mechanization
- National Food Security Campaign
- Pradhan Mantri Krishi Sinchan Yojana - More crop per drop

- Integrated Horticulture Development Campaign Post-harvest project management
- Centrally sponsored agricultural mechanization sub-campaign
- National Food Security Campaign- Cereal crops
- Integrated Horticulture Development Campaign Area Expansion
- Collective Farms (under National Horticulture Mission)
- Agricultural Technology Management System - Atma
- Erection of onion storage structure
- Pradhan Mantri Micro Food Industry Upgradation Scheme (PMFME) under Atmanirbhar Bharat Package
- Agricultural Infrastructure Scheme
- Restructured Weather Based Crop Insurance Schemes for 2020-21, 2021-22 and 2022-23
- Prime Minister's Crop Insurance Scheme Kharif 2020-21 to Rabi 2022-23
- Farmers Monthly
- Maha-DBT
- National Food Security Campaign- Cereal crops
- Punyashlok Ahilya Devi Holkar Nursery Scheme Year 2020-21 under National Agricultural Development Plan
- Demonstration Program with Soil Health Magazine Scheme Training under National Sustainable Agriculture Mission 2020-21
- Traditional Agriculture Development Scheme (Organic Farming)
- Dr. Punjabrao Deshmukh Organic Farming Mission
- Intensive Cotton Development Program under National Food Security Mission Commercial Crops- 2021-22
- Gopinath Munde Farmers Accident Insurance Scheme
- Dryland Area Development (RAD) under National Sustainable Agriculture Mission (NMSA)
- Traditional Agriculture Development Scheme (Organic Farming)
- Land Health Magazine Program Year 2021-22

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:

- Project on Climate Resilient Agriculture (PoCRA)
- State of Maharashtra's Agribusiness and Rural Transformation (SMART) Project
- Group Farming Scheme
- Maharashtra Agribusiness Network project (MagNet)
- Mahatma Jotirao Phule Shetkari Karj Mukti Yojna 2019 (MJPSKY)
- Digital India Land Records Modernization Programme (DILRMP)

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

Chapter 2 Credit potentials for Agriculture

2.1 Farm Credit

Farm credit includes loans to farmers for pre and post harvest activities viz. spraying, weeding, harvesting, sorting, grading and transporting of their own farm produce. It also includes loans to farmers up to Rs 0.50 lakh against pledge/hypothecation of agricultural produce (including warehouse receipts) for a period not exceeding 12 months, loans to distressed farmers indebted to non-institutional lenders, crop loans to farmers which will include traditional/non-traditional plantations, horticulture, allied activities and medium and long-term loans to farmers for purchase of agricultural implements and machinery, loans for irrigation and other developmental activities undertaken in the farm, and developmental loans for allied activities.

Reserve Bank of India (RBI) has revised the Priority Sector guidelines vide its circular dated 23 April 2015 by classifying Priority Sector into 8 broad sectors. Besides, the sub-sectors and activities covered under each broad sector have also undergone revision. Accordingly, Agriculture sector has been divided into three broad sub-sectors viz. Farm Credit, Agriculture Infrastructure and Ancillary Activities. The basket of activities covered under each of the above sub-sectors has also undergone revision. In line with these revisions, this chapter has also been regrouped into Farm Credit (2.1), Agriculture Infrastructure (2.2) and Ancillary Activities (2.3).

Chapter 2.1.1 Crop Production, Maintenance and Marketing

2.1.1.1 Introduction:

The economy of Solapur district is mainly dependent on agriculture. About 62% of the workforce is engaged in agriculture. The district has a geographical area of 14.89 lakh ha of which 11.71 lakh ha is available for cultivation and the cropping intensity is 126%. The land holding pattern in the district reveals that more than 67 percent of the holdings are less than 2 ha. Under the National Food Security Programme launched in 2007-08, Solapur district was identified for oilseed and pulses production and strategies to increase the area under cultivation and production on a sustainable basis.

The growth rate of agricultural production in Solapur district was around 2.74 per cent as per District Statistical report for the year 2016-17. There is an urgent need to accelerate agricultural growth through special efforts in certain areas where the gap between the potential and actual yield is quite high. There is a need to increase Rabi Jowar and Gram under irrigated conditions, because yield response to irrigation is good in both the crops. Small and marginal farmer, especially in dry land regions play an important role in ensuring food security of the country.

Jowar is the major foodgrain crop in the district. Other important food crops grown in the district are Bajra, Wheat, Maize, Tur, Gram, etc. Farmers also grow cash crops like Sugarcane, Tomato, Groundnut, Onion, Cotton, Soyabean, Vegetables and Fruits like Grapes, Mango, Pomegranate, Custard Apple, Banana, Lime, Ber, etc. The area under Floriculture (in Poly Houses) is increasing steadily in the district. Further, the area under High Yielding varieties has also been increasing in the district due to improved irrigation facilities; improved variety of seeds, use of fertilizer and change in cropping pattern. The agricultural production in the district is also increasing.

2.1.1.2 Infrastructure and linkage support available, planned and gaps:

The Solapur district is very well developed in terms of infrastructure required for pursuing farming.

- i. The Scale of Finance (SoF) is fixed by the District Level Technical Committee (DLTC) every year to make it more realistic to match the production cost of the farmer. Separate scales are prescribed for irrigated and non-irrigated crops.

- ii. The seeds are being supplied through network of marketing societies, private distributors as also by the Agriculture Department to small and marginal farmers. The District Administration is ensuring timely supply of inputs to farmers.
- iii. Marketing support is adequately available in the district. There are 11 APMCs which are providing various marketing facilities to farmers. Transport and communication arrangements are adequately developed for marketing of agricultural produce.
- iv. Processing and Storage facilities are also available within the district. Many new infrastructure processing and storage facilities have come up in the district.
- v. The district has adequate and effective network of extension services. Besides the Agricultural Department, and Zilla Parishad (ZP), extension facilities are also available through the two Krishi Vigyan Kendras (KVKs), Centre of Rabi Sorghum, Zonal Agriculture Research Centre, National Research Centre on Pomoeegrenate (NRCP), etc. District Agriculture Department is catering to extension needs of farmers through a team of technically qualified Sub-Divisional Agriculture Officers and Taluka Agriculture Officers.
- vi. Various Central/State Government sponsored programs, aimed at improving production and productivity in agriculture, are under implementation in the district. These include Food Security Programme (Rice, Grains and Pulses), Rainfed Agriculture Development Programme, Farm mechanization, P.P.P. Maize, Fodder development etc., are provided to farmers at subsidized rates.
- vii. There are good numbers of Farmers Clubs sponsored by Agricultrre Department and NABARD and KVKs. These clubs have to be activated for externalizing extension work effectively. The KVKs can educate more farmers about the proven technology of different crops through CAT programmes funded by NABARD.
- viii. Interest Subvention Scheme is being implemented by GoI & State Govt. to reduce burden of interest on farmers.
- ix. Ground Level Credit Flow under Crop production, Maintenance and Marketing (KCC crop loans) during last three financial years 2018-19, 2019-20 and 2020-21 were Rs. 2544 crore, Rs. 2173 crore and Rs. 3355 crore respectively.

2.1.1.3 Assessment of potential for FY 2022-23 (in both physical and financial terms):

Keeping in view the composition of SF/MF, cropping pattern, infrastructure available, gaps assessed, physical and financial potential for Crop Loan is worked out as given in following table:

Sr. No.	Name of the Crop	SoF (per ha)	Physical Unit (ha)	Bank Loan (₹ Lakh)
Kharif crops				
1	Rice	0.14	114	15.96
2	Jowar	0.25	27888	6972.00
3	Bajra	0.23	22548	5186.04
4	Maize	0.06	28364	1701.84
5	Other cereals	0.08	401	32.08
6	Tur (Arhar/Pigeon Pea)	0.30	73395	22108.50
7	Moong (Green Gram)	0.22	23817	5120.66
8	Urad (Black Gram)	0.22	0	0.00
9	Other pulses	0.08	0	0.00
10	Groundnut	0.29	28626	8301.54
11	Soyabean	0.34	72916	24791.44
12	Sunflower	0.22	0	0.00
13	Other oilseeds	0.30	0	0.00
14	Cotton	0.49	578	280.33
15	Sugarcane	1.10	16244	17868.40
16	Chilli	0.34	14740	5011.60
17	Onion	0.60	21125	12675.00
18	Tomato	0.50	14604	7302.00
19	Green vegetables	0.14	2643	370.02

20	Leafy vegetables	0.06	7 09	42.54
21	Other vegetables	0.14	1436	201.04
	Subtotal - Kharif		350148	117890.99
	Post Harvest/ household / consumption requirements (10%)			11789.10
	Repairs and Maintenance expenses of Farm assets (20%)			23578.20
	Total crop loan – Kharif			153258.28
	Rabi crops			
22	Jowar	0.33	164500	53462.54
23	Wheat	0.33	16141	5326.53
24	Maize	0.43	22961	9873.23
25	Other cereals	0.08	0	0.00
26	Harbhara (Gram)	0.30	20178	6053.40
27	Other pulses	0.08	0	0.00
28	Oilseeds	0.30	7 89	236.70
29	Sugarcane	1.00	124772	124772.00
30	Banana (Tissue culture)	1.30	2496	3244.80
31	Chilli	0.34	1645	559.30
32	Onion	0.60	3175	1905.00
33	Tomato	0.50	1142	571.00
34	Green vegetables	0.14	1391	194.74
35	Other vegetables	0.14	1003	140.42
	Subtotal - Rabi		360193	20639.66
	Post Harvest/ household / consumption requirements (10%)			20633.97
	Repairs and Maintenance expenses of Farm assets (20%)			41267.93
	Total crop loan – Rabi			268241.56
	Grand Total (Crop loan) - Kharif + Rabi			
	Total		710341	324230.65
	Post Harvest/ household / consumption requirements (10%)			32423.06
	Repairs and Maintenance expenses of Farm assets (20%)			64846.13
	Total Crop loan			421499.84

2.1.1.4 Critical interventions required for creating a definitive impact:

- Farmers are to be adequately aware about the adoption of climate resilient crops taken into account of changing cropping patterns also. (Action: Agri. Deptt. & Research institutes)
- Training programmes or workshops 'Improved agricultural practices' are needs to be organized for major crops such as Jowar, Bajara, Maize and Wheat. (Action: Agricultural Research Institutes)
- Special focus should also be given for enhancing production of oilseeds & pulses. (Action: Agri. Deptt.)
- Adequate and timely supply of critical farm inputs such as seeds, fertilizers & pesticides. (Action: Agri. Deptt.)
- Production of Certified seeds is to be encouraged. (Action: Agri. Deptt.)
- Additional storage facilities both dry & cold are also to be created to prevent losses in food grains. (Action: Agri. Deptt.)
- Un-interrupted supply of electricity is to be made available to farmer for providing proper irrigation to crops. (Action: MSDDL)

2.1.1.5 Suggested Action Points:

- Banks may take initiative so that farmers may be encouraged to avail Marketing Credit, especially in respect of crops that can be stored and fetch better prices during post-harvest period.
- Banks may encourage and motivate the farmers to avail agriculture term loan for sustainable agriculture in order to increase crop production & productivity.
- Banks may issue KCC to all borrowing farmers and educate all farmers to derive optimum benefits through KCC scheme under new guidelines. Banks may make also use of Farmers' Club for this purpose.
- In view of huge cost expected to be involved in developing infrastructure for agriculture, there is a need to encourage collaboration with private sector for creation

of non-commercial and long term infrastructure in farm sector. The concept of Public –Private Participation should be encouraged. Accordingly bank finance should be made available for private investment in agriculture infrastructure.

- Improve productivity through green manuring, introduction of mechanization, soil testing, and Integrated Nutrient management, use of bio-fertilizers/bio pesticides; and reducing effects of chemical waste/gases on crops. (Action: Agri. Deptt.)
- Create awareness about cost reduction through integrated pest management, increasing cropping intensity, interaction with Experts, quality control, proper use of seeds, fertilizers & pesticides. (Action: Agri. Deptt. & Agri. Research Institutes)
- Develop scientific system of collection, grading, packing and standardization of quality etc. of vegetables, fruit crops. Farmers may be trained for undertaking medicinal /herbal plants, Green Houses tech. and Agro processing activities.
- In order to ensure better Seeds Replacement Ratio, maintain N, P, K ratio of chemical fertilizers, make use of pesticides scientifically and increase the coverage under organic fertilizers Agri. Dept may involve KVKs, Agri. Colleges, Farmers' Clubs etc., to create awareness amongst farmers.
- Impress upon the farmers on the undesirable consequences of erosion in soil productivity due to excessive use of Urea. (Action: Agri. Deptt.)
- Efforts to open more depots for distribution of seeds, fertilizers, pesticides etc. (Action: Agri. Deptt.)
- Energisation of irrigation pump sets needs to be given top priority. This should be backed by regular and assured supply of power. Farmers may be encouraged to create on farm rain harvesting structures. (Action: Agri. Deptt.)
- Extension machinery of State Government to focus on creating awareness about benefits of soil and water conservation measures. (Action: Agri. Deptt.)
- Large numbers of small & marginal farmers are to be covered under crop loans. (Action: Banks)
- Eligible beneficiaries under PM Kisan Scheme, who have not availed crop loans, may be covered under crop loans. (Action: Banks)
- No minimum area norms are to be prescribed by the banks. (Action: Banks)

2.1.1.6 Other related matters:

(i) GoI scheme on Interest Subvention for crop loans:

Interest Subvention (IS) @ 2% is provided to the banks to enable them to lend at 7%, further 3% of interest subvention is provided for the farmers repaying their dues promptly.

(ii) Crop Insurance: Pradhan Mantri Fasal Bima Yojana:

The scheme Pradhan Mantri Fasal Bima Yojana (PMFBY) came into effect from the year 2016-17. As per the guidelines of the new insurance schemes, all the loanee and non loanee farmers are covered and eligible for the scheme. Rate of insurance is 2% for Kharif crops, 1.5% for Rabi and 5% for horticulture crops. All the Kharif crops are covered under the scheme.

(iii) Farmers Personal Accident Insurance Scheme:

Under this scheme, insurance coverage in the form of compensation of ₹ 2.00 Lakh (in the event of death, loss of two limbs or two eyes and loss of one limb and one eye) and ₹ 1.00 Lakh are paid (for loss of one limb or one eye to the affected farmer) during 2020-22 also.

(iv) State Government's Scheme on Interest Subvention for crop loans:

In addition to GoI interest subvention scheme, Government of Maharashtra is also extending interest subvention to banks @1% to enable them to finance @6%. It also extends interest rebate to farmers on prompt repayment as follows – farmers availing crop loan upto Rs 1 lakh will get 3% interest subvention on prompt repayment and farmers availing crop loans above Rs 1 lakh and upto Rs 3 lakh, will get interest subvention of 3% for the amount of Rs 1 lakh and 2% for the remaining amount i.e. above Rs. 1 lakh to Rs. 3 lakh. Effectively, under both the schemes put together, in Maharashtra, the prompt repaying farmers effectively get crop loan upto Rs 1 lakh @ 0% and if the loan is upto Rs. 3 lakh, then upto Rs 1 lakh @ 0% and @ 1% for the portion between Rs. 1 lakh to upto Rs. 3 lakh. During current FY 2021-22, the Maharashtra government is providing interest subvention facilities for crop loans upto Rs. 3 lakh to only those farmers who will promptly repay their loans.

Chapter 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 is more than 10000 ha; (b) Medium Irrigation Projects where culturable command area is between 2000 ha to 10000 ha and (c) Minor Irrigation (MI) Projects where the irrigated area is below 2000 ha.

2.1.2.1.1 Classification of MI Projects:

MI categorised into two groups depending on the source of water, viz. (a) Ground water exploitation by constructing MI structures and (b) Surface water irrigation by lift irrigation scheme. Besides, efficient irrigation systems like Drip and Sprinkler as also water saving devices like lining of channels, underground pipelines have also been included under MI as they help in increasing the area under irrigation.

Activities covered under MI:

The various activities which could be covered under MI are as follows:

- **MI schemes for groundwater exploitation**
Dug Well (DW), Dug-cum-Bore well (DCBW), Bore Well (BW), Deep Tube Wells (DTW), Shall Tube Wells (STW), Filter Points, Lining of field channel (distribution of pipe lines), Underground pipelines.
- **Water lifting devices (from MI structures under “a” above)**
Conventional/Traditional devices like Centrifugal pump sets, Submersible pump sets, Vertical Turbine pump sets, Rahat, Persian Wheel, Others (specify) and Non-conventional energy devices i.e. Solar water pumping system, Wind Mill for irrigation, Hydrants, etc.
- **Surface Water Schemes**
The same may include farm ponds, lift irrigation, check dams, etc.
- **Lift Irrigation Schemes (individual/community):**
Individual Schemes where an individual farmer lifts surface water (from rivers, canal, pond, tank, etc.) by means of a pump set and suitable length of pipeline or Community Schemes where a group of farmers come together and a combined irrigation scheme is prepared, KT Weirs, Farm ponds for rainwater harvesting, Tanks, Check dams or weirs, Diversion weirs.
- **Drip Irrigation** - Primarily suited to Plantation and Horticulture crops, etc.
- **Sprinkler Irrigation** - Primarily suited to field crops/ close growing crops in uneven fields.

2.1.2.1.2 Details of major water resources in the district:

There are five major rivers viz. Bhima, Sina, Nira, Man and Bhogavati flowing in the district of which Bhima is the main river, covering a distance of about 289 kms. These rivers remain dry for a considerable part of the year due to shortfall of rains and construction of a number of dams in their upstream area. Solapur district has 1488 ha of total geographical area. Out of this, Gross Cropped Area of the district is 11.71 lakh ha and Net Sown Area is 9.29 lakh ha while, Gross Irrigated Area and Net Irrigated Area are 3.75 lakh ha and 3.66 lakh ha respectively by way of wells, canals, tanks and other sources (tube wells). Irrigation intensity of the district is about 39%. Average annual rainfall of district is 488 mm.

In Solapur district, irrigation projects of 01 major, 06 medium & 128 minor have been completed and about 1.59 lakh ha irrigation potential created so far. 10 major, 07 medium & 11 minor projects are ongoing, which may create additional irrigation potential of 3.66 lakh ha and future planned/future projects are of 01 medium & 28 minor, which will create about 0.21 lakh additional potential. Total no. of 192 all type irrigation projects (including of future projects) are going to create 5.46 lakh ha of irrigation potential. (Source: Official website of Maharashtra Water Resources Regulatory Authority).

As per Report of Infrastructure Statistics 2013-14 & 2014-15 of Directorate of Economic and Statistics of Government of Maharashtra, at the end of June 2014 total 4.76 lakh irrigation potential created in the district. Total actual irrigated area during 2014-15 in the district was about 4.28 lakh ha, which was 90% of total irrigation potential created.

As per report of Dynamic Groundwater Resources Assessment of India – 2017, Barshi, Karmala, Madha, Mangawedha, Mohol, Pandharpur and Sangola blocks are categorized as 'Semi-Critical' from earlier 'Safe' category of all of them and Malshiras block was the only which is categorized as 'Over-Exploited', in terms of their Stage of Ground Water Extraction.' If this type ground water exploitation still continues, all these blocks will face acute ground water shortage. Overall stage of ground water extraction of the Solapur district was about 78.37% as on 2017.

The block-wise Ground water extraction is given below:

Sr No	Administrative Unit	Net Annual Ground Water Availability	Existing Gross Ground Water Draft for Irrigation	Existing Gross Ground Water Draft for Domestic and Ind. Water supply	Estisting Gross Ground Water Draft for All User	Provision for Domestic and Ind water supply to 2025	Net Ground water availability for further Irr. Development	Surface Gr. Water Dev (%)
1	Akkalkot	14783.17	7496.74	499.89	7996.63	999.78	6286.65	54.09
2	Barshi	11600.15	8684.92	497.83	9182.74	919.31	1995.93	79.16
3	Karmala	12653.18	9421.39	397.70	9819.09	705.08	2703.97	77.60
4	Madha	17294.39	13056.60	524.17	13580.76	887.71	4166.65	78.53
5	Malshiras	21141.50	20851.03	613.74	21464.77	890.63	2452.44	101.53
6	Mangalwedha	9949.14	7628.17	344.24	7972.29	654.35	1166.63	84.37
7	Mohol	13362.63	11243.48	474.11	11717.58	763.93	2227.92	87.69
8	N. Solapur	7067.28	4324.25	210.91	4535.16	418.39	2338.10	64.17
9	Pandharpur	14899.90	11075.76	382.99	11458.76	707.31	3441.74	76.90
10	S. Solapur	12481.59	7351.55	365.73	7717.27	718.33	4480.43	61.83
11	Sangola	16051.53	11891.79	625.44	12517.23	1266.13	2897.93	77.98
	Total	150784.49	113025.66	4936.63	117962.29	8930.95	34158.39	78.23

Out of total 11 blocks of the district, only three blocks viz. Akkalkot, North & South Solapur are still in 'Safe' category in terms of ground water extractions.

One canal project in Sangola block is implemented under the PMKSY with an estimated irrigation potential of about 6883 ha with total project cost of Rs. 32.45 crore.

2.1.2.2 Infrastructure and linkage support available planned and gaps: Energisation of pumpsets:-

All the villages and towns in Solapur District have already been electrified. However, power situation in the district is precarious with unscheduled power cuts, voltage fluctuations and low voltage. MSEDCL has accorded priority for Energisation of pump sets. During 2020-21 as many 5199 pump sets were granted connection and total 13571 new connections are pending with MSEDCL (Source: Kharif Aadhava 2021, DSAO Office, Solapur).

Pumpset, sprinkler and drip irrigation system dealer & Servicing and repair centres: - There are sufficient dealers of micro irrigation systems like drip and sprinkler. These dealers also offer the services of maintenance, repair and repair to rigs and drilling machine

Replacement of pumpsets and drip sets:- On an average, the life of pumpsets, drip sets and sprinkler set can be taken as five year Therefore, taking into account number of pumps, drip and sprinkler sets in the district, pumpsets, dripsets and sprinkler needs replacement every year.

Micro irrigation system: Under micro irrigation scheme of Agriculture Department, subsidy to the extent of 60% and 50% of cost of sprinkler/drip equipments and installation charges is available, subject to ceiling of 5 Ha. land holding.

Ground Level Credit (GLC) flow under this sector for last 3 financial years is not available.

2.1.2.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit (Nos/ha)	Unit Cost	Physical Units	TFO	Bank loan
1	Dugwells (Dia – 4.5 m, Depth – 10 m & Lining – 3 m)	Nos.	1.57	701	1100.57	1102.67
2	IP Set Electric – 5 HP	Nos.	0.30	4009	1202.70	1082.43
3	IP Set Diesel – 7.5 HP	Nos.	0.40	3051	1220.40	1098.36
4	Drip Irrigation Set (Grapes, Sugarcane, Cotton, Vegetables & Flowers, etc.)	ha	1.00	21682	21682.00	10841.00
5	Sprinkler Set (75 mm HDPE Pipes)	ha	0.30	18637	5591.10	2795.55
6	Lift Irrigation (Small)	ha	0.36	6050	2178.00	1960.20
7	Lift Irrigation (Big)	ha	1.32	4950	6534.00	5880.60
8	Bore wells	Nos.	0.31	6315	1957.65	1788.04
9	HDPE Pipeline Systems (100 mm)	Nos.	0.38	3960	1504.80	1354.32
10	HDPE Pipeline Systems (65 mm)	Nos.	0.51	5088	2594.88	1946.17
11	Rainwater harvesting	Nos.	0.65	1901	1235.65	1112.12
	Total				46801.75	30961.46

In view of the need for judicious and appropriate use of water for cultivation of agricultural produce, potential available and ground level credit the potential has been assessed for micro irrigation practices. Water resources in Malshiras block is categorized as 'Over-exploited' and therefore, credit potential under the activities such as Dug well, Bore well/Tube well have not been projected for the same to restrain the individuals/farmers from digging more wells.

2.1.2.4 Critical interventions required for creating a definitive impact:

- Water conservation measures are need of hour in semi-critical & Over-exploited blocks in order to increase ground water availability (except Akkalkot, North & South Solapur, which are in safe category).
- Although, there is a State Government Act enforcing the formation of Water Users' Association to take over the Irrigation Structures created, the participation of WUA in the irrigation command is very poor.
- **Introduction of water saving irrigation methods in Lift Irrigated Command Area**

Water has become a scarce input for agriculture. One of the reasons for failures of Lift Irrigation schemes is due to the less water availability in the source. This can be overcome only when efficient management of available water in the source is ensured. There is a vast scope for bringing more area under irrigation through efficient management of available water through drip/sprinkler irrigation under lift irrigated command area. The lift irrigation schemes should preferably be planned with drip or sprinkler irrigation system.

(Action: Water Resources Dept and Horticulture Dept).

2.1.2.5 Suggested Action Points:

- There is a scope for huge potential for irrigation in the district. More area can be brought under irrigation through concerted efforts. (Action: WRD/PWD)
- Concerted efforts should be made to popularize Drip/Sprinkler irrigation systems (especially in the command area of LI Schemes), lining of field channels, use of underground pipelines etc., to ensure optimum utilization of water resources. The Govt may promote drip and sprinkler irrigation aggressively in view of the depleting water resources. (Action: Agri. Deptt.)
- There is need to increase water-use efficiency of lift irrigation schemes. There is need to revive the Co-operative Lift Irrigation Schemes so that the expenditure already incurred does not become infructuous. (Action: Irrigation Deptt.)
- Artificial recharge measures through construction of rain water harvesting structures like rain water storage tanks, percolation tanks, farm ponds, check dams etc. to be undertaken. Also the existing percolation tanks and village ponds need to be rejuvenated to act both as water conservation and artificial recharge structures. (Action: Water Resource Deptt./PWD)
- The agriculture research institutions working in the district may educate farmers for growing short duration, less water consuming crops so as to increase their income generating capacity. (Action: Agri. Research Institutes)
- Rain water in many parts of the district flows as runoff due to natural physiography. An efficient utilization of this rainfall through rain harvesting structures can ensure availability of water for irrigation during dry seasons. (Action: Agri. Deptt./WRD/PWD)
- Scope exists for construction of suitable artificial recharge structures in the district. The structures recommended particularly for the hilly area in the west and northwestern part are contour bunds, gully plugs, nala bunds and check dams etc. For other hard rock areas of the district, nala bunds, check dam, KT weirs and percolation tanks at suitable sites are suggested. The existing dug wells may also be used for artificial recharge of ground water by ensuring that the water used for recharge should be free from silt and other impurities. (Action: Agri. Deptt./WRD/PWD)
- To enhance the ground water resources and for sustainable development, mass awareness programmes should be organized in large scale by district administration. Such programmes are necessary so as to educate the user regarding yielding capacity of aquifer and declining trend of water levels in the district. Similarly farmer should also be encouraged to adopt appropriate crop planning and irrigation practices. (Action: Agri. Deptt.)
- Subsidy for micro irrigation systems such as Drip & Sprinkler systems may be rationalized (Action: Agri. Deptt.)
- Micro irrigation systems for Sugarcane, Fruits & vegetables are to be provided adequate & timely finance to increase the area under the same. (Action: Banks)
- Uninterrupted availability of power supply is to be insured. (Action: MS&EDCL)
- There is need to increase water efficiency and focus to be given for popularizing DRIP irrigation for sugarcane crop as around 971 h.a area is covered under sugarcane cultivation. (Action: Agri. Deptt.)

2.1.2.6 Other related matters:

The major objective of Pradhan Mantri Krishi Sinchai Yojana (PMKSY) is to expand cultivable area under assured irrigation, improve on-farm water use efficiency to reduce wastage of water, enhance the adoption of precision-irrigation and other water saving technologies such as sprinkler and drip irrigation (More Crop Per Drop). The scheme is being implemented in the State from 2015-16. As per the subsidy norms small & marginal farmers can avail 55 per cent subsidy and other farmers can avail 45 per cent subsidy, with a limit of five ha area for both.

Chapter 2.1.3 Farm Mechanization

2.1.3.1 Introduction:

Farm mechanization means the use of machines and technology in the agriculture sector to increase productivity of land and labour through timeliness of operations, efficient use of inputs, improvement in quality of produce, safety & comfort of farmers, reduce loss of produce & drudgery of farmer and even helps in fighting against climate change. 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 benefits of farm mechanization can be summarized as under.

- Reduction in cost of farm operations
- Timeliness of all farm operations
- Better and efficient farm operations
- Drudgery reduction
- Enhancement of farm production & productivity
- Reduction of loss in produce
- Excess income generation

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.

Agricultural mechanization refers to interjection of improved tools, implements and machines between farm workers and materials handled by them. Independent India ushered in a process of agricultural mechanization and revival of rural agro-processing which got acceleration during post-Green Revolution period. Irrigation pump sets, power threshers, tractors, power tillers and matching implements, including for 65 million draft animals have become popular. Seed and seed-cum-fertilizer drills, planters, mechanical rice trans-planters, vertical conveyor reapers, and combines soon followed. In the recent past, Zero-till Drill and Raise Bed Planters have found good acceptance from the farmers. Currently mechanization is in increasing demand. Farmers and policy makers and developmental agencies now realize that for increasing production and productivity at reduced unit cost of production, free of arduous labour, agricultural mechanization is essential. It is brought in centre stage with globalization of world markets. Introduction of electromechanical power units supplementing and substituting traditional animate sources of farm power is going to continue.

Major constraints in development of Farm Mechanization Sector:

Some of the major constraints which are hindering the growth of Farm Mechanization Sector are as follows:

- Fragmentation of land
- Large numbers of Small and Marginal Farmers (SF/MF)
- Difficult Topography in some parts
- Higher charges of hiring

Status of Farm Mechanization in Maharashtra State:

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 the district is **1.37**

kW/ha, which is slightly higher than that of Maharashtra State (1.19 kW/ha) but, very much lower than that of national average of 2.02 kW/ha by the end of year 2016-17.

The share of power from tractor in the total farm power is increasing substantially. Further, share of electric motor is also increasing. But, share of animal power and draught animal power is decreasing in the total farm power. There is a linear relationship between availability of farm power and farm yield. Therefore, there is a need to increase the availability of national farm power from 2.02 kW per ha (2016-17) to **4.0 kW per ha by the end of 2030** to cope up with increasing demand of food grains. The requirement of Farm Power Availability (kW/ha) for the Maharashtra State is as per under:

State	Average Farm Power Availability (kW/ha)		
	2016-17	2022	2030
Maharashtra	1.19	1.59	3.01

Sources:

1. Water and Power Consultancy Services (India) Limited – WAPCOS – Final Report on Submission on Agricultural Mechanization, May 2018
2. NABARD - Sectoral Paper on Farm Mechanization, December 2018.

2.1.3.2 Infrastructure and linkage support available planned and gaps:

The infrastructure and support services generally required for the sector are as given under.

- 67% of the farmers are categorized as SF/MF they acquire 35% of land only big farmers are using Farm Mechanisation in their field as it is viable proportion for them. SF/MF using the machines on higher basis.
- There are 40 sugar factories with crushing capacity of 1.56 lakh M.T in the district. Of which 30 were involved in crushing during the year 2020-21, combine crushing made was 1.35 lakhs M.T. Thus, there is sizable demand for sugar factories for hiring of tractors for the purpose of transportation of sugarcane.
- Dealer Network: There is dealer network for tractor and other agri machineries in the district.
- The fuel required for the operation of the tractor and other machineries is easily available at the shortest distance within a radius of about 5 km from the place of residents/farm of the farmer
- The repair and service center for tractor are adequately available in the district. However, center for repair and shops for spare parts of combine harvester are not easily available.
- There is great demand for low hp power tractor which, are particularly suitable for small holdings.
- Trained and skilled manpower for operation of tractor and other farm implements are available in the district. However, there is shortage of skilled manpower for operation, maintenance and repair of combine harvester the same needs to be addressed.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.1.3.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

Considering the cost of labours for cultivation of land besides decreasing population of draught animals in the villages the increased use of farm machineries and implements has become necessary. There is increased scope for financing tractor due to its off farm and on farm requirement.

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Tractor (55 hp)	Nos.	7.70	3777	29082.90	21812.18
2	Power Thresher (7 hp)	Nos.	0.72	2914	2098.08	1573.56
3	Power Tiller (8 hp)	Nos.	1.90	2430	4617.00	3693.60
4	Combine Harvester	Nos.	6.90	189	1304.10	1043.28
5	Sugarcane Harvester	Nos.	92.00	44	4048.00	3238.40
Total					41150.08	31361.02

2.1.3.4 Critical interventions required for creating a definitive impact:

- Promotion of group farming for the small farmers with low investment capacity to bring down the cost of farm mechanization.
- Use of suitable makes/models/horse power agri-implements for different size of operational holdings may be promoted.
- Technical know-how should be provided to the farmers with respect to appropriateness of farm machinery for the situation and for its proper use.
- Repairs/maintenance support for power driven farm equipment need to be strengthened. Special training programmes for repair of small machinery may be given to rural youth.
- Agri implements exhibitions for promotion of new implements needs to be organized regularly by Agriculture Dept., KVKs, private players etc.
- Custom hire service of the agri-implements may be provided by the FPOs/PACS to the farmers at a cheaper rate thus also generating income for the FPOs/PACS.
- Use of technology for optimization and timely availability of agri-implements for hiring.
- Bankers to encourage purchase of Tractor and other agricultural equipment by SC/ST/Minority/Small farmers under the Central Govt. schemes like National Mission on Agricultural Extension & Technology (NMAET) under which the farmers receive subsidy of 40-50%.
- Designing less costly smaller machinery suitable for small farms is necessary.
- Agricultural mechanization Centres for provision/ marketing/ lending/ service/ repairs/ training/ demonstration on traditional and innovative agricultural implements need to be established at the block level for intensive farm mechanization.

(Source: Maharashtra State Focus Paper 2021-22, NABARD)

In respect of Maharashtra State, availability of adequate farm power for mobile and stationary farm operations should be increased from the present level of about 1.19 kW/ ha to about 1.59 kW/ha and 3.01 kW/ha by 2022 & 2030, respectively. For stationary operations like water lifting, threshing, chaff cutting, cane crushing, cleaning, grading and other agro-processing and value addition activities, adequate electrical energy needs to be provided. The following strategies which can be adopted for enhancing agricultural productivity and income of the farmers:

- There is need to mechanize planting, harvesting and sugarcane trash management in all regions.
- The Sorghum and Bajra crops should be mechanized in the Western Maharashtra plain zone, Scarcity Zone and Central Vidarbha zone for harvesting operation.
- There is need to mechanize planting, inter-culture and shredding operation for cotton crop in the Scarcity zone, Central Maharashtra and Central Vidarbha zone.
- There is need to introduce self-propelled harvester and mini combine for safflower crop in Western Maharashtra plain and Scarcity Zone.
- There is need to adapt coconut climber and harvester for the sub-mountain zone and Western Maharashtra plain zone.
- The banana crop in the Central Maharashtra plateau and Central Vidarbha region should be mechanized.
- In all the zones of Maharashtra there is need to mechanize vegetable and fruit cultivation.
- In Maharashtra part of the zone sugarcane bagasse and groundnut shell should be used for gasification plant for use in industrial applications.

(Source: WAPCOS – Final Report on Sub-Mission on Agricultural Mechanization, May 2018)

- Business establishments provide farmers with specialized farm equipment and various amenities to improve crop yield through the adoption of latest agricultural technologies. Many companies in the country have participated in such practices before. The continuation and growth of **contract farming** with more entities getting involved provides future opportunities for the expansion of the industry.

2.1.3.5 Suggested Action Points:

Government Departments:

- i. **Rationalization of subsidy** for farm mechanization.
- ii. **Establishment of Custom Hiring Centres** (at least one per block) through Farmers' group (Farmers' Clubs, JLGs, etc.), Agri-entrepreneurs, FPOs, PACS, etc. needs to be promoted.
- iii. **Training & capacity building** for farmers on selection of farm machineries & its' use & technical know-how.
- iv. To encourage **Agri Start-ups** in Farm Mechanization.
- v. Facilitation of **online platform for Custom Hiring Services of farm machineries**. (Example – JFarm app of TAFE tractor company)

Banks:

- i. **Financing for farm equipments** needs to be increased, which may results not only into increasing farm power availability but also, helps in capital formation in agriculture sector.
- ii. All the banks may also provide **finance for establishment of Custom Hiring Centres (CHCs)**.
- iii. All the banks to consider financing to small & marginal farmers, Farmers' groups including Farmers' Clubs, Joint Liability Groups (JLGs), etc.
- iv. DCCBs to consider financing to good working PACS for establishment Multi Service Centre (MSC) for Custom Hiring Centre and can avail concessional refinance from NABARD.

2.1.3.6 Other related matters:

2.1.3.6.1. Government Sponsored Schemes:

2.1.3.6.1.1. Government of India:

Sub-Mission on Agricultural Mechanization (SMAM):

The Sub-Mission on Agricultural Mechanization (SMAM), a centrally sponsored scheme for promotion of farm mechanization was launched by the Ministry of Agriculture and Farmers Welfare in the year 2014-15 for its implementation through State Department of Agriculture, FMT&TIs, selected agricultural universities and ICAR institutes. The main components of the scheme are; training, testing and demonstrations of farm machinery and equipments, establishment of custom hiring centre, subsidy through state departments of agriculture for purchase and distribution of farm implements to the farmers and promotion of post-harvest technology for encouraging primary processing. The financial assistance in the form of subsidy is provided under the above is ranges between minimum 25% & upto 50%, as per schemes' guidelines.

(Source: Operation Guidelines on Sub-Mission on Agricultural Mechanization available on official website of Ministry of Agriculture & Farmer Welfare, Government of India)

2.1.3.6.1.2. Government of Maharashtra:

In Maharashtra State, Agricultural Mechanisation Campaign is being implemented since 2017-18 under '**Unnat Sheti Samruddha Shetkari Campaign**' with an objective to tackle challenges posed due to declining size of land holding, decreasing number of bullocks, non-availability of labours, increasing labour wages, short period of kharif season, varied cropping pattern, etc. Components of this campaign are subsidy to farmers for purchase of improved agricultural implements and establishment of agricultural implements banks.

(Source: Chapter 7 - Economic Survey of Maharashtra 2020-21)

2.1.3.6.1.3. Refinance from NABARD:

- NABARD is providing Long Term Refinance to the eligible financial institutions against Ground Level Credit (GLC) disbursements under Farm Mechanization Sector by them.
- NABARD is also providing concessional refinance @ 4% per annum to eligible District Central Cooperative Banks (DCCBs) through respective State Cooperative Banks (StCBs) for providing finance to the activity of Custom Hiring Centre (CHC) promoted by the Primary Agricultural Cooperative Societies (PACS) under its' recent refinance scheme of 'PACS as Multi Service Centre (PACS as MSC)'

(Source: Official website of NABARD)

Chapter 2.1.4 **Plantation and Horticulture including Sericulture**

2.1.4.1 Introduction:

Plantation and 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 as well as State. 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. The sector also provides excellent opportunities to farmers in rainfed areas, where a significant shift towards horticulture is evident. Since the past decade, India has witnessed a huge demand for horticultural produce from domestic market due to increase in per capita income and shift in consumption pattern of the population and international markets as well. This phenomenon has provided a big opportunity to the farmers for fetching higher income through high value horticultural crops.

An Agro climatic condition of the Solapur district is conducive for development of various horticulture crops especially, of dry land horticultural crops. Some of the major horticultural crops grown in the district are Pomegranate, Grapes, Banana, Ber, Custard apple and Mango, etc. Besides, vegetables such as chilies, onion, tomato, brinjal, capsicum, watermelon, melon etc. are also grown. Total area and production under the above major horticultural crops is about **177.492 (000 ha)** and **1960.265 (000 MT)** during last FY 2020-21. Break-up of the same is as per under:

Sr. No.	Category	Area (000 ha)	Production (000 MT)
(i)	Fruits	86.887	1053.962
(ii)	Vegetables	89.938	902.180
(iii)	Flowers	0.351	0.331
(iv)	Spices	0.316	3.792
	Total	177.492	1960.265

Solapur district has been identified as an Agri Export Zone (AEZ) for Grape & Grapevine, Onion and Pomegranate. While Maharashtra Industrial Development Corporation (MIDC) is the Nodal Agency for Grapes and Grapevine. Maharashtra State Agricultural Marketing Board (MSAMB) is the Nodal Agency for Pomegranate and Onion.

2.1.4.2 Infrastructure and linkage support available planned and gaps:

Sr. No.	Particular	Infrastructure Available	Infrastructure Required/ planned	Gaps
1	Planting Material	14 Nurseries of Horticulture Dept. 10 private nurseries 01 pomogranate hub (NRCP) at Solapur. 15 private pomogranate nurseries. Adequate planting material is available from 14 nurseries of Horticulture Department and 15 private nurseries.	Tissue culture lab for banana, Pomogranate and sugarcane Seedling	Tissue culture lab for banana, pomogranate and sugarcane Seedling

Sr. No.	Particular	Infrastructure Available	Infrastructure Required/ planned	Gaps
2	Cold storage facility	45 cold storage units in the in the district, capacity 15,000MT	Requirement of 5 more cold storages. Required capacity 7500MT	Requirement of 5 cold storage. Required capacity 7500 MT
3	Processing/Value addition	Raisin making-110	There is need of increasing raisin marketing facility. Approximately 40 are required having capacity of 500MT each.	Required pomogranate processing units
4	Greenhouse/Polyhouse/ Shadenet	Greenhouse/Polyhouse - 1209 Shadenet-4699	110 no. of greenhouse and polyhouse to be established	--

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.1.4.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

Sr. No.	Activity	Unit (Area /Nos.)	Unit Cost	Physical Unit	TFO	Financial
1	Mango (10 x 10 m)	ha	1.57	4566	7168.62	6451.77
2	Grapes	ha	10.54	400	4216.00	3794.39
3	Pomegranate	ha	2.05	19060	39073.00	35165.72
4	Custard apple	ha	1.14	254	289.56	260.61
5	Ber	ha	0.30	1927	578.10	520.29
6	Acid Lime	ha	1.67	8162	13630.54	12267.49
7	Sapota (Chikoo)	ha	1.29	2001	2581.29	2323.15
8	Polyhouse (500sq m)	No	6.25	374	2337.50	2103.79
9	Horticulture Nursuries	ha	1.38	57	79.23	70.55
10	Aonla (Indian gooseberry)	ha	0.79	222	175.38	157.85
11	Dry land fruit crops (Guava, Mosambi, etc.)	ha	0.50	15204	7602.00	6841.80
12	Floriculture (Champaka – Sonchapha)	ha	3.53	475	1676.75	1509.10
13	Shaedenets for flowers vegetables (20 R)	ha	6.27	2288	14345.76	7782.69
Total					93753.73	79249.20

2.1.4.4 Critical interventions required for creating a definitive impact:

- Crop insurance should cover the period till harvesting and marketing of the crop
- An effective supervision mechanism should be evolved for plantation under Employment Guarantee Scheme to improve survival rates of plants.
- Marketing, storage, processing infrastructure has to be improved for horticulture and vegetables produce in the district.
- Vigorous promotion of use of drip irrigation in horticultural crops by implementing special subsidy programme for horticulture crops is required.
- Active involvement of Growers' Associations in identifying Seri culturists/ progressive farmers for horticulture activity in the district may be encouraged.
- Certification facility for organic produce should be available at Taluka level to encourage farmers for adopting the organic farming and facilitating the

- marketing/ exporting of certified organic produce.
- Some NGOs to be identified specially for training the farmers in quality control, packaging and marketing of vegetables and horticulture produces.
- There is shortage of cold storage. Most of the farmers shift their Raisins to adjourn Sangli district for storage. Thus there is need for development of integrated cold chain in the district.
- Only APMC markets are available for marketing of horticulture produced. There is need of organising marketing, storage infrastructure.

2.1.4.5 Suggested Action Points:

- There is scope to promote nurseries. Government may give thrust for setting up of public and private nurseries.
- Horticulture Directorate and the State Agriculture Universities may provide the necessary extension services and popularise such package of practices. Desirable traits need to be introduced in existing commercial varieties of Pomogranate through hybridization and transgenic lines need to be developed through biotechnology. Rapid multiplication of desired propagating material will be achieved through tissue culture technology. Bacterial blight (Telya) and wilt in pomegranate are the major challenges faced by the pomegranate growers over the past few years and pose a severe threat to production and productivity of this commercially important crop.
- Growers Associations such as Farmers clubs may play a key role in identifying beneficiaries and coordinating with banks for encouraging institutional finance. Growers Associations may also help the banks in ensuring recoveries of loans.
- Soil testing, quality control laboratories and testing facilities for residual limits at one place may be set up at least at taluk 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.
- Cluster approach, being adopted in a few districts, may be spread throughout the state, which ensures availability of technical and financial inputs to the sericulture farmers NGOs may be involved by the Department for social mobilisation.

2.1.4.6 Other related matters:

- Agriculture and Processed Food Products Export Development Authority (APEDA), Government of India has identified Solapur district as potential export clusters for propmation cultivation of Pomogranate & Banana fruit crops
(Source: Website- www.apeda.gov.in).
- Keeping in view the importance & widely growing the trade to pomegranate & Banana in international level, an apex body named “MAHAANAR” & “MAHABANANA” were established with an objective of promotion of cultivation of these fruit crops by Maharashtra State Agricultural Marketing Board, Government of Maharashtra.
(Source: Website - <https://www.msamb.com/Export/Mahaanar/Mahabanana>).
- Solapur district has also been for Cluster Development Programme for Pomegrenate by National Horticulture Board (NHB).

Chapter 2.1.5 Forestry & 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. India has developed a strong legal and policy framework for Forestry sector for sustainable forest governance through National Forest Policy, 1988, Indian Forest Act, 1927, Forest (Conservation) Act, 1980 and Wildlife (Protection) Act, 1972.

Forestry sector is facing many challenges like forest fires, illegal felling of trees, illegal grazing, encroachments on forest lands, degradation of forest eco-systems etc. All protection related issues of forest and wildlife sector are dealt in Indian Forest Act, 1927, Wildlife Protection Act 1972, Forest Conservation Act, 1980 etc. Many development and industrial projects such as dams, mining, industries, roads etc require diversion of forest land. Project proponent whether government or private have to obtain prior approval from Ministry of Environment, Forests and Climate Change (MoEF&CC).

National Forest Policy, 1988 sets a strategy of forest conservation with principal aim of ensuring environmental stability and maintenance of ecological balance by bringing a minimum of one-third of total land area of the country under forest or tree cover. National Forest Policy is now under revision to incorporate issues those have gained importance in last few decades.

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.

2.1.5.1.1 Present Status of Forest Cover in Maharashtra State:

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 **2nd** among the States in terms of the recorded forest area. As per the India State of Forest Report 2019, the State has reported extent of **Recorded Forest Area (RFA) 61,579 sq km** which is **20.01%** of its geographical area, against the target of 33 per cent, set under the National Forest Policy (1988). Maharashtra accounts for **8%** 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 61,579 sq km of which 49,546 sq Km is Reserved Forests, 6,733 sq km is Protected Forest and 5,300 sq km is Unclassed Forests. In Maharashtra, during the period from 1st January 2015 to 5th February 2019, a total of 3797.16 hectares of forestland was diverted for non-forestry purposes under the Forest Conservation Act, 1980 (MoEF & CC, 2019). As per the information received from the SFD, a total area of 1,47,814 ha has been notified as reserved forests during 2014 to 2019. Six National Parks, 48 Wildlife Sanctuaries and 6 Conservation Reserves constitute the Protected Area network of the State covering 3.03% of its geographical area.

As per the India State of Forest Report 2019, in terms of forest canopy density classes, the State has 8,720.53 sq km under Very Dense Forest (VDF), 20,572.35 sq km under Moderately Dense Forest (MDF) and 21,484.68 sq km under Open Forest (OF). Forest Cover in the State has increased by 95.56 sq km as compared to the previous assessment reported in ISFR 2017.

Forest Cover of Maharashtra (in sq km)

Class	Area	Percentage of GA
VDF	8,720.53	2.83
MDF	20,572.35	6.69
OF	21,484.68	6.98
Total	50,777.56	16.50
Scrub	4,256.49	1.38

(Source: India State of Forest Report 2019)

2.1.5.1.2 Present Status of Forest Cover in Solapur district:

Geographical Area (GA)	2019 Assessment (ha)				% of GA	Change wrt 2017 assessment	Scrub
	Very Dense Forest	Mod. Dense Forest	Open Forest	Total			
14,895	0.00	5.50	44.17	49.67	0.33	1.67	60.72

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, 2020-21, total value of forest produce (major & minor products) was about Rs. 466 crore.

2.1.5.1.3 Agroforestry:

Presently, the agriculture sector is confronted with issues like practice of mono-cropping, reduction in per capita land holding (approx. 1 ha), increase in number of Marginal and Small farmers (86% cultivating about 47% of the net sown area), limited scope for horizontal expansion of land for agriculture purpose, high dependency on monsoon with assured irrigation facilities only available in 48% of the net sown area, climate risk, etc. Thus, the economics does not gel much in favour of the sector which harbours almost 50% of the population.

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

Agroforestry Systems:

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

Agro-Forestry Systems			
Structural Basis		Functional basis	
Nature of Components	Arrangement of Components	Productive Function	Protective Function
Agri-Silvicultural Systems	Spatial Arrangement	Timber, Fodder & Fuel wood	Wind Breaks & Shelterbelts
Silvi-Pastoral Systems		Food, Fiber & Shelter	Soil Conservation

Agro-Silvi-Pastoral Systems	Temporal Arrangement	Non Timber Forest Produce	Soil Improvement
➤ Agri- Component comprises of Food Grains; Horticulture Crops viz. Fruits, Vegetables, Flowers, Medicinal & Aromatic Plants; Animal husbandry – Livestock Animals, SGP, Poultry, etc. ➤ Silvi - Component comprises of Woody Perennial or Trees including Bamboos which is a grass – Primarily grown for timber, fodder & fuel wood, NTFPs ➤ Pastoral - Component comprises of fodder grasses ➤ Agro - Components only comprises of food grain component			

2.1.5.1.4 Wasteland availability in district:

As per report of Wastelands Atlas of India 2019, Wastelands Area of Solapur district was reduced from 1225.29 sq km to 1220.12 sq km by about 5.17 sq km. Details of available wastelands in the district during 2015-16 were as per following classifications:

Sr. No.	Wasteland Class	Area (sq. km.)
(i)	Gullied and/or ravionous land (medium)	0.99
(ii)	Land with Dense Scrub	420.09
(iii)	Land with Open Scrub	591.68
(iv)	Under-utilised/degraded forest (scrub domin)	90.27
(v)	Under-utilised/degraded forest (Agriculture)	0.60
(vi)	Mining wastelands	0.11
(vii)	Barren Rocky/Stony waste	116.40
	Total wasteland	1220.12

As per above table, wastelands with Dense & open is having about 83% of total wastelands in the district.

2.1.5.2 Infrastructure and linkage support available planned and gaps:

- Forest Development Corporation, Maharashtra (FDCM), in association with the Social Forestry Department of the Government, is implementing the schemes for development of social forestry. Under the centrally sponsored Integrated Wasteland Development Programme social forestry is being developed in 1,08,560 ha in 129 villages of the district.
- In addition, the Social Forestry Department has covered 4700 ha area under planting on community and private land and also covered roadside planting. The department has planted species like eucalyptus, babhol, neem, teak wood, subabul, gamar and acassia etc. on panchayat/private land.
- Planting materials are available in the district. There are many Government and private Nurseries in the district, which supply seedlings of forest species, viz. Teak, Bamboo, Nilgiri, Sisum, Neem, etc.
- Planting materials for growing different species is available in sufficient quantity through nurseries in government and private sector. Similarly, other inputs like fertilizers, pesticides/insecticides, farm equipment, etc. are also easily available in the district.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.1.5.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs. lakh)

Sr. No.	Activity	Species	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Farm Forestry	Acasia, Subabul, Neem, etc.	ha	0.50	2296	1148.00	975.80
Total							975.80

2.1.5.4 Critical interventions required for creating a definitive impact:

- 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.
- Planting materials are available in the district. There are many Government and private Nurseries in the district, which supply seedlings of forest species, viz. Teak, Bamboo, Nilgiri, Sisum, Neem, etc.
- Apart from the efforts of Forest department and other Govt. Agencies the district also has a very good network of NGOs/VAs, which could be utilized for supplementing efforts of government. Some of these are active in field of afforestation and tree plantations.
- Under integrated farming programme of the State Govt., farmers are encouraged to cultivate bamboo on their waste lands as well as on the boundaries of their farms. State Govt.'s Eco-Village Scheme under which villages are encouraged for plantation of trees also provides scope for wasteland development.
- Wasteland of about 1.22 lakh ha can be brought under forest plantation, which will not only increase forest cover in the district but also, can generate additional revenue/income.

2.1.5.5 Suggested Action Points:

- There is a need to create awareness regarding techno-economic feasibility of farm forestry with inter-cropping.
- Proper extension support and coordination has to be provided for the exploitation of potential in promoting forestry on private waste land.
- There is absence of marketing tie-up, especially with forest based industries. Initiative should be taken in this regard.
- Popularization of Government schemes for increasing plantations.
- Teakwood is the most preferred forest species by the farmers in the region. There is good scope to promote eucalyptus clones for harvesting the essential oil that can be used in the pharmaceutical sector for which there exists a growing demand
- Banks may formulate suitable schemes in consultation with concerned line departments for extending credit for development of forestry and wasteland in the district. Banks may extend credit facilities to SHGs being formed in forest area by State Forest Department.
- There is need for regular interaction among all stakeholders like Banks, Social Forestry Dept., Agriculture Department, NGOs, Farmers, Corporates, etc. and a coordinated approach to ensure that development of this sector is evenly spread.
- There is a need to create awareness among farmers with regard to benefits of taking up plantation of forest and other species on their wastelands. Hence, the Agriculture/Extension Dept. of the state government may emphasis on propagating forest species.
- Beedi industry is the second important industry in Solapur. There are 115 units of 29 various beedi factories. In these 115 units there are about 70000 lady workers and 1725 factory workers in the district. In Beedi manufacturing units, the Tendu leaves (*Diospyros melanoxylon*) are mostly used as wrappers for beedis. District Forest Department can undertake a plantation of tendu leaves either in the forest areas or on private waste land through farmers, which can generate some additional revenue/income.

2.1.5.6 Other related matters:

- Forest Department of Maharashtra State is implementing massive 'Tree plantation programme' to increase forest cover.
- 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 Maharashtra the Joint Forest Management (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 with a view to create awareness about the importance of forest & wild life, to protect the forest from illegal tree cutting, encroachments, etc. Under the scheme 12,194 Joint Forest Management Committees (JFMC) were constituted in 15,500 villages. The best performing three committees at district & state level and one committee for Aurangabad region were awarded JFMC award. The JFMC manages 27.04 lakh ha of forest area. The expenditure incurred during 2017-18 was Rs. 75 lakh.
- In Maharashtra State, 'Social Forestry (Samajik Vanikaran)' is being implemented since very long.
- **Sant Tukaram Vangram Yojana** is launched with a view to create awareness about the importance of forest & wild life, to protect the forest from illegal tree cutting, encroachments, etc. Under the scheme 12,084 Joint Forest Management Committees (JFMC) were constituted in 15,500 villages in the state (Source: Economic Survey of Maharashtra – 2020-21).

Chapter 2.1.6 Animal Husbandry – Dairy

2.1.6.1 Introduction:

Among the three major sectors of the economy, 'Agriculture and allied activities' sector was the only sector that contributed positively to GSVA in 2020-21 and was least impacted during Covid-19 pandemic.

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.

Dairy farming is one of the major subsidiary activities in the district providing employment opportunities to the rural poor. Dairy is one of the important source of subsidiary income to the farmer as it is stable and continuous through out the year. Dairy has been recognised as an integral part of rural development process in India in general and it is more relevant to Maharashtra. There is an excellent potential for milk production and its marketing in the district. Production of hygienic & clean milk has become a necessity in order to compete in the international market and thus, professional procurement and processing in an organised way will be instrumental in near future in furthering the milk market for guarding the dairy farmer's interest.

Solapur is leading district in dairy development. The collection of milk, processing and transport provides large scale employment. The milk is marketed in nearby district viz Sangali, Kolhapur, Satara and also in Metro Cities like Pune and Mumbai. Pandharpuri breed is the main buffalo breed and Khillari is the main cattle breed. HF cross breed are mainly found in the district.

As per 20th Livestock Census, the livestock population of the district is as per under:

Sr. No.	Particulars	Male	Female	Total population
A	Cattles			
(i)	Exotic	6365	505622	511987
(ii)	Indigenous	66237	167180	233417
	Total	72602	672802	745404
B	Buffalos	14145	482309	496454
	Grand Total (A+B)	86747	1155111	1241858

As per Integrated Sample Survey Scheme Report on Estimation of Milk, Egg, Wool, Meat Production and Livestock & Poultry Keeping Practices in Maharashtra State for the Year 2017-18, the estimated total milk production was **982.55 (000 MT)** during the year 2017-18. Further, Solapur was ranked 4th in milk production in the same year.

2.1.6.2 Infrastructure and linkage support available planned and gaps:

- Institutes having Artificial Insemination Facilities as on 31 March 2018:

Sr. No.	Type of institutions	Nos.
	Zilla Parishad	
(i)	Veterinary Dispensaries - Grade I	120
(ii)	Veterinary Dispensaries - Grade II	83
(iii)	Mobile Veterinary Clinics	Nil
	State Level Institutions	
(iv)	Taluka Mini Veterinary Polyclinics (HQ)	5
(v)	District Mini Veterinary Polyclinics (HQ)	1
	Total	209

PLP 2022-23
Solapur District

- There is one (01) Cattle Breeding Farm for the Cattle Buffaloe Development under the control of Maharashtra Pashudhan Vikas Mandal in the district.
- One (01) District AI Centre is also available in the district.
- There are 96 milk chilling plants with a capacity of 9,79,000 liter per day (LPD) at Malshiras, Pandharpur, Sangola and Kalmala operating at 26% capacity. In addition, 2 central dudh utapadak sanghas are operating in the district. All the villages are linked by Dairy Cooperative Societies. Average membership is 80 per society. In the district, there are 4 milk federations having 3577 registered Dairy Co-operative Societies. Out of which 1321 societies are non operative, 33 registered private milk projects, 47 unregistered private milk projects, collecting 12.27 lakh liters of milk daily. There is no milk powder project in the district.
- In case of group loaning, the District Administration is encouraging purchase of dairy animals through DRDA by women SHGs as an income generating activity.
- There are total nine (09) livestock market located at Solapur, Sangola, Akulj, Natepute, Kurdwadi, Modnimb, Barshi, Akkalkot and Pandharpur. Under skill development for livestock farming, ATMA, Agriculture Department conducts training programme for farmers. Total 268 society members were trained during 2017-18.
- Training for dairy activity is also being provided by both KVKs and also by RSETI working in the district.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.1.6.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)						
Sr. No.	Activity	Unit (No.)	Unit Cost	Physical Units	TFO	Bank Loan
Term Loan						
1	Cross Breed (CB) Cows	Nos.	0.67	19293	12926.31	10905.38
2	Buffaloes (Graded Murrah)	Nos.	0.72	17687	12734.64	10824.44
3	Indigenous Cows	Nos.	0.30	17796	5338.80	4804.92
4	Mini Dairy Unit	Nos.	6.00	225	1350.00	1080.00
5	Commercial Dairy Unit (10 animals)	Nos.	6.10	634	3867.40	3093.92
6	Calf Rearing (20 calves)	Nos.	6.00	193	1158.00	926.40
7	Veterinary Clinics (including graduate centres)	Nos.	2.50	84	210.00	189.00
8	Fodder cultivation	Ha	0.15	5324	798.60	718.77
9	Bulk Milk Cooling Units	Nos.	20.00	56	1120.00	840.00
10	Artificial Insemination (AI) Centres - Private	Nos.	1.00	230	230.00	172.50
11	Milk Booths	Nos.	0.56	123	68.88	51.66
Total - Term loan					39802.63	33606.99
Working Capital under KCC						
12	CB Cows	Nos.	0.20	19293	3906.84	3906.84
13	Buffaloes	Nos.	0.20	17687	3581.63	3581.63
14	Indigenous Cows	Nos.	0.17	17796	3107.19	3107.19
Total - Working capital					10595.66	10595.66
Grand Total					50398.29	44202.65

2.1.6.4 Critical interventions required for creating a definitive impact:

- As per National Agriculture Commission norms, 01 veterinary graduate centre for 5000 adult cattle units, the district requires 149 such centres, as per district cattle population of 20th Livestock Census, 2019. There are total 126 nos. of such centres are already available in the district. Hence, there is a gap of just 23 nos. of such centres.
- There are 209 AI center distributed among the 11 blocks of the district. Considering the norm of one AI center for 1000 breedable animals, the district required around 1241 AI center based on Cattle & Buffalo population as per 20th Livestock Census, 2019. The gap under AI centre is still more than 1032 nos.
- The above gap in veterinary institutes can be covered through private investments.
- Milk powder manufacturing unit is not available in the district. This can be established through PPP mode or through private investments.

2.1.6.5 Suggested Action Points:

- Keeping in view the equitable distribution of livestock resources and the fact that contribution of livestock to farmer income is significantly increasing with the decline in farm size, there is a need for supporting allied activities to improve cash flow of small and marginal farmers and it can play a major role in our efforts for doubling of the farmers income by 2022.
- Productivity across various livestock species is a major issue especially in case of dairy animals. Field progeny testing programme offers excellent scope for enhancement of productivity of milch animals. Incentives may be made available to milk unions, farmer producer organizations, etc., for implementing such programmes.
- Systematic conservation, genetic improvement and sustainable utilization of indigenous livestock breeds is required.
- Modernization of such physical infrastructure may be planned by State Governments Financial assistance is available from NABARD under RIDF and NIDA.
- Frequent outbreaks of diseases like FMD, BQ, PPR, Brucellosis, Swine fever and Avian Influenza etc. continue to reduce productivity and production. However, the available veterinary support in terms of infrastructure (for hospitals) is qualitatively insufficient. Moreover, most of the existing dispensary and hospital buildings are very old and in dilapidated condition. Therefore, modernization of such physical infrastructure may be planned by State Governments Financial assistance is available from NABARD under RIDF and NIDA.
- Disease diagnosis, reporting, epidemiology, surveillance and forecasting mechanisms are to be strengthened. Several diagnostic kits required for disease surveillance and monitoring are imported at a huge cost. The limited diagnostics available in the country are produced by few laboratories and are not of desired quality. Managing livestock diseases through prophylactic controls with strong laboratory diagnostic system is the option before all the concerned stakeholders.
- There is a need to establish food testing laboratories duly accredited by the Food Safety and Standards Authority of India (FSSAI) to check adulteration.
- There is a need to create awareness among farmers to take up dairy activity on scientific lines and on project basis.
- Banks should use Area Based Scheme prepared for dairy sector and provided in the document.
- In case of drought like situation or shortfall in rain, dairy sector suffers due to shortage of good quality fodder. Availability of fodder remains prime area of concern for farmers as it impacts the health of livestock and in turn quality and quantity of milk. Hence, cultivation of good quality fodder needs to be emphasized upon.
- Efforts may be taken to operationalize non-operative milk societies.

2.1.6.6 Other related matters:

Government Sponsored Schemes:

- **Rashtriya Gokul Mission:** The scheme is being implemented with the objectives of Development & conservation of indigenous breeds, Enhancing milk production & productivity of bovine population by increasing disease free high genetic merit female

population and check on spread of diseases, Distribution of disease free high genetic merit bulls for natural service, To bring all breedable females under organised breeding policy through AI or natural service using germ plasm of high genetic merits, To arrange quality AI services at farmers' doorstep, To create e-market portal for bovine germ plasm for connecting breeders and farmers, etc.

- **National Animal Disease Control Programme:** GoI started 100 per cent centrally sponsored National Animal Disease Control Programme on mission basis from 2019-20 to achieve effective control on Foot and Mouth Disease (FMD) and Brucella by 2024-25 and complete eradication by 2029-30.
- **Kisan Credit Card (KCC) Scheme** – Working Capital for Animal Husbandry and Fisheries:
From the Union Budget 2018-19, Government of India has extended the facilities of Kisan Credit Card (KCC) to Animal Husbandry farmers and Fisheries (AH &F) to help them to meet their working capital requirements upto Rs. 2 lakh in addition to KCC for crop loans.
- **Livestock Insurance Scheme:** This scheme is being implemented in the State by Maharashtra Livestock Development Board since 2006-07. The main objective of the scheme is to provide protection to the cattle holders against any eventual losses due to death of animal because of natural calamity, accident or disease.
- **Navinypuarn Scheme - 06/04/02 Milch Animal Group Distribution Scheme:** Under this scheme, subsidy is being provided @ 50% to General Category and 75% to SC/ST beneficiaries.
- Subsidy schemes are also available under **District Planning Committee.**
- State govt. is also spending for **fodder development.**
- i. **Dairy Infrastructure Development Fund (DIDF):**
In the Union Budget for FY 2017-18, setting up of Dairy Infrastructure Development Fund (DIDF) was announced. Accordingly, the fund of Rs. 8004 crore titled DIDF was set-up with NABARD with total financial outlay of Rs. 10881 crore for the project comprising
 - (a) Rs. 8004 crore to be raised by NABARD from market
 - (b) Rs. 2001 crore to be contributed by Eligible End Borrowers (EEBs) towards margin
 - (c) Rs. 12 crore to be contributed by National Dairy Development Board (NDDB)/National Cooperative Development Corporation (NCDC) on prorata basis towards Project Management and Learning
 - (d) Interest Subvention of Rs. 864 crore to be provided to NABARD by Department of Animal Husbandry Dairying and Fisheries (DADF), Ministry of Agriculture and Farmer Welfare, Government of India, through budgetary support from Government of India.

(Source: www.dahd.nic.in//www.nabard.org)

Chapter 2.1.7 Animal Husbandry – Poultry

2.1.7.1 Introduction:

Poultry farming can be taken on a commercial basis and also as rural backyard units. They provide supplementary income to the underemployed rural poor besides providing nutritional security.

As per Integrated Sample Survey Scheme Report on Estimation of Milk, Egg, Wool, Meat Production and Livestock & Poultry Keeping Practices in Maharashtra State for the Year 2017-18, the overall estimation of egg production during the year 2017-18 was as per under:

Sr. No.	Particulars	No. of layers (lakh)			Total Egg Production (lakh)		
		Rural	Urban	Total	Rural	Urban	Total
(i)	Deshi Layers	8.65	0.20	8.84	1178.87	23.37	1202.24
(ii)	Improved layers	12.01	0.00	12.01	3440.46	0.00	3440.46
	Grand Total	20.66	0.20	20.85	4619.33	23.37	4642.70

Further, Solapur was ranked 4th in egg production in the same year.

As per 20th Livestock Census, 2019, total no. of fowls was as per under:

Sr. No.	Particulars	No. of fowls		
		Rural	Urban	Total
(i)	Poultry Farms	133662	61	133723
(ii)	Backyard units	1931282	12895	1944177
	Grand Total	2064944	12956	2077900

The poultry activity in the district has witnessed declining trend primarily due to high feed cost, increasing management expenditure and un-remunerative prices for the produce.

In meat production, poultry sector contributes about 60% in the total meat production.

2.1.7.2 Infrastructure and linkage support available planned and gaps:

- About 30% of bird population is concentrated in three blocks i.e. in Barshi, Sangola and Malshiras.
- There are 6 cooperative poultry farms in the district viz. Shivkrupa Coop., Rukmini Coop., Pancharatna Coop., Vijay Coop. and Gajanan Coop., Rajhans Poultry Farming Sanstha. There are about 140 primary poultry farming Sansthas working in the district.
- One (01) Intensive Poultry Development Block under Poultry Development is established in the district.
- There are two Government hatcheries in Solapur district, which are located in Solapur and Pandharpur blocks. One private hatchery is also located at Varvade Madha block. However, Day Old Chicks (DOC) are mainly available from Pune and Hyderabad. Other infrastructure like water, transportation and electricity are adequate. Health services, including vaccination, are available through AH department and private hatcheries.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.1.7.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Units	TFO	Bank Loan
	Term Loans					
1	Commercial Broiler Units (2000 birds)	Nos.	4.00	1147	4588.00	4129.20

2	Commercial Layer Units (2000 birds)	Nos.	10.00	384	3840.00	3264.00
3	Egg/ Broiler Carts	Nos.	0.13	544	707.2	63.65
4	Poultry Feed Plant (1 MT capacity)	Nos.	19.80	46	910.80	683.10
6	Broiler Dressing Units	Nos.	5.00	220	1100.00	990.00
Total - Term loan					10509.52	9129.95
Working capital under KCC						
7	Commercial Broiler Units (2000 birds)	Nos.	3.32	1147	3808.04	3808.04
8	Commercial Layer Units (2000 birds)	Nos.	3.32	384	1274.88	1274.88
Total - Working capital					5082.92	5082.92
Grand Total					15592.44	14212.87

2.1.7.4 Critical interventions required for creating a definitive impact:

Possibility of marketing channels for eggs & broiler (meat/ culled birds) local demand / export to other district States / countries required to be explore.

2.1.7.5 Suggested Action Points:

- Indian poultry industry is well equipped and organized to achieve target growth rate of 11% for commercial broilers and 7% for layers although it failed to diversify in favour of duck, quail and turkey production. Strategic diversification efforts are need of the hour. Further, rural poultry sector needs financial, infrastructure and technological support to raise its share in total poultry production.
- Rearing of desi birds on scientific lines also made a beginning. Few private hatcheries are supplying improved desi broiler as well layers. Adequate awareness is necessary to capture potential under rural poultry production by rearing desi improved birds.
- Lack of access to organized markets and meagre profits distract farmers from investing into improved technologies and quality inputs. Informal market intermediaries often exploit the producers. Activity specific Farmer Producer Organizations may be formed on the lines of milk cooperatives for acting aggregators and to participate in modern electronic marketing infrastructure being created by GoI and State Governments.
- Banks may encourage / support financially viable projects in coordination with private hatcheries and also encourage eligible activities under various Government Sponsored Programmes and VCF poultry subsidy scheme (Venture Capital Fund)
- There is a need to create more awareness among the prospective borrower as well as among the banker about commercial poultry activity.
- Government poultry department may encourage backyard poultry.
- Rearing of low input technology like "Girija" could be promoted through SHG.

2.1.7.6 Other related matters:

Government Sponsored Scheme:

- **Kisan Credit Card (KCC) Scheme** – Working Capital for Animal Husbandry and Fisheries:

From the Union Budget 2018-19, Government of India has extended the facilities of Kisan Credit Card (KCC) to Animal Husbandry farmers and Fisheries (AH &F) to help them to meet their working capital requirements upto Rs. 2 lakh in addition to KCC for crop loans.

(Source: www.dahd.nic.in/www.nabard.org)

- **Navinypuarn Scheme - 1000 starting poultry farming (avocation) in Maharashtra State by rearing 1000 broiler birds:** Under this scheme, subsidy is being provided @ 50% to General Catgory and 75% to SC/ST beneficiaries.
- Subsidy schemes are also available under **District Planning Committee.**

Chapter 2.1.8 Animal Husbandry – Sheep, Goat and Piggery, etc.

2.1.8.1 Introduction:

Sheep & goat rearing activity is generally popular among families living below poverty line and with small/marginal farmers as it serves as source of subsidiary occupation to a large number of rural populations. It plays an important role in creating employment opportunities and providing supplementary income to these farmers. Besides providing nutritious food materials, further no substantial amounts to be invested towards feed cost, feeding is mainly supported by grazing and use of crop residues. The sheep rearing activity is more popular among traditional shepherds in eastern parts of the district, while the goat rearing activity is more or less evenly spread all over the district. Although, a few piggery units have come up in the district, the activity is yet to gain popularity and attain commercial status.

As per 20th Livestock Census of 2019, there was 4.96 lakh Sheeps, 9.63 lakh goats and 0.10 lakh pigs were in the district.

Further, as per Integrated Sample Survey Scheme Report on Estimation of Milk, Egg, Wool, Meat Production and Livestock & Poultry Keeping Practices in Maharashtra State for the Year 2017-18, Solapur district was ranked 7th in wool production with 82.15 MT.

Osmanabadi & Sangamneri are the predominant breeds of goat in Solapur. In view of ecology of state & district, goat breeds of Maharashtra are having good prolificacy, productivity & dressing percentage with well-accepted taste.

Solapuri (Sangola) sheep breed is mainly reared for wool production. However, the income derived from meat production is much more than that of wool production as the wool produced is rough and coarse which is used only for production of local products like ghongadi, jen & blankets.

2.1.8.2 Infrastructure and linkage support available planned and gaps:

- This district has large number of shepherd community, who are specially taking up sheep rearing as a traditional activity. District had 77,000 ha grazing land and 4200 ha of forest land also.
- Inadequate fodder availability through grazing lands affects the shepherds. The State Government the Zila Parishad may therefore develop free grazing lands and also make provision for fodder depots.
- There is no organized market for sheep/goat/pig meat, 4 recognized slaughter houses and many unrecognized slaughter houses meet the local needs. Lack of training, illiteracy and lack of awareness among butcher, least attention paid by Municipalities and Gram Panchayats for hygiene and sanitation in the slaughter houses are the major concerns for development of the activity.
- **Breeding and training Centre** - The Sheep and Goat Development Corporation of Maharashtra with its Head Office in nearby district Pune, which is the nodal agency for sheep and goat development. It ensures supply of quality sheep, goats, and also provides training to farmers.
- Both KVKs & one RSETI are also providing training to the farmers on sheep & goat rearings.
- **Health Care** - Livestock health services through veterinary institutions (as indicated in the chapter on Dairy Development) are also available for Sheep/Goat/Piggery activities.
- The district has adequate infrastructure for promoting stall-fed commercial Goat rearing farms and commercial piggery units on a selective basis.
- **Market** – Mumbai, Pune and nearby districts offers a good market for meat and pork products. To encourage Ghongdi and Zen making. A common facility center had been established at Balavadi village of Sangola block with NABARD support.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.1.8.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
Term Loan						
1	Goat Rearing Units (10+1) – Osmanabadi/Sangamneri	Nos.	0.89	4233	3767.37	3202.27
2	Stall Fed Goatery Units (50+5)	Nos.	3.30	403	1329.90	997.44
3	Sheep Rearing Units (20+1)	Nos.	1.32	2567	3388.44	2880.17
4	Commercial Piggery Units (10+1)	Nos.	0.90	9	8.10	7.29
Total - Term loan					8493.81	7087.17
Working capital under KCC						
5	Goat Rearing Units (10+1) – Osmanabadi/Sangamneri	Nos.	0.27	4656	1257.21	1257.21
6	Stall Fed Goatery Units (50+5)	Nos.	1.49	403	598.47	598.47
7	Sheep Rearing Units (20+1)	Nos.	0.57	2554	1455.51	1455.51
8	Commercial Piggery Units (10+1)	Nos.	0.30	9	2.67	2.67
Total - Working capital					3313.86	3313.86
Grand Total					11807.67	10401.03

2.1.8.4 Critical interventions required for creating a definitive impact:

Since, vast majority of population engaged in goat rearing as traditional activity. One training centre is required at district level.

2.1.8.5 Suggested Action Points:

- Bank may encourage financing eligible activities under Integrated Developments of Small Ruminants.
- Financing this activity in groups of SHG/JLG will be beneficial for banks.
- An effective Training and Extension campaign may be launched to create awareness about benefits of taking up various activities under this sector, especially among the landless and unemployed youth in rural areas.
- Successful farmers should be contacted and be encouraged for availing of bank finance.
- There is a need to promote stall-fed goat rearing as a viable economic activity outside government sponsored programs.
- Similarly, Commercial piggery may also be encouraged, linking it with Hotels/Kitchen Left Overs for optimizing feeding expenses.
- Sheep and Goat Development Corporation may identify proper sources for procuring sheep and goats.
- Animal Husbandry Dept. may identify proper sources for supply of exotic / crossbred pigs and also plan for establishing pig breeding farms.
- Research centre or common service centre on leather processing/ tannery, wool processing units and necessary extension services for training of farmers be established by Sheep and Goat Development Corporation.
- Exposure visits/training of potential SHGs on goat rearing may be considered under ATMA.

2.1.8.6 Other related matters:

- **State breeding policy for Goat:** Breeding policy for goats primarily aims at increased meat production for meeting not only its local demand but also to explore the export avenues. At the same time, goat milk is also important in rural economy. This will also act as an added impetus to make the rural goat farming more sustainable. Hence, on this background desired genetic improvement amongst the goat population will help in reaping the benefits of dual purpose breeds through the use of identified breeds. Priority for this purpose will be given to selective

breeding/up gradation of the recognized local indigenous breeds like Osmanabadi and Sangamneri. Efforts will be made for identifying the local indigenous goat breeds through rigorous phenotypic characterization. Besides using these local indigenous breeds, a strategy will be adopted to evolve sturdy goat, which would sustain and thrive in the heavy rainfall areas. Through up gradation of the identified sturdy goat and after finalizing desired phenotypic characters, such goat will be got registered with NBAGR as a specific breed and will be used for genetic up gradation of the local goat in heavy rainfall areas. Exotic/Indigenous dual purpose goat breeds with twinning trait will also be considered for improvement of nondescript goats through either importation or locally fetching suitable material on experimental basis.

- **Breeding policy for Sheep:** Breeding policy for sheep primarily aims at increased meat production for meeting not only its local demand but also to explore the export avenues. Hence, on this background impending genetic improvement of the breedable sheep will help in reaping the benefits of meat purpose breeds, through the use of identified breeds. Priority for genetic improvement will be given through selective breeding/ up gradation of the local non-descript sheep population. Extensive use of Deccani breed of sheep will be sought for this purpose. Besides this, possible use of newly identified breed namely Madgyal from Jath, Dist. Sangli will also be explored for genetic upgradation of non-descript sheep in extended home tract. For selection of elite rams (to be used for breeding), organization of Ram Shows will be encouraged and promoted.
- **Kisan Credit Card (KCC) Scheme – Working Capital for Animal Husbandry and Fisheries Sectors:**

From the Union Budget 2018-19, Government of India has extended the facilities of Kisan Credit Card (KCC) to Animal Husbandry farmers and Fisheries (AH &F) to help them to meet their working capital requirements upto Rs. 2 lakh in addition to KCC for crop loans.

(Source: www.dahd.nic.in//www.nabard.org)

- **Navinypuarn Scheme – Semi-Stallfed 10 goats and 1 male goat group distribution:** Under this scheme, subsidy is being provided @ 50% to General Category and 75% to SC/ST beneficiaries.
- Subsidy schemes are also available under **District Planning Committee.**
- **Raje Yashwantrao Holkar Mahamesh Yojana:** This scheme aims at promotion of sheep rearing for Nomadic Tribes-C beneficiaries. Under the scheme, 75 per cent subsidy is given for sheep unit (20+1), distribution of improved male sheep, providing infrastructure for sheep rearing & balanced feed for each sheep unit and 50 per cent subsidy given for purchasing of mini silage baler-cum-wrapper machine & installation of animal feed units.

Chapter 2.1.9 Fisheries

2.1.9.1 Introduction:

The district has 82 tanks including Ujani of which 78 tanks have been given on lease for fisheries development. The fish culture which is practiced in the District is mostly through these tanks. Total area under fisheries in the district inclusive of tanks, small tanks, medium irrigation project, ZP/GP tanks works out to 27896 ha. The total fish production was 3800 MT for 2016-17.

The area available for inland fisheries, area brought under fishery and production of fish is as under:

River Length (km)	Area under Ponds, Reservoirs, etc. for fisheries		Area for Fishery (ha)	Production of Fish (MT)	Fishery Cooperative Societies	
	Nos.	Total area (ha)			Nos.	Members
772	80	27458	26778	2950	138	4594

(Source: District Statistical handbook: 2014)

In the district there are 82 ponds having 29000 ha water area, out of which 11 ponds are more than 200 ha capacity and rest are less than 200 ha capacity.

Ministry of Agriculture, Govt of India has set an outlay of ₹ 3000 crores for implementation of **blue revolution programme** in the next five years with focus on production, productivity, upgrading technology and infrastructure development etc. The plan aims at increasing total fish production by 50 per cent to 15.2 million tons and triples the export earnings to ₹ 1 lakh crore by year 2020.

Blue Revolution, the **Neel Kranti Mission** has the vision to achieve economic prosperity of the country and the fishers and fish farmers as well as contribute towards food and nutritional security through full potential utilization of water resources for fisheries development in a sustainable manner, keeping in view the biosecurity and environmental concerns. The **Neel Kranti Mission, 2016 (NKM 16)**, being the year in which the Vision has been given by the Prime Minister will have multi-dimensional approach to all activities concerned with development of the fisheries sector as modern world class industry in India. It will focus on tapping the full production potential and enhance productivity substantially from aquaculture and fisheries resources, both inland and marine. Substantially increasing the share of Indian fisheries in the export area would be a key goal.

2.1.9.2 Infrastructure and linkage support available planned and gaps:

- There are 138 fisheries co-operative societies having active 5005 member.
- Introducing a policy of leasing of the tanks owned by Irrigation Department on the basis of the water spread area. Tanks are being leased out to primary fishermen cooperative societies as well as to private farmer, in case societies are unable to take it.
- Leasing of tanks for a period of five year to private entrepreneur and Fishermen cooperative societies.
- Marketing of fish will not pose any problem as the entire fish catch in Solapur district is locally consumed.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.1.9.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Units	TFO	Bank Loan
Term Loans						
1	Composite Fish Culture - Existing ponds	Ha	1.76	55	96.80	87.13
2	Composite Fish Culture - New ponds	Ha	2.07	74	153.18	137.86
3	Fresh Fishery Prawn Culture	Ha	3.17	29	91.93	68.96
Total - TL				158	341.91	293.95
Working capital under KCC						
4	Composite Fish Culture - Existing ponds	Ha	0.30	55	16.28	16.28
5	Composite Fish Culture - New ponds	Ha	0.30	74	21.90	21.90
6	Fresh Fishery Prawn Culture	Ha	0.30	29	8.58	8.58
Total - WC				158	46.76	46.76
Grand Total				316	388.67	340.71

2.1.9.4 Critical interventions required for creating a definitive impact:

- Integrated reservoir development plan for increasing fish production both under capture and culture fisheries are required. Establishment of aqua mart & aqua labs.
- Efforts for development of saline lands and utilize the same for aquaculture.
- Fish seed rearing in private sector needs to be promoted.
- Ornamental fish parks may be set up.
- Setting up hygienic fish markets utility for which assistance available from NFDB.
- Increase in fish seed production, utilize available inland fisheries potential with optimum fish seed stocking and reservoir fisheries development with the help of NFDB to achieve higher fish production are the priority areas to achieve expected growth rate in inland sector. The training and awareness creation of fishers and aqua-culturists about resource potential, business management, responsible fishing, laws and regulations, incentives etc., needs priority attention.

2.1.9.5 Suggested Action Points:

- Banks may coordinate with Fisheries Deptt. for identification of borrowers, form SHGs/JLGs group of farmers so that financing and recovery is facilitated.
- Revitalization of defunct fisheries cooperative societies.
- The lease period of ponds and tanks owned by Gram Panchayat, ZP, Municipalities and Irrigation Department need to be enhanced to 7 to 10 years so as to facilitate banks to extend long term loans for improving production and productivity.
- There is need to encourage rearing of carp spawn to fingerlings and yearling by the entrepreneurs including allotment of suitable lands so that the carp seed production and rearing can be developed with bank credit.
- Identification of reservoir fisheries for scientific stock management and development.
- Encouraging fishermen to undertake fresh water prawn farming in order to increase fish production
- Strengthening of inland fish marketing by providing infrastructure facilities
- Encourage private farmers for construction of new fish ponds for providing employment and providing self-employment to them
- Renovation, expansion and up gradation of the existing fish seed production farms.
- Ornamental fish farming through groups especially women SHGs.
- State Government may consider availing loans under Rural Infrastructure Development Fund (RIDF) from NABARD for creation of common infrastructure.
- Producers Organization of fishermen can play vital role in increasing the fishery production in the district. (Action: Fisheries Deptt.)

2.1.9.6 Other related matters:

- **Kisan Credit Card (KCC) Scheme – Working Capital for Animal Husbandry and Fisheries:** In the Union Budget 2018-19, Government of India has extended the facilities of Kisan Credit Card (KCC) to Animal Husbandry farmers and Fisheries (AH &F) to help them to meet their working capital requirements upto Rs. 2 lakh in addition to KCC for crop loans.
(Source: www.dahd.nic.in//www.rbi.org.in)
- **Pradhan Mantri Matsya Sampada Yojana (PMMSY):** GOI has launched this scheme on 3rd December, 2020 for a period of five years. The PMMSY is designed to address critical gaps in fish production & productivity, quality, technology, post-harvest infrastructure & management, modernisation & strengthening of value chain, establishing a robust fisheries management and fishers' welfare.
- **Fisheries and Aquaculture Infrastructure Development Fund (FIDH):** GOI has created this fund with a corpus of Rs. 10,000 crore under this fund through budget announcement in the year 2018. FIDF envisages creation of fisheries infrastructure facilities both in marine and inland fisheries sectors and augment the fish production to achieve the target of 15 million tonnes by 2020 set under the Blue Revolution. Besides, the FIDF aims to achieve a sustainable growth of 8- 9 per cent, in a move to augment the country's fish production to the level of about 20 million tonnes by 2022-23.

(Source: Official website of Ministry of Fisheries, Animal Husbandry and Dairy)

Chapter 2.1.10 **Farm Credit Others - Bullocks, Carts, two wheelers, etc.**

2.1.10.1 Introduction:

Due to small size of land holding and suitability of bullocks for ploughing and other agricultural operations, many farmers still follow the traditional method of agriculture using bullocks for ploughing and other agricultural operations. Bullock carts are still used for transportation of agricultural produce. Even today bullocks continue to be source of power for agricultural operations for large number of farmers with small unirrigated land holdings, as mechanisation is not viable option for them.

Major source of power for agricultural operations in rural India is bullocks. The large number of sugar factories in the district also offer potential for financing bullocks & bullock carts for transporting sugarcane from field to the factory. Both the bullocks and bullock carts are locally available, easily maintainable, have multiple uses and adaptable for a variety of conditions. Bullock carts are also used for custom hiring which is a source of income to the farmers/agricultural labourers. Further, activity like farm house can also be source of income to farmers considering emphasis given on rural tourism and also can be utilized for stay purpose of farmers and agricultural labourers. Population of draught animal in the district is about 72602 cattles (male), as per 20th Livestock Census of 2019.

2.1.10.2 Infrastructure and linkage support available planned and gaps:

- The health care facilities for the bullocks are available through a network of veterinary centers and dispensaries as indicated in the Chapter on Animal Husbandry – Dairy Development.
- By and large, good numbers of quality bullocks, cart manufacturing and repairing facilities are available in the district.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.1.10.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Units	TFO	Bank Loan
1	Bullocks/other animals	Nos.	0.40	2035	814.00	732.60
2	Bullock Carts	Nos.	0.30	2780	834.00	750.60
Grand Total					1648.00	1483.20

Keeping in view the increasing use of mechanization in agricultural operations, improved transportation systems and communication facilities and the past trend in the flow of bank credit to this sector, potential for financing of bullocks/bullock carts for the year 2022-23 has been assessed.

2.1.10.4 Critical interventions required for creating a definitive impact:

- Fodder availability needs to be ensured to the farmers during draught/summer season.
- Training on use of bullock drawn implements are also to be provided to the farmers especially small & marginal farmers, who do not afford rent for tractors.
- Bank branches nearly sugar factories may encourage financing for bullock carts with JLG approach.

2.1.10.5 Suggested Action Points:

- Animal Husbandry Department may formulate special breeding programme for improving quality of the bullocks.
- Banks may finance as per market cost of carts and encourage use of pneumatic tyre carts for transport purpose.
- Adequate Veterinary Services to be provided through AH Deptt.

Chapter 2.1.11

Integrated Farming Systems for sustainable income and climate resilience

2.1.11.1 Introduction

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

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

The advantages of IFS are indicated below:

- Soil fertility and productivity enhancement through organic waste recycling and increased sustainable farm income
- Integrated farming system shall meet the energy and timber needs of rural households and also timber needs of construction sector in a cost effective manner.
- Higher food production to equate the demand of the exploding population

The various components of IFS are crops, live stocks, birds and trees. The crops may have subsystem like mixed/intercrop, multi-tier crops. The livestock components may be milch animals, goat, sheep, poultry and the tree components include fruits, timber, fuel and fodder. The major factors which need to be considered in choosing an IFS model are soil type, rainfall, its distribution and length of growing season.

2.1.11.2 Policy Support/Models

Indian Institute of Farming Systems Research (IIFSR), Modipuram and other ICAR institutions have developed 51 integrated farming systems suitable to marginal and small holders, which can be accessed from the link -

http://www.iifsr.res.in/sites/default/files/prog_files/Bulletin_IFS_July_2020.pdf

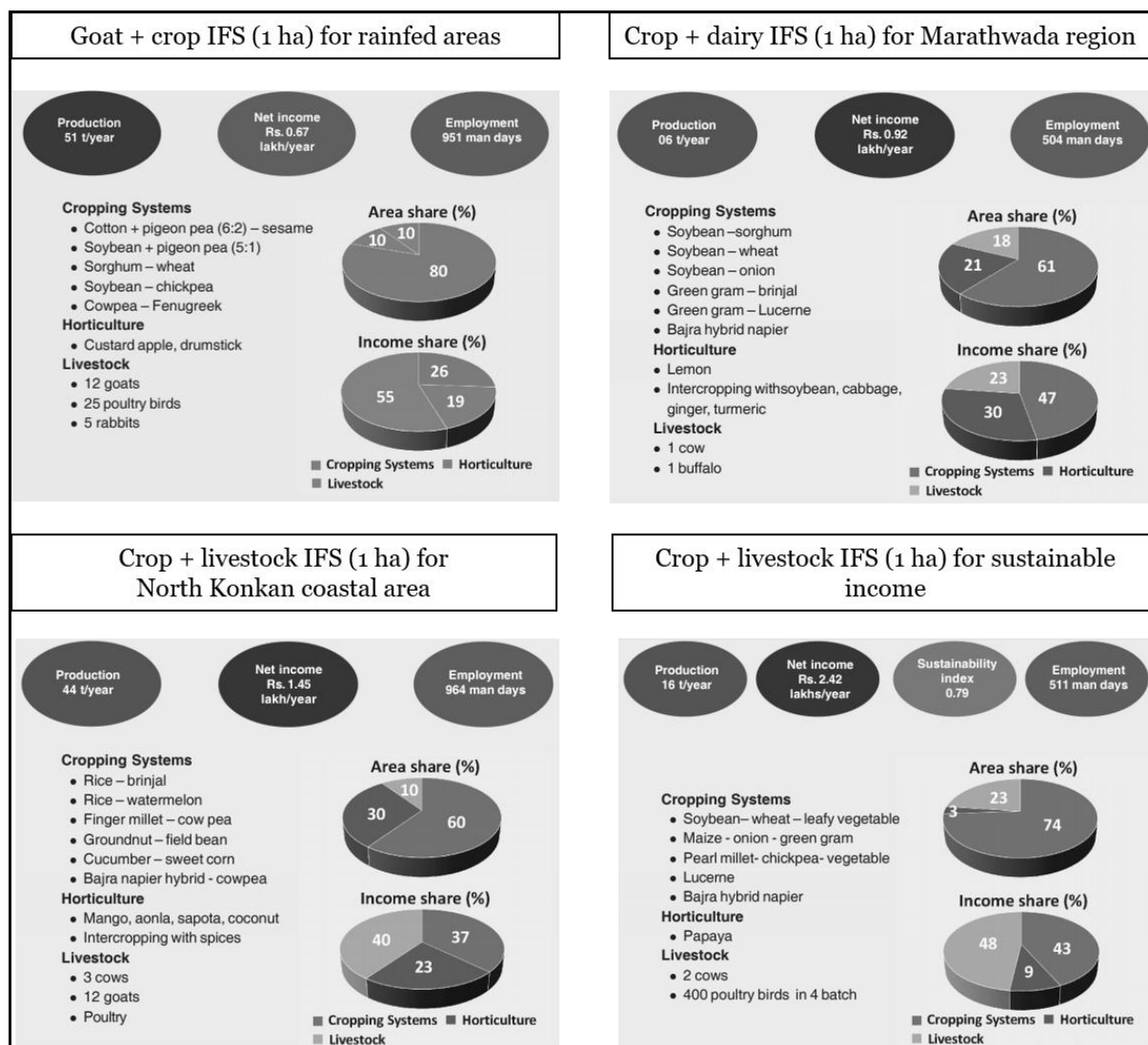
The Maharashtra specific models for IFS for Agricultural Diversification, Enhanced Income and Employment brought out by the Indian Council of Agricultural Research (ICAR) are presented below in the table 2.1.11.4.

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

2.1.11.3 Issues and Suggestions

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

2.1.11.4 The models for Integrated Farming Systems for Agricultural Diversification, Enhanced Income and Employment are as follows:



Chapter 2.2 Agriculture Infrastructure

Agriculture Infrastructure is the most essential input regarding the development of Indian agriculture as one third population of the country depends on agriculture sector directly or indirectly. At present, much emphasis has been on commercializing agricultural production, hence adequate production and distribution of food has become a high priority. This in turn implies that agriculture infrastructure like seeds, fertilizers, irrigation sources should be organized to achieve the maximum momentum of growth.

The factors like high soil productivity, supply of balanced crop nutrients, efficient water management, improved crops, better plant protection, and post-production management for value-addition are responsible for higher yield in the Indian agriculture. Further the uninterrupted supply during off season requires creation of scientific storage and market facility including warehouses, market yards, godowns, silos, cold storage units and cold storage chains.

Chapter 2.2.1 Construction of Storage and Marketing Infrastructure (Warehouses/Godowns, Market yards, Silos, Cold storage units/Cold chains)

2.2.1.1 Introduction:

Agriculture sector is critical to India's development, for it contributes 14.1% to the nation's GDP and employs 52% of the total workforce. Indian agriculture sector, despite its high potential is constrained by supply chain inefficiencies and huge post-harvest losses arising out of inadequate storage.

The rural-urban supply chain is not only crucial for food security but also for the income of those employed in the urban and rural areas, be it farmer, wholesaler, transporter, processor and retailer that are all a part of the supply chain. Fruit and vegetable growing hubs with marketable surpluses have potential for a sustainable supply. Therefore, there is need to develop and strengthen supply chain for perishable farm produce to connect production, processing and consumption centers. There is a significant gap between the demand and supply of storage infrastructure in the country.

The MSAMB has schemes like Farmer market, onion storage structure, godown construction, information display, grain handling unit etc and the projects under its fold are like terminal markets, pre cooling and cold storage, MACP, AIDP and PPP mode projects.

2.2.1.2 Infrastructure and linkage support available planned and gaps:

There are 178 godowns of dry warehousing capacity of 1.64lakh MT with FCI, Private entrepreneur and PACS. Also, 45 cold storage having capacity of 15000 MT are there in the district.

The 11 APMCs are having godowns with storage capacity of 18900 MT which is fully utilized, also 45 cold storages with capacity of 15000 MT in the district are also fully utilised. Further 130 Primary Agriculture Cooperative Societies (PACS) in Solapur district also has godowns with storage capacity of 26000 MT. Wahkar Mahamandal has 12 godowns with capacity of 47500 MT, Market Federation has 05 godowns with capacity of 12,000 MT and 5 Private Godowns having capacity of 11,500 MT. Thus, the total nos. of godowns in the district are 1765 having total capacity of 1,64,000 MT in the district.

Latest technological development/ emerging activity in the Solapur district

Silo project: This technique of storage is fast gaining popularity due to its advantages over conventional methods. Most important advantage is requirement of less space to store loose grains. As the structure is more vertical in nature, space/ land requirement for construction is very less. Second advantage of silo project is saving in operational cost as labour cost is drastically cut in silo project. The quality is also comparatively better on account of provision for fumigation and Air circulation.

Double storage buildings/ Multi storage: There is demand for this kind of storage facility due to increased capacity in lesser area of land.

Galvolium roof storage with turbo ventilators: This is latest construction type using pre-engineered material for construction. Further, in Solapur, warehouse/ godowns of

MSWC is also implementing 'Rainwater Harvesting' in their godowns/ warehouses which can be replicated elsewhere also in the district to overcome water shortage in rainfed district like Solapur.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.2.1.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Storage Godown (500 MT)	Nos.	20.00	196	3920.00	1960.00
2	Storage Godown (200 MT)	Nos.	8.00	561	4488.00	2244.00
3	Cold Storage (500 MT)	Nos.	50.00	47	2350.00	1175.00
4	Onion Storage (25 MT)	Nos.	0.63	1650	1031.25	515.64
5	Milk Chilling Plant (5000 Lit)	Nos.	9.90	408	4039.20	2019.60
			Total	2862	15153.48	7914.24

2.2.1.4 Critical interventions required for creating a definitive impact:

- Timely availability of market information is a critical factor for enabling the farmers to realize a certain and best price for their produce.
- Primary Agriculture Cooperative Societies (PACS) can establish a business by developing storage infrastructure under new GOI scheme of 'Agriculture Infrastructure Fund (AIF)', wherein interest subvention @3% is available upto the project cost of Rs. 2 crore and PACS can avail finance from DCCB, which can also avail refinance from NABARD under its' scheme of 'PACS as MSC' @4%. Therefore, ultimate ROI to PACS will be just 1%. Further, capital subsidies are also available under various government sponsored schemes.

2.2.1.5 Suggested Action Points:

- Block/ Taluka wise scientific assessment of storage capacities required in the district for creation of additional storage capacity.
- Agricultural extension services may propagate the importance of scientific postharvest techniques including use of storage facilities. Strengthen marketing infrastructure and facilities in regulated markets.
- APMCs should provide facilities for processing and packing of agricultural produce.
- Awareness among farmers about government Schemes for storage facilities has to be created.
- Encourage pledge finance. Encourage farmers and entrepreneurs to take advantage of subsidy available under the schemes
- There is a need to improve the power supply position to ensure viability of cold storage units.
- DCCB to start financing to good working PACS under AIF scheme.

2.2.1.6 Other related matters:

- **Agriculture Infrastructure Fund (AIF):** GOI has created this fund with a total corpus of Rs. 1 lakh for period of 10 years from FY 2020-21. Agricultural storage infrastructure is eligible activity under the same. Interest subvention @ 3% is available under the scheme with a credit guarantee for loans upto Rs. 2 crore over period of 7 years.

Chapter 2.2.2 Land Development, Soil Conservation & Watershed Development

2.2.2.1 Introduction:

Land Development (LD) activities are of critical importance for ensuring effective utilization of land and water resources, more so when about more than 60% of the gross cropped area is rain fed as in the Solapur district. Agriculture depends upon the fertility of the soil and adequate moisture to support plant growth. Thus soil and water are the two basic natural resources needed for farming. Land Development encompasses activities relevant to soil conservation, water management, land reclamation, on farm development, etc. In view of the emerging need to ensure food security, sustainability of enhanced productivity has assumed importance. There has been a perceptible improvement in level of awareness among farmers about benefits of land development relating to these activities.

Keeping in view problems of erosion of top soil as also the scarcity of water resources, watershed development will be the proper solution for water problem in the district. At present, watershed development activities are being undertaken by the State Government and NGOs, under programs like the Integrated Watershed Development Program (IWMP), Jalyukt Shivar Abhiyan, Adarsh Gram Yojana, etc. Activities under these programmes are by and large limited to contour bunding, generally on public lands and to a very limited extent on private land with bank loan.

Banks have to play a proactive role to exploit the potential created for deployment of credit for on-farm development and other activities in treated watersheds. Watershed-wise Banking Plans would be required to be prepared for Farm as well as Non-Farm activities, for the purpose of providing credit to the farmers, who require additional funds due to the improved moisture regime, availability of water, fodder, etc.

Soil and water are the two basic natural resources in agriculture. They must be conserved well and used scientifically to ensure sustained level of production and productivity. Land provides food, fuel, fodder and shelter besides supporting other economic life supporting systems. The quality of land is deteriorating due to various factor like soil erosion caused mainly due to shift in cultivation, deforestation, reckless mining activities, overgrazing, etc. Land development activities include all activities undertaken by farmer to improve productivity of land, to prevent erosion of soil and to improve land quality. Ultimate aim is to utilize these two resources on sustainable basis.

2.2.2.2 Infrastructure and linkage support available planned and gaps:

- The district has more than 67% of farmers having land holding of 2 ha or less than 2 ha. In this situation, they cannot afford machineries for land leveling.
- **Farm Ponds** - Harvesting and recycling of rainwater in farm pond for critical lifesaving irrigation in Kharif and pre-sowing irrigation to short duration Rabi crop is gaining popularity. Due to lack of irrigation facilities, the area having scanty rain fall are forced to adopt mono cropping pattern. The farm ponds are very useful in the area. But due to small land holding farmers are not willing to spare land for farm ponds. Government of Maharashtra has introduced the scheme of Farm pond for whosoever demands it. It is necessary to increase awareness among the farmers and demonstrate some good models for alternate land use.
- **Marketing Facility**- There is an urgent need for arrangement of marketing facilities for organic farming products, so as to motivate more number of farmers for adoption of organic farming. Certifying laboratories for the benefit of organic farmers should be established at taluka level. There are many villages where farmers are producing vegetables without the use of chemical fertilizers and pesticides. Department of Agriculture may establish more laboratories for soil testing. The facility should be extended up to taluka at a minimum cost.
- The district has 1173558 ha of cultivable area and 467700 ha of non-cultivable area/wasteland. The district has 1,92,125 wells, 97188 tube wells, 269 lift irrigation schemes and 70 KT weir including 10 financed by NABARD under RIDF-I, 08 medium irrigation projects and 51 minor irrigation projects including tanks, etc. The command area covered under these projects is available for land development.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.2.2.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Land Reclamation (Saline)	Ha	0.27	1320	356.40	320.76
2	Organic Farming	Ha	0.48	7480	3590.40	3231.36
3	Farm ponds (50x50x7.5m)	Ha	1.10	6143	6757.30	3378.65
4	Land Development	Ha	0.16	7840	1215.20	911.41
5	Land Leveling	Ha	0.12	17893	2147.20	1610.40
6	Polythene Mulching	Ha	0.22	4230	930.60	697.95
Total				33723	14997.10	10150.53

2.2.2.4 Critical interventions required for creating a definitive impact:

In districts like Solapur, where topography is uneven and total rainfall received is erratic, soil and water conservation by watershed development approach has assumed great significance. With the increased awareness about the importance of these activities, role and scope for institutional finance is showing considerable potential.

2.2.2.5 Suggested Action Points:

- There is need to promote and finance schemes of NADEP Compost, Vermi Compost, Bio-Fertilizers, Bio-Pesticides, Organic Farming, etc. Both, the banks and the government departments, can play an active role in this direction.
- Mobile Soil Testing and Testing Laboratory for organic farming should provide door to door service to encourage farmers of remote areas and away from taluka / district places.
- Irrigation Department should assess the requirement of On-Farm Development Part-II works in the command area of Irrigation Projects.
- Demonstration plots may be set up for exhibiting effective reclamation of saline lands.
- Extension machinery of the State Government/District Administration should embark upon a campaign to create more and more awareness among the farmers about the tangible and intangible benefits of undertaking LD activities.
- Banks should also play a proactive role in extending credit for LD activities especially in completed watersheds and CADA. The village watershed committee of completed watersheds may form farmers club which can be trained for preparing area development scheme for the watershed village. These clubs may also be graduated into a business correspondent.
- Awareness of effective utilization of "Plasticulture in agriculture", like plastic mulching, drip irrigation, shade net, plastic lining of farm ponds, etc.
- Special Bank Plans may be prepared for completed watersheds and community may be supported with bank credit.
- Awareness on Integrated Nutrient Management & Integrated Pest Management may be mooted to reduce the dependence on chemical agriculture.
- Programme for popularization of Micro Irrigation Systems may be undertaken for small & marginal farmers, JLGs, Women farmers, SHGs, etc.
- Solar Water Pumping associated with Drip Irrigation cluster may be promoted with credit support especially for small farmers.

2.2.2.6 Other related matters:

Components of investments under sub-sectors like Land Development / Soil Conservation / Water Management & Agronomy activities are given below.

Development activity	Feasible interventions
Soil and Water Conservation	Contour bund, contour trenches, retaining wall, check dam etc.
Water harvesting structure	Farm pond, check dam
Land Reclamation	Reclamation of saline and alkaline soil- Drainage development with underground pipeline & application of suitable soil amendment materials such as gypsum, sulphur, molasses, press mud etc.
On Farm Development	Land leveling, bunding, construction of irrigation/drainage channels
Water management	Lining of water courses, pipeline for water distribution, land levelling of commands of MI structures, use of micro irrigation like drip, sprinkler irrigation.
Composite Farm Development	land leveling, bunding, compost making, improved farm implements, fencing, water harvesting structure along with distribution system
Organic Farming	bio-fertilizer, bio-pesticides, market oriented cultivation of organic produce
Soil/land improvement	Tank silt application, sand casting

Chapter 2.2.3 **Agriculture Infrastructure - Others**

2.2.3.1 Introduction:

Productivity in agriculture depends on the quality of seed, suitable fertilizer and the practices adopted for cultivation. The performance and efficiency of other inputs depends on the quality of seed. Certified/quality seed plays an important role in achieving higher yields. Hence supply of quality seed to the farmers is one of the most important interventions to increase the production and productivity of any crop. Sustained increase in agriculture production and productivity necessarily requires continuous development of new and improved varieties of crops and efficient systems of production (Seed Chain) and supply of Certified/Quality seed to farmers.

2.2.3.2 Infrastructure and linkage support available planned and gaps:

- Supply of quality seeds in required quantity and appropriate time to farmers is a critical issue which is to be addressed.
- Agriculture and Horticulture Departments are promoting vermi-compost by providing subsidy and also propagating extensive use of bio-fertilizer to increase their efficiency and to reduce the use of chemical fertilizers.
- The district has officials from Agri department, KVK, and a few NGOs who conduct various awareness/capacity building programmes on an ongoing basis with regard to steps required for conservation of fertility of land. 20 Private Bio fertiliser units are available in the district which provides fertilizer to farmers. There is scope for developing such small scale units in the district for increasing the productivity.
- Big biotech houses are providing sugarcane and banana tissue seed / seedlings culture at reasonable price. However, the area under sugarcane, grapes, pomegranate and banana are declining in the district.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.2.3.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Tissue Culture Laboratories	Nos.	75.00	10	750.00	562.50
2	Seed Production Units	Nos.	10.00	74	740.00	629.00
3	Bio-fertilizer/ Bio-pesticides Units	Nos	32.00	66	2112.00	1900.80
4	Vermi Compost Units	Nos.	0.50	8950	4475.00	3982.50
Total				9100	8077.00	7074.80

2.2.3.4 Critical interventions required for creating a definitive impact:

- A few quality seed processing plants in a few select villages would help the seed processing.
- There is a need to create awareness on use of bio-fertilizers at Mandal and village levels by utilizing the services of village/community organizations like FCs/ NGOs.
- Efforts may be made to involve Private Sector/NGOs for setting up manufacturing facilities for Vermicomposting, Bio Fertilizer and Fruits & Vegetable Compost.

2.2.3.5 Suggested Action Points:

- Banks to encourage Farmers' Clubs/PACS/SHGs to take up production of quality compost/ vermicomposting, organic seeds/ planting materials and plant protection materials.
- Farmer's Cooperatives, exclusively for promotion of organic farming which can also act as business platform for the farmers, may be promoted.
- Agri. and Horticulture Deptts should popularize the modern biotechnology plant tissue culture for better plant varieties.
- Bankers may extend credit to seed processing, vermicomposting units and bio-fertilizer units.

Chapter 2.3 Agriculture - Ancillary Activities

Chapter 2.3.1

Food and Agro Processing

2.3.1.1 Introduction:

Food & Agro Processing Sector is of great importance for Indian agriculture on account of its potential contribution in the reduction in post-harvest losses, better price realization, catering to the changing domestic demand for processed agro-products, enhancing the competition of Indian agriculture to meet the challenge posed by changing global agricultural. It ensures linkages and synergies between industry, agriculture, post-harvest technology and management. It plays a crucial role in value addition to agricultural produce. Farmers can get good price for their produce. This also ensures creation of additional employment opportunities in rural area.

As per the revised priority sector guidelines of RBI (Circular dated 23rd April 2015), loans for food and agro processing up to an aggregate sanctioned limit of Rs 100 crore per borrower from banking system shall be classified under agriculture-ancillary activities.

Scope for the sector:

Solapur district is well known for large cultivation & higher production of Rabi Jowar. Jowar is identified under 'One District One Product (ODOP)' by GOI. Some lentil crops such as Tur (Arhar), Urad, Moong, Harbhara (Gram), etc. are also being cultivated & produced on large scale in the district. Soyabean & Sunflower type of oilseeds are grows in large quantity. Further, major horticultural crops such as Pomegrenate, Grapes, Banana, Ber, Custard Apple, Guava & Mango, etc. are being produced on large scale and Pomogrenate & Banana are being exported to international as well as domestic market. APEDA organization has identified export clusters for two fruit crops i.e. Pomogrenate & Banana. National Horticulture Board has also identified Pomogrenate fruit crop under its' Cluster Development Programme (CDP) for the Solapur district. Dry land horticultural crops are cultivated in the district due to suitability of agro-climatic conditions. Vegetables such as Chilli, Tomato, Onion, Brinjal, etc. are also grows in good numbes of quantity.

Therefore, there is huge potential for food & agro processing sector in the district such as Jowar processing, Dal Mills, Oil Mills, Fruits & vegatble processing. Sugarcane is also being cultivated on large area and there is good network of Sugar Mills in the district. Jaggery making unit also has a huge potential. Solapur is ranked 4th in milk production and hence, milk processing activity can be promoted on large scale in the district.

Production of some of major agricultural & allied commodities during FY 2020-21 is as per under:

Sr. No.	Commodity	Production (MT)
(i)	Total Cereals	5,19,456.00
(ii)	Total Pulses	1,67,758.00
	Total Foodgrains	6,87,214.00
(iii)	Total Oilseeds	87,946.00
	Total agri. Production	7,75,160.00
(iv)	Sugarcane	1,78,450.00
(v)	Milk production	9,82,549.00
(vi)	Fruit production (2019-20)	7,87,716.00
(vii)	Vegetables (2019-20)	12,35,147.00
	Total Horti. Production (Fruits & vegetables)	20,22,863.00

(Source: Official website of Department of Agriculture,
ISSS Report of 2017-18 of Department of Animal Husbandry &
Horticulture Area Production Information System – HAPIS portal
Of Government of Maharashtra)

2.3.1.2 Infrastructure and linkage support available planned and gaps:

- The district has total nine (09) MIDC areas evenly spread across the blocks with equal number of Industrial Estates and adequate forward & backward linkages which, needs further strengthening.
- There are 4360 small scale agro based units, 43 food processing units registered with DIC up to 31 March 2019.
- Easy availability of land, heterogeneous cropping, adequate supply of raw material, labours and other logistic services, good connectivity, communication, network of APMCs and other markets, existence of well developed industrial estates, research center etc. are available in districts.
- As per the data available with the District Industries Centre, Solapur, there are 30 Dal Mills, 20 Oil Mills, 01 Animal Feed Manufacturing Unit and 12 other Food grain/Pulses Processing Units in the district. Besides, 01 Fruit Processing Unit, 01 Cashew Processing Unit and 04 Spices Processing Units have been set up in the district.
- National Research Centre on Pomogrenate (NRCP) is located at outskirts of Solapur city, which not only conducting training & capacity building programmes but also provides nursery facilities to the Pomogrenate growers. Local growers are having an advantage due to availability of NRCP in the district.
- Infrastructure presently available, planned and gap therein is indicated in the following table (For food & agro processing industry no separate details of basic infrastructure are available except for some components):

Infrastructure available	Planned	Gap
Powersupply		
• All industrial areas/ estates have been provided with separate power supply lines. Consumption • Domestic 3106.30 lakh KW • Agri 18316.80 Lakh KW • Commercial 880.10 lakh KW • Common Facility 324.80 lakh KW	• Adequate, uninterrupted, reliable power supply to agroindustries. • Use of non conventional & renewable energy sources, co-generation energy from wastes to meet burgeoning energy demand	• Inadequate and poor quality power supply has been hampering the productivity and production of industry / agri. sector. • Poor maintenance of infrastructure
Connectivity		
• All blocks are well connected to district HQ by all-weather roads. (length 19990 km) • District has good connectivity with other parts of the state/country by road, railway and airway. • Road density- 1150 per 1000 sq.km./1064 of all villages connected by black topped roads.	• Four Lane Road from Junani Tal. Sangola to Solapur & Pandharpur to Sangola.	• Some portion pending for land aquisition. • Road Construction around 1 Km is pending for Permission for Forest Department .
Raw-Material		
• Food grains, pulses, oil seeds, cash crops like cotton, sugarcane, horticulture produce etc. adequately available for processing as detailed in the earlier table. • Allied sector – Milk, poultry birds, sheep/goat etc. <u>Livestock Population</u> - Poultry birds – 20.78 lakh	• Increase in productivity / production of agriproduce that is being used as raw material to ensure adequate and regular supply of raw material to Food & Agro processing units • Increase in milk production from present level of 12.27 lac lit /month to 2000 lac ltr/day in 5 year span presuming 4.4% growth in population by 2017-18 • Encouraging promotion of	• F&AP being unorganized sector in the district, it has negative impact on supply and costing of raw-materials. • Only 2% of fruits & veg. are presently utilised for processing. This could be raised to 20% after direct marketing, consumption etc. • Allied sector – Except

Infrastructure available	Planned	Gap
Milch animals 12.41 lakh Sheep/Goats 14.59 lakh	poultry, dairy, sheep, goat farms to meet increasing demand for animal husbandry based raw material	milk, most of the other raw material is utilized for marketing/ consumption
Technical support / Capacity building		
- DIC & Dist. Agri. Dept., Small Industries Service Institute provide necessary technical, promotional support and arrange training programmes through KVK, MITCON, MSSIDC & MCED for prospective entrepreneur - Allied sector- Sheep-Goat Development Centre at Padegaon regularly organizes training programmes - NABARD supports promotional programmes like REDP/SDP, Agri-Clinic / Agri-Business etc.	- Organization of training programmes, awareness camps for processing of agri & allied produce - Establishment of - District Training Centre- 15 Govt. 3 Pvt. - Block Training Centres- 10 - Video Conferencing Centres 12 - KVK-ATIC centre- 02 - Weather centre- 52	- Awareness camps, trainings, seminar not organized frequently which helps large no. of farmer, entrepreneur, unemployed youth to update their knowledge base. - Strong R&D unit for food & agro processing need to be set-up to help all stakeholder in developing high quality products & services. - Dairy, sheep/ goat farming - Farmer, entrepreneur need to be sensitized & trained for adoption of scientific methods of breeding rearing clean milk production.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.3.1.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Agro Processing Units (Foodgrains & pulses)	Nos.	10.00	2880	28800.00	23040.00
2	Jaggery (Gud) Processing Units (Micro)	Nos.	0.75	2170	1627.50	1302.00
3	Fruits & vegetables Processing Units	Nos.	6.00	2064	12384.00	9907.20
4	Milk Processing Units	Nos.	1.50	830	1245.00	996.00
5	Fruit Pulp Processing Units (Pomogrenate)	Nos.	12.00	119	1428.00	1142.40
6	Dal Mills/Oil Mills	Nos.	22.00	131	2882.00	2305.60
Total – Term Loans				8194	48366.50	38693.20
7	Working capital requirements for (New & Old Units)	LS	50% of TL	8194	19346.60	19346.60
Grand Total					67713.10	58039.80

2.3.1.4 Critical interventions required for creating a definitive impact:

- Considering huge potential under food & agro processing in the district the Coop. societies, APMCs, farmer, entrepreneur, SHGs etc. need to be encouraged to setup Dal mills, flour mills, grains/pulses/fruits/vegetables processing units, cold storages, mini slaughter houses etc.
- Post harvest management practices need to be improved to minimize post harvest losses from 20% to reasonable level of 5%.

2.3.1.5 Suggested Action Points:

A. Banks:

- Banks have to relax the norms for calculation of requirement of Working Capital. Further, the entrepreneurs have to bear heavy interest cost for stock holding and banks/Govt. may have to look into this issue for ensuring the viability of these units.
- Provide loans to unemployed youth trained by MCED/MITCON for agro and fruit processing
- Encourage SHGs to undertake Papad/Spices making activity on commercial basis.
- Encourage poultry farmers for meat-processing/egg and fish processing activity.

B Govt. Dept:

- DIC may look into under noted constraints which are hampering growth of these units: Inadequate knowledge on preservation techniques, product diversification, inferior/higher cost of packaging, poor hygiene practices, labelling norms, absence of linkage with markets other than Mumbai. AH Dept./DIC may encourage entrepreneurs to start meat/fish/egg processing/oil mills, etc.
- Agri. Dept. may train Women SHGs and farmers growing various fruits for starting canning, pulp, jam, pickles, juice etc. having small processing capacities between 5 to 50 MTs.
- Facilitate promotion and handholding of Farmer producer organisations, who can act as a link between the farmer members and food processing units.
- NRCP, KVKs & RSETI to provide trainings to farmers, entrepreneurs, etc. on food & agro processing activities.

2.3.1.6 Other related matters:

- **Agriculture Infrastructure Fund (AIF):** GOI has created this fund with a total corpus of Rs. 1 lakh for period of 10 years from FY 2020-21. Primary & Secondary agro-horti processing is eligible activity under the same. Interest subvention @ 3% is available under the scheme with a credit guarantee for loans upto Rs. 2 crore over period of 7 years.
- **Chief Minister Agriculture and Food Processing Scheme:** This scheme is being implemented in the State since 2017-18 for consecutive five years. The main objectives of the scheme are to encourage modern technology based projects for quality enhancement of agriculture produce, to encourage exports, to create skilled manpower for agro & food processing and employment generation through small and medium agro & food processing units in rural areas.
- **Prime Minister Formalisation of Micro Food Processing Enterprises Scheme (PMFME):** Under Aatmanirbhar Bharat abhiyaan, GoI has launched all India centrally sponsored PM Formalisation of Micro food processing Enterprises Scheme (PMFME) in partnership with the state governments, for providing financial, technical and business support for upgradation of existing micro food processing enterprises in the unorganized sector. PMFME is going to be implemented on '**One District One Product**' basis for a period of five years from 2020-21 to 2024-25. Objectives of the scheme are (i) support for capital investment for upgradation, (ii) Capacity building through skill training, imparting technical knowledge on food safety standards & hygiene and quality improvement, (iii) hand holding support for preparation of DPR, availing bank loan and upgradation and (iv) support to Farmer Producer Organisations (FPOs), Self Help Groups (SHGs), producers' co-operatives for capital investment, common infrastructure and support branding & marketing. Under the scheme, the State has set a target of empowering 20,119 micro food processing industries in five years. Individual micro food processing units for perishable agricultural commodities, food grains, pulses, oilseeds, spice crops, fisheries, poultry, dairy, forest products, etc. are going to be covered under the scheme and individual micro food processing units would be provided 35 per cent of the project cost as credit-linked capital subsidy with a maximum limit of Rs. 10 lakh per unit.

Chapter 2.3.2 **Agri Ancillary Activities - Others**

2.3.2.1 Introduction:

RBI vide its Circular No. RBI/2014-15/573/FIDD.CO.Plan.BC.54/ 04.09.01/2014-15 dated April 23, 2015 on targets and classification of priority sector has put the following as qualifying for priority sector.

- i. Loans up to Rs 5 crore to co-operative societies of farmers for disposing of the produce of members.
- ii. Loans for setting up of Agri. Clinic and Agribusiness Centres.
- iii. Loans for Food and Agro-processing up to an aggregate sanctioned limit of Rs 100 crore per borrower from the banking system.
- iv. 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.
- v. Loans sanctioned by banks to MFIs for on-lending to agriculture sector as per the conditions specified in paragraph IX of this circular
- vi. Outstanding deposits under RIDF and other eligible funds with NABARD on account of priority sector shortfall.

2.3.2.2 Infrastructure and linkage support available planned and gaps:

- Solapur district has a very good network of cooperatives societies at ground level with 1265 Primary Agriculture Cooperative Societies (PACS) affiliated with Solapur District Cooperative Bank Ltd. (DCCB), 3577 Milk Cooperatives, 61 Marketing (warehouse) Cooperatives, 40 Sugar Factories, 3000 Weavers' Cooperatives, Industrial cooperatives, Lift Irrigation Cooperatives, 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.
- There are two (02) Nodal Training Institutes (NTIs) one at Wadala, North Solapur and another at Paniv, Malshiras identified by National Institute of Agricultural Extension Management (MANAGE) for providing trainings to entrepreneurs under ACABC Scheme.
- 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.
- NBFC-Micro Finance Institutes (MFIs) are also working in the district.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

2.3.2.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Loans to PACS/FSS/LAMPS/MACS	No.	25.00	333	8325.00	6660.00
2	Loans to MFIs for onlending	No.	10.00	116	1160.00	1044.00
3	Agri-Clinics Agri Business Centres (ACABC)	No.	20.00	120	2400.00	1800.00
Grand Total					11885.00	9504.00

2.3.2.4 Critical interventions required for creating a definitive impact:

- There are about more than 425 out of total 1265 PACS affiliated with Solapur DCCBs are in good financial positions. These PACS can establish businesses with loan supports.
- Primary Agriculture Cooperative Societies (PACS) can establish a business by developing storage infrastructure under new GOI scheme of 'Agriculture Infrastructure Fund (AIF)', wherein interest subvention @3% is available upto the project cost of Rs. 2 crore and 425 nos. of PACS having good financial health can avail finance from DCCB, which can also avail refinance from NABARD under its' scheme of 'PACS as MSC' @4%. Therefore, ultimate ROI to PACS will be just 1%. Further, capital subsidies are also available under various government sponsored schemes.
- Additional one NTI under ACABC can be identified in the district.

2.3.2.5 Suggested Action Points:

- Banks can finance for eligible trained graduates in coordination with training centers and line departments considering gap in number of success stories and units financed by banks.
- Banks may also encourage units involving graduates relating to allied sectors like veterinary science, fisheries, agriculture engineering, etc.
- The controlling offices of banks may consider sensitizing branch managers about the scheme and allocate suitable targets for financing ACABC units for identified branches.
- The Agri Clinic Agri Business Scheme in operation since modified by Govt of India and the State Governments, Krishi Vigyan Kendra, Banks and Panchromatic Raj Institutions shall also be henceforth actively involved in its implementation.
- Banks may explore the opportunity of financing viable cooperatives and MFIs as the new business opportunity.
- DCCB to extend finance to their good working affiliated PACS under AIF Scheme as well as other agri related activities and can avail refinance under PACS as MSC from NABARD.

2.3.2.6 Other related matters:

- **PACSs as Multi Service Centers (MSCs)** - NABARD introduced Special refinance scheme to saturate all the potential PACS for conversion as Multi Service Centres, over a period of three years commencing from the year 2020-21. The scheme intends to develop all the potential PACS as Multi Service Centres (MSCs) over a period of three years commencing from the year 2020-2021 by providing concessional refinance to StCBs at 3% to support PACS to create quality infrastructure (capital assets) and increase their business portfolio in tune with needs of members. Under this line of credit, NABARD has envisaged transformation of 35,000 PACS in three years commencing with the transformation of 5,000 PACS in FY 21. During 2020-21, 3055 PACS were given in-principle sanction by NABARD with estimated Project cost of Rs.1,760.82 crore and estimated loan of Rs.1,568 crore.
- **Agriculture Infrastructure Fund (AIF):** GOI has created this fund with a total corpus of Rs. 1 lakh for period of 10 years from FY 2020-21. Primary & Secondary agro-horti processing is eligible activity under the same. Interest subvention @ 3% is available under the scheme with a credit guarantee for loans upto Rs. 2 crore over period of 7 years. PACS is one of the eligible beneficiary under this scheme.

Chapter 3

Micro, Small and Medium Enterprises (MSME)

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.

Studies conducted by National Small Industries Corporation (NSIC) and Khadi and Village Industries Commission (KVIC) to assess the impact of COVID-19 Pandemic on MSMEs including units set up under Prime Minister's Employment Generation Programme (PMEGP), revealed that

- i. 91% MSMEs were found to be functional.
- ii. Most critical problems faced by MSMEs were Liquidity (55% units), Fresh Orders (17% units), Labour (9% units), Logistics (12% units) and availability of Raw Material (8% units.)
- iii. 88% of the beneficiaries of PMEGP scheme reported that they were negatively affected due to Covid-19.
- iv. Majority of the beneficiaries expressed the need for additional financial support, relaxation of waiver of interest and marketing support for their products.

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.

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.

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 GoI, 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 Rs. 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:

- Common Facility Centres may be established and job oriented training programmes for skill development need to be conducted.
- Awareness and handholding support may be provided to young entrepreneurs through incubation support. Incubation funds may be created in identified technical institutes.
- 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.
- Banks may extend adequate working capital for the small scale enterprises.
- 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 to finance at least one SC/ST and one woman per bank branch as stipulated under the Stand-Up India Scheme.

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

Solapur District Specific:

3.1 Introduction:

Solapur district is having rich mineral deposits of limestone, graphite, bauxite etc., as well as abundant supplies of red soil clay, building stones. Handlooms/powerlooms, readymade garments, sugar, foundry, leather, silver ornaments, automobile ancillaries, foundry, jaggery and agricultural implements are the major sector under which MSME units have been set up. The district is having a network of large industries and the raw material is locally available. The large scale industries are providing employment to more than 1 lakh persons. The Cotton Textile Mills at Solapur district is the only large scale industry in the district. There are other registered factories like cotton ginning and pressing, manufacture of edible oils, bidi making, repairing of motor vehicles, leather works and bone meal units. The ginning and pressing industry has acquired a significant place in the set-up of the district because of production of cotton in the Sangola and Akkalkot blocks.

Small Scale Industries:

There are mills extracting oil from groundnut in Barshi and South Solapur, Akkalkot talukas. Rolling bidis in Solapur and Akkalkot blocks, making earthen pots, bricks and tiles are some of the other industries in the district. There are 110 small garments and chaddar factories in Solapur.

Large Scale Industries:

There are 4 ginning and pressing mills at Akkalkot, Sangola, South Solapur and Mohol. There are 2 spinning mills at Kumbhari Ta South Solapur and Sangola. There are textile mill at Mohol, South Solapur and Akkalkot. 40 Sugar Factories (Cooperatives & private) are located in almost in all blocks of Solapur. There are 2 oil mills at Barshi and Mohol. There

are 9 dal mills at Mohol, South Solapur and Barshi. There are 10 Chemical factories at Mohol and 1 cement factory in Mohol.

Trade, Commerce and Export:

Sugar, Pomegranate, Grapes are the most important item of export from the district. Groundnut, chillies, milk, jowar and pulses are the other items of export along with sugar which are largely exported to Mumbai, Pune, and Andhra Pradesh, Karnataka States.

Area specific activities in the district are as given below:

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	Copper/brass utensils making	MIDC Kumbhari and Mohol	South Solapur, Mohol
2	Woolen blanket	Akkalkot/Sangola	Akkalkot/Sangola
3	Carts manufacturing	Chincholi MIDC	Mohol
4	Agro processing - Pomegranate processing	Sangola	Sangola
5	Grapes processing	Kasegaon	Pandharpur
6	Garments and Textiles Mills	Solapur, Akkalkot	Solapur, Akkalkot
7	Rasin Making	Kasegaon	Pandharpur

3.2 Infrastructure and linkage support available planned and gaps:

- There are 76 Large Scale Industries in the district with Capital Investment of ₹ 1908.63 lakh providing employment opportunities to 22927 persons. The total number of MSME units is 10848 with capital investment of ₹ 203125 lakh providing employment opportunities to 88734 persons. Out of the total number of 9617 enterprises, 8901 are micro, 634 are small, 06 are medium, and 76 are large units.
(Source: DIC Annual Report)
- The raw material required for agro based industries, non-metal mineral based industries are adequately available within the district. About 2710.70 MT of fruits and 1102.13 MT of crops like Maize, Groundnut, and Soybean are available for processing. It is estimated that at least 90 tiny sector units for fruit processing and 1500 units under SSI for processing crops/oilseeds can be established in the district.
- There are 308 weavers' (power loom) societies registered in the district with total membership of 28851. The aggregate share capital of the societies is ₹.0.35 lakhs including share capital contributed by the government.

Gaps:

- Water shortage and erratic power supply hamper the progress in this sector.
- Skill up-gradation training facilities for the beneficiaries under govt. sponsored programs such as SGSY, PMRY, MPBCDC, KVIB are not adequate.
- Deteriorating financial health of Industrial Societies, BLVA, SSI units, Cottage and Village Industries due to power and water shortage.
- Facilities for consultancy services for processing, packing, gradation, forwarding and export not available.

GLC flow under MSME in Solapur district:

The Grould Level Credit (GLC) disbursements under MSME sector in the district was Rs. 2,21,457/- lakh, Rs. 1,91,315/- lakhs & Rs. 1,52,746/- lakhs during last three FYs of 2018-19, 2019-20 & 2020-21 respectively. ACP target under the sector for FY 2021-22 is Rs. 2,03,000/- lakhs.

(Source: SLBC, Maharashtra)

3.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit Cost	Physical Units	TFO	Bank Loan
A	Term Loans				
(a)	Manufacturing Sector Enterprises				
1	Micro Enterprises	50.00	100	5000.00	4500.00
2	Small enterprises	400.00	20	8000.00	7200.0
3	Medium enterprises	2000.00	10	20000.00	18000.00
	Sub Total		130	33000.00	29700.00
(b)	Service Sector Enterprises				
1	Micro enterprises	40.00	100	4000.00	3600.00
2	Small enterprises	300.00	30	9000.00	8100.00
3	Medium enterprises	1500.00	10	15000.00	13500.00
	Sub Total		140	28000.00	25200.00
	Term Loan - Total		270	61000.00	54900.00
B	Working Capital				
(a)	Manufacturing Sector Enterprises				
1	Micro Enterprises	20.00	500	10000.00	9000.00
2	Small enterprises	100.00	100	10000.00	9000.00
3	Medium enterprises	500.00	10	5000.00	4500.00
	Sub Total		610	25000.00	22500.00
(b)	Service Sector Enterprises				
1	Micro enterprises	10.00	6000	60000.00	54000.00
2	Small enterprises	80.00	800	64000.00	57600.00
3	Medium enterprises	400.00	50	20000.00	18000.00
	Sub Total		6850	144000.00	129600.00
	Working Capital - total		7460	169000.00	152100.00
	Grand Total		7730	230000.00	207000.00

3.4 Critical interventions required for creating a definitive impact:

- Common Facility Centres may be established and job oriented training programmes for skill development need to be conducted.
- 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.
- 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.

3.5 Suggested Action Points:

- 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.
- Banks may set up exclusive offices for appraisal and sanction of projects under micro and small industries sector in the district.
- Private participation in creating infrastructure facilities may enhance opportunities in manufacturing sector
- Banks / Govt Deptts 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. The concerned banks and agencies should offer the necessary support to the prospective entrepreneurs and sanction the cases.

3.6 Other related matters:

- Subsidies are available under schemes of **Pradhan Mantri Employment Generation Programme (PMEGP)** of GOI and **Chief Minister Employment Generation Programme (CMEGP)**. Both schemes are being implemented through DIC.

Chapter 4 **Credit Potential for Exports, Education and Housing**

Chapter 4.1 **Export Credit**

A. As per latest reports, India made it to the top 10 list of agricultural produce exporters in 2019 with a sizeable share in the export of rice, cotton, soybeans and meat. According to World Trade Organization (WTO) report on the trends in world agricultural trade in the past 25 years, India with 3.1% share in agri exports replaced New Zealand to take the No.9 spot. The Foreign Trade Policy for 2015-2020 announced by the GoI on 1 April 2015 (presently extended up to 30 Sep 2021, due to COVID-19 exigencies), aims at increasing India's export of merchandise and services from \$466 billion in 2013-14 to around \$900 billion by 2019-20 and to raise India's share in world exports from 2% to 3.5%. The new Foreign Trade Policy - 2021-2026 will set the goals for the sector for the next five years.

Maharashtra is the leading state in the country for export of agriculture produce. The Government of Maharashtra has come out with Agriculture Export Policy 2019, for the state, in accordance with the Agriculture Export Policy developed by Department of Commerce, Government of India. The policy focus is on agriculture export oriented production, export promotion, better farmer realization and synchronization within the policies and programmes of Govt of India. The theme is to have a "Farmer Centric Approach", for improved income through value addition at source itself, and expects a paradigm shift from "residual export to targeted export". The nodal agency under this Policy in Maharashtra is Maharashtra State Agricultural Marketing Board (MSAMB). The focus is on developing clusters having potential for export oriented production of specific products. In order to promote the agriculture export, State has established 8 Agri Export Zones (AEZs) involving commodities such as Grapes/ grape wine, Flowers, Alphonso Mango, Kesar Mango, Onion, Pomegranate, Banana, Mandarin (Nagpur Orange).

B. The new Foreign Trade Policy for 2015-2020 announced by the GoI on 1st April 2015, aims at increasing India's export of merchandise and services from \$466 billion in 2013-14 to around \$900 billion by 2019-20 and to raise India's share in world exports from 2% to 3.5%. The new Foreign Trade Policy - 2020-2025 will set the goals for the sector for the next five years.

C. 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. Packing credit is sanctioned on the basis of letter of credit or a confirmed and irrevocable order for the export of goods and 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 after shipment of goods / rendering of services to the date of realization of export proceeds.

(RBI Guidelines on Export Credit- RBI Master circulars dated 01.07.2013 and 01.07.2015)
Further, as per the Master Direction-FIDD.CO.Plan.1/04.09.01/2016--Priority Sector Lending-Targets And Classification, issued by RBI on 7 July 17 (updated as on December 05, 2019), 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- Department of Banking Regulation. In case of Domestic Banks incremental export credit over corresponding date of the preceding year, upto 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.

C. 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.

D. The total exports from Maharashtra during 2017-18, 2018-19 and 2019-20 was to the tune of ₹ 4,49,508 cr, ₹ 5,08,975 cr and ₹ 4,59,637 cr respectively, as compared to the total export from India at ₹ 19,55,541 crore, ₹ 23,07,726 crore and ₹ 22,19,854 crore respectively. (Source: ESM- 2020-21)

The major products exported from Maharashtra are gems & jewellery, petrochemicals, readymade garments, cotton yarn, metal & metal products, agro-based products, engineering items, drugs & pharmaceuticals and plastic & plastic items. The State is taking initiatives like giving awards for export performance and implement space rent subsidy scheme to Small Scale Industries for participation in International Exhibitions. In accordance with the **Special Economic Zone (SEZ)** policy adopted by the State with effect from February, 2006, in all 30 SEZs were executed with total investment of Rs 36,352 crore on an area of 4,231 ha generating employment of about 5.94 lakh (Source: ESM- 2019-20).

Maharashtra, which accounts for about a quarter of India's total exports, has a policy to focus on value - added exports in sectors such as textiles, agriculture and dairy.

In the following commodities exported from India, the state of Maharashtra is one among the top three states- Pearl, Precious and semi precious stones, Petroleum products, Drug formulations, Biologicals, Gold and precious metal jewellery, Iron and steel products (Source: FIEO)

E. Agricultural and Horticultural Export from Maharashtra - The agricultural sector has been playing a key role in the composition of Indian exports. India's top agricultural export commodities in terms of quantity and value are cotton, marine products, guar gum, rice and meat.

E.1 APEDA- The Agricultural and Processed Food Products Export Development Authority (APEDA) was established by the Government of India under the Agricultural and Processed Food Products Export Development Authority Act passed by the Parliament in December, 1985.

The following functions have been assigned to APEDA -

- Development of industries relating to the scheduled products for export by way of providing financial assistance or otherwise for undertaking surveys and feasibility studies, participation in enquiry capital through joint ventures and other reliefs and subsidy schemes;
- Registration of persons as exporters of the scheduled products on payment of such fees as may be prescribed;
- Fixing of standards and specifications for the scheduled products for the purpose of exports;
- Carrying out inspection of meat and meat products in slaughter houses, processing plants, storage premises, conveyances or other places where such products are kept or handled for the purpose of ensuring the quality of such products;
- Improving of packaging of the Scheduled products;
- Improving of marketing of the Scheduled products outside India;
- Promotion of export oriented production and development of the Scheduled products;
- Collection of statistics from the owners of factories or establishments engaged in the production, processing, packaging, marketing or export of the scheduled products or from such other persons as may be prescribed on any matter relating to the scheduled products and publication of the statistics so collected or of any portions thereof or extracts therefrom;
- Training in various aspects of the industries connected with the scheduled products;

E.1.1 Potential Clusters identified by Agriculture Export Policy:

The potential clusters identified as per Agriculture Export Policy in Maharashtra are as follows-

Vegetables (fresh/IQF/dehydrated)	Pune, Satara and Nashik
Pomegranate	Solapur , Ahmednagar, Pune, Sangli, Nashik, Latur, Aurangabad, Beed and Osmanabad
Poultry & Poultry Products	Pune, Solapur , Satara, Raigarh and Sangli
Banana	Jalgaon, Kolhapur and Solapur
Mango	Ratnagiri and Sindhudurg
Grapes	Pune, Nasik and Sangli
Onion	Nasik
Orange	Nagpur, Amaravathi and Wardha

(Source: APEDA)

E.2 Major Exportable Agri/Horti Crops from Maharashtra

❖ **Grapes- Peak season – Feb/ March, Varieties- Thompson, Sonaka, Sharad.**
The district wise details of potential areas are as under:-

Sr. No.	Districts	Blocks
1	Solapur	Karmala, Barsi, Madha, Mohol, Mangalwedha, Sangole, Malsiras, Pandharpur, Akalkot.
2	Nashik	Kalvan, Peint, Igatpuri, Sinnar, Niphad, Yeola, Nandgaon, Satana, Surgana, Dindori, Malegaon
3	Sangli	Atpadi, Khanapur, Islampur, Shirala, Valva, Tasgaon, Kavathe, Mahankal, Jath, Miraj
4	Ahmednagar	Srirampur, Sangamner, Akole, Rahuri, Nevasa, Parner, Pathardi, Srigonda, Karjat
5	Pune	Junnar, Ambegaon, Ghod, Rajgurunagar, Wadgaonsirur, Mulshi, Welhe, Purandar, Bhor, Baramati, Indapur, Daund, Saswad.
6	Satara	Mahabaleshwar, Khandala, Wai, Phaltan, Koregaon, Khata, Patan, Karad, Vadug.

(Source: NAFED)

❖ **Onion- Peak season – April/ May, Varieties- Dark / Light Red, Rose, Pusa Red- – Catchment Area in Maharashtra**

Sr. No.	Districts	Blocks
1	Nasik	Kalvan, Peint, Igatpuri, Sinnar, Niphad, Yeola, Nandgaon, Satara, Surgana, Dindori, Melgaon
2	Ahmednagar	Srirampur, Sangamner, Akola, Rahuri, Nevasa, Parner, Pathardi, Srigonda, Karjat
3	Pune	Junnar, Ambegaon, Ghod, Rajgurunagar, Wadgaonsirur, Mulshi, Welhe, Purandhar, Bhor, Baramati, Indapur, Daund, Saswad
4	Solapur	Malshiras, Pandharpur, Akalkot

(Source: NAFED)

❖ **Mangoes- Peak season – April/ May, Varieties- Alphonso, Kesar- Catchment Area in Maharashtra**

Sr. No.	Districts	Blocks
1	Ratnagiri	Mandangarh, Dapoli, Khed, Chiplun, Guhagarh, Sangameshwar, Lanza, Rajapur, Sangva

2	Raigarh	Matheran, Karjat, Khalapur, Pen, Alibagh, Panvel, Uran, Sudhagarh, Poladpur, Mangaon, Mhasla, Mahad, Roha, Murud, Srivardhan,
3	Sindhudurg	Devgarh, Kankawali, Malvan, Kudal, Vengurla, Savantvadi

(Source: NAFED)

F.3 MPEDA- The Marine Products Export Development Authority (MPEDA) was set up by an act of Parliament during 1972. The erstwhile Marine Products Export Promotion Council established by the Government of India in September 1961 was converged in to MPEDA on 24th August 1972. MPEDA is given the mandate to promote the marine products industry with special reference to exports from the country. It is envisaged that this organisation would take all actions to develop and augment the resources required for promoting the exports of “all varieties of fishery products known commercially as shrimp, prawn, lobster, crab, fish, shell-fish, other aquatic animals or plants or part thereof and any other products which the authority may, by notification in the Gazette of India, declare to be marine products for the purposes of (the) Act”.

F.3.1 Functions of MPEDA in brief:

- Registration of infrastructural facilities for seafood export trade.
- Collection and dissemination of trade information.
- Promotion of Indian marine products in overseas markets.
- Promotion of aquaculture for augmenting export production through hatchery development, new farm development, diversification of species and up gradation of technology
- Market promotional activities and publicity.
- Conduct research and development for the aquaculture of aquatic species having export potential through Rajiv Gandhi Centre for Aquaculture (RGCA).

F.4 The Mission for Integrated Development of Horticulture (MIDH) launched for the holistic development of horticulture is being implemented in 34 districts from 2015-16 with 60:40 sharing pattern of GoI & GoM. Grapes, Mango, Pomegranate and Banana are the major fruits being exported from the State (Source- Economic survey of Maharashtra 2019-20).

F.5 Agri Export Zones - With a view to promoting agricultural exports from the country and remunerative returns to the farming community in a sustained manner, the concept of the agri export zones (AEZ) was floated. These zones have been set up for end to end development for export of specific products from a geographically contiguous area. Services which would be managed and co-ordinated by State Government/corporate sector and would include provision of pre/post-harvest treatment and operations, plant protection, processing, packaging, storage and related research & development etc. APEDA will supplement, within its schemes and provisions, efforts of State Governments for facilitating such exports

The Agri Export Zones in Maharashtra (State Nodal Agency – MIDC/MSAMB) are as under:

Product	District
Pomegranate	Solapur , Ahmednagar, Pune, Sangli, Nasik, Latur and Osmanabad
Flowers	Pune, Nasik, Kolhapur and Sangli
Banana	Jalgaon, Dhule, Nandurbar, Buldhana, Parbhani, Hingoli, Nanded and Wardha
Mangoes	Ratnagiri, Sindhudurg, Raigarh and Thane
Kesar Mangoes	Aurangabad, Beed, Jalna, Ahmednagar and Latur
Grape & Grapevine	Nasik, Sangli, Solapur , Satara and Ahmednagar
Onion	Nasik, Ahmednagar, Pune, Satara, Jalgaon and Solapur
Orange	Nagpur, Amaravathi

(Source: APEDA)

F.6 Characteristics of Maharashtra relevant to exports-

- Maharashtra has 9 agro climatic zones with Coast line stretching 720 kms.
- Inland Container Depots (ICD) at 5 places – Mumbai, Pune, Aurangabad, Jalgaon and Nagpur.
- 18 National Highways, 3 International and 7 Domestic Airports and 6181.46 kms of Railway Network in the State.
- Highly Urbanized (45%) and skilled population. Top exporting state of the country.
- State share in India's export- 22%
- Diversified export profile- Pharmaceutical and BioTech, Agro Products, IT/ ITES and Electronics, Engineering, Textiles, Chemicals, Automobile & auto components, Services etc.
- JNPT- the largest container handling port in India.

F.7 District Production Clusters of Fruits & Vegetables (Top 5 Districts) Creation of Infrastructure for Agri processing Clusters - Kisan Sampada Yojana

District	Estimated Annual Production of F&V (in '000 MT)	Fruit	Vegetable
Nashik	4897	Grape, Pomegranate, Guava	Onion, Tomato, Brinjal
Jalgaon	2897	Banana, Sweet Orange, Limes & Lemons, Papaya	Onion, Brinjal, Green Chilli
Pune	2061	Grape, Pomegranate, Banana	Onion, Tomato, Potato, Leafy Vegetables, Cauliflower, Cabbage, Brinjal
Ahmednagar	1895	Pomegranate, Limes & Lemons, Banana	Onion, Tomato, Cucumber
Aurangabad	1037	Sweet Orange, Pomegranate, Banana	Onion, Brinjal, Tomato

F.8 Cluster Development Programme of National Horticulture Board

MoA&FW has identified 53 horticulture clusters, of which 12 have been selected for the pilot launch of the programme during the year. One of the objective of the programme is to address the concerns of horticulture value chain from pre-production, production, post-harvest management and value chain to logistics, marketing and branding, in an integrated manner for enhancing competitiveness in the domestic and export programme. It aims to increase export of the targeted crops by approximately 20% and create cluster specific brands to enhance the competitiveness of the crops. The programme will be implemented through National Horticulture Board.

The list of the identified crops and clusters in Maharashtra in the pilot phase is as follows:

S.No	Crop	Cluster
1	Pomegranate	Solapur
2	Grapes	Nasik

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

NABARD has sanctioned grant assistance of Rs.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. 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,
- d. To organize need-based training courses in different export-related issues.

The beneficiaries of the centre are existing exporters/ importers, new aspirants, progressive farmers, FPOs, MSME in Agro food processing & commodity growers' association. The interventions are expected to create a positive impact on the existing and aspiring exporters through the facilitation/ hand holding role of MCCIA. As the agri export is being given a huge push by the State / Central Governments and also by NABARD, this project would enable achieving the envisaged goal of doubling agricultural exports to \$60 billion by 2022 and reach \$100 billion in the next few years thereafter.

Such facilitation by MCCIA would help in diversification of export basket (through suggesting the export potentials for various commodities in different destinations) and enabling market access. These will in turn benefit farmers as individual SF/ MFs could be the backward linkage points and the FPOs could directly be the exporters.

H. GLC flow to the sector :

(Rs crore)

Export credit flow	2017-18	2018-19	2019-20	2020-21
	5114.47	4724.07	3410.75	13304.53

(Source- SLBC)

Some of the major districts which contributed to the flow during 2020-21 are Mumbai city, Mumbai suburb; Pune, Thane and Nasik, and the major banks were Indusind Bank, Yes Bank, Punjab National Bank, Indian Overseas Bank and Central Bank of India.

(Source- SLBC)

I. 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.

- Organization of exports through consolidation of production data, identification of target markets and authentication of foreign buyers needs to be attempted.
- Concerns on the issues such as Certification becoming expensive to small exporters have been expressed.
- 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.
- Integration of bank finance with contemporary developments like Mega Food Parks and promotion of various clusters.
- Need for financing commodity specific MSMEs.
- Banks to extend higher export credit taking advantage of the guarantee cover provided by ECGC for pre and post shipment credit.

For detailed paper visit

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

Solapur district specific:

4.1.1 Introduction:

Solapur district has a good potential under export sector. Textile products such as Solapur Chaddar, Towels, Bed linen, etc. are being exported. Solapur Chaddar is one of the Geographical Indication (GI) products besides Mangalwedha Jowar in the district. Further, export quality fruits viz. Pomogrenate, Banana & Grapes as well as processed fruits products are also exported from the district.

As envisaged above in this chapter, Solapur district has been identified as potential cluster for agricultural commodities viz. Pomogranate, Poultry & Poultry products and Banana under Agriculture Export Policy of GoI. Potential block having major exportable agri/Horti crops of Solapur district are as per under:

Sr. No.	Crops	Peak season	Varieties	Potential areas
(i)	Grapes	February/ March	Thompson, Sonaka & Sharad	Karmala, Barshi, Madha, Mohol, Mnagawedha, Sangola, Malshiras, Pandharpur & Akkalkot
(ii)	Onion	April/May	Dark/Light Red, Rose, Pusa Red	Malshiras, Pandharpur, Akkalkot

Solapur is identified under Agri Export Zones for products such as Pomegranate, Grape & Grapevine and Onion.

Under Mission for Integrated Development of Horticulture (MIDH) for holistic development of horticulture is being implemented from 2015-16 for Grapes, Mango, Pomegranate & Banana major fruits being exported from the district.

Solapur has also been identified under Cluster Development Programme (CDP) of National Horticulture Board (NHB) for concerns of horticulture value chain of Pomogrenate fruit crop.

4.1.2 Infrastructure and linkage support available planned and gaps:

- National Research Centre on Pomogrenate (NRCP) is located in the district, which has also developed export quality varieities. NRCP is also providing not only trainings but also provides nursery facilities to the local farmers.
- APEDA is also providing hand holding trainings to the local farmers for quality maintenance & other export related processes.

4.1.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Export Credit for various commodities (including Pre & Post Shipment credits)	Nos	300.00	09	2700.00	2160.00
Total				09	2700.00	2160.00

Chapter 4.2 **Education**

Literacy and Education level are the basic indicators of the level of development achieved by a society. Spread of literacy is generally associated with important traits of modern civilization such as modernization, urbanization, industrialization, communication and commerce.

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 11 June 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.

GoI 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 GoI. 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.

Indian bankers Association (IBA) has formulated a scheme for providing collateral free loans up to 7.5 lakh under the sector for students belonging to economically weaker sections.

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.

The Economic Survey of Maharashtra 2020-21 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), RSCM tuition fees scholarship scheme etc.

Suggested 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.

For detailed paper visit

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

Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Within India	Nos	4.00	3455	13820.00	12438.00
Grand Total				3455	13820.00	12438.00

Chapter 4.3 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. GoI has resolved '**Housing for all by 2022**' and accordingly has encouraged the Housing Sector through budgetary announcements related to various initiatives such as Affordable Housing that gives tax relief and Pradhan Mantri Awas Yojana – Gramin (PMAY-G) that aims at providing 1.95 crore houses in the second phase of PMAY-G (2019-20 to 2021-22)

As per the RBI guidelines on Priority Sector Lending, updated on 11 June 2021, Bank loans to Housing sector as per limits prescribed below are eligible for priority sector classification:

- a. 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.
- 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.
- 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.

The Economic Survey of Maharashtra 2020-21 covers the Social Sector of Housing with the detailed scenario in the State encompassing Urban and Rural Housing featuring Pradhan Mantri Awas Yojana, State Schemes for ST/ SC. Assistance for purchase of land etc. that 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.

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

Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit (Nos)	Unit Cost	Physical Unit	TFO	Bank Loan
1	Rural Housing	Nos	6.00	2885	16992.00	15579.00
2	Urban/Semi-urban Housing	Nos	10.00	3255	32000.00	29295.00
3	Renoavation/Repairs – Rural Housing	Nos	2.00	1219	2442.00	2194.20
4	Renoavation/repairs – Urban/Semi-urban Housing	Nos	4.00	1240	4960.00	4464.00
Grand Total				8599	57258.00	51532.20

Chapter 5 **Infrastructure Support**

Chapter 5.1 **Infrastructure – Public investments**

5.1.1 Introduction:

5.1 Infrastructure – Public investments

Infrastructure is best envisioned as services that come from a set of public works, not as physical facilities. In concept, rural infrastructure can expand rural economies by raising productivity levels, allowing expansion in the use of other resources, and attracting resources, thus an effective driver of growth for increase in productivity in agriculture and poverty reduction both within and outside agricultural sectors.

5.1.1 Rural Infrastructure Development Fund (RIDF):

The GOI established a fund to be operationalized by NABARD in the Union Budget 1995–96 called 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. RIDF in Tranche I 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. 30,000 crore for 2020-21 under RIDF XXVI, the cumulative allocation has reached Rs. 3,68,875 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 (as on 31st March 2021):

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 (Rs. crore)	RIDF loan disbursed (Rs. Crore)
Irrigation (MI, Checkdams, etc.)	872	8979.50	6658.06
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	227.77
Roads and Bridges	15211	8295.82	6968.72
Warehousing	621	615.38	344.17
Waste Water Management	21	67.48	47.65
Total	22142	19088.28	14817.28

The **cumulative sanctions under RIDF** have reached **Rs. 19,088.28 crore** and the **utilisation** accounted for **78%** of the sanctions.

5.1.3 Status of RIDF in the Solapur district:

During the year **2020-21**, total **06 projects** of rural bridges were sanctioned in the district out of the **total 443 projects** in the State; with **RIDF loan of Rs. 1270.45 lakh**.

The cumulative purpose wise number of projects and amount sanctioned, in respect of **ongoing tranches** (i.e., RIDF XX to XXVI) in the Solapur district as on 31st March 2021 is given hereunder:

Sl. No.	Sector	(Rs Crore)	
		Sanctioned	
		No. of Projects	Loan amt
1	Roads (PWD)	53	3453.47
2	Bridges (PWD)	29	6163.92
3	Rural Roads (Rural Devt Dept)	05	2703.89
4	Irrigation (MI, LI, check dams, etc.)	01	5122.43
	Total	88	17443.71

Status of development under important sectors in the district:

- **Irrigation:** There is a need to expedite completion of incomplete projects and tap surface and ground water potential to provide better irrigation facilities to the farmers.
- **Rural Connectivity:** At present, the total road-length in the district is 19990 km. The dearth of road network is more acutely felt in the rural areas because of the increased demand for agricultural inputs and other services.

5.1.2 Infrastructure and linkage support available planned and gaps:

- **Health:** The government health facilities in the district consist of 18 Hospitals (Govt.), 17 Dispensaries (Govt), 77 Primary Health Centers, 429 Sub- centers and 4776 Anganwadis as on 31 March 2014. There is a need to increase this number for better health facilities. Broadly for every 1,00,000 population one CHC, for each 30,000 population one PHC and for every 5,000 population one Sub Centre is required .
- **Education:** Presently, the literacy rate in the district is 77%. The district has made significant achievement in providing access to elementary education. Primary school facility has been provided within a distance of 1 km radius of each habitation and a middle school facility within a distance of 3 km radius. Govt may consider providing facilities for higher education like Colleges, Polytechnics, etc in the vicinity of the villages. Presently there are 1028 Primary schools and 90 collages in the district. Broadly for every village 5 Primary /Middle schools and in each block one collage is required in the district.
- **Drinking water:** Shortage of adequate quantity of drinking water in some parts of the district/ villages is another area of concern. Ground water is not adequately recharged due to scanty rainfall which is causing shortage of drinking water. The rate of dwindling of yield of wells has become alarmingly high due to depletion in the ground water table. Thus, the quantity of water supplied to the villages has reduced considerably.
- **Sanitation:** Facilities like community toilet blocks etc. in the rural areas/market places may be provided.
- Construction of rainwater harvesting structures needs to be promoted in view of drought like conditions in many blocks.
- Sanitation/ drainage facilities and road connectivity at tourist/ pilgrimage places such as Pandharpur, Akkalkot, Malshiras need to be improved
- Solid waste treatment plants/ composting units need to be set up in urban/ semi urban areas by municipality/ palikas/ nagar parishads to resolve problem of solid waste disposal

Critical interventions required for creating a definitive impact in the district:

- Irrigation intensity of the district is 40% and un-irrigated 441622 ha in the Solapur district. There is a huge potential for creation irrigation infrastructure in the district.
- Interior rural roads are in bad shape and need repairing/re-surfacing in almost all blocks of the district. These roads are to be constructed on priority basis in order to have access to the nearby markets by the local farmers.
- Health infrastructure facilities are also in bad shape and the same needs to be improved. New health infrastructure with improved amenities may be created at block level & sub-block (i.e. Gram Panchayat) levels.
- Focus on incomplete projects for its completion.
- Focus on Irrigation long pending project of 35 villages of Mangalwedha block.

Suggested Action Points:

- There is need for line departments of Government of Maharashtra to keep various projects in pipeline so that the same can be taken up for funding under RIDF.
- Projects under Irrigation sector may be posed to NABARD only after getting all necessary clearances from Forest / Revenue Departments and completing the formalities relating to land acquisition, rehabilitation etc., to avoid abnormal delay and cost escalation in implementation of projects.
- 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 form WUAs under irrigation projects to ensure effective functioning of WUAs, wherever formed, so that benefits reach the community.
- PWD may ensure to complete the connectivity of the road network to the market centres so that concrete benefits can be realised by the beneficiary villagers (road projects).
- PWD may focus on construction of new roads in rural areas, rather than upgradation of MDRs.

Other related matters:

- **Rural Infrastructure Promotion Fund (RIPF):** Despite making remarkable progress under RIDF a number of constraints like inadequate planning, lack of awareness of officials involved in implementation of the projects etc., have been experienced while implementing the RIDF projects. Recognizing the need for capacity building of officials, creation of experimental/critical infrastructure of smaller investments with focus on last mile connectivity benefiting the community may generate demand for RIDF funding for other infrastructures of higher order, NABARD has set up a separate fund titled 'Rural Infrastructure Promotion Fund (RIPF)'. The objective of the fund is to support the activities required for promotional efforts for RIDF which will include support for conducting knowledge sharing workshops, creation of experimental infrastructure projects by Gram Panchayat, SHG/SHG Federation, Farmers Clubs/FC Federation, and support for survey of potential assessment/demand survey for new Agri/rural infrastructure projects.
- **NIDA (NABARD Infrastructure Development Fund):** The fund was created to finance Rural Infrastructure Projects outside RIDF. Assistance under NIDA is available for a period of 15 years with 2 to 3 years repayment holiday. Initially, NIDA was created to support State Owned entities. However, the scope of NIDA has been broadened and from the year 2014-15, PPP projects and NBFCs, Public Financial Institutions are eligible under NIDA. As on date, an amount of ₹242.36 crore has been sanctioned under NIDA in the State.
- **Long Term Irrigation Fund (LTIF):** In Maharashtra, State Government was sanctioned a loan amount of ₹ 7242.73 crore under LTIF for completion of 23 projects. An amount of ₹ 1723.58 crore was released during 2016-17. With readily available funds, it is expected that these projects which were ongoing for the past few decades would be completed by 2018-19 and bring an area of 7.14 lakh ha under irrigation." An amount of ₹ 409.95 crore was sanctioned under LTIF for completion

of Sangola Branch Canal project, which is completed and brought an area of 13766 ha under irrigation in Sangola block of Solapur district. During the year 2017-18 an amount of ₹ 15.69 crore was released to the State Government. The project is expected to create an additional potential of 11290 ha.

Chapter 5.2

Social Infrastructure involving Bank Credit

5.2.1 Introduction:

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 on 28 December 2018, stipulated that Bank loans up to a limit of ₹ 5 crore per borrower for building social infrastructure for activities namely schools, health care facilities, drinking water facilities and sanitation facilities (including loans for construction/ refurbishment of toilets and improvement in water facilities in the household) in Tier II to Tier VI centres are eligible for classification under priority sector. Bank credit to Micro Finance Institutions (MFI) extended for on-lending to individuals/members of SHGs/JLGs for water and sanitation facilities is also eligible for classification as priority sector loans under 'Social Infrastructure' subject to certain criteria.

Literacy rate in Solapur district is 77% (Male – 85% & Female– 69%) as compared to 82.3% for the State. As per Maharashtra Human Development Report 2012, Human Development Index for Maharashtra is 0.752 and for Solapur district it is **0.624**, which is less than that of state's HDI.

5.2.2 Infrastructure and linkage support available planned and gaps:

- There are 4134 (1,10,566) Primary & secondary schools in the district having 5.23 lakh students on roll. Student-Teacher Ratio is 126 (31). (Figures in bracket are for the State). (Source: District Socio & Economic Survey, 2014). More than 90 colleges of various education streams are also in Solapur district.
- In Solapur district, 18 hospitals, 17 dispensaries, 77 Primary health centres and 429 Primary Health Sub-centres are available.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

5.2.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Sanitation (Toilets)	No.	0.20	1705	341.00	323.95
2	Drinking Water RO units	No.	2.00	935	1870.00	1691.50
Grand Total					2211.00	2015.45

5.2.4 Critical interventions required for creating a definitive impact:

Assured and continuous availability of electricity and skilled manpower like teachers, doctors, timely maintenance services would help in creating definitive impact in this sector.

5.2.5 Suggested Action Points:

Government Departments:

- Wherever possible, toilet constructions may be linked to Indira Awas Yojana.
- Availability of manpower for the created infrastructure is essential. This may require skill up gradation of manpower and in case of hospitals – professionals.
- Participation of the beneficiaries, especially women, in water supply schemes may be ensured. The Village Water and Sanitation Committees may be formed and their capacity building may be done.

Banks: Bankers may proactively take up financing of these activities to full fill their priority sector obligations.

5.2.6 Other related matters:

- **Special refinance scheme on Water, Sanitation and Hygiene (WASH)** - A NABARD provided refinance to banks for building social infrastructure relating to drinking water facilities, sanitation facilities including construction/ refurbishment of household toilets and health care facilities.

Chapter 5.3 Renewable Energy

5.3.1 Introduction:

Clean energy is the “Need of the Hour” for mooted development process on a sustainable basis. As the world witnesses a growth in demand for clean energy, the generation of power through new and renewable energy has been the thrust area of every state and central government. The Government of Maharashtra recognizes green energy as one of its focus sectors and has thus emerged as one of the leader state of India’s future renewable energy programme.

Renewable energy has become a major focus area of the government with the ambitious target of achieving 40 percent cumulative electric capacities 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.

As per priority sector guidelines issued by RBI, bank loans can be extended upto a limit of Rs. 15 crore to borrowers for purposes like solar based power generators, biomass based power generators, windmills, micro-hydel plants and for non-conventional energy based public utilities viz., street lighting systems, and remote village electrification. For individual households, the loan limit will be Rs 10 lakh per borrower.

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. The Ministry of New and Renewable Energy, GoI also provides financial support for installation of Micro Hydro Power projects upto 100 KW capacity in the country set up by Government dept., agencies, co-operative societies, local bodies, tea gardens, NGOs, entrepreneur etc. for the benefit of villagers living in the remote & inaccessible hilly areas to meet their local electricity needs in decentralized manner. A support of ₹ 1,25,000/- per KW is provided for installation of these projects. Department of Financial services has instructed to all Public Sector Banks to encourage home loan / home improvement loan seekers to install rooftop solar PV plants and include cost of system in their home loan proposals. The rooftop solar systems from 1 kWp upto 500 kWp or in combination can be set up on the roofs. About 10 sq.m area is required to set up 1 kWp grid connected rooftop solar system.

The key driver for renewable energy is the following

- ✓ The demand supply gap, especially as population increase
- ✓ A large untapped potential
- ✓ Concern for the environment
- ✓ The need to strengthen India Energy security
- ✓ Pressure on high emission industry sector from their shareholder
- ✓ A viable solution for rural electrification

Sources of new and renewable energy:

The source of new renewable energy are Biogas, Biomass, wind energy, Solar energy etc.

Biogas:

Biogas is a clean and efficient fuel. It contains about 65 per cent methane, about 34 percent carbon dioxide and traces of other gases, such as hydrogen sulphide and ammonia. There is a feeling amongst the farming community that there is no direct monetary benefit if one opts for this venture. Easy availability of LPG also acts as a deterrent. The implementing agencies have to initiate necessary steps to motivate the people and propagate the use of renewable source of energy. Inadequate availability of animals for selected size of the plant, water scarcity, defective designing of the plant, maintenance issues lack of scientific approach by the farmer and poor extension service are a few constraints in the way of the growth of the sector.

Solar Energy:

Among the renewable sources of energy, solar energy has a huge potential for power generation in Maharashtra. There are 250-300 days of clear sun with an available average radiation of 4 to 6 kWh/sq.metre over a day. There is a capacity to generate 1.5 million units/MW/year through solar photovoltaic systems & up to 2.5 million units/MW/ year

through solar thermal systems. Maharashtra is already in process to boost this enormous source and interested solar project developer can submit their proposals to Maharashtra Energy Development Agency.

5.3.2 Infrastructure and linkage support available planned and gaps:

- Presence of adequate infrastructure and support services in the district are positive factors which help promoting the use of non-conventional and renewable sources of energy, for setting up of Solar Energy and Biogas Based Plant etc.
- District Agricultural Officers/Extension Officers provide necessary technical support for putting up Bio-gas plants.
- Trained masons are available for construction of biogas plants and skilled personnel are available for providing post installation services.
- All the material, necessary for commissioning biogas plants, such as cement, bricks, steel etc., are easily available in the district.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

5.3.3 Assessment of potential for the financial year 2022-23 (in both physical and financial terms):

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	Biogas Plants	Nos	0.18	1540	277.20	138.60
2	Solar Home Light System (24 Wp)	Nos	0.11	3795	417.45	208.73
3	Solar Pumpsets	Nos	3.42	605	2069.10	1034.55
4	Solar Water Heating System, (200 LPD)	Nos	0.45	825	371.25	334.13
Grand Total					3135.00	1716.11

5.3.4 Critical interventions required for creating a definitive impact:

- ✓ There is huge potential for creation of infrastructure for harnessing Solar & Wind energy, as the climatic conditions are most conducive for these type of renewable energy activities.
- ✓ In Solapur district, there is also scope for ethanol production by Sugar Mills.

5.3.5 Suggested Action Points:

- Awareness among farmers has to be created about various renewable energy and waste management/utilization programs of the government.
- All Govt Sponsored subsidy programmes should be credit linked to ensure proper end use monitoring
- Incentives may be provided to SHGs for taking up renewable energy programmes and establishing small vermin culture units
- There is need to link government programmes with the bank credit so that sufficient number of beneficiaries could be covered.
- Corporates may be persuaded to adopt Solar/wind energy or similar devices so as to save and conserve energy.

5.3.6 Other related matters:

- ✓ NABARD provides 100% refinance to all banks for loans extended for renewable sources of energy and it is one of the thrust areas for NABARD for refinance.
- ✓ Subsidies are also available for solar installations.

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.

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.

6.2 On-going Initiatives- Micro Finance Profile in the District: A comparative position of SHGs formed in the district vis-à-vis Maharashtra is as given in under:

	a	b	c
Position as on	No. of SHGs in Maharashtra	No. of SHGs in the Solapur district	Share of total SHGs in Solapur district to Maharashtra position (b/a*100)
31/3/2021	1213093	21111	1.74 %

As can be seen in the table, the total number of SHGs formed constituted **1.74%** of Maharashtra State as on 31 March 2021. It has been planned to form **17,809 SHGs** as to include the entire rural poor women population under the SHG - BLP programme.

Total No. of blocks in the district	11 blocks
No. of blocks where SHGs exist	11 blocks
Total No. of blocks where SHGs are linked	11 blocks
Total No. of bank branches in the district	CBs – 324, Coops.- 208, RRBs - 35
Of which No. of branches participating in linkage program	CBs - NA, Coops. – 208 , RRBs - 35
No. of additional branches to be roped in	CBs - NA, Coops. - NA, RRBs - Nil
No. of Govt. / other agencies participating	Total – 15 Govt. Depts. – MSRLM (01), Solapur Municipal Corporation (01), Municipal Councils (12); Others – MAVIM (01)

MSRLM – Maharashtra State Rural Livelihood Mission (UMED)

MAVIM – Mahila Arthik Vikas Mahamandal.

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

Sr. No	Particulars	As on 31 March 2021
1	No. of SHGs promoted in the district (excluding of defunct SHGs)	21,111
2	No. of SHGs credit linked in the district	18,611
3	Amount of Bank loan availed (Rs lakh) in the district	58,698.00
4	Percentage of women SHGs in the district	100%
5	Average loan disbursed per SHG (Rs.) in the district (2020-21)	3,15,394.12
6	Average loan disbursed per SHG (Rs.) in the State (2020-21)	1,45,000.00
7	Average loan disbursed per SHG (Rs.) in the Country (2020-21)	2,01,118.00
8	NPA position in the district (2020-21)	3%
9	NPA position in the State (2020-21)	10.10%
10	NPA position in the Country (2020-21)	4.73%
11	Loan outstanding per SHG (2020-21) district	1,08,872.77
12	Loan outstanding per SHG (2020-21) State	1,10,031.20
13	Loan outstanding per SHG (2020-21) Country	1,78,694.40

The percentage of NPAs in the State is nearly two times the national average and the same for district is **3%**, which is less than that of NPA of State as well as country.

During the year 2021-22, Various Capacity building programme **viz. One day Sesityation meet for bankers** (02 nos.), **3 day training programme for bank officers/ BCs/ JLGPI on JLGs** (01 no.), **Trainings for field workers of NGOs** (02 nos.), **Field visit of BLBCs to SHGs** (01 no.) & **Trainings of SHG Leaders/Members** (05 nos.), etc. and 30 nos. of **Village level programmes** have been planned to be conducted under SHG-BLP to give a fillip to SHG-BLP.

6.3 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 / BF s also in promotion and financing of JLGs. By availing of services of BCs / BF s 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.

Bank Loan Disbursed and Outstanding - Joint Liability Groups as on 31 March 2021 in the state of Maharashtra

	(₹ lakh)
Cumulative No. of JLGs promoted as on 31.03.2020	690947
Cumulative Loan disbursed as on as on 31.03.2020 (₹ Lakh)	1178135.19
No. of JLGs promoted during 2020-21	341125
Loan Disbursed during 2020-21 (₹ Lakh)	457910
Cumulative No. of JLGs promoted as on 31.03.2021	1032072
Cumulative Loan disbursed as on as on 31.03.2020 (₹ Lakh)	1636045.62

(Source: Status of Microfinance in India 2020-21 by NABARD)

During 2020-21, total number of JLGs credit linked in Maharashtra are 341125 with an amount of Rs. 457910 lakh as compared to 4126882 JLGs financed in India with an amount of Rs.5831178 lakh.

Status of JLG financing in the district:

In Solapur District, status of JLG financing as on 31st March 2021 is given below:

Total nos. of JLGs formed & saving linked	: 1444 nos.
Total nos. of JLGs credit linked	: 1444 nos.
Total loan disbursed	: Rs. 5353 lakh
Total nos. of JLGs in NPA	: 88 nos.
NPA amount	: Rs. 364.78 lakh

With a view to sensitising the stakeholders of the JLG programme, NABARD has been arranging training programmes and exposure visits to successful JLGs.

The JLG mode of financing serves as a collateral-substitute for loans provided to the small, marginal, tenant farmers, oral lessees, share-croppers, entrepreneurs etc. It enables the banks to reach farmers through group approach, adopt cluster approach, facilitates education and credit discipline. Hence, banks in the district may increase their financing to the small, marginal, tenant farmers and oral lessess through JLG mode of financing. Considering the **number of farmers with less than one hectare of land** in the district as **236819**, there is potential for formation/promotion of **47364 JLGs (5 members in each group)** which can be credit linked in phased manner in the district.

6.4 Issues related to Micro finance:

In Maharashtra, there are 12.13 lakh SHGs but only 2.66 lakh SHGs are having outstanding loans as on 31 March 2021 which is a matter of concern. Nearly 80% groups are still outside the purview of the scheme in the state.

Relatively high level of NPA of SHGs in Maharashtra is a matter of concern. Bankers are not able to supervise the SHGs financed due to staff constraints. They are also finding it difficult to rate the SHGs by themselves due to paucity of time at their end. Bankers have to depend on the rating done by NGOs. But on some occasions, their rating falls short of objectivity. Monitoring mechanism of SHGs by NGOs has to be strengthened.

All the above issues have been addressed to a great extent with implementation of EShakti.

6.5 SHG Linkage Programme - Goals and Strategy for the year 2021-22:

- 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.

6.6 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.

6.7 Enhancement in credit flow – capital formation:

Establishment of micro-units by SHGs members will translate into investment credit business of banks thereby increasing capital formation in agriculture and off-farm sector. ***NABARD has sanctioned new projects for formation & promotion 05 new FPOs in Pandharpur (02), Sangola (01), Karmala (01) & South Solapur (01) to SHPI Yashaswini Mahila FPC in Solapur district. About 1882 SHG women are share holders in these five FPCs. Further, Yashaswini Mahila FPC the parent FPC is having more than 1500 women SHG members associated with them. These FPOs are involved in activities such as Dairy, Fruits & vegetable trading & processing.*** This will surely lead to enhancement in credit flow in priority sector and empowerment of women. The small and micro units will create employment opportunities for women in villages which would result in arresting the trend of urban migration.

6.8 Assessment of Potential

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	Total Population of the district (as per 2011 census)	43,18,000
2	Rural population (as per 2011 census)	29,19,000
3	No. of households (2 above / 5*)	5,83,800
4	No. of SHGs required (3 above / 15**)	38,920
5	No. of SHGs already linked	24,439
6	Balance (4-5)	14,481

*average members per household **average members per SHG

Considering the total poor rural population of the district, it is estimated that there is total potential for promotion and saving linkage of **38,920 SHGs** in the district. So far, 24,439 SHGs (including defunct SHGs of more than 3000) have been promoted in the district, thereby, leaving a gap for promotion of **14,481 SHGs**.

Block wise details of potential available for promotion and savings linkage of SHGs:

Sl. No.	Name of the block	Total potential for promotion of SHGs	No. of SHGs savings linked on 31 March 2020 #	Balance potential as on 31 March 2020	No. of SHGs planned to be promoted and savings linked during 2020-21	No. of SHGs to be promoted and savings linked during 2021-22	No. of new SHGs planned to be promoted and savings linked during 2022-23
1	Akkalkot	3300	2017	1283	274	213	330
2	Barshi	3400	2140	1260	268	209	330
3	Karmala	3800	2370	1430	300	234	360
4	Madha	3800	2426	1374	309	241	400
5	Malshiras	4000	2636	1364	292	227	360
6	Mangalwedha	2800	1733	1067	220	171	270
7	Mohol	3200	2019	1181	260	200	320
8	N.Solapur	3000	1878	1122	239	186	300
9	Pandharpur	4100	2598	1502	331	258	400
10	Sangola	5000	3101	1899	401	315	500
11	S. Solapur	2520	1521	999	218	170	280
Dist. Total		38920	24439	14481	3112	2424	3850

- including of defunct SHGs.

Block wise potential for credit linkage of SHGs:

Sl. No.	Name of the block	No. of SHGs (credit linked as on 31 Mar. 2021)	SHGs credit linked during 2021-22				SHGs to be credit linked during 2022-23			
			Fresh		Repeat		Fresh		Repeat	
			No.	Amount (Rs lakh)	No.	Amount (Rs lakh)	No.	Amount (Rs lakh)	No.	Amount (Rs lakh)
1	Akkalkot	195	286	357.50	110	192.00	234	117.00	83	42.00
2	Barshi	3344	369	462.00	297	858.00	366	183.00	196	98.00
3	Karmala	794	400	500.50	124	269.00	289	144.00	60	30.00
4	Madha	685	372	465.50	124	247.00	258	129.00	68	34.00
5	Malshiras	929	1070	1337.60	668	2484.00	300	150.00	82	41.00
6	Mangalwedha	566	286	357.50	110	408.00	254	127.00	81	40.00
7	Mohol	4373	943	1179.20	569	2190.00	133	66.00	62	31.00
8	N.Solapur	1958	315	393.80	96	212.00	264	132.00	192	102.00
9	Pandharpur	913	457	572.00	125	286.00	246	123.00	82	41.00
10	Sangola	2717	369	462.00	297	858.00	231	115.00	62	31.00
11	S.Solapur	619	315	393.80	110	212.00	228	114.00	69	35.00
Dist. Total		17093	5182	6481.40	2630	8216.00	2803	1400.00	1047	525.00

Credit Potential for Others

Introduction:

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

- Loans not exceeding Rs 50,000/- per borrower provided directly by banks to individuals and their SHG/JLG, provided the individual borrower's household annual income in rural areas does not exceed Rs 100,000/- and for non-rural areas it does not exceed Rs 1,60,000/-
- Loans to distressed persons not exceeding Rs 1,00,000/- per borrower to prepay their debt to non-institutional lenders.
- Overdrafts extended by banks upto Rs 5,000/- under Pradhan Mantri Jan Dhan Yojana (PMJDY) accounts provided the borrowers household annual income does not exceed Rs 1,00,000/- for rural areas and Rs 1,60,000/- for non-rural areas.
- Loans sanctioned to State Sponsored Organizations for Scheduled Castes/ Scheduled Tribes for the specific purpose of purchase and supply of inputs and/ or the marketing of the outputs of the beneficiaries of these organizations.

Ground Level Credit (GLC) flow under this sector for last three financial years is not available.

Assessment of Credit Potential for 2022-23:

The details of activity wise projections for the year 2022-23 are furnished below:

(Rs lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Unit	TFO	Bank Loan
1	SHG –Finance	No.	0.50	3850	1925.00	1925.00
2	Loans to JLGs	No.	2.50	1650	4125.00	4125.00
3	PMJDY Overdrafts	No.	0.05	4400	220.00	220.00
4	Loan to distress persons	No.	0.10	716	71.60	71.60
5	Consumption	No.	0.10	3295	329.50	329.50
Grand Total					6671.10	6671.10

Availability of Infrastructure, critical gaps & interventions required:

- There is good scope for disbursement of small loans to individuals for consumption, household needs, minor agricultural needs etc.
- The district also has good potential for financing SHGs and JLGs in view of increasing demand by the groups for commencing income generating activities.

Action points/issues to be addressed:

- Banks to undertake quick disposal of all loan applications.
- Bankers are required to provide adequate quantum of consumption loans especially to SF/MF and small entrepreneurs. This will avoid diversion of production loans for consumption purposes.
- Banks to extend adequate credit to minorities and women as to meet the benchmark prescribed by RBI.
- Development Departments may extend necessary help to banks to expand credit and recovery.
- Regular monitoring of finance to the sector may be taken up on all related fora.

Success Story - Joint Liability Group (JLG)

Dongargaon village of Mangalwedha Block

Mangalwedha Block of the district is called as Kothar of the quality Jowar production. It is considered as a drought prone area and agriculture is dependent on vagaries of monsoon.

Dairy has been recognized as a supportive occupation not only to supplement farmers' income but also generate gainful employment and essential nutrients for low cost living families. Especially women contribution to this sector is more than 70%.

Thus, most of the agriculture families depend on this activity for lively hood. They are doing this activity in a traditional way. These families are facing several problem viz. availability of concentrated animal feed, timely veterinary services, compensation of insurance cover etc. Mainly support of bank credit for purchase of dairy animals was very dismal. This has resulted in low productivity and low income to farmer's families.

The collateral free bank credit was the main issue faced by these farmers. Samaj Sevak Trust, an NGO came forward and decided to organize these families at one platform.

In the year 2010-11 NGO, with support from NABARD provided hand holding support to farmers and formed Farmers Clubs. During the year 2015-16 they have decided to form Joint Liability Groups of the farmers in Mangalwedha, Pandharpur and Sangola blocks of the district with support of VKGB and NABARD. For the purpose they have entered into a Tri-partite agreement with VKGB/NABARD and started formation of JLG of five farmers each.

Initially, they have formed 5 JLGs in the year 2019 and avail the loan of Rs. 7.00 Lakh. With its concerted efforts and proper inclination with poor families, they have made good network in these 3 blocks and over a period of 3 years they have sincerely worked on formation and linkage of JLGs.

As on 31 March 2021 NGO had formed 472 JLG's involving 2360 small and marginal farmers with financial support extended by VKGB. The total financial support stood at Rs. 38.00 Crore.

Thus JLG mode of financing as a collateral substitute for loan provided to small marginal tenant farmers, oral leases had been served.

In addition of supply with animal feed, recently they have started activities like supply of Agri. input to the farmers.

Annexure I
Activity-wise/Block-wise physical and financial proejctions for FY 2022-23

(Rs lakh)

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
A Farm Credit															
i) Crop Production, Maintenance, Marketing															
Kharif Crops															
Rice	0.14	ha	Phy.	104	0	0	0	0	0	0	0	0	0	10	114
		100%	BL	14.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	15.96
Jowar	0.25	ha	Phy.	2640	2655	2204	1904	1675	5114	1870	2355	1920	3241	2310	27888
		100%	BL	660.00	663.75	551.00	476.00	418.75	1278.50	467.50	588.75	480.00	810.25	577.50	6972.00
Bajra	0.23	ha	Phy.	1813	200	1920	1328	2497	4722	700	130	910	7319	1009	22548
		100%	BL	416.99	46.00	441.60	305.44	574.31	1086.06	161.00	29.90	209.30	1683.37	232.07	5186.04
Maize	0.06	ha	Phy.	2176	1682	4153	3702	3860	3603	1607	1533	1299	3491	1258	28364
		100%	BL	130.56	100.92	249.18	222.12	231.60	216.18	96.42	91.98	77.94	209.46	75.48	1701.84
Other cereals	0.08	ha	Phy.	15	39	107	55	12	47	36	32	14	25	19	401
		100%	BL	1.20	3.12	8.56	4.40	0.96	3.76	2.88	2.56	1.12	2.00	1.52	32.08
Tur (Arhar/Pigeon Pea)	0.30	ha	Phy.	20346	10580	5643	8514	2536	4261	3012	3061	2168	2263	11011	73395
		100%	BL	6103.80	3174.00	1692.90	2554.20	760.80	1278.30	903.60	918.30	650.40	678.90	3303.30	22018.50
Moong (Green Gram)	0.22	ha	Phy.	2229	3109	3366	2326	2139	1752	1368	1675	1832	2708	1313	23817
		100%	BL	479.24	668.44	723.69	500.09	459.89	376.68	294.12	360.13	393.88	582.22	282.30	5120.66
Groundnut	0.29	ha	Phy.	3014	2712	2202	2440	2112	2373	2103	2194	2594	2511	4371	28626
		100%	BL	874.06	786.48	638.58	707.60	612.48	688.17	609.87	636.26	752.26	728.19	1267.59	8301.54
Soyabean	0.34	ha	Phy.	3827	38992	4555	2450	1580	4324	2101	2154	1901	6864	4168	72916
		100%	BL	1301.18	13257.28	1548.70	833.00	537.20	1470.16	714.34	732.36	646.34	2333.76	1417.12	24791.44
Cotton	0.49	ha	Phy.	271	36	225	0	2	0	0	0	2	0	42	578
		100%	BL	131.44	17.46	109.13	0.00	0.97	0.00	0.00	0.00	0.97	0.00	20.37	280.33
Sugarcane	1.10	ha	Phy.	1844	1275	1125	1319	1844	1422	1813	1310	1222	1310	1760	16244
		100%	BL	2028.40	1402.50	1237.50	1450.90	2028.40	1564.20	1994.30	1441.00	1344.20	1441.00	1936.00	17868.40
Chilli	0.34	ha	Phy.	1059	1631	1587	1254	1252	1461	1468	1212	1342	1233	1241	14740

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
		100%	BL	360.06	554.54	539.58	426.36	425.68	496.74	499.12	412.08	456.28	419.22	421.94	5011.60
Onion	0.60	ha	Phy.	1802	1552	1948	1426	1008	1185	1458	7663	1422	1510	151	21125
		100%	BL	1081.20	931.20	1168.80	855.60	604.80	711.00	874.80	4597.80	853.20	906.00	90.60	12675.00
Tomato	0.50	ha	Phy.	1426	1816	1182	1399	1191	1245	1400	1217	1303	1171	1254	14604
		100%	BL	713.00	908.00	591.00	699.50	595.50	622.50	700.00	608.50	651.50	585.50	627.00	7302.00
Green Vegetables	0.14	ha	Phy.	255	405	207	219	211	205	222	250	224	220	225	2643
		100%	BL	35.70	56.70	28.98	30.66	29.54	28.70	31.08	35.00	31.36	30.80	31.50	370.02
Leafy Vegetables	0.06	ha	Phy.	75	88	51	79	48	52	40	77	73	51	75	709
		100%	BL	4.50	5.28	3.06	4.74	2.88	3.12	2.40	4.62	4.38	3.06	4.50	42.54
Other Vegetables	0.14	ha	Phy.	110	154	133	145	143	121	117	118	150	120	125	1436
		100%	BL	15.40	21.56	18.62	20.30	20.02	16.94	16.38	16.52	21.00	16.80	17.50	201.04
Sub -Total(phy) - (Kharif)		ha	Phy.	43006	66926	30608	28560	22110	31887	19315	24981	18376	34037	30342	350148
Sub -Total(Bank Loan) - (Kharif)		100%	BL	14351.28	22597.23	9550.88	9090.91	7303.78	9841.01	7367.81	10475.76	6574.13	10430.53	10307.69	117890.99
Post harvest/household consumption requirements - (Kharif)	10% of the Crop loan			1435.13	2259.72	955.09	909.09	730.38	984.10	736.78	1047.58	657.41	1043.05	1030.77	11789.10
Repairs and Maintenance Expenses of Farm Assets - (Kharif)	20% of the Crop loan			2870.26	4519.45	1910.18	1818.18	1460.76	1968.20	1473.56	2095.15	1314.83	2086.11	2061.54	23578.20
Total Crop Loan as per KCC - (Kharif)				18656.66	29376.39	12416.14	11818.18	9494.91	12793.31	9578.15	13618.48	8546.37	13559.69	13399.99	153258.28
Rabi Crops															
Jowar	0.33	ha	Phy.	18325	25085	19841	14521	2424	24822	17825	13041	2024	15225	11367	164500
		100%	BL	5955.63	8152.63	6448.33	4719.33	787.80	8067.15	5793.13	4238.33	657.80	4948.13	3694.28	53462.54
Wheat	0.33	ha	Phy.	2662	1219	2147	1905	1086	1406	1234	961	1577	779	1165	16141
		100%	BL	878.46	402.27	708.51	628.65	358.38	463.98	407.22	317.13	520.41	257.07	384.45	5326.53
Maize	0.43	ha	Phy.	952	1025	2174	2189	3241	2212	3079	1015	3276	2680	1118	22961
		100%	BL	409.36	440.75	934.82	941.27	1393.63	951.16	1323.97	436.45	1408.68	1152.40	480.74	9873.23
Harbhara (Gram)	0.30	ha	Phy.	2497	2747	2431	2123	1782	1071	1671	1185	1247	679	2745	20178
		100%	BL	749.10	824.10	729.30	636.90	534.60	321.30	501.30	355.50	374.10	203.70	823.50	6053.40
Oilseeds	0.30	ha	Phy.	181	8	14	3	4	157	217	116	0	79	10	789
		100%	BL	54.30	2.40	4.20	0.90	1.20	47.10	65.10	34.80	0.00	23.70	3.00	236.70
Sugarcane	1.00	ha	Phy.	9196	6555	12536	10249	14439	8119	18536	3987	21883	8108	11164	124772

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
		100%	BL	9196.00	6555.00	12536.00	10249.00	14439.00	8119.00	18536.00	3987.00	21883.00	8108.00	11164.00	124772.00
Banana (Tissue culture)	1.30	ha	Phy.	50	110	737	453	715	20	287	14	75	15	20	2496
		100%	BL	65.00	143.00	958.10	588.90	929.50	26.00	373.10	18.20	97.50	19.50	26.00	3244.80
Chilli	0.34	ha	Phy.	124	153	181	123	149	116	191	130	130	188	160	1645
		100%	BL	42.16	52.02	61.54	41.82	50.66	39.44	64.94	44.20	44.20	63.92	54.40	559.30
Onion	0.60	ha	Phy.	468	334	339	488	222	313	213	282	183	118	215	3175
		100%	BL	280.80	200.40	203.40	292.80	133.20	187.80	127.80	169.20	109.80	70.80	129.00	1905.00
Tomato	0.50	ha	Phy.	111	87	118	108	127	81	204	88	101	44	73	1142
		100%	BL	55.50	43.50	59.00	54.00	63.50	40.50	102.00	44.00	50.50	22.00	36.50	571.00
Green Vegetables	0.14	ha	Phy.	107	121	99	99	240	184	126	134	81	91	109	1391
		100%	BL	14.98	16.94	13.86	13.86	33.60	25.76	17.64	18.76	11.34	12.74	15.26	194.74
Other Vegetables	0.14	ha	Phy.	116	118	90	92	81	79	74	84	79	91	99	1003
		100%	BL	16.24	16.52	12.60	12.88	11.34	11.06	10.36	11.76	11.06	12.74	13.86	140.42
Sub -Total (phy) - (Rabi)		ha	Phy.	34789	37562	40707	32353	24510	38580	43657	21037	30656	28097	28245	360193
Sub -Total (Bank Loan) - (Rabi)		100%	BL	17717.53	16849.53	22669.66	18180.31	18736.41	18300.25	27322.56	9675.33	25168.39	14894.70	16824.99	206339.66
Post harvest/household consumption requirements - (Rabi)	10% of the Crop loan			1771.75	1684.95	2266.97	1818.03	1873.64	1830.03	2732.26	967.53	2516.84	1489.47	1682.50	20633.97
Repairs and Maintenance Expenses of Farm Assets - (Rabi)	20% of the Crop loan			3543.51	3369.91	4533.93	3636.06	3747.28	3660.05	5464.51	1935.07	5033.68	2978.94	3365.00	41267.93
Total Crop Loan as per KCC - (Rabi)				23032.79	21904.39	29470.56	23634.40	24357.33	23790.33	35519.33	12577.93	32718.91	19363.11	21872.49	268241.56
Grand Total - (Kharif+Rabi)															
Total (phy)		ha	Phy.	77795	104488	71315	60913	46620	70467	62972	46018	49032	62134	58587	710341
Total (Bank Loan)		100%	BL	32068.81	39446.76	32220.54	27271.22	26040.19	28141.26	34690.37	20151.09	31742.52	25325.23	27132.68	324230.65
Post harvest/household consumption requirements	10% of the Crop loan			3206.88	3944.68	3222.05	2727.12	2604.02	2814.13	3469.04	2015.11	3174.25	2532.52	2713.27	32423.06
Repairs and Maintenance Expenses of Farm Assets	20% of the Crop loan			6413.76	7889.35	6444.11	5454.24	5208.04	5628.25	6938.07	4030.22	6348.50	5065.05	5426.54	64846.13
Total Crop Loan as per KCC				41689.45	51280.78	41886.70	35452.59	33852.24	36583.64	45097.48	26196.41	41265.28	32922.80	35272.48	421499.84
ii) Water Resources															
Dug Wells (Dia 4.5 m, 10m depth of lining 3m)	1.57	No.	Phy.	107	127	79	69	0	57	72	38	50	44	58	701
		100%	BL	168.31	199.77	124.27	108.54	0.00	89.66	113.26	59.77	78.65	69.21	91.23	1102.67
IP Set Electric 5 HP	0.30	No.	Phy.	455	396	357	378	388	384	371	475	363	278	164	4009

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
		90%	BL	122.85	106.92	96.39	102.06	104.76	103.68	100.17	128.25	98.01	75.06	44.28	1082.43
IP Set Diesel 7.5 HP	0.40	No.	Phy.	263	255	257	254	260	210	312	285	310	385	260	3051
		90%	BL	94.68	91.80	92.52	91.44	93.60	75.60	112.32	102.60	111.60	138.60	93.60	1098.36
Drip Irrigation Set (Grape, Sugarcane, Cotton, Vegetables & Flowers, etc.)	1.00	No.	Phy.	1844	2092	2944	2179	1242	1654	1277	1843	3024	2084	1499	21682
		50%	BL	922.00	1046.00	1472.00	1089.50	621.00	827.00	638.50	921.50	1512.00	1042.00	749.50	10841.00
Sprinkler Set (75 mm HDPE Pipes)	0.30	Ha	Phy.	1549	2032	1596	1950	1695	1837	2414	1611	1576	770	1607	18637
		50%	BL	232.35	304.80	239.40	292.50	254.25	275.55	362.10	241.65	236.40	115.50	241.05	2795.55
Lift Irrigation (Small)	0.36	ha	Phy.	550	550	550	550	550	550	550	550	550	550	550	6050
		90%	BL	178.20	178.20	178.20	178.20	178.20	178.20	178.20	178.20	178.20	178.20	178.20	1960.20
Lift Irrigation (Big)	1.32	No.	Phy.	450	450	450	450	450	450	450	450	450	450	450	4950
		90%	BL	534.60	534.60	534.60	534.60	534.60	534.60	534.60	534.60	534.60	534.60	534.60	5880.60
Bore Wells	0.31	No.	Phy.	710	750	655	600	0	550	480	655	663	796	456	6315
		90%	BL	201.03	212.36	185.46	169.88	0.00	155.73	135.91	185.46	187.72	225.38	129.11	1788.04
HDPE Pipeline System (100 mm)	0.38	No.	Phy.	360	360	360	360	360	360	360	360	360	360	360	3960
		75%	BL	123.12	123.12	123.12	123.12	123.12	123.12	123.12	123.12	123.12	123.12	123.12	1354.32
HDPE Pipeline System (65 mm)	0.51	No.	Phy.	460	460	460	460	461	462	463	464	465	466	467	5088
		75%	BL	175.95	175.95	175.95	175.95	176.33	176.72	177.10	177.48	177.86	178.25	178.63	1946.17
Rain Water Harvesting	0.65	No.	Phy.	210	205	165	195	0	190	185	195	201	180	175	1901
		90%	BL	122.85	119.93	96.53	114.08	0.00	111.15	108.23	114.08	117.59	105.30	102.38	1112.12
Sub - Total			BL	2875.94	3093.45	3318.44	2979.87	2085.86	2651.01	2583.51	2766.71	3355.75	2785.22	2465.70	30961.46
iii) Farm Mechanisation															
Tractor (55HP)	7.70	No	Phy.	360	335	360	334	361	385	315	370	312	324	321	3777
		75%	BL	2079.00	1934.63	2079.00	1928.85	2084.78	2223.38	1819.13	2136.75	1801.80	1871.10	1853.78	21812.20
Power Tillers (8 HP)	1.90	No	Phy.	290	210	304	302	284	244	126	142	240	260	28	2430
		80%	BL	440.80	319.20	462.08	459.04	431.68	370.88	191.52	215.84	364.80	395.20	42.56	3693.60
Power Thresher (7 HP)	0.72	No	Phy.	250	254	324	310	354	170	282	202	298	330	140	2914
		75%	BL	135.00	137.16	174.96	167.40	191.16	91.80	152.28	109.08	160.92	178.20	75.60	1573.56
Combine Harvester	6.90	No	Phy.	11	13	14	14	12	15	19	24	21	24	22	189

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
		80%	BL	60.72	71.76	77.28	77.28	66.24	82.80	104.88	132.48	115.92	132.48	121.44	1043.28
Sugarcane Harvester	92.00	No	Phy.	2	2	4	5	5	5	5	3	5	4	4	44
		80%	BL	147.20	147.20	294.40	368.00	368.00	368.00	368.00	220.80	368.00	294.40	294.40	3238.40
Sub - Total			BL	2862.72	2609.95	3087.72	3000.57	3141.86	3136.86	2635.81	2814.95	2811.44	2871.38	2387.78	31361.04
iv) Plantation & Horticulture															
Mango (10 x 10 m)	1.57	ha	Phy.	847	517	511	460	277	12	440	360	312	255	575	4566
		90%	BL	1196.81	730.52	722.04	649.98	391.40	16.96	621.72	508.68	440.86	360.32	812.48	6451.77
Grapes	10.54	ha	Phy.	15	42	42	95	27	30	50	15	42	17	25	400
		90%	BL	142.29	398.41	398.41	901.17	256.12	284.58	474.30	142.29	398.41	161.26	237.15	3794.39
Pomegranate	2.05	ha	Phy.	435	620	1031	1260	1464	1176	1545	1324	3041	5014	2150	19060
		90%	BL	802.58	1143.90	1902.20	2324.70	2701.08	2169.72	2850.53	2442.78	5610.65	9250.83	3966.75	35165.72
Custard Apple	1.14	ha	Phy.	11	21	25	25	35	20	27	16	35	25	14	254
		90%	BL	11.29	21.55	25.65	25.65	35.91	20.52	27.70	16.42	35.91	25.65	14.36	260.61
Ber	0.30	ha	Phy.	137	251	175	260	115	133	235	113	180	170	158	1927
		90%	BL	36.99	67.77	47.25	70.20	31.05	35.91	63.45	30.51	48.60	45.90	42.66	520.29
Acid Lime	1.67	ha	Phy.	825	2414	1002	733	364	197	955	376	287	528	481	8162
		90%	BL	1239.98	3628.24	1506.01	1101.70	547.09	296.09	1435.37	565.13	431.36	793.58	722.94	12267.49
Sapota (Chikoo)	1.29	ha	Phy.	44	194	168	169	212	112	162	119	310	407	104	2001
		90%	BL	51.08	225.23	195.05	196.21	246.13	130.03	188.08	138.16	359.91	472.53	120.74	2323.15
Green Polyhouse (500 sqm)	6.25	ha	Phy.	35	40	35	35	32	37	28	35	31	31	35	374
		90%	BL	196.88	225.00	196.88	196.88	180.00	208.13	157.50	196.88	174.38	174.38	196.88	2103.79
Horticulture - Nurseries	1.38	No	Phy.	5	5	8	3	3	6	4	5	8	6	4	57
		90%	BL	6.19	6.19	9.90	3.71	3.71	7.43	4.95	6.19	9.90	7.43	4.95	70.55
Aonla (Indian gooseberry)	0.79	No	Phy.	19	22	18	22	17	15	19	20	23	22	25	222
		90%	BL	13.51	15.64	12.80	15.64	12.09	10.67	13.51	14.22	16.35	15.64	17.78	157.85
Other Fruit crops (Dry land horticulture)	0.50	ha	Phy.	1143	1432	1740	1413	1264	2350	1800	1620	906	777	759	15204
		90%	BL	514.35	644.40	783.00	635.85	568.80	1057.50	810.00	729.00	407.70	349.65	341.55	6841.80

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
Floriculture	3.53	ha	Phy.	40	40	40	40	55	45	45	40	45	40	45	475
		90%	BL	127.08	127.08	127.08	127.08	174.74	142.97	142.97	127.08	142.97	127.08	142.97	1509.10
Shednet for flowers & vegetables (20 R)	6.27	ha	Phy.	208	208	208	208	208	208	208	208	208	208	208	2288
		90%	BL	1174.49	660.82	660.82	660.82	660.82	660.82	660.82	660.82	660.82	660.82	660.82	7782.69
Sub - Total				5513.52	7894.75	6587.09	6909.59	5808.94	5041.33	7450.90	5578.16	8737.82	12445.07	7282.03	79249.20
v) Forestry and Wasteland Development															
Forestry/Wasteland Dev.	0.50	ha	Phy.	472	311	215	107	129	182	251	101	119	221	188	2296
		85%	BL	200.60	132.18	91.38	45.48	54.83	77.35	106.68	42.93	50.58	93.93	79.90	975.84
Sub - Total			BL	200.60	132.18	91.38	45.48	54.83	77.35	106.68	42.93	50.58	93.93	79.90	975.84
vi) Animal Husbandry – Dairy															
A. Term Loans															
Cross Breed Cows	0.67	No.	Phy.	1519	1660	1885	1844	1950	1650	1653	1622	1905	2045	1560	19293
		85%	BL	858.61	938.32	1065.50	1042.32	1102.24	932.66	934.36	916.84	1076.80	1155.94	881.79	10905.38
Buffaloes (GradedMurrah)	0.72	No.	Phy.	1526	1603	1462	1701	1685	1782	1693	1425	1996	1184	1630	17687
		85%	BL	933.91	981.04	894.74	1041.01	1031.22	1090.58	1036.12	872.10	1221.55	724.61	997.56	10824.44
Indigenous Cows	0.30	No.	Phy.	1280	1450	1460	1610	1860	1485	1520	1533	1745	1988	1865	17796
		90%	BL	345.60	391.50	394.20	434.70	502.20	400.95	410.40	413.91	471.15	536.76	503.55	4804.92
Mini Dairy Unit	6.00	No.	Phy.	20	15	25	25	35	15	20	11	24	20	15	225
		80%	BL	96.00	72.00	120.00	120.00	168.00	72.00	96.00	52.80	115.20	96.00	72.00	1080.00
Commercial Dairy Unit (10 animals)	6.10	No.	Phy.	44	53	50	57	77	52	67	47	77	55	55	634
		80%	BL	214.72	258.64	244.00	278.16	375.76	253.76	326.96	229.36	375.76	268.40	268.40	3093.92
Calf Rearing (20 calves)	6.00	No.	Phy.	18	16	22	15	15	18	16	20	15	20	18	193
		80%	BL	86.40	76.80	105.60	72.00	72.00	86.40	76.80	96.00	72.00	96.00	86.40	926.40
Veterinary Clinics	2.50	No.	Phy.	6	9	7	5	5	4	8	11	10	10	9	84
		90%	BL	13.50	20.25	15.75	11.25	11.25	9.00	18.00	24.75	22.50	22.50	20.25	189.00
Fooder cultivation	0.15	HH	Phy.	854	970	483	529	489	270	449	274	464	327	215	5324
		90%	BL	115.29	130.95	65.21	71.42	66.02	36.45	60.62	36.99	62.64	44.15	29.03	718.77

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
Bulk Milk Cooling Units	20.00	No.	Phy.	4	5	5	5	7	4	5	5	5	6	5	56
		75%	BL	60.00	75.00	75.00	75.00	105.00	60.00	75.00	75.00	75.00	90.00	75.00	840.00
Artificial Insemination (AI) Centres	1.00	No.	Phy.	20	17	23	24	25	25	25	24	15	15	17	230
		75%	BL	15.00	12.75	17.25	18.00	18.75	18.75	18.75	18.00	11.25	11.25	12.75	172.50
Milk Booths	0.56	No.	Phy.	5	9	11	14	12	8	21	10	9	12	12	123
		75%	BL	2.10	3.78	4.62	5.88	5.04	3.36	8.82	4.20	3.78	5.04	5.04	51.66
Sub - Total - Term Loan			BL	2741.13	2961.03	3001.87	3169.74	3457.48	2963.91	3061.83	2739.95	3507.63	3050.65	2951.77	33606.99
B. Working capital under KCC															
Indigenous Cows	0.17	No.	Phy.	1280	1450	1460	1610	1860	1485	1520	1533	1745	1988	1865	17796
		100%	BL	223.49	253.17	254.92	281.11	324.76	259.28	265.39	267.66	304.68	347.10	325.63	3107.19
CB Cows	0.20	No.	Phy.	1519	1660	1885	1844	1950	1650	1653	1622	1905	2045	1560	19293
		100%	BL	307.60	336.15	381.71	373.41	394.88	334.13	334.73	328.46	385.76	414.11	315.90	3906.84
Buffaloes	0.20	No.	Phy.	1526	1603	1462	1701	1685	1782	1693	1425	1996	1184	1630	17687
		100%	BL	309.02	324.61	296.06	344.45	341.21	360.86	342.83	288.56	404.19	239.76	330.08	3581.63
Sub - Total - Working capital			BL	840.11	913.93	932.69	998.97	1060.85	954.27	942.95	884.68	1094.63	1000.97	971.61	10595.66
Total - AH Dairy			BL	3581.24	3874.96	3934.56	4168.71	4518.33	3918.18	4004.78	3624.63	4602.26	4051.62	3923.38	44202.65
vii) Animal Husbandry – Poultry															
A. Term Loans															
Commercial Broiler Unit (2000 Birds)	4.00	No.	Phy.	126	141	113	157	116	102	78	110	81	123		1147
		90%	BL	453.60	507.60	406.80	565.20	417.60	367.20	280.80	396.00	291.60	442.80	0.00	4129.20
Commercial Layer Unit (2000 Birds)	10.00	No.	Phy.	19	21	24	37	57	41	48	32	27	51	27	384
		85%	BL	161.50	178.50	204.00	314.50	484.50	348.50	408.00	272.00	229.50	433.50	229.50	3264.00
Egg/Broiler Cart	0.13	No.	Phy.	45	70	40	43	42	36	57	47	50	54	60	544
		90%	BL	5.27	8.19	4.68	5.03	4.91	4.21	6.67	5.50	5.85	6.32	7.02	63.65
Poultry Feed plant (1MT capacity)	19.80	No.	Phy.	4	7	3	4	4	3	2	3	3	7	6	46
		75%	BL	59.40	103.95	44.55	59.40	59.40	44.55	29.70	44.55	44.55	103.95	89.10	683.10
Broiler dressing Unit	5.00	No.	Phy.	20	20	17	18	22	16	20	20	25	24	18	220
		90%	BL	90.00	90.00	76.50	81.00	99.00	72.00	90.00	90.00	112.50	108.00	81.00	990.00

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
Sub - Total - Term Loan			BL	769.77	888.24	736.53	1025.13	1065.41	836.46	815.17	808.05	684.00	1094.57	406.62	9129.95
B. Working capital under KCC															
Commercial Broiler Unit (2000 Birds)	3.32	No.	Phy.	126	141	113	157	116	102	78	110	81	123	0	1147
		100%	BL	418.32	468.12	375.16	521.24	385.12	338.64	258.96	365.20	268.92	408.36	0.00	3808.04
Commercial Layer Unit (2000 Birds)	3.32	No.	Phy.	19	21	24	37	57	41	48	32	27	51	27	384
		100%	BL	63.08	69.72	79.68	122.84	189.24	136.12	159.36	106.24	89.64	169.32	89.64	1274.88
Sub - Total - Working capital			BL	481.40	537.84	454.84	644.08	574.36	474.76	418.32	471.44	358.56	577.68	89.64	5082.92
Total - AH Poultry			BL	1251.17	1426.08	1191.37	1669.21	1639.77	1311.22	1233.49	1279.49	1042.56	1672.25	496.26	14212.87
viii) Animal Husbandry – Sheep, Goat, Piggery,etc.															
A. Term Loans															
Goat Rearing (10+1) - (Osmanabadi/Sangamneri)	0.89	No.	Phy.	325	280	243	247	190	360	398	356	462	724	648	4233
		85%	BL	245.86	211.82	183.83	186.86	143.74	272.34	301.09	269.31	349.50	547.71	490.21	3202.27
Stall Fed Goatery Unit (50+5)	3.30	No.	Phy.	42	40	40	30	30	32	41	38	27	41	42	403
		75%	BL	103.95	99.00	99.00	74.25	74.25	79.20	101.48	94.05	66.83	101.48	103.95	997.44
Sheep Rearing (20+1)	1.32	No.	Phy.	245	220	190	171	245	250	245	250	270	221	260	2567
		85%	BL	274.89	246.84	213.18	191.86	274.89	280.50	274.89	280.50	302.94	247.96	291.72	2880.17
Comm Piggery unit (10+1)	0.90	No.	Phy.	0	1	1	1	1	1	1	0	1	1	1	9
		85%	BL	0.00	0.77	0.77	0.77	0.77	0.77	0.77	0.00	0.77	0.77	0.77	7.29
Sub - Total - Term Loan			BL	624.70	558.43	496.78	453.74	493.65	632.81	678.23	643.86	720.04	897.92	886.65	7087.17
B. Working capital under KCC															
Goat Rearing (10+1) - (Osmanabadi/Sangamneri)	0.27	No.	Phy.	380	330	250	250	200	400	450	430	500	750	716	4656
		100%	BL	102.60	89.10	67.50	67.50	54.00	108.00	121.50	116.10	135.00	202.50	193.41	1257.21
Stall Fed Goatery Unit (50+5)	1.49	No.	Phy.	42	40	40	30	30	32	41	38	27	41	42	403
		100%	BL	62.37	59.40	59.40	44.55	44.55	47.52	60.89	56.43	40.10	60.89	62.37	598.47
Sheep Rearing (20+1)	0.57	No.	Phy.	245	220	190	170	245	250	245	250	270	225	266	2576
		100%	BL	138.43	124.30	107.35	96.05	138.43	141.25	138.43	141.25	152.55	127.13	150.34	1455.51
Comm piggery unit (10 +1)	0.30	No.	Phy.	0	1	1	1	1	1	1	0	1	1	1	9
		100%	BL	0.00	0.30	0.30	0.30	0.30	0.30	0.30	0.00	0.30	0.30	0.30	2.67

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
Sub - Total - Working capital			BL	303.40	273.10	234.55	208.40	237.28	297.07	321.12	313.78	327.95	390.82	406.42	3313.86
Total - AH Sheep, Goat & Piggery Dev.				928.10	831.53	731.33	662.14	730.93	929.88	999.35	957.64	1047.99	1288.74	1293.07	10401.03
ix) Fisheries															
A. Term Loans															
Composite Fish Culture Existing Ponds	1.76	Ha	Phy.	5	6	7	4	6	4	5	5	5	4	4	55
		90%	BL	7.92	9.50	11.09	6.34	9.50	6.34	7.92	7.92	7.92	6.34	6.34	87.13
Composite Fish Culture New Ponds	2.07	Ha	Phy.	7	6	8	6	4	7	7	9	9	4	7	74
		90%	BL	13.04	11.18	14.90	11.18	7.45	13.04	13.04	16.77	16.77	7.45	13.04	137.86
Fresh Fishery Prawn culture	3.17	Ha	Phy.	2	2	3	2	3	2	3	3	3	2	4	29
		75%	BL	4.76	4.76	7.13	4.76	7.13	4.76	7.13	7.13	7.13	4.76	9.51	68.96
Sub - Total - Term Loan			BL	25.72	25.44	33.12	22.28	24.08	24.14	28.09	31.82	31.82	18.55	28.89	293.95
B. Working capital under KCC															
Composite Fish Culture Existing Ponds	0.30	Ha	Phy.	5	6	7	4	6	4	5	5	5	4	4	55
		100%	BL	1.48	1.78	2.07	1.18	1.78	1.18	1.48	1.48	1.48	1.18	1.18	16.28
Composite Fish Culture New Ponds	0.30	Ha	Phy.	7	6	8	6	4	7	7	9	9	4	7	74
		100%	BL	2.07	1.78	2.37	1.78	1.18	2.07	2.07	2.66	2.66	1.18	2.07	21.90
Fresh Fishery Prawn culture	0.30	Ha	Phy.	2	2	3	2	3	2	3	3	3	2	4	29
		100%	BL	0.59	0.59	0.89	0.59	0.89	0.59	0.89	0.89	0.89	0.59	1.18	8.58
Sub - Total - WC Fisheries			BL	4.14	4.15	5.33	3.55	3.85	3.84	4.44	5.03	5.03	2.95	4.43	46.76
Total - Fisheries			BL	29.86	29.59	38.45	25.83	27.93	27.98	32.53	36.85	36.85	21.50	33.32	340.71
x) Other Activities - Bullock, Bullock Cart etc.															
Bullocks/other animals	0.40	No.	Phy.	185	185	185	185	185	185	185	185	185	185	185	2035
		90%	BL	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	66.60	732.60
Bullock Carts	0.30	No.	Phy.	260	255	255	235	255	285	285	255	255	255	185	2780
		90%	BL	70.20	68.85	68.85	63.45	68.85	76.95	76.95	68.85	68.85	68.85	49.95	750.60
Sub - Total			BL	136.80	135.45	135.45	130.05	135.45	143.55	143.55	135.45	135.45	135.45	116.55	1483.20
Total Farm Credit				59069.40	71308.72	61002.49	55044.04	51996.14	53821.00	64288.08	43433.22	63085.98	58287.96	53350.47	634687.84
B Agriculture Infrastructiure															

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
i) Construction of Storage facilities															
Storage Godown (500 MT)	20.00	No	Phy.	14	22	20	18	15	20	21	15	18	18	15	196
		50%	BL	140.00	220.00	200.00	180.00	150.00	200.00	210.00	150.00	180.00	180.00	150.00	1960.00
Storage Godown (200 MT)	8.00	No	Phy.	50	45	60	34	54	51	58	58	52	52	47	561
		50%	BL	200.00	180.00	240.00	136.00	216.00	204.00	232.00	232.00	208.00	208.00	188.00	2244.00
Cold Storages (500 MT)	50.00	No	Phy.	4	5	4	5	4	5	3	4	4	4	5	47
		50%	BL	100.00	125.00	100.00	125.00	100.00	125.00	75.00	100.00	100.00	100.00	125.00	1175.00
Onion Storage (25 MT)	0.63	No	Phy.	150	165	170	135	120	160	160	215	135	120	120	1650
		50%	BL	46.88	51.56	53.13	42.19	37.50	50.00	50.00	67.19	42.19	37.50	37.50	515.64
Milk Chilling Plant (20000 litres capacity)	9.90	No	Phy.	38	38	39	35	47	39	41	33	38	34	26	408
		50%	BL	188.10	188.10	193.05	173.25	232.65	193.05	202.95	163.35	188.10	168.30	128.70	2019.60
Sub - Total			BL	674.98	764.66	786.18	656.44	736.15	772.05	769.95	712.54	718.29	693.80	629.20	7914.24
ii) Land development, Soil conservation, Watershed development															
Land reclamation (saline)	0.27	ha	Phy.	120	120	120	120	120	120	120	120	120	120	120	1320
		90%	BL	29.16	29.16	29.16	29.16	29.16	29.16	29.16	29.16	29.16	29.16	29.16	320.76
Organic Farming	0.48	ha	Phy.	680	680	680	680	680	680	680	680	680	680	680	7480
		90%	BL	293.76	293.76	293.76	293.76	293.76	293.76	293.76	293.76	293.76	293.76	293.76	3231.36
Farm Ponds (50 x 50 x 7.50 mt)	1.10	ha	Phy.	510	520	565	478	590	580	580	580	580	580	580	6143
		50%	BL	280.50	286.00	310.75	262.90	324.50	319.00	319.00	319.00	319.00	319.00	319.00	3378.65
Land development	0.16	No	Phy.	535	570	735	885	860	755	790	725	740	625	620	7840
		75%	BL	62.19	66.26	85.44	102.88	99.98	87.77	91.84	84.28	86.03	72.66	72.08	911.41
Land levelling	0.12	ha	Phy.	1626	1633	1626	1626	1626	1626	1626	1626	1626	1626	1626	17893
		75%	BL	146.34	146.97	146.34	146.34	146.34	146.34	146.34	146.34	146.34	146.34	146.37	1610.40
Polythene Mulching	0.22	ha	Phy.	360	360	390	390	390	390	390	390	390	390	390	4230
		75%	BL	59.40	59.40	64.35	64.35	64.35	64.35	64.35	64.35	64.35	64.35	64.35	697.95
Sub - Total			BL	871.35	881.55	929.80	899.39	958.09	940.38	944.45	936.89	938.64	925.27	924.72	10150.53
iii) Others (Agriculture Infrastructure)															
Tissue Culture Labs	75.00	No.	Phy.	1	1	2	0	2	0	1	1	1	1	0	10

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
		75%	BL	56.25	56.25	112.50	0.00	112.50	0.00	56.25	56.25	56.25	56.25	0.00	562.50
Seed Production Unit	10.00	No.	Phy.	6	6	6	6	6	6	6	8	8	8	8	74
		85%	BL	51.00	51.00	51.00	51.00	51.00	51.00	51.00	68.00	68.00	68.00	68.00	629.00
Bio Fertilizer/ Bio Pesticide	32.00	No.	Phy.	5	4	5	6	7	7	8	8	7	5	4	66
		90%	BL	144.00	115.20	144.00	172.80	201.60	201.60	230.40	230.40	201.60	144.00	115.20	1900.80
Vermi Compost Unit	0.50	No.	Phy.	900	800	900	800	900	700	700	900	950	900	500	8950
		80%	BL	360.00	360.00	405.00	360.00	405.00	315.00	315.00	405.00	427.50	405.00	225.00	3982.50
Sub - Total				611.25	582.45	712.50	583.80	770.10	567.60	652.65	759.65	753.35	673.25	408.20	7074.80
Total Agriculture Infrastructure				2157.58	2228.66	2428.48	2139.63	2464.34	2280.03	2367.05	2409.08	2410.28	2292.32	1962.12	25139.57
C Ancillary activities															
i) Food and Agro processing															
Agro Processing Units (Foodgrains)	10.00	No	Phy.	240	240	240	270	270	270	270	270	270	270	270	2880
		80%	BL	1920.00	1920.00	1920.00	2160.00	2160.00	2160.00	2160.00	2160.00	2160.00	2160.00	2160.00	23040.00
Jaggery (Gud) Processing Units	0.75	No	Phy.	200	155	150	205	235	200	200	200	235	195	195	2170
		80%	BL	120.00	93.00	90.00	123.00	141.00	120.00	120.00	120.00	141.00	117.00	117.00	1302.00
Fruit & Vegetable Processing Units	6.00	No.	Phy.	218	205	235	132	142	167	120	157	155	281	252	2064
		80%	BL	1046.40	984.00	1128.00	633.60	681.60	801.60	576.00	753.60	744.00	1348.80	1209.60	9907.20
Milk Processing Units	1.50	No.	Phy.	50	0	60	80	80	80	110	80	90	80	120	830
		80%	BL	60.00	0.00	72.00	96.00	96.00	96.00	132.00	96.00	108.00	96.00	144.00	996.00
Fruit/Pulp Processing (Pomogrenate)	12.00	No.	Phy.	3	5	8	9	12	15	12	10	15	18	12	119
		80%	BL	28.80	48.00	76.80	86.40	115.20	144.00	115.20	96.00	144.00	172.80	115.20	1142.40
Dal Mills	22.00	No.	Phy.	9	15	10	13	14	12	15	11	14	9	9	131
		80%	BL	158.40	264.00	176.00	228.80	246.40	211.20	264.00	193.60	246.40	158.40	158.40	2305.60
Sub - Total				3333.60	3309.00	3462.80	3327.80	3440.20	3532.80	3367.20	3419.20	3543.40	4053.00	3904.20	38693.20
Working Capital (New & old units)			BL	1666.80	1654.50	1731.40	1663.90	1720.10	1766.40	1683.60	1709.60	1771.70	2026.50	1952.10	19346.60
Total				5000.40	4963.50	5194.20	4991.70	5160.30	5299.20	5050.80	5128.80	5315.10	6079.50	5856.30	58039.80
ii) Others (Ancillary activities)															
Loans to PACS/FSS/LAMPS	25.00	No.	Phy.	26	32	30	35	30	30	30	30	30	30	30	333

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
		80%	BL	520.00	640.00	600.00	700.00	600.00	600.00	600.00	600.00	600.00	600.00	600.00	6660.00
Loans to MFIs for onlending	10.00	No.	Phy.	10	10	11	10	10	12	10	10	13	10	10	116
		90%	BL	90.00	90.00	99.00	90.00	90.00	108.00	90.00	90.00	117.00	90.00	90.00	1044.00
Agri Clinics Agri Business Centres (ACABC)	20.00	No.	Phy.	11	20	12	8	7	4	11	11	15	11	10	120
		75%	BL	165.00	300.00	180.00	120.00	105.00	60.00	165.00	165.00	225.00	165.00	150.00	1800.00
Sub - Total				775.00	1030.00	879.00	910.00	795.00	768.00	855.00	855.00	942.00	855.00	840.00	9504.00
Total Ancillary Activities			BL	5775.40	5993.50	6073.20	5901.70	5955.30	6067.20	5905.80	5983.80	6257.10	6934.50	6696.30	67543.80
TOTAL AGRICULTURE			BL	67002.38	79530.88	69504.17	63085.37	60415.78	62168.23	72560.93	51826.10	71753.36	67514.78	62008.89	727371.21
II Micro, Small and Medium Enterprises															
a) Manufacturing Sector Enterprises-Term Loans															
i. Micro Enterprises	50.00	No.	Phy.	10	5	10	10	5	10	10	10	10	10	10	100
		90%	BL	450.00	225.00	450.00	450.00	225.00	450.00	450.00	450.00	450.00	450.00	450.00	4500.00
ii. Small Enterprises	400.00	No.	Phy.	2	1	2	2	1	2	2	2	2	2	2	20
		90%	BL	720.00	360.00	720.00	720.00	360.00	720.00	720.00	720.00	720.00	720.00	720.00	7200.00
iii. Medium Enterprises	2000.00	No.	Phy.	1	0	1	0	0	1	1	3	1	1	1	10
		90%	BL	1800.00	0.00	1800.00	0.00	0.00	1800.00	1800.00	5400.00	1800.00	1800.00	1800.00	18000.00
Sub - Total				2970.00	585.00	2970.00	1170.00	585.00	2970.00	2970.00	6570.00	2970.00	2970.00	2970.00	29700.00
b) Service Sector Enterprises -Term Loans															
i. Micro Enterprises	40.00	No.	Phy.	5	5	5	5	5	5	20	20	10	10	10	100
		90%	BL	180.00	180.00	180.00	180.00	180.00	180.00	720.00	720.00	360.00	360.00	360.00	3600.00
ii. Small Enterprises	300.00	No.	Phy.	2	1	3	2	2	2	5	6	2	2	3	30
		90%	BL	540.00	270.00	810.00	540.00	540.00	540.00	1350.00	1620.00	540.00	540.00	810.00	8100.00
iii. Medium Enterprises	1500.00	No.	Phy.	1	0	1	0	0	1	1	3	1	1	1	10
		90%	BL	1350.00	0.00	1350.00	0.00	0.00	1350.00	1350.00	4050.00	1350.00	1350.00	1350.00	13500.00
Sub - Total				2070.00	450.00	2340.00	720.00	720.00	2070.00	3420.00	6390.00	2250.00	2250.00	2520.00	25200.00
a. Manufacturing Sector Enterprises-Working Capital															

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
i. Micro Enterprises	20.00	No.	Phy.	50	25	25	25	25	25	100	100	50	25	50	500
		90%	BL	900.00	450.00	450.00	450.00	450.00	450.00	1800.00	1800.00	900.00	450.00	900.00	9000.00
ii. Small Enterprises	100.00	No.	Phy.	10	5	10	10	5	10	10	10	10	10	10	100
		90%	BL	900.00	450.00	900.00	900.00	450.00	900.00	900.00	900.00	900.00	900.00	900.00	9000.00
iii. Medium Enterprises	500.00	No.	Phy.	1	0	1	0	0	1	1	3	1	1	1	10
		90%	BL	450.00	0.00	450.00	0.00	0.00	450.00	450.00	1350.00	450.00	450.00	450.00	4500.00
Sub - Total				2250.00	900.00	1800.00	1350.00	900.00	1800.00	3150.00	4050.00	2250.00	1800.00	2250.00	22500.00
b) Service Sector Enterprises -Working Capital															
i. Micro Enterprises	10.00	No.	Phy.	600	300	300	300	300	300	1200	1200	600	300	600	6000
		90%	BL	5400.00	2700.00	2700.00	2700.00	2700.00	2700.00	10800.00	10800.00	5400.00	2700.00	5400.00	54000.00
ii. Small Enterprises	80.00	No.	Phy.	80	40	80	80	40	80	80	80	80	80	80	800
		90%	BL	5760.00	2880.00	5760.00	5760.00	2880.00	5760.00	5760.00	5760.00	5760.00	5760.00	5760.00	57600.00
iii. Medium Enterprises	400.00	No.	Phy.	5	2	3	1	1	3	5	15	5	5	5	50
		90%	BL	1800.00	720.00	1080.00	360.00	360.00	1080.00	1800.00	5400.00	1800.00	1800.00	1800.00	18000.00
Sub - Total				12960.00	6300.00	9540.00	8820.00	5940.00	9540.00	18360.00	21960.00	12960.00	10260.00	12960.00	129600.00
TOTAL MSME				20250.00	8235.00	16650.00	12060.00	8145.00	16380.00	27900.00	38970.00	20430.00	17280.00	20700.00	207000.00
III Export Credit															
Export credit for various commodities	300.00	No.	Phy.	1		1		1		1	2	2		1	9
		80%	BL	240.00	0.00	240.00	0.00	240.00	0.00	240.00	480.00	480.00	0.00	240.00	2160.00
TOTAL Export Credit			BL	240.00	0.00	240.00	0.00	240.00	0.00	240.00	480.00	480.00	0.00	240.00	2160.00
IV Education															
Within India	4.00	No.	Phy.	350	380	325	355	330	385	185	305	255	305	280	3455
		90%	BL	1260.00	1368.00	1170.00	1278.00	1188.00	1386.00	666.00	1098.00	918.00	1098.00	1008.00	12438.00
TOTAL Edu Credit			BL	1260.00	1368.00	1170.00	1278.00	1188.00	1386.00	666.00	1098.00	918.00	1098.00	1008.00	12438.00
V Housing															
Rural Housing	6.00	No.	Phy.	257	281	257	257	267	257	257	281	247	257	267	2885
		90%	BL	1387.80	1517.40	1387.80	1387.80	1441.80	1387.80	1387.80	1517.40	1333.80	1387.80	1441.80	15579.00

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
Urban Housing	10.00	No.	Phy.	315	305	295	295	295	295	295	315	305	285	255	3255
		90%	BL	2835.00	2745.00	2655.00	2655.00	2655.00	2655.00	2655.00	2835.00	2745.00	2565.00	2295.00	29295.00
Renovation/Repairs - Rural housing	2.00	No.	Phy.	60	62	62	65	80	85	135	185	120	195	170	1219
		90%	BL	108.00	111.60	111.60	117.00	144.00	153.00	243.00	333.00	216.00	351.00	306.00	2194.20
Renovation/Repairs - Urban housing	4.00	No.	Phy.	110	90	110	120	110	110	110	120	120	120	120	1240
		90%	BL	396.00	324.00	396.00	432.00	396.00	396.00	396.00	432.00	432.00	432.00	432.00	4464.00
TOTAL HSG. Credit				4726.80	4698.00	4550.40	4591.80	4636.80	4591.80	4681.80	5117.40	4726.80	4735.80	4474.80	51532.20
VI Renewable Energy															
Bio-gas plants	0.18	No.	Phy.	140	140	140	140	140	140	140	140	140	140	140	1540
		50%	BL	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	12.60	138.60
Solar Home Light System (24 Wp)	0.11	No.	Phy.	345	345	345	345	345	345	345	345	345	345	345	3795
		50%	BL	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	18.98	208.78
Solar Pumpset	3.42	No.	Phy.	55	55	55	55	55	55	55	55	55	55	55	605
		50%	BL	94.05	94.05	94.05	94.05	94.05	94.05	94.05	94.05	94.05	94.05	94.05	1034.55
Solar Water Heating System (200 LPD)	0.45	No.	Phy.	75	75	75	75	75	75	75	75	75	75	75	825
		90%	BL	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	334.18
Total Renewable Energy			BL	156.01	156.01	156.01	156.01	156.01	156.01	156.01	156.01	156.01	156.01	156.01	1716.11
VII) Others															
SHG – Fresh Finance	0.50	No.	Phy.	350	350	350	350	350	350	350	350	350	350	350	3850
		100%	BL	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	175.00	1925.00
Loans to JLGs	2.50	No.	Phy.	100	150	150	150	150	150	150	150	150	150	200	1650
		100%	BL	250.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	375.00	500.00	4125.00
PMJDY overdrafts	0.05	No.	Phy.	400	400	400	400	400	400	400	400	400	400	400	4400
		100%	BL	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	220.00
Loan to distress persons	0.10	No.	Phy.	66	65	65	65	65	65	65	65	65	65	65	716
		100%	BL	6.60	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	71.60
Consumption	0.10	No.	Phy.	305	305	305	305	305	275	305	305	305	305	275	3295
		100%	BL	30.50	30.50	30.50	30.50	30.50	27.50	30.50	30.50	30.50	30.50	27.50	329.50

PLP 2022-23
Solapur District

Activity	SoF/ Unit cost	Unit size/ Assist.	Phy /BL	Akkalkot	Barshi	Karmala	Madha	Malshiras	Mangalwedha	Mohol	North Solapur	Pandharpur	Sangola	South Solapur	Total
Total Others			BL	482.10	607.00	607.00	607.00	607.00	604.00	607.00	607.00	607.00	607.00	729.00	6671.10
VIII) Social Infrastructure involving bank credit															
Sanitation (Toilets)	0.20	No.	Phy	155	155	155	155	155	155	155	155	155	155	155	1705
		95%	BL	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	29.45	323.95
Drinking Water RO units	2.00	No.	Phy	85	85	85	85	85	85	85	85	85	85	85	935
		95%	BL	161.50	153.00	153.00	153.00	153.00	153.00	153.00	153.00	153.00	153.00	153.00	1691.50
Total Social Infra				190.95	182.45	182.45	182.45	182.45	182.45	182.45	182.45	182.45	182.45	182.45	2015.45
TOTAL PRIORITY SECTOR				94308.24	94777.34	93060.03	81960.63	75571.04	85468.49	106994.19	98436.96	99253.62	91574.04	89499.15	1010904.07

Annexure II

An overview of Ground Level Credit Flow - Agency-wise and Sector-wise during FYs 2018-19, 2019-20 & 2020-21 and ACP Target for 2021-22
(Rs lakh)

Sr. No.	Agency / Type of Loan	2018-19		2019-20		2020-21		2021-22
		Target	Achievement	Target	Achievement	Target	Achievement	Target
1	Crop Loan							
	SCBs	294953.00	NA	300501.00	178244.00	349913.00	281385.00	322290.40
	RRBs	17069.00	NA	15910.00	7567.00	11660.00	13912.00	12987.89
	DCCB	80632.00	NA	86839.00	31526.00	43528.00	40194.00	40121.71
	Sub Total	392654.00	254384.00	403250.00	217337.00	405101.00	335491.00	375400.00
2	Agri. Term Loan (MT + LT)							
	SCBs	239652.00	NA	246916.00	45804.00	260863.00	39475.00	230711.43
	RRBs	13869.00	NA	13057.00	0.00	8694.00	0.00	7688.57
	DCCB	0.00	NA	0.00	0.00	0.00	0.00	0.00
	Sub Total	253521.00	69380.00	259973.00	45804.00	269557.00	39475.00	238400.00
3	Total Agriculture Loan (1+2)							
	SCBs	534605.00	NA	547417.00	224048.00	610776.00	320860.00	553001.83
	RRBs	30938.00	NA	28967.00	7567.00	20354.00	13912.00	20676.46
	DCCB	80632.00	NA	86839.00	31526.00	43528.00	40194.00	40121.71
	Sub Total	646175.00	323764.00	663223.00	263141.00	674658.00	374966.00	613800.00
4	MSME							
	SCBs	172538.00	NA	187122.00	192095.00	185101.00	151192.00	196091.87
	RRBs	3867.00	NA	4193.00	2543.00	6527.00	1554.00	6908.13
	DCCB	0.00	NA	0.00	0.00	0.00	0.00	0.00
	Sub Total	176405.00	221457.00	191315.00	194638.00	191628.00	152746.00	203000.00
5	Other Priority Sector							
	CBs	63760.00	NA	66428.00	50180.00	67166.00	44987.00	74750.45
	RRBs	1414.00	NA	1450.00	1267.00	1385.00	1110.00	1549.55
	DCCB	0.00	NA	0.00	0.00	0.00	0.00	0.00
	Sub Total	65174.00	44444.00	67878.00	51447.00	68551.00	46097.00	76300.00
6	Total Priority Sector							
	CBs	770903.00	NA	800967.00	466323.00	863043.00	517039.00	823844.15
	RRBs	36219.00	NA	34610.00	11377.00	28266.00	16576.00	29134.14
	DCCB	80632.00	NA	86839.00	31526.00	43528.00	40194.00	40121.71
	Grand Total (1+2+3+4+5+6)	887754.00	589665.00	922416.00	509226.00	934837.00	573809.00	893100.00

[Source: Maharashtra State Level Bankers' Committee (SLBC) website and Annual Credit Plan 2021-22 prepared by Lead District Manager (LDM), Solapur]

Annexure III

Sub-sector-wise and Agency-wise Credit Flow under Agriculture and allied activities - 2018-19, 2019-20 & 2020-21 and ACP Target for 2021-22
(Rs lakh)

Sr. No.	Agency/ Activities	FY 2018-19				FY 2019-20				FY 2020-21				Target 2021-22			
		SCBs	RRBs	CO-OPs	Total	SCBs	RRBs	CO-OPs	Total	SCBs	RRBs	CO-OPs	Total	CBs	RRBs	CO-OPs	Total
I	Crop loans	NA	NA	NA	254384.00	178244.00	7567.00	31526.00	217337.00	281385.00	13912.00	40194.00	335491.00	322290.40	12987.89	40121.71	375400.00
II	Term loans																
i	Minor Irrigation	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	50863.05	1693.78	0.00	52556.83
ii	Land Development	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16713.93	556.45	0.00	17270.38
iii	Farm Mechanisation	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25688.04	855.56	0.00	26543.60
iv	Plantation & Horticulture	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12849.01	427.80	0.00	13276.81
v	AH - Dairy Development	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	24014.80	801.90	0.00	24816.70
vi	AH - Poultry	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20584.90	687.40	0.00	21272.30
vii	AH - Sheep, Goat & Piggery	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18868.27	630.03	0.00	19498.30
viii	Fisheries	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10291.92	343.58	0.00	10635.50
ix	Forestry & Waste Land Development	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10277.15	342.15	0.00	10619.30
x	Storage/Market Yard	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14867.56	494.61	0.00	15362.17
xi	Others	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	25692.80	855.31	0.00	26548.11
	Subtotal - II	NA	NA	NA	69380.00	45804.00	0.00	0.00	45804.00	39475.00	0.00	0.00	39475.00	230711.43	7688.57	0.00	238400.00
III	Total (I+II)	NA	NA	NA	323764.00	224048.00	7567.00	31526.00	263141.00	320860.00	13912.00	40194.00	374966.00	553001.83	20676.46	40121.71	613800.00

[Source: Maharashtra State Level Bankers' Committee (SLBC) web site and Annual Credit Plan 2021-22 prepared by Lead District Manager (LDM), Solapur]

Annexure IV

Indicative unit costs for various major agricultural activities as arrived at by State Level Unit Cost Committee (SLUCC), NABARD for FY 2021-22:

Sr. No.	Item	Unit Cost (Rs.)
A	Minor Irrigation	
1	Dug well	120000-157300
2	Bore well	31460-42350
3	Submersible Pump sets 5 HP	55000
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)	15600
2	Graded bunding (0.95 Sq.mt c/s, 210 ml/ha)	17270
3	Land levelling and shaping slope 1-2%	11700
4	Fencing (running mts) (barbed 1.8 m)	145
5	Field drainage for wet lands	29600
D	Animal Husbandry	
1	2 CB Cows	133000
2	2 Graded Murrah Buffaloes	154000
3	Goat rearing (10+1) (Osmanabadi/Sangamneri)	89000
4	Goat rearing (10+1) Non-descript	78000
E	Fisheries	
1	Composite pond new	206800
2	Composite pond renovation	176200
3	Shrimp Farming	448140

For details, please refer to the State Level Unit Cost Committee meeting proceedings.

Annexure V

Scale of Finance (SoF) for major crops fixed by Solapur District Level Technical Committee (DLTC) for FY 2021-22:

(Rs Lakh)

Sr. No.	Name of the crop	Unit	Scale of Finance (SoF)	
			Rainfed	Irrigated
Kharif crops (Major)				
1	Bajra	Ha	0.17	0.23
2	Jowar	Ha	-	0.25
3	Maize	Ha	0.06	0.43
4	Groundnut	Ha	0.18	0.29
5	Tur (Arhar/Pigeon Pea)	Ha	0.275	0.30
6	Urad (Black Gram)	Ha	0.20	0.215
7	Moong (Green Gram)	Ha	0.19	0.215
8	Soyabean	Ha	-	0.34
9	Sunflower	Ha	0.13	0.22
Rabi Crops (Major)				
10	Jowar	Ha	0.23	0.325
11	Wheat	Ha	0.06	0.33
12	Maize	Ha	0.06	0.43
13	Harbhara (Gram)	Ha	0.20	0.30
14	Sunflower	Ha	-	0.27
Sugarcane				
15	Adsali	Ha	1.10	
16	Suru (Seasonal)	Ha	0.95	
17	Ratoon (Khodwa)	Ha	0.75	
18	Tissue culture	Ha	0.90	
Horticultural crops				
19	Grapes – Export quality	Ha	2.20	
20	Grapes – General	Ha	2.10	
21	Banana (Tissue culture)	Ha	1.30	
22	Banana (Ratoon)	Ha	0.65	
23	Pomogranate (Improved & local)	Ha	1.30	
24	Custard Apple	Ha	0.55	
25	Fig	Ha	0.33	
26	Lemon	Ha	0.35	
27	Ber	Ha	0.30	
Other crops				
28	Cotton	Ha	0.23	0.485
29	Groundnut (Summer)	Ha	-	0.31
30	Vegetables (Leafy)	Ha	0.06	
31	Vegetables (Cruciferous)	Ha	0.14	
32	Potato	Ha	0.135	
33	Onion (Kharif & Rabi)	Ha	0.60	
34	Chilli (hybrid)	Ha	0.34	
35	Tomato (hybrid)	Ha	0.50	
36	Medicinal crop (Shatawari)	Ha	0.75	
Fodder crops				
37	Grass (Gajraj)	Ha	0.08	
38	Grass (Lasun)	Ha	0.33	

[Note: The Scale of Finance for above major crops & other crops were fixed for the purpose of availing crop loans under Kisan Credit Cards Scheme (KCC) for FY 2021-22 based on Agro-climatic conditions in the district by the Solapur District Level Technical Committee in its' meeting held on 20th January 2021 which was convened by Solapur District Central Cooperative Bank.]

Annexure V (A)

Scale of Finance (SoF) for working capital under KCC for Animal Husbandry (Dairy, Goat/Sheep rearing & Poultry) fixed by Solapur District Level Technical Committee (DLTC) for FY 2021-22:

(Rs)

Sr. No.	Particulars	Unit	SoF
Dairy			
1	Cow/ Buffalo (Indigenous)	Per animal	17,460/-
2	Cow/ Buffalo (Exotic)	Per animal	20,250/-
Goat/Sheep rearing			
3	Goat/Sheep	Per animal	2700/-
Poultry			
4	Indigenous	Per batch of 1000 birds	1,51,500/-
5	Broiler	Per batch of 1000 birds	1,66,000/-

[Note: The Scale of Finance for working capital requirements under KCC for Animal Husbandry Sector such as Dairy, Goat/Sheep rearing & Poultry were fixed by the Solapur District Level Technical Committee in its meeting held on 20th January 2021 convened by Solapur District Central Cooperative Bank]

Annexure V (B)

Scale of Finance (SoF) for working capital under KCC for Fisheries fixed by Solapur District Level Technical Committee (DLTC) for FY 2021-22:

(Rs)

Sr. No.	Particulars	Unit	SoF
Fisheries			
1	Fishery unit	10R size Fish Pond	29,600/-

[Note: The Scale of Finance for working capital requirements under KCC for Fisheries sector was fixed by the Solapur District Level Technical Committee in its meeting held on 20th January 2021 convened by Solapur District Central Cooperative Bank]

List of the District Development Managers of Maharashtra

S.N.	Name of the District	Name of the DDM Shri/Smt	Mobile No.	E-mail
1	Ahmednagar	Sheelkumar B. Jagtap	828647823	ahmednagar@nabard.org
2	Akola	Sharad P. Walke	7415403877	akola@nabard.org
3	Amravati	Rajendra B. Rahate	9407689522	amravati@nabard.org
4	Aurangabad	Suresh R. Patwekar	9575390390	aurangabad@nabard.org
5	Beed	Tatyasaheb L Markad	8668649552	beed@nabard.org
6	Bhandara	Sandeep M. Deogirkar	7073350545	bhandara@nabard.org
7	Buldhana	Vikram B. Pathare	7028755522	buldana@nabard.org
8	Chandrapur	Trunal Fulzele	9168106384	chandrapur@nabard.org
9	Dhule	Vivek K. Patil	8528458621	dhule@nabard.org
10	Gadchiroli	Rajendra G. Chaudhari	890404589	gadchiroli@nabard.org
11	Gondia	Neeraj B. Jagare	827694389	gondia@nabard.org
12	Jalgaon	Shrikant K. Zambre	8160363418	jalgaon@nabard.org
13	Jalna	Tejal Kshirsagar	7709981977	jalna@nabard.org
14	Kolhapur	Ashutosh Jadhav	9414037647	kolhapur@nabard.org
15	Nagpur	Sachin M. Sonone	805070077	nagpur@nabard.org
16	Nanded	Rajesh M. Dhurve	9404109057	nanded@nabard.org
17	Nandurbar	Pramod D. Patil	9987667891	nandurbar@nabard.org
18	Nasik	Amol Lohakare	946932508	nasik@nabard.org
19	Osmanabad / Latur	Chaitanya Gokhale	9881494520	osmanabad@nabard.org
20	Parbhani / Hingoli	Pritam M. Jangam	9446060035	parbhani@nabard.org
21	Pune	Rohan R. More	9420835131/ 9021804727	ddm.pune@nabard.org
22	Raigad	Sudhakar S. Raghatwan	803744439	raigad@nabard.org
23	Ratnagiri	Shrradha V. Hajirnis	7275000138	ratnagiri@nabard.org
24	Sangli	Laxmikant P. Dhanorkar	9771372611	sangli@nabard.org
25	Satara	Subodh S. Abhyankar	869308384	satara@nabard.org
26	Sindhudurg	Ajay A. Thute	9007607414	sindhudurg@nabard.org
27	Solapur	Nitin B. Shelke	9906384941	solapur@nabard.org
28	Palghar / Thane	Kishor G. Padghan	9822668185	palghar@nabard.org
29	Wardha	Pravin S. Muley	9987399872	wardha@nabard.org
30	Washim	Shankar Kokadwar	9423101925	washim@nabard.org
31	Yavatmal	Deepak B. Pendam	9907433101	yeotmal@nabard.org
32	Mumbai -City	Senthilvel Balasubramanian	9962256223	senthilvel.balasubramanian@ nabard.org
33	Mumbai - Suburb	Elangaivendhan A	8277390537	elangaivendhan.a@nabard.org

*** End of PLP ***



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1-1-61, RTC 'X' Road, P.B. No. 1863
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- › The company has a range of financial products and services including financing of SHGs in partnership with NGOs and JLGs directly through its branches.
- › Operating across in 16 States of India and touching lives of more than 5.50 lakh households with a commitment towards their socio-economic empowerment and furthering the cause for financial inclusion.

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Trustee Private Limited

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- › Established to manage various credit guarantee funds of Government of India, State Government etc.
- › NABSanrakshan and multiple credit guarantee funds under its management housed in separate Trusts.
- › The Eligible Lending Institutions will extend formal credit to the borrowers and

NABSanrakshan through various schemes of the Trusts will provide credit guarantee against a nominal fee.

- › NABSanrakshan manages Credit Guarantee Fund under Animal Husbandry Infrastructure Development Fund (AHIDF).

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