



संभाव्यतायुक्त ऋण योजना 2023-24

Potential Linked Credit Plan 2023-24

पंचमहाल जिला

PANCHMAHAL DISTRICT

राष्ट्रीय कृषि और ग्रामीण विकास बैंक

National Bank for Agriculture and Rural Development

गुजरात क्षेत्रीय कार्यालय, अहमदाबाद

GUJARAT REGIONAL OFFICE, AHMEDABAD



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

संभाव्यतायुक्त ऋण योजना
POTENTIAL LINKED CREDIT PLAN

2023-24

जिला : पंचमहल
DISTRICT : PANCHMAHAL
STATE : GUJARAT



गाँव बढ़े तो >> देश बढ़े
Taking Rural India >> Forward

राष्ट्रीय कृषि और ग्रामीण विकास बैंक
गुजरात क्षेत्रीय कार्यालय, अहमदाबाद

National Bank for Agriculture and Rural Development
Gujarat Regional Office, Ahmedabad

प्राक्कथन

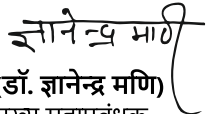
कृषि संवर्धन हेतु वित्तीय और गैर-वित्तीय सहयोगों के माध्यम से कृषि और ग्रामीण विकास के संवर्धन के लिए नाबार्ड को अधिदेश प्राप्त है। ग्रामीण समृद्धि हेतु हमारे अधिदेश और मिशन के अनुसार, जिले में उपलब्ध प्राकृतिक संपदा और आधारभूत सुविधाओं के मद्देनजर प्राथमिकता प्राप्त क्षेत्र की विभिन्न गतिविधियों के अंतर्गत दोहनीय ऋण संभाव्यता का आकलन करते हुए प्रति वर्ष, प्रत्येक जिले के लिए संभाव्यतायुक्त ऋण योजना (पीएलपी) तैयार की जाती है। इन पीएलपी से आगामी वर्ष हेतु विभिन्न क्षेत्रों में निहित संभावनाओं के विकास का पथ प्रशस्त करने हेतु सहायता मिलती है।

जिले में बैंकरों और अन्य हितधारकों के साथ व्यापक विचार-विमर्श करने के पश्चात "बॉटम अप" अप्रोच अपनाते हुए इस पीएलपी में विकास के संभावित क्षेत्रों, आधारभूत सुविधाओं में विद्यमान कमियों, भावी विकास की रणनीति पर ध्यान केंद्रित किया गया है। वर्ष 2023-24 के लिए संभाव्यतायुक्त ऋण योजना प्रस्तुत करते हुए मुझे प्रसन्नता हो रही है और मुझे आशा है कि जिले के लिए वार्षिक ऋण योजना तैयार करने में पीएलपी एक स्रोत दस्तावेज के रूप में उपयोगी सिद्ध होगी।

वर्ष 2023 को "अंतर्राष्ट्रीय बाजरा वर्ष" के रूप में घोषित करने और उसे सुपरफूड के रूप में बढ़ावा देने की पृष्ठभूमि में, किसानों द्वारा बाजरे की खेती पर अधिक जोर दिया जाना चाहिए। जलवायु परिवर्तन और उससे संबंधित जोखिमों को ध्यान में रखते हुए, यह आवश्यक है कि बाजरे की विशिष्टताएँ- उच्च उत्पादकता, शुष्क, उच्च तापमान की स्थितियों में अल्पावधि फसलचक्र को देखते हुए बाजरे की खेती को बढ़ावा देने की आवश्यकता है। तदनुसार, हमने 2023-24 की संभाव्यतायुक्त ऋण योजना में बाजरे पर विशेष ध्यान दिया है।

"आज़ादी का अमृत महोत्सव" मनाने के अवसर पर कृषि व सम्बद्ध गतिविधियों और सूक्ष्म लघु मध्यम उद्यम (एमएसएमई) क्षेत्र को दिये जाने वाले बैंक ऋण की महत्वपूर्ण भूमिका है। इससे आर्थिक गतिविधियों को बढ़ावा मिलेगा, किसानों, ग्रामीण शिल्पकारों और उद्यमियों की आय बढ़ेगी, जिसके परिणामस्वरूप वर्ष 2047 तक भारत को एक विकसित राष्ट्र बनाने के राष्ट्रीय लक्ष्य को प्राप्त किया जा सकेगा। मुझे विश्वास है कि संभाव्यतायुक्त ऋण योजना में आकलित ऋण संभाव्यताओं और सुझाई गई गैर-ऋण गतिविधियों से हितधारकों को इस दिशा में मार्गदर्शन प्राप्त होगा।

मैं, इस दस्तावेज़ को तैयार करने में भारतीय रिजर्व बैंक, जिला कलेक्टर, अग्रणी जिला प्रबंधक, समानांतर विभागों, बैंकरों, गैर सरकारी संगठनों, अन्य हितधारकों द्वारा हमारे जिला विकास प्रबन्धकों को दिए गए सहयोग, समर्थन, सहायता तथा बहुमूल्य सुझाव के लिए अपना हार्दिक धन्यवाद व्यक्त करता हूँ। मुझे विश्वास है कि यह दस्तावेज़ सभी हितधारकों को बेहतर कार्यनीति तैयार करने और आधार स्तर पर प्रभावी रूप से उसे लागू करने और वर्ष 2027 तक गुजरात राज्य की अर्थव्यवस्था को \$500 बिलियन तक पहुंचाने का मार्ग प्रशस्त करेगा।


(डॉ. ज्ञानेन्द्र मणि)
मुख्य महाप्रबंधक

FOREWORD


NABARD has been given the mandate to promote agriculture and rural development through financial and non-financial interventions for fostering rural prosperity. In consonance with our mandate and mission of ensuring rural prosperity, Potential Linked Credit Plans (PLPs) for each district are prepared every year estimating the exploitable credit potential under various activities of priority sector keeping in view the natural endowments and infrastructure available in the district. PLPs help to streamline the trajectory of growth potential in various areas for the forthcoming year.

The PLP, focussing on potential areas for growth, existing deficiencies in Infrastructure and strategies for future growth, has been prepared after extensive consultation and discussions with bankers and other stakeholders in the district after adopting a "Bottom up" approach. I am happy to present the Potential Linked Credit Plan for the year 2023-24 and I am hopeful that it would serve as a resourceful document for the preparation of Annual Credit Plan for the District.

In the backdrop of the year 2023 been announced as the 'International Year of Millets' the potential in cultivation and promotion of millets as super food, may be tapped by farmers. In the wake of Climate change and related risks, it is a necessity to promote millets due to its qualities like high productivity and short growing season under dry, high-temperature conditions. We have accordingly strived to focus on millets in the PLPs of 2023-24.

As we are celebrating the 'Azadi ka Amrut Mahotsav' the role of bank credit to agriculture & allied activities and MSME sectors gains an utmost importance to pave the way for boosting economic activities and increasing income level of farmers, rural artisans and entrepreneurs for achieving the National goal of making India a developed nation by 2047. I am sure that the credit potential assessed in the PLP and the non-credit activities suggested would guide the stakeholders in this direction.

I extend my sincere gratitude to Reserve Bank of India, District Collector, Lead District Manager, Line departments, Bankers, NGOs and other stakeholders for their cooperation, support, assistance and valuable suggestions provided to our District Development Manager for preparing this document. I am confident that this document would act as a reference to all stakeholders to draw their strategies for effective & efficient deployment at the ground level which would pave the way for realisation of \$500 billion economy of the State of Gujarat by 2027.


(Dr. Gyanendra Mani)
Chief General Manager

INDEX

Sr. No	Particulars	Page No.
	Executive Summary	i
	Sector / Sub Sector wise Projections : 2023-24 (Appendix A&B)	iii
	District Profile along with the map of the District	v
	Banking Profile	ix
	Methodology of Preparation of Potential Linked Credit Plans (PLPs)	xi
1	Important Policies & Developments	1
2	Credit Potential for Agriculture	
2.1	Farm Credit	
2.1.1	Crop Production, Maintenance and Marketing	15
2.1.2	Water Resources	19
2.1.3	Farm Mechanization	22
2.1.4	Plantation and Horticulture including Sericulture	25
2.1.5	Forestry and Waste Land Development	28
2.1.6	Animal Husbandry - Dairy	31
2.1.7	Animal Husbandry - Poultry	35
2.1.8	Animal Husbandry - Sheep, Goat, Piggery, etc.	37
2.1.9	Fisheries	38
2.1.10	Farm Credit - Others - Bullocks, Bullock-carts, two wheelers, etc.	42
2.1.11	Integrated Farming	43
2.2	Agriculture Infrastructure	
2.2.1	Construction of Storage and Marketing Infrastructure (warehouses/godowns, market yards, silos, cold storage units/ cold chains)	46
2.2.2	Land Development, Soil Conservation and Watershed Development	48
2.2.3	Agri Infrastructure – “Others” <ul style="list-style-type: none"> • e-NAM • Tissue culture • Agri “bio-technology” • Seed production • Bio-pesticides/ fertilizers • Vermi-composting 	50
2.3	Agriculture - Ancillary Activities	
2.3.1	Food and Agro Processing	54
2.3.2	Agri Ancillary Activities – Others <ul style="list-style-type: none"> • Loans to Co-op. Societies of farmers for disposing of their produce • Agri-clinic/ Agri-Business Centers (ACABC) • Loans to PACS/ FSS/ LAMPS • Loans to MFIs for on-lending • Credit Potential for Others - Loans to SHGs/ JLGs, Loans to distressed persons to prepay non-institutional lenders, 	56
3	Credit Potential for Micro Small and Medium Enterprises (MSME)	61

PLP 2023-24
Panchmahal District

4	Credit Potential for Export Credit, Education and Housing	63
5	Credit Potential for Infrastructure	
5.1	Infrastructure - Public Investments	67
5.2	Social Infrastructure involving bank credit (2023-24)	70
5.3	Renewable energy	71
6	Informal Credit Delivery System	74

Annexures

Annexure-I	Activity-wise & Block-wise Physical and Financial Projections - 2023-24	77
Annexure-II	An overview of Ground Level Credit Flow – Agency-wise and Sector-wise –2019-20, 2020-21, 2021-22, and target for 2022-23	87
Annexure-III	Sub-sector-wise and Agency-wise Credit Flow under Agriculture and allied activities - 2019-20, 2020-21, 2021-22, and target for 2022-23	88
Annexure-IV	Indicative unit costs (for major activities of the district) as arrived at by NABARD for its internal use	89
Annexure-V	Scale of Finance for major crops fixed by District Level Technical Committee (DLTC) for 2022-23	90
	List of Abbreviations	91

EXECUTIVE SUMMARY

A. Introduction

Potential Linked Credit Plans (PLPs) are a step towards decentralized credit planning with the basic objective of mapping the existing potential for development through bank credit. The Potential Linked Credit Plan (PLP) for 2023-24 has been prepared aligning with the revised RBI guidelines on Priority Sector Lending. It estimates credit flow of ₹168023.94 lakh, of which, Crop Production sector has a major share of 39% at ₹64995.89 lakh. Term loan under agriculture is assessed at ₹49142.85 lakh (29%). Under MSME, ₹26600.00 lakh has been assessed as potential forming 15.84 % and balance ₹27285.19 lakh has been estimated for working capital (AH&F) and other sectors like Exports, Education, Housing, etc. The activity-wise and block-wise assessment of potential is presented in Annexure I.

Panchmahal is primarily an agricultural district in middle Gujarat region with paddy, maize as its predominant crops. The other crops cultivated are wheat, pulses, groundnut, tobacco, etc. The small and marginal farmers hold the 76.94 % of the land holdings comprising 39.81 % of total area.

Suggested action Points in respect of major sectors and infrastructure/non-credit inputs are as under:

B. Sector-wise comments on major sectors

1. Crop Production, Maintenance and Marketing

Provision of quality inputs i.e. seeds, fertilizers, pesticides along with suitable training support needs to be given to farmers. There is a need to set up organized sorting, grading, cleaning, packaging facilities to help channelise farm produce for marketing purpose. There is a scope for taking up high value crops and vegetables which will give higher income to small and marginal farmers. The farmers needs to be encouraged for progressive diversification and adoption of two-tier farming practices.

2. Water Resources and Land Development

There is a need for greater focus on water resource management for maintaining ground water level. Farmers may adopt Drip and Sprinkler irrigation system.

3. Farm Mechanization

Increased bank credit should flow for purchase of different farm machineries like mini Tractors, paddy transplanters, threshers etc. This will increase farmers' productivity and also reduce drudgery.

4. Plantation and Horticulture

Area under Horticulture crops is on rise. Vegetables and Floriculture may be encouraged with processing and market infrastructure. The NABARD wadi model where income level of tribals have gone up substantially, may be replicated by Department of Horticulture.

5. Animal Husbandry

Dairy is the second largest economic activity after agriculture. Large Milk processing capacity of Panchmahal Dairy Union may be taken as an opportunity for higher earning for farmers and scope for business by banks. Animal husbandry, particularly dairy, is the most suitable subsidiary occupation.

6. MSME

The District has famous Halol GIDC area of Gujarat. Banks should step up their lending to MSME sector including provision of adequate Working Capital assistance.

C. Highlights of Developments, initiatives taken, achievements, specific prescriptions etc.

NABARD as its initiative on Natural Resources Management has supported wadi development for 1500 tribal families in the district. 'WADI' model is holistic in approach,

addressing production, processing and marketing of produce and other livelihood needs. Farmers' Producers Organisation (FPOs) are being formed to provide forward linkages for processing and marketing of various produce from Wadi farmers. In the Hilly terrain area of Gogumba and Jambughoda blocks, NABARD has successfully completed Wadi and Watershed programmes. Due to implementation of various water retaining measures in the area, ground water level has increased substantially. This has resulted in tribals taking multiple crops, increase in standard of living and checking their migration to cities. One new Watershed programme was started in Gogumba block.

D. Thrust areas for 2023-24

The PLP document, besides discussing the development initiatives taken by Government of India and Government of Gujarat in the fields of agriculture, horticulture and infrastructure, lays emphasis on the specific thrust areas that call for collective participation of all stakeholders in the district to firm up the credit plan and to work towards achievement of targets for 2023-24. The doubling of farmers' income can be achieved with the help of following objectives:

- a) Adoption of High Tech Agriculture by the farmers
- b) Irrigation with focus on water-use-efficiency "Per drop more crop"
- c) Providing of quality seeds, fertilisers and increasing awareness of farmers regarding scientific agricultural practices
- d) Ensuring capital formation in agriculture by financing potential sectors mainly Farm Mechanization, Dairy and Food and Agro processing
- e) Increasing investments in warehouses and cold chains
- f) Setting-up of agro & horticultural produce processing units on priority basis
- g) Improvement in CD ratio & coverage of all eligible farmers under KCC
- h) Promotion of Joint Liability Groups (JLGs) and ensuring their credit linkage
- i) Capacity building of SHGs and upscaling of SHG linkage
- j) Implementation of Area Development Schemes
- k) Formation of Farmer Producers Organisations in the district
- l) Strengthening of PACS as MSC

E. Conclusion

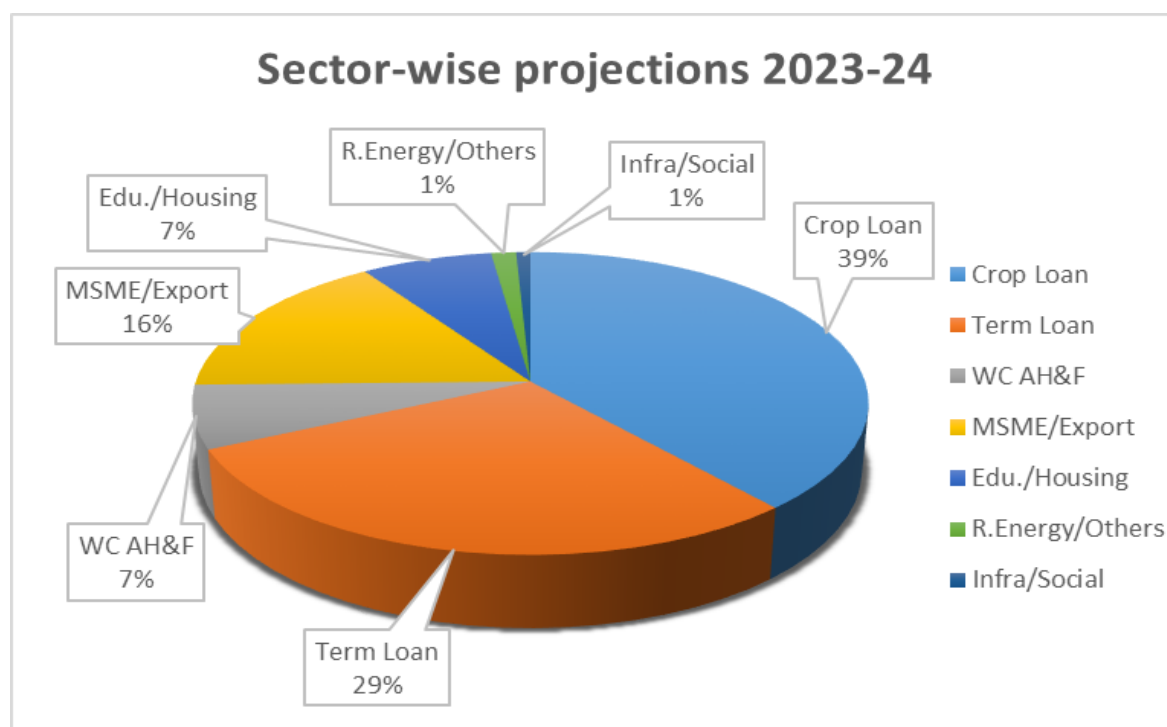
The major driver of private sector capital formation is investment credit. Immediate thrust is required to raise its share in the total agriculture credit. The document, has therefore, been prepared with emphasis on accelerating the pace of capital formation in agriculture and allied sectors. As per goal set up by Government of India doubling of farmers' income is to be achieved. This goal can be achieved with coordinated efforts of all the stakeholders. The Potential Linked Credit Plan for FY 2023-24 will certainly help in further boosting the capital formation in agriculture, resorting to 'High Tech Agriculture', improve agriculture production and productivity and thus, secure rural prosperity in the district.

Appendix A Broad sector-wise projections – 2023-24

District : Panchmahal

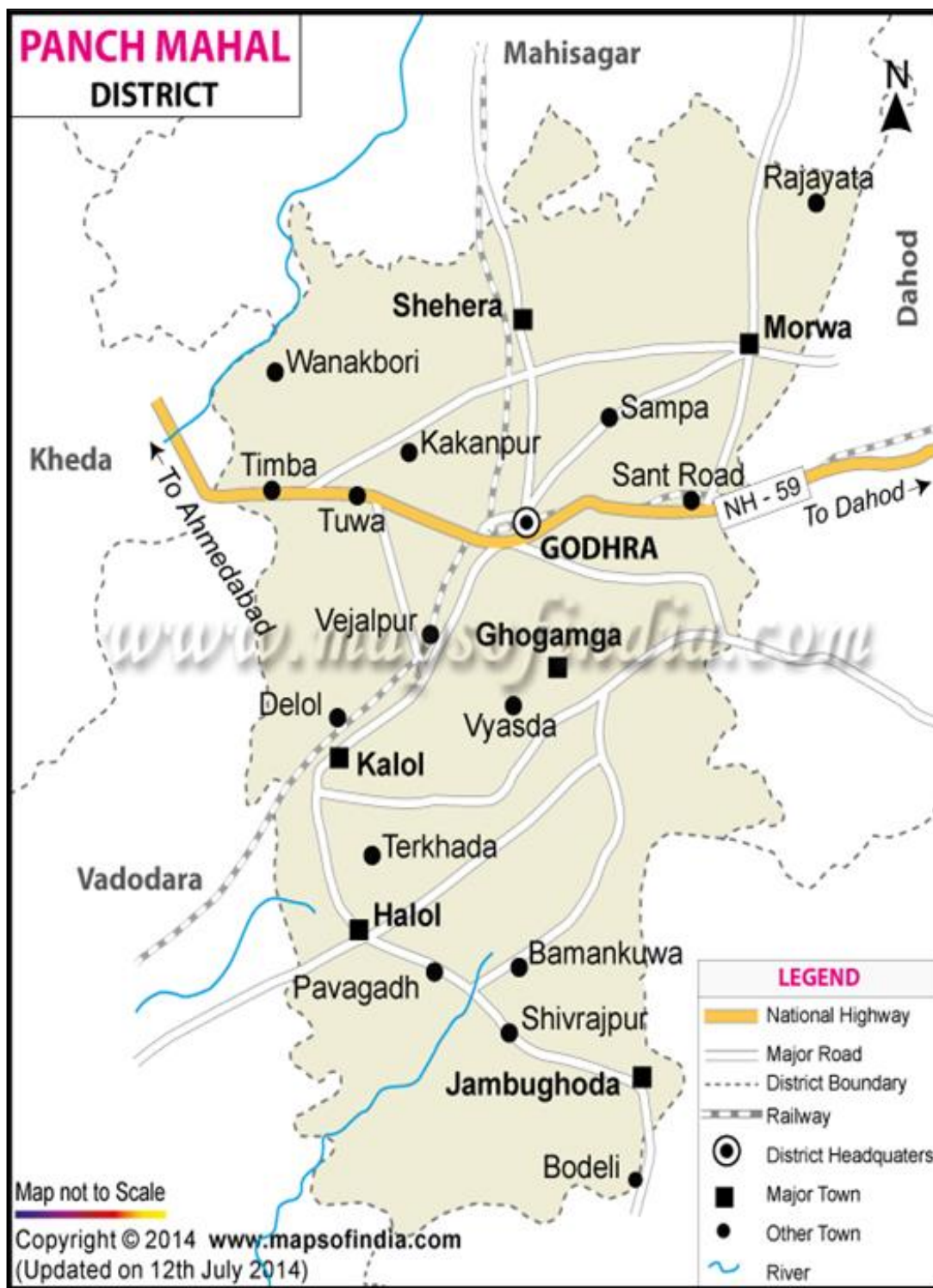
(₹Lakh)

Sr. No.	Particulars	PLP Projections 2023-24
A.	Farm Credit	
i	Crop Production, Maintenance and Marketing	64995.89
ii	Term Loans for Agriculture and allied activities	37137.37
	Sub total	102133.26
B.	Agriculture Infrastructure	7998.68
C.	Agriculture Ancillary Activities	4006.80
D.	Working Capital – AH & F	11338.01
I	Credit Potential for agriculture (A+B+C+D)	125476.75
II	MSME	26600.00
III	Export	228.00
IV	Education	2113.20
V	Housing	9988.00
VI	Social Infrastructure involving bank credit	1312.10
VII	Renewable Energy	492.76
VIII	Credit Potential for others	1813.12
	Total Priority Sector (I to VIII)	168023.94



Appendix B
Sector /sub-sector wise PLP projections – 2023-24
(₹Lakh)

Sr. No.	Particulars	PLP projections 2023-24
I	Credit Potential for Agriculture	
A.	Farm Credit	
i	Crop Production, Maintenance and Marketing	64995.89
ii	Water Resources	4475.99
iii	Farm Mechanization	3955.84
iv	Plantation and Horticulture (including sericulture)	7868.02
v	Forestry and Wasteland Development	863.64
vi	Animal Husbandry -Dairy	16350.37
vii	Animal Husbandry -Poultry	248.42
viii	Animal Husbandry –Sheep, Goat, Piggery, etc.	831.12
ix	Fisheries	155.98
x	Farm Credit Others – Bullocks, Bullock carts, two wheelers etc.	2388.00
	Sub Total	102133.27
B	Agriculture Infrastructure	
i	Construction of storage facilities and Marketing Infrastructure (warehouses/godowns, market yards, silos, cold storage units / cold chains)	7026.56
ii	Land Development , Soil Conservation, Watershed Development	360.92
iii	Agri Infrastructure Others (e-NAM, Tissue culture, Agri bio-technology, Seed production, Bio-pesticides / fertilisers, Vermi composting)	611.20
	Sub total	7998.68
C	Agriculture - Ancillary activities	
i	Food and Agro processing	2880.40
ii	Agri Ancillary Others (Loans to Co-op Societies of farmers for disposing of their produce, Agri-clinics / Agri-Business Centres (ACABC), Loans to PACs / FSS / LAMPS. Loans to MFIs for on - lending)	1126.40
	Sub Total	4006.80
D	Working Capital –AH&F- Through KCC	11338.01
I	Total Agriculture (A+B+C+D)	125476.76
II	Micro, Small and Medium Enterprises	
i	MSME – Term Loan	22400.00
ii	MSME – Working Capital	4200.00
	Total MSME	26600.00
III	Credit Potential for Export	228.00
IV	Credit Potential for Education	2113.20
V	Credit Potential for Housing	9988.00
VI	Social Infrastructure involving bank credit	1312.10
VII	Credit Potential for Renewable energy	492.76
VIII	Credit Potential for others	1813.12
	Total Priority Sector (I to VIII)	168023.94



District Profile										
District - Panchmahal			State -Gujarat		Division - Central					
1. PHYSICAL & ADMINISTRATIVE FEATURES			2. SOIL & CLIMATE							
Total Geographical Sq.Km.	3159		Agro-	Semi Arid						
No. of Sub Divisions	3		Climate	Gujarat plains & Hill Region						
No. of Blocks	7		Soil Type	Loamy, Medium Black Soil, alluvial						
No. of Villages	593									
No. of Panchayats	487									
3. LAND UTILISATION [Ha]			4. RAINFALL & GROUND WATER							
Total Area Reported	315946		Rainfall [in mm]	Normal	Actual	2016-17	2017-18	2018-19		
Forest Land	64352			904		891	838	806		
Area Not Available for Cultivation	12242			Variation from Normal (%)		-1	-7	-11		
Permanent Pasture and Grazing Land	7885		Availability	Net annual recharge		Net annual draft		Balance		
Land under Miscellaneous Tree Crops	6415			412.1145		156.282		255.8325		
Culturable Wasteland	7917		5. DISTRIBUTION OF LAND HOLDING							
Current Fallow	9199		Classification of Holding	Holding		Area				
Other Fallow	5189			Nos.	% to Total	Ha.	% to Total			
Net Sown Area	192374		<= 1 Ha	77670	53	32250	15			
Total or Gross Cropped Area	232775		>1 to <=2	35420	24	50690	24			
Area Cultivated More than Once	61133		>2 Ha	33890	23	125410	60			
Cropping Intensity [GCA/NSA] (%)	121		Total	146980	100	208350	100			
6. WORKERS PROFILE [in '000]			7. DEMOGRAPHIC PROFILE [in '000]							
Cultivators	297		Category	Total	Male	Female	Rural	Urban		
Of the above,			Population	1391	713	678	1055	336		
Agricultural Labourers	258		Scheduled Caste	53	27	26	36	17		
Workers engaged in Household Industries	5		Scheduled Tribe	360	184	176	336	24		
Workers engaged in Allied Agro-activitiesm	0		Literate	1026	431	595	843	183		
Other workers	647		BPL	64						
8. HOUSEHOLDS [in '000]			9 combined							
Total Households	447		Having brick/stone/concrete houses	196		Having electricity supply	593			
Rural Households	379		Having source of drinking water	447		Having independent toilets	593			
BPL Households	64		Having access to banking services	200		Having radio/tv sets	521/91			
10. VILLAGE-LEVEL INFRASTRUCTURE [Nos]			11. INFRASTRUCTURE RELATING TO HEALTH & SANITATION [Nos]							
Villages Electrified 100%	593		Anganwadi	2000		Dispensaries (CHCs)	13			
Villages having Agriculture Power Supply	593		Primary Health Centres	50		Hospitals Clinics	91			
Villages having Post Offices	225		Primary Health Sub-Centres	300		Hospital Beds Govt/Pvt	936/ 600			
Villages having Banking Facilities	593		12. INFRASTRUCTURE & SUPPORT SERVICES FOR AGRICULTURE							
Villages having Primary Schools	593		Fertiliser/Seed/Pesticide Outlets [Nos]	70555 / 35 / -		Agriculture Pumpsets[Nos]	31792			
Villages having Primary Health Centres	593		Total N/P/K Consumption [MT]	118091		Pumpsets Energised [Nos]	NA			
Villages having Potable Water Supply	593		Certified Seeds Supplied [MT]			Agro Service Centres [Nos]	76			
Villages connected with Paved Approach Roads	593		Pesticides Consumed [MT]	73000		Soil Testing Centres [Nos]	1			
13. IRRIGATION COVERAGE [Ha]			Agriculture Tractors [Nos]	17329		Plantation nurseries [Nos]	1			
Total Area Available	250221		Power Tillers [Nos]	6874		Farmers'	1			
Irrigation Potential Created	91766		Threshers/Cutters [Nos]	3353		Krishi Vigyan Kendras[Nos]	1			
Net Irrigated Area(Total area irrigated at least once)	68557		14. INFRASTRUCTURE FOR STORAGE, TRANSPORT & MARKETING							
Area irrigated by Canals / Channels	23312		Rural/Urban Mandi/Haat [Nos]	28		Wholesale Market [Nos]	7			
Area irrigated by Wells	21760		Length of Pucca Road [Km]	3799		Godown [Nos]	NA			
Area irrigated by Tanks	14115		Length of Railway Line [Km]	155		Godown Capacity[MT]	10645			
Area irrigated by Other Sources	9278		Public Transport Vehicle [Nos]	167394		Cold Storage	1			
Irrigation Potential Utilized	84995		Goods Transport Vehicle [Nos]	NA		Cold Store Capacity[MT]	1			
15. AGRO-PROCESSING UNITS			16. AREA, PRODUCTION & YIELD OF MAJOR CROPS							
Type of Processing	No of units	Cap.[MT]	Crop	2020-21		2021-2022		Avg. Yield		
Food	1045			Area (Ha)	Prod. (MT)	Area (Ha)	Prod. (MT)			
Sugarcane	0		Paddy	47440	62230	43100	53270	1276		
Fruit (Pulp/Juice/Fruit	0		Wheat	10980	24230	12250	27220	2215		
Spices (Masala)	0		Jowar	220	250	70	50	1034		
Dry-fruit	0		Maize	68970	108540	66870	105180	1573		
Cotton	1		Groundnut	830	1670	870	1450	1835		
Milk (Chilling/Cooling/Processing)	1	11.00 la ltrs	Bajra	2620	4510	2430	4210	1727		
Meat	0	0	Pulses	20730	24590	19460	25710	1252		
Animal feed	0	0								
17. ANIMAL POPLN - AS PER CENSUS 2012			18. INFRASTRUCTURE FOR DEVELOPMENT OF ALLIED ACTIVITIES							
Category of animal	Total	Male	Female	Veterinary Dispensary units [Nos]	22	Animal Markets [Nos]		1		
Cattle crossbred	119997	18597	101400	Disease Diagnostic Vet. Centres [Nos]	6	Mil kcollection Centres		1066		
Cattle - Indigenous	492547	267847	224700	Artificial Insemination Centers [Nos]	688	Fishermen Societies [Nos]		14		
Buffaloes	509759	66459	443300	Animal Breeding Farms [Nos]	0	Fish seed		0		
Sheep - Cross bred	384	219	165	Animal Husbandry Tng Centres [Nos]	0	Fish Markets		0		
Sheep - Indigenous	1811	327	1484	Dairy Cooperative Societies [Nos]	1066	Poultry		0		
Goat	597548	143834	453714	Improved Fodder Farms [Nos]	0	Slaughter		0		
Pig - Cross bred	10	7	3	19. MILK, FISH, EGG PRODUCTION & THEIR PER CAPITA AVAILABILITY						
Pig - Indigenous	0	0	0	Fish	Production	2635	Per cap avail.	1.12		
Horse/Donkey/Camel	126/2064/87			Egg	Production	542	Per cap avail.	39		
Poultry - Cross bred	18165	8206	9959	Milk	Production	818	Per cap avail.	410		
Poultry - Indigenous	264407	104618	159789	Meat	Production	726	Per cap avail.	1.430		
Sources (if not mentioned against Item Nos 1, 6, 7, 9 & 10 - Census 2001 ; Item Nos. 2, 3, 5, 8, 12, 13 & 14 ,16- Dept of Agr/ Dir of Eco & Stat. ; Item No. 15` - District Ind centre / Dir of Eco & Stat ; Item No. ; Item No. 17 - AH Census 2012; 18- Bulletin of AH & Dairying Statistics 2014-15										
Prior to division, Panchmahal distt. was having 11 blocks, after bifurcation Panchahal distt has 7 blocks										

District Profile

The history of Panchmahal district revolves around the city of Champaner which was established in 7th century (647) in the territory of King Vanraj of Solanki dynasty. Panchmahal is located in the eastern part of Gujarat. It is spread across 7 talukas and Godhra is the district headquarter. Godhra is 166 km from Gandhinagar, State capital and National Highway (NH) 59 passes through the district connecting it to Ahmedabad (136 Kms.) and Indore (260 Kms.). The total rail length in the district is 155 Km and nearest airport (Vadodara) is 80 Kms away.

The major industrial locations are Kalol, Halol and Godhra. The focused industry sectors are mineral, engineering and automobile, tourism, irrigation projects, dairy farming. This district is the largest producer of quartz. Major tourist attractions include Pavagarh Archeological park which is listed as world heritage site by UNESCO, temple of Mata Kalika in Pavagarh, the Jain pilgrimage center at Pavoli, fairs of Chaitri Atham and math Kotal, etc.

The Cropping Intensity of the District is 121 with Gross Cropped Area 232775 ha and Net Sown Area is 192374 ha. Major crops are Paddy, Wheat Maiz and pulses.

Economy and Industry

This district is rich in minerals and agricultural produce. Major occupations are dairy farming and agriculture, major crops cultivated are paddy, wheat, maize and pulses. Besides agriculture large cultivation of horticultural crops of mango, banana, papaya, citrus, guava, brinjal, cabbage, onion, garlic, etc. is done. This district boasts of 97% production of Quartz in Gujarat that is exported to other districts and region is manufacturing base for steel products, automobiles and cryogenic equipment. The major minerals present are quartz, marble and granite. Tourist destinations and fairs attract a large number of tourists every year. Around 20% of the total area of the district is covered under forests.

Economy Drivers

The economy of the district is driven by dairy farming and agriculture practices. Small scale industry sector such as food processing units, wooden products and machine tools are the supporting pillars of the economy. Emergence of small industries, vast reserves of minerals and existence of many industry players are enhancing the economic and industrial growth of the district. Recent surge in the growth of engineering sector has added more jobs and increased opportunities for the masses.

Cooperative Sector

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

Sr. No.	Block	PACS	Milk Societies	Fisheries Societies	Irrigation Societies	Labour Societies
1	Shahera	25	135	0	39	10
2	Morva Hadaf	13	44	2	26	5
3	Godhra	30	123	1	52	27
4	Kalol	15	90	0	14	4
5	Ghoghumba	16	85	5	11	17
6	Halol	19	90	5	7	8
7	Jambughoda	7	34	1	28	7
		125	601	14	177	78

Panchmahal district has a rich cooperative profile with 1468 Cooperative Societies registered under 33 different categories having total membership of 239496. The total number of societies registered under PACS, Milk, Fisheries, Irrigation and Labour are 995 with 74160 membership.

b. Potential for formation of Cooperatives: There is fair potential for cooperative activity in the fisheries sector, as elucidated in the chapter 2.1.9 on Fisheries. The presence / network of societies is low in Jambughoda and Morva Hadaf blocks in almost every category and there is potential for creation of cooperative societies in Milk and Fisheries sectors in these 2 blocks. This can have immense multiplier effect in giving a fillip to economic activities in these areas.

NABARD's initiatives in the district

NABARD is implementing two watershed projects in Ghogamba block with "Ridge to Valley" concept for treatments of area and drainage line. Under the CBP of watershed project area, treatment of land has been done and ground water level has increased considerably resulting in increased agricultural production. NABARD had also supported 2 Tribal Development Programmes for tribal and landless farmers for establishment of Wadi. Under the Wadi project, activities of agriculture, horticulture and fodder/boarder plantation are taken on 1 Acre of small land for planting mango, lemon and guava trees together with vegetables cultivation on mandap structures as intercropping. Besides this NABARD had sanctioned 4 FPOs in this District. Under FPO, farmers are getting economy of scale in input procurement and will try for undertaking group processing and marketing activities. This has increased their income as now they don't have to depend only on their traditional crop production like paddy and maize. It has made a visible impact and stood out as a demonstrative and sustainable model.

Banking Profile

Banks & Branches: Bank of Baroda is the lead bank of the district. Apart from 109 branches of 16 commercial banks, 12 branches of 8 of SFBs/Payment Banks, 27 branches of RRB, 21 branches of District Cooperative Bank and 4 branches of GSCARDB, the district is served by 125 PACS affiliated to Panchmahal District Cooperative Bank.

Overall Analysis: Total deposits of the banks in the district amounted to ₹801058.00 Lakh as on 31 March 2022 with loans outstanding at ₹424309.00 Lakh of which ₹109870.00 Lakh were agriculture advances (25.89%). The deposits and advances of banks are increasing steadily, however, there is decline in the share of agriculture loans and advances in the overall advances. CD Ratio was 52.97 % as on 31 March 2022, as against the benchmark of 60% specified by RBI.

KCCs: During the year 2021-22, disbursement of ₹34984 lakh has been made through 34290 number of KCCs and an amount of ₹65408 lakhs was outstanding against 66967 KCC accounts.

FLC: During the year, 314 Financial Literacy Camps were conducted in different villages by 94 rural bank branches.

RSETI: Baroda Swarojgar Vikas Sansthan (BSVS) is having its Training Centre in Godhra. During 2021-22 a total 20 training programmes were conducted with 622 persons trained on different skills like stitching, dairy activity, driving, mobile repairs etc. A cumulative 19875 No. of persons were trained out of which 13704 trainees were settled as on 31 March 2022.

Progress under PMJDY: Ministry of Finance, Government of India had launched PMJDY to give a new thrust to the Financial Inclusion on 15.8.2014. Total number of 724416 accounts have been opened with deposits outstanding of ₹27502.00 lakhs. Out of which 632273 accounts have been Aadhar seeded while RuPay Cards and Pass book has been issued to 611623 and 724416 account holders respectively.

Progress under PMSBY, PMJJBY: As on 31 March 2022, total 147921 beneficiaries under PMJJBY, 284686 beneficiaries under PMSBY & 46982 beneficiaries under APY have been covered.

Progress under PMMY : Under Pradhan Mantri Mudra Yojana, a total number of 51422 accounts have been opened and an amount of ₹21628.00 lakhs has been disbursed as on 31 March 2022.

Financial Literacy Awareness Programmes

Banks are organizing Financial Literacy awareness programmes for propagating various Insurance and other schemes i.e. Pradhan Mantri Jan dhan Yojana, Pradhan Mantri Jeevan Jyoti Bima Yojana, Pradhan Mantri Suraksha Bima Yojana, Atal Pension Yojana, etc. This has helped in creating awareness amongst the masses and many of the villagers are enrolling themselves with banks to take benefit of the above social security schemes.

Banking Profile										
District -	Panchmahal	State -		Gujarat		Lead Bank - Bank of Baroda			Rs. Lakh	
1. NETWORK & OUTREACH (As on 31/03/2022)										
Agency	No. of Banks/Soc.	No. of Branches				No. of non-formal agencies associated			Per Branch Outreach	
		Total	Rural	Semi-urban	Urban	mFIs/mFOs	SHGs/JLGs	BCs/BFs	Villages	Households
Commercial Banks	16	109	53	25	29	NA	851/1098	265	16	4714
Regional Rural Bank	1	27	22	4	1	NA	939/54	133	11	1851
District Central Coop.	1	21	15	3	3	NA	4/00	124	52	16495
Coop. Agr. & Rural	1	4	0	3	1	NA	NA	NA	172	51844
Primary Agr. Coop.	0	125	125	0	0	NA	NA	NA	6	1657
Others	6	12	1	7	4	1	NA	NA	NA	NA
All Agencies		173	91	42	38	1	1794/ 1152	522	257	76561
2. DEPOSITS OUTSTANDING										
Agency	No. of Accounts					Amount of Deposit				
	31-Mar-20	31-Mar-21	31-Mar-22	Growth(%)	Share(%)	31-Mar-20	31-Mar-21	31-Mar-22	Growth(%)	Share(%)
Commercial Banks	N.A.	N.A.	N.A.	N.A.		474969.00	503276.00	673136.00	33.75	84.03
Regional Rural Bank	N.A.	N.A.	N.A.	N.A.		75447.00	81922.00	89741.00	9.54	11.20
Cooperative Banks	N.A.	N.A.	N.A.	N.A.		17165.00	19159.00	28390.00	48.18	3.54
Others	N.A.	N.A.	N.A.	N.A.		97829.00	134147.00	9791.00	-92.70	1.22
All Agencies	N.A.	N.A.	N.A.	N.A.		665410.00	738504.00	801058.00	8.47	100.00
3. LOANS & ADVANCES OUTSTANDING										
Agency	No. of accounts					Amount of Loan				
	31-Mar-19	31-Mar-20	31-Mar-21	Growth(%)	Share(%)	31-Mar-20	31-Mar-21	31-Mar-22	Growth(%)	Share(%)
Commercial Banks	17550	0	N.A.	N.A.		178270	189974	347067	82.69	81.80
Regional Rural Bank	27280	27605	N.A.	N.A.		29182	31642	35786	13.10	8.43
Cooperative Banks	6172	0	N.A.	N.A.		18527	19030	15732	-17.33	3.71
Others	6765	0	N.A.	N.A.		82420	98113	25724	-73.78	6.06
All Agencies	57767	27605	N.A.	N.A.		308399	338759	424309	25.25	100
4. CD-RATIO				5. PERFORMANCE UNDER FINANCIAL INCLUSION (No. of A/cs)						
Agency	CD Ratio					Agency	Cumulative			
	31-Mar-20	31-Mar-21	31-Mar-22				Deposit	Credit	Deposit	Credit
Commercial Banks	37.53	37.75	51.56			Commercial Banks	29398	NA	464059	NA
Regional Rural Bank	38.68	38.62	39.88			Regional Rural Bank	17978	NA	260357	NA
Cooperative Banks	107.93	99.33	55.41			Cooperative Banks	0	NA	0	NA
Others	84.25	73.14	262.73			Others	0	NA	0	NA
All Agencies	46.35	45.87	52.97			All Agencies	47376	NA	724416	NA
6. PERFORMANCE TO FULFILL NATIONAL GOALS (As on 31/03/2022)										
Agency	Priority Sector Loans		Loans to Agr. Sector		Loans to Weaker Sections		Loans under DRI Scheme		Loans to Women	
	Amount ['000]	% of Total Loans	Amount ['000]	% of Total Loans	Amount ['000]	% of Total Loans	Amount ['000]	% of Total Loans	Amount ['000]	% of Total Loans
Commercial Banks	236559	68	84450	24	NA	#VALUE!	NA	#VALUE!	NA	#VALUE!
Regional Rural Bank	26696	75	19726	55	NA	#VALUE!	NA	#VALUE!	NA	#VALUE!
Cooperative Banks	8049	51	5694	36	NA	#VALUE!	NA	#VALUE!	NA	#VALUE!
Others	0	0	0	0	NA	#VALUE!	NA	#VALUE!	NA	#VALUE!
All Agencies	271304	64	109870	26	NA	#VALUE!	NA	#VALUE!	NA	#VALUE!
7. AGENCY-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS										
Agency	2019-20			2020-21			2021-22			Average Ach[%] in last 3 years
	Target	Ach/ment	Ach/ment [%]	Target ['000]	Ach/ment	Ach/ment [%]	Target	Ach/ment	Ach/ment [%]	
Commercial Banks	76776.81	56044.24	73	83636.00	65950.00	79	96401.00	120418.00	125	94.39
Regional Rural Bank	19619.08	11535.12	59	21533.00	13315.00	62	23687.00	14969.00	63	61.41
Cooperative Banks	8047.68	4172.07	52	7730.00	4844.00	63	9368.00	8624.00	92	70.15
Others	6055.33	16858.28	278	8409.00	13681.00	163	0.00	0.00	#DIV/0!	211.14
All Agencies	110498.9	88609.71	80	121308.00	97790.00	81	129456.00	144011.00	111	91.46
8. SECTOR-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS										
Broad Sector	2019-20			2020-21			2021-22			Average Ach[%] in last 3 years
	Target	Ach/ment	Ach/ment [%]	Target	Ach/ment	Ach/ment [%]	Target	Ach/ment	Ach/ment [%]	
Crop Loan	43526.57	25992.48	60	47879.00	30393.00	63	51297.00	38382.00	75	66.41
Term Loan (Agr)	25661.00	11917.00	46	27986.00	23306.00	83	29851.00	29071.00	97	77.00
Total Agri. Credit	69187.57	37909.48	55	75865.00	53699.00	71	81148.00	67453.00	83	70.32
Non-Farm Sector	37417.86	50031.52	134	22453.00	35597.00	159	42588.00	68589.00	161	150.52
Other Priority Sector	3893.47	668.71	17	22990.00	8494.00	37	5719.00	7970.00	139	52.55
Total Priority Sector	110498.90	88609.71	80	121308.00	97790.00	81	129455.00	144012.00	111	91.46
9. RECOVERY POSITION										
Agency	2019-20			2020-21			2021-22			Average Rec. [%] in last 2 years
	Demand	Recovery	Recovery [%]	Demand	Recovery	Recovery [%]	Demand	Recovery	Recovery [%]	
Commercial Banks	#####	#####	92	189956.00	180596.00	95	372791.00	354832.87	95	95
Regional Rural Bank	29182.45	27022.33	93	31462.00	30573.00	97	35786.00	34609.00	97	97
Cooperative Banks	17573.00	17437.55	99	19030.00	17580.00	92	15732.00	13796.00	88	90
Others	83365.10	83032.65	100	98292.00	96995.00	99	0.00	0.00	#DIV/0!	#DIV/0!
All Agencies	#####	#####	95	338740.00	325744.00	96	424309.00	403237.87	95	96
Sources: Lead Bank & SLBC										

Methodology of Preparation of Potential Linked Credit Plans (PLPs)

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

Objectives of PLP

The objectives of PLP are

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

Methodology

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

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

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

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

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 Farmers/Marginal Farmers 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

Sr. No.	Sector	Methodology of estimation of credit potential
		<p>Estimation of credit potential taking into account Scale of Finance and also the KCC guidelines in vogue</p> <p>Block-wise allocation of potential taking into account credit absorption capacity in a particular block, cropping pattern, etc.</p>
2	Water Resources	<p>MI potential is the area that can be brought under irrigation by ground and surface water;</p> <p>Collection of data on ultimate irrigation potential, area already brought under irrigation and balance potential available under groundwater and surface water for the district</p> <p>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;</p> <p>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.</p> <p>Preference of farmers for different MI structures like dug wells, bore wells, DCBW, etc. is to be taken into account.</p> <p>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.</p>
3	Farm Mechanization	<p>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;</p> <p>Calculation of requirement of number of tractors assuming one tractor per 30 acres and 45 acres of irrigated and unirrigated cropped area;</p> <p>Adjustment of tractor potential with land holdings</p> <p>Based on the cropping pattern, topography etc similar assessment is made for power tillers, combine harvesters etc</p>
4	Plantation and Horticulture	<p>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;</p> <p>Feasibility and possibility of shifting from food crops to plantation crops;</p> <p>Estimation of replanting by taking into account approximate economic life of a few plantation crops</p> <p>Estimation of potential for rejuvenation of existing plantation</p>
5	Animal Husbandry – Dairy	<p>Collection of data on number of milch animals as per the latest census</p> <p>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;</p> <p>1/6th of the animals are assumed to be good quality animals and 60% of the good quality 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.</p>

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

Limitations and constraints

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

- Non-Availability of accurate granular data on credit flow – Sector and sub-sector-wise;
- Non-availability of data required for estimation of potential in some sectors with the line Depts.

Chapter 1

Important Policies and Developments

1.1 Policy Initiatives - Government of India

1.1.1 Union Budget of India- 2022-23

Agriculture and Food Processing

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

MSME

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

Skill Development

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

Inclusive Welfare Focus

- A new scheme, Prime Minister's Development Initiative for North-East (PM-DevINE), will be implemented through the North-Eastern Council to fund infrastructure, in the spirit of PM Gati Shakti, and social development projects based on felt needs of the North-East.
- Border villages with sparse population, limited connectivity and infrastructure will be

covered under the new Vibrant Villages Programme for construction of village infrastructure, housing, tourist centres, road connectivity, provisioning of decentralized renewable energy, direct to home access for Doordarshan and educational channels, and support for livelihood generation, etc.

- To mark 75 years of our independence, it is proposed to set up 75 Digital Banking Units (DBUs) in 75 districts of the country by Scheduled Commercial Banks.

Productivity enhancement and Investment

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

Sunrise opportunities and climate action

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

Financing Public Investment

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

1.1.2 Strengthening of Cooperative Sector

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

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

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

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

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

Sr. No	Type	Number of Societies
10	Primary Agriculture Credit Societies	93978
C	Multi State Cooperative Societies (MSCs)	
11	MSCs	1469

Source: NCUI 2018

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

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

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

- a. Cooperative Credit Guarantee Fund:** This is a new scheme being created for providing credit guarantee on loans of Primary Agriculture Cooperative Societies and other primary cooperative societies.
- b. Co-operative Education:** This scheme aims at introduction of cooperative education as a course curriculum and also as independent degree / diploma courses in Schools and Universities. This will also take care of research in the field of cooperation.
- c. Cooperative Training:** This scheme aims at revamping strengthening existing cooperative training structure in the country and modernize the training methods through a revamped scheme.
- d. Computerization of Primary Agriculture Cooperative Societies:** This scheme aims at computerization of 63,000 functional PACS leading to increase in efficiency, profitability, transparency and accountability in the working of PACS
- e. Sahkar se Samridhi:** This scheme is an umbrella scheme with a number of sub-components as mentioned below with the aim of all round development of cooperatives in the country by providing them necessary support in terms of finance, technology and infrastructure and transform them into successful economic entities: (a) Recapitalization of PACS; (b) Seed money for new PACS; (c) Revival of defunct PACS; (d) Transformation of PACS into multi-role cooperatives on the lines of FPOs; (e) Assistance to cooperative societies in branding, marketing and trade; (f) Capital subsidy for creation of basic infrastructure.

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

1.1.3 Enhancing Credit Flow: Credit Guarantee Schemes

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

Item	Credit Guarantee Scheme for FPOs	Credit Guarantee Scheme for Animal Husbandry and Dairying
Guarantee Cover	85% of the sanctioned amount max. ₹1.5 cr	25% of the Credit Facility
Annual Guarantee Fee	Upto 0.85% of sanctioned amount	1.0% of the sanctioned amount
Eligible Lending Institutions	Scheduled Commercial Banks, Co-operative Banks	Scheduled Banks

Item	Credit Guarantee Scheme for FPOs	Credit Guarantee Scheme for Animal Husbandry and Dairying
	NEDFI, NABKISAN, etc.	
Eligible Borrower	FPOs (Agri based)	FPO, Pvt Company, Sec. 8 Company, Individual Entrepreneur, MSME, etc.

1.2 Policy Initiatives – Reserve Bank of India

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

- i. Master circular on Lead Bank Scheme consolidating the relevant guidelines/ instructions issued by Reserve Bank of India on Lead Bank Scheme up to March 31, 2022, was issued vide circular FIDD.CO.LBS.BC.No.02/02.01.001/2022-23 dated 01 April 2022. It reemphasizes the focus of the Lead Bank scheme to inclusive growth and financial inclusion.
- ii. Master circular on SHG- Bank Linkage Programme consolidating the relevant guidelines/ instructions issued by Reserve Bank of India up to March 31, 2022, was issued vide circular FIDD.CO.FID.BC.No.1/12.01.033/2022-23 dated 01 April 2022. As per the circular, utmost priority should be given by banks in lending to SHGs and the same should also form an integral part of the bank's corporate credit plan.
- iii. **Kisan Credit Card Scheme - Eligibility criteria for farmers engaged in fisheries/ aquaculture**
RBI has issued modified instructions to all Commercial Banks including Small Finance Banks and excluding Regional Rural Banks, with regard to the eligibility criteria for inland fisheries and aquaculture. As per the modified instructions, the beneficiaries must own or lease any fisheries related assets such as ponds, tanks, open water bodies, raceways, hatcheries, rearing units, boats, nets and such other fishing gear as the case may be and possess necessary authorisation/certification as may be applicable in respective states for fish farming and fishing related activities and for any other state specific fisheries and allied activities. The detailed instructions were issued by RBI vide circular FIDD.CO.FSD.BC.No.6/05.05.010/2022-23 dated 18 May 2022.
- iv. **Lending by Commercial Banks to NBFCs and Small Finance Banks (SFBs) to NBFC-MFIs, for the purpose of on-lending to priority sector**
To ensure continuation of the synergies that have been developed between banks and NBFCs in delivering credit to the specified priority sector, RBI issued instructions to all Scheduled Commercial Banks including Small Finance Banks that Bank credit to NBFCs (including HFCs) for on-lending will be allowed up to an overall limit of 5 percent of an individual bank's total priority sector lending in case of commercial banks. In case of SFBs, credit to NBFC-MFIs and other MFIs (Societies, Trusts, etc.) which are members of RBI recognized 'Self-Regulatory Organisation' of the sector, will be allowed up to an overall limit of 10 percent of an individual bank's total priority sector lending. These limits shall be computed by averaging across four quarters of the financial year, to determine adherence to the prescribed cap.

SFBs are allowed to lend to registered NBFC-MFIs and other MFIs which have a 'gross loan portfolio' (GLP) of up to ₹500 crore as on March 31 of the previous financial year, for the purpose of on-lending to priority sector. In case the GLP of the NBFC-MFIs/other MFIs exceeds the stipulated limit at a later date, all priority sector loans created prior to exceeding the GLP limit will continue to be classified by the SFBs as PSL till repayment/maturity, whichever is earlier. The detailed instructions were issued by RBI vide circular FIDD.CO.Plan.BC.No.5/04.09.01/2022-23 dated 13 May 2022.
- v. **Modified Interest Subvention Scheme for Short Term Loans for Agriculture and Allied Activities availed through Kisan Credit Card (KCC) during the financial year 2021-22**

Modified instructions on Interest Subvention Scheme for Short Term Loans for Agriculture and Allied Activities availed through Kisan Credit Card (KCC) during the financial year 2021-22 were issued by RBI to all Public Sector Banks, Private Sector banks and Small Finance Banks to extend the benefit of Interest Subvention vide circular FIDD.CO.FSD.BC.No.3/05.02.001/2022-23 dated 28 April 2022. As per the scheme, banks to submit their additional claim pertaining to the disbursement made during the year 2021-22 which is (i) not included in the claim as on 31 March 2022; and (ii) repaid promptly during 2022-23, latest by 30 June 2023.

1.3 Policy Initiatives – NABARD

1.3.1 Long-Term Refinance

To ensure increased and uninterrupted credit flow to farmers, as also to give a boost to capital formation in agriculture sector, NABARD provides refinance to the cooperative banks and RRBs out of Long Term Rural Credit Fund, at a reasonable rate of interest. An amount of ₹1,20,000.00 crore was allocated for the year 2021-22.

1.3.2 Short-Term Refinance

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

1.3.3 Other Initiatives

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

(ii) Special Liquidity Facility-2

NABARD, under Atmanirbhar Bharat Abhiyan, disbursed ₹24,399.43 crore to Cooperative Banks, RRBs, SCARDBs, and NBFC-MFIs as special liquidity facility (SLF-2) during the pandemic. Out of which, ₹15053.30 crore was disbursed to Cooperative Banks, ₹7746.13 crore to RRBs for the purpose of ASAO and ST-Others and ₹1600 crore to SCARDBs & NBFCs/NBFC-MFIs. Under Additional Special Liquidity Facility (ASLF) an amount of ₹150.00 crore was disbursed during the year 2021-22 to NBFCs/NBFC-MFIs with asset size of less than ₹500.00 crore.

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

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

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

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

1.3.4 Government Sponsored Programmes with Bank Credit

- Department of Food and Public Distribution (DFPD), Government of India has notified the "Scheme for extending financial assistance to project proponents for enhancement of their ethanol distillation capacity or to set up distilleries for producing 1st Generation (1G) ethanol from feed stocks such as cereals (rice, wheat, barley, corn & sorghum),

sugarcane, sugar beet, etc.”NABARD has been appointed as the Nodal Bank for interacting with DFPD and managing interest subvention under the Scheme. The operational guidelines have been issued to Cooperative Banks, RRBs, NCDC, PSBs, Commercial Banks, etc. for implementation of the scheme.

- Administrative approval conveying continuation of the following subsidy schemes for 2021-2022 (till 30 September 2022) has been received from the GoI :
 - Agri Clinics and Agri Business Centres (ACABC)
 - Agri Marketing Infrastructure (AMI) sub scheme of Integrated Scheme for Agricultural Marketing (ISAM)

1.3.5 Rural Infrastructure Development Fund (RIDF)

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

Other Important Funds

i) Long Term Irrigation Fund (LTIF)

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

ii) Micro irrigation Fund (MIF)

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

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

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

1.3.6 Micro Credit Intervention

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

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

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

Credit Guarantee Fund for Micro Units (CGFMU) is the Trust Fund set up by Government of India, managed by NCGTC as a Trustee, with the purpose of guaranteeing payment against default in Micro Loans extended to eligible borrowers by Banks/ NBFCs/ MFIs/ Other Financial Intermediaries. Consequent to the amendment in the CGFMU scheme, the

collateral free loans to SHGs under DAY-NRLM were enhanced from ₹10 lakh to ₹20 lakh and categorised as under.

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

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

1.3.7 Financial Inclusion

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

1.3.8 Farm Sector Development – Important Initiatives

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

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

II. FPO Promotion

- NABARD, in collaboration with GiZ, developed a mobile application for conduct of baseline survey of FPOs and an automated rating tool for FPOs (FPO Manak tool).
- BIRD, Lucknow as the Nodal Training Institute for Central Sector Scheme of 10,000 FPOs developed five Basic training modules and eight advanced training modules for FPOs and other stakeholders.

- 417 FPOs were promoted under Central Sector Scheme on 10,000 FPOs during 2021-22. With this, the Cumulative number of FPOs promoted is 1096, of which 774 are registered.

III. IOT and ICT Interventions

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

IV. Climate Action

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

1.3.9 Off Farm Sector Initiatives

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

1.3.10 Agriculture Credit Target during 2022-23

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

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

1.4 Policy Initiatives – State Government

The Gross State Domestic Product (GSDP) of Gujarat for 2022-23 (at current prices) is projected to be ₹ 22,03,062 crore expecting a growth of 13.3% over the revised estimate of GSDP for 2021-22 (₹ 19,44,107 crore).

1.4.1 Budget Initiatives

State Government has presented a budget of ₹2,18,408 crore for the year 2022-23. The overall surplus as per budget estimates for the year 2022-23 is ₹1,006 crore. The government has declared that there may be no increase in the existing tax rates and it would not impose any new taxes. The budget allotted to the education sector at ₹34,884 crores is highest amongst all sectors.

Major highlights of the budget are:

Agriculture, Farmers' Welfare and Cooperation Department

A. Total provision of ₹7737 crore has been earmarked for various activities of Agriculture, farmers' welfare and Cooperation Department. Some components of the allocation are as under-

- To clear out the pending applications for agricultural power connection, a subsidy of ₹8300 crore is provided in the budget. This will expedite the access of subsidized power connection to farmers
- A provision of ₹260 crore has been made to provide subvention in purchasing tractors and various farm machineries for mechanization of agriculture activities/ agriculture operations.
- Provision of ₹231 crore for various projects related to agriculture and allied sectors under Rashtriya Krishi Vikas Yojana.
- A provision of ₹213 crore for maintenance of cows for the farmers who are engaged in organic farming with dependence entirely on cows rearing.
- A provision of ₹142 crore for constructing small godowns at farms under Mukhyamantri Pak Sangrah Yojana.
- Gujarat Prakrutik Krushi Vikas Board has been formed to provide a boost to organic farming. The board will work towards enhancing agricultural production by integrating farmers with this campaign. A provision of ₹100 crore has been made exclusively for this purpose.
- A provision of ₹100 crore to provide subvention to Agro and Food Processing Units under Sarvagrahi Krishi Vyavasay Niti.
- A provision of ₹81 crore under Khedut Khatedar Akasmat Bima Yojana for crop insurance in the State covering crop failure due to emergent reasons.
- A provision of ₹54 crore to provide one drum and two plastic baskets free of cost to farmers of the state to carry out multipurpose activities.
- A provision of ₹35 crore for increasing agricultural production by application of fertilizers and insecticides with the help of drone and thereby decreasing the cost of agricultural inputs.
- A provision of ₹32 crore to encourage farmers engaged in organic farming in the Dangs district, for entirely chemical free cultivation.
- A provision of ₹20 crore for erecting solar power fencing around farms to prevent the crop being damaged by wild animals.

- A provision of ₹17 crore for storage of fertilizers in order to ensure timely supply of fertilizer to the farmers in adequate quantity.
- A provision of ₹15 crore to provide subvention on the purchase of goods carrying vehicles for transportation of agricultural products.
- A provision of ₹10 crore to promote "Sanedo", an agricultural implement, developed by local manufacturers of the State.

B. For the development of Horticulture, total provision of ₹369 crore was made under various schemes of the Directorate of Horticulture as below.

- i. A provision of ₹10 crore to increase the area under cultivation of Kamalam (dragon fruit).
- ii. A provision of ₹10 crore to engage 10,000 farmers of the state in honey production to provide a boost to the Honey Revolution.
- iii. A provision of ₹7 crore under Comprehensive Horticulture Development Program.
- iv. A provision of ₹7 crore to establish 3 centers of excellence for horticulture crops, one each at Ahmedabad, Jamnagar and Kheda districts.

Apart from this, a provision of ₹757 crore has also been made to intensify Agricultural Research and Education Programmes under Agricultural Universities.

C. For activities related to the Animal Husbandry division, the following provisions have been made:

- i. A provision of ₹500 crore to Gaushala, Panjrapole and Trust managed institutions for preservation of cow and infrastructural facilities in Mukhyamantri Gaumata Poshan Yojana.
- ii. A provision of ₹300 crore for interest relief to Animal keepers on short term loan.
- iii. A provision of ₹80 crore to provide subvention for setting up dairy farm and animal unit at rural level for self-employment.
- iv. A provision of ₹44 crore to provide benefit of cattle feed through 'Pashu Khandan Sahay Yojana' to animal keepers during pre and post deliveries of their animals.
- v. A provision of ₹12 crore for construction of milk house/godowns for rural milk producing cooperative societies.

D. Total provision of ₹880 crore is provided in the budget for following major activities of Fisheries Division.

- i. A provision of ₹264 crore for maintenance of the existing ports, strengthening the infrastructural facilities and to provide facility of floating jetty at Chorwad and Umarsadi.
- ii. A provision of ₹230 crore for the scheme to exempt VAT on high speed diesel oil for the fishermen.
- iii. A provision of ₹201 crore to construct 5 new all-weather fishing ports at Nava Bandar, Veraval, Madhvad, Porbandar and Sutrapada.
- iv. A provision of ₹75 crore to provide interest relief on short term loans to fishermen.
- v. A provision of ₹40 crore to provide modern equipment to fishermen and thereby increase their security and productivity.
- vi. A provision of ₹30 crore for Pradhanmantri Matsya Sampada Yojana.
- vii. A provision of ₹25 crore to provide subvention for equipment to the beneficiaries engaged in inland fisheries.
- viii. A provision of ₹5 crore for various schemes for providing infrastructural facilities to prawn fishing farms for development of brackish water fisheries.

E. Co-operative Sector: There is an increased budgetary allocation in this sector with following major details:

- i. A provision of ₹1250 crore for this scheme to provide interest relief to farmers for Kharif and Rabi crops.
- ii. A provision of ₹50 crore for the management and strengthening of Agricultural Marketing System.

- iii. A provision of ₹13 crore for interest relief on short and long term credit to Sugar Cooperative Societies.
- iv. A provision of ₹10 crore for reviving of Co-operative sugar mills.
- v. A provision of ₹2 crore to provide trollies to porters in agriculture produce marketing committees for transporting goods.

F. Water Resource: Total provision of ₹5,339 crore is made under the budget for different activities of Water Resources sector with following details :

- i. With majority works of **Sardar Sarovar Project** - the lifeline of the state - completed, the entire state has been bestowed with water security cover with irrigation facility of 69 lakh ha. of land in the State. Construction of Sardar Sarovar Dam has been completed in the year 2017. Keeping in view the principle of "Per Drop More Crop", State Government is making efforts to use water resources effectively. Provision of ₹6090 crore has been made for the **Narmada Project**. The water stored in Sardar Sarovar reservoir is used for irrigation, generating hydraulic power, drinking and industrial purposes. It has been planned to complete the works of Kutch branch canal and its ancillary network to take Narmada water to Mandvi taluka. Besides, special planning has been made for strengthening the existing canals of Narmada Project in north Gujarat and complete the missing link in Saurashtra.
- ii. **Micro Irrigation** : By taking an initiative in micro irrigation, Gujarat has made remarkable progress. In the last two decades, 13 lakh farmers have been benefitted by putting in place micro irrigation in approximately 21 lakh ha. area. A provision of ₹500 crore for expanding the scope of this scheme in further 1 lakh ha. in the next year.
- iii. **Bhadbhut Barrage project** : Work has started for the ambitious Bhadbhut Barrage to construct a sweet water reservoir on river Narmada at a cost of ₹5322 crore and a provision of ₹1240 crore has been made for this scheme.

G. Social Justice and Empowerment

- i. A provision of ₹75 crores to provide assistance for individual/community irrigation wells with 3 HP solar pumps to tribal farmers.
- i. A provision of ₹38 crores under the new scheme of assistance to farmers in tribal areas to use power tillers for cultivation.
- ii. A provision of ₹27 crores for tribal beneficiaries under integrated dairy development scheme in tribal areas.
- iii. A provision of ₹30 crores for tribal beneficiaries under the scheme of agricultural diversification for tribal beneficiaries.
- iv. A provision of ₹3 crores for marketing support to tribal beneficiaries for their production cum sale.
- v. A provision of ₹3 crores for assistance in construction of milk societies in tribal districts.

H. Panchayat, Rural Housing & Rural Development

- i. Provision of ₹9048 crores for Panchayat, Rural Housing & Rural Development
- ii. As per 15th Finance Commission recommendations, Panchayats would get ₹15650 crore for development of Infrastructure facilities. Of this, provision of ₹2446 crore is made for next year.
- iii. The Mukhyamantri Gram Asmita Yojana is being implemented for improving the living standard of the village people by developing infrastructural facilities in Gram Panchayats.
- iv. Provision of ₹35 crore for strengthening e- Gram Centers to provide approximately 200 services.

I. Rural Development

- i. Provision of ₹933 crore for constructing 4 lakh new houses in the next two years under Pradhanmantri Awas Yojana (Gramin) to achieve the goal of “a house for all” by 2024.
- ii. Provision of ₹900 crore under Mahatma Gandhi Rashtriya Gramin Rojgar Yojana
- iii. Provision of ₹500 crore to create anganwadi, classrooms, mid-day meal sheds, forest nursery, community wells, cattle sheds through Mahatma Gandhi Rashtriya Gramin Rojgar Yojana.
- iv. Provision of ₹467 crore for improving cleanliness standards at the rural level under Swachchh Bharat Mission (Gramin).
- v. Provision of ₹231 crore for economic development and women empowerment under National Rural Livelihood Mission (Aajivika).
- vi. Provision of ₹91 crore to promote basic services for economic upliftment at rural level under Shyama Prasad Mukherjee Urban Mission.
- vii. Provision of ₹38 crore for providing bathroom facility in newly approved houses under Pradhanmantri Awas Yojana (Gramin).
- viii. Provision of ₹18 crore to provide interest relief to ensure that women Self-Help Groups can avail interest free loans.

1.4.2. Status of Cooperatives in Gujarat

‘Cooperative’ values such as member-owned democratic control, member-welfare and member economic participation should be inscribed in the process of technological & managerial modernization of the Cooperative institutions- to meet the contemporary realities of rural aspirations. This way, Cooperatives can re-assert their relevance in niche arenas as well such as frugal innovations, ‘common’ ownership of assets and climate change finances also- apart from pre-requisites of attaining business viability and financial health.

The socio-economic landscape in rural areas is increasingly uncertain due to concerns of climate change & food security and technological breakthroughs in banking, new concepts of collaborative consumption etc. The rural community needs a bulwark to withstand shocks while also getting the right platform for actively participating in co-creation of value through steering frugal innovations and catalysing rural entrepreneurship. Cooperative Credit Institutions –be it Rural Cooperative Banks or grass-root institutions such as PACS- hold the promise for strengthening and rejuvenating rural economy in such a rapidly changing landscape: provided they are strengthened and given the opportunity to participate actively in the rural ecosystem.

Cooperative sector in Gujarat is reasonably well developed and sound, as evidenced in the well-developed Dairy sector and a strong system of Rural Cooperative Banks.

1. The operational efficiency and turnover of the Cooperative Dairy sector in Gujarat is well above the national average, anchored by systematic procurement system, efficient payment cycle, robust infrastructure and trained manpower with a cooperative spirit. As regards the Rural Cooperative Banks of Gujarat, it is a 3-tier structure, consisting of Gujarat State Cooperative Bank, 18 DCCBs and over 7700 PACS. All 18 DCCBs are in profit and on CBS (Core Banking Solution) Platform. 13 DCCBs are offering Mobile Banking facility and all 18 DCCBs are offering RTGS/NEFT facility to their customers. However, there is considerable variation among the DCCBs as regards to their financial resources and business performance. Likewise, out of over 7700 PACS, there are some PACS, which are not profit-making/viable and lack adequate infrastructure or trained man-power to undertake business activities adequately and to play effective role in rural economy.
2. At macro-level, a strong Rural Cooperative Sector will reflect in a rise in percentage share of GLC Flow of DCCBs (relative to other banks) and an increase in Agri-Term loan disbursements in various districts. This has however, become a challenge, particularly with the influx of Small Financial Banks & NBFCs that are foraying into the domain of Rural Cooperative Banks (RCBs). For RCBs to reclaim their prominence in rural credit

landscape, it is crucial that PACS play a more decisive role in rural economy through business diversification, thus generating greater demand for credit.

1.4.3 Sector-wise/ Activity-wise distribution Co-operatives-

Sr. No	Type	Number of Societies
A	Details of Non Credit Cooperative Societies*	
1	AH Sector (Milk/Fishery/ Poultry etc.)	17461
2	Consumer Stores	2026
3	Housing Societies	17642
4	Weavers	-
5	Marketing	-
6	Labour Societies	3764
7	Industrial Societies	-
8	Agro Processing and Sugar	2213
9	All others	28363
	Total	71469
B	Details of Credit Cooperative Societies#	
10	Primary Agriculture Credit Societies	7700
C	Details of Multi State Cooperative Societies (MSCs)\$	
11	No. of MSCs	47

[*Source – RCS, GoG (data as on 31.03.2020); #Source – Institutional Development Department, NABARD, Gujarat; \$ Source- Ministry of Cooperation, GoI]

1.4.4 Recent Developments/Initiatives taken by State Government in strengthening of outreach and activities of Cooperatives

Government of Gujarat is implementing a number of schemes through RCS for strengthening of the cooperatives in the State. A list policies is as under:

1. Progress Under the Centrally Sponsored Scheme of PACS Computerization: It has been agreed to shortlist PACS based on a several agreed-upon criteria including completion of audit of PACS as on 31 March 2022, a good audit score (A or B) etc. State PMU for PACS Computerization has already been formed in Gujarat and State Government is constituting SLIMC and DLIMC committees.

2. Kisan Kalpvriksha Yojna: The scheme is aimed at development of basic infrastructure like auction shed, parking sheds, RCC roads, Weigh over bridge, cold storage, ripening chambers in the 'A' and 'B' category APMCs with 50% capital subsidy. The scheme was formulated in the year 2018-19 with a total outlay of ₹32.6 crore. A provision of ₹25 crore has been made during the budget 2022-23.

3. Capital subsidy to PACSs, APMCs, and Cooperative institutions for the construction of new godown and interest subsidy on loan for construction of new godown – A provision of ₹5.01 crore has been made under the scheme for this year and is expect to benefit 150 PACS and 500 farmers.

4. Under the scheme for “Providing Navigational Aids and other Infrastructural facilities”, assistance is being provided to Fisheries Cooperative societies to establish new processing plant. Provision for development of one such unit has been made in the Budget 2022-23

1.5 State Government sponsored programmes with Bank Credit:

Aatma Nirbhar Gujarat Sahay Yojana

Government of Gujarat had announced 'Atmanirbhar Gujarat Sahay Yojana' to enable the middle class working group to overcome the challenges posed by the disruptive impact of COVID-19 pandemic. Main beneficiaries include small businessmen, skilled workers, autorickshaw owners, electricians & others.

Under the scheme, unsecured collateral free loan of ₹1,00,000/- at effective interest rate of 2% with a moratorium of 6 months, will be provided by Cooperative Banks, Credit Societies

and RRBs. Although the total interest rate is 8%, eligible borrowers need to pay only 2% as remaining 6% will be paid by the State government. The period of loan is 3 years and the Quantum of Assistance from the State Government is ₹5000 Crore.

1.5.1 Other developments in the State

a. Mukhya Mantri Kisan Sahay Yojana

Mukhyamantri Kisan Sahay Yojana was launched in 2021 to bring agriculture under the Insurance. The scheme covers over 53 lakh farmers against crop losses occurred due to drought, excess rain or unseasonal rain, without collecting any premium. Tribal farmers registered under the Forest Rights Act are also eligible for this scheme.

A compensation of ₹20,000/- will be given per hectare, in case of 33% to 60% damage of Kharif Crops, within an overall limit of 4 hectare. In case of over 60 percent damage to crops, per hectare ₹25000/- assistance will be given in 4 hectare limit. Benefits will be transferred to the beneficiaries account directly via Direct Benefit Transfer.

b. Agricultural Diversification Scheme 2021

State Government in June 2021 launched the Agricultural Diversification Scheme-2021 for benefitting Vanbandhu-farmers in the tribal areas of State. This scheme will benefit more than 1.26 lakh Vanbandhu farmers of 14 tribal districts from Ambaji to Umargam in Gujarat. Under this scheme tribal farmers will get fertilizer-seed assistance of ₹31 crores in which 45 kg of urea, 50 kg of NPK and 50 kg of Ammonium Sulphate will be provided.

An assistance of ₹250 crore has been provided to 10 lakh tribal farmers under this scheme in the last ten years. Seeds of crops like maize, Bitter gourd, Sponge gourd, tomato, millet, etc. are provided under this scheme.

c. Kisan Suryodaya Yojana

Gujarat Government launched Kisan Suryodaya Yojana in October 2020 for providing 16 hours of power supply to farmers. Under the Kisan Suryodaya Yojana farmers will get 3 phase power supply from 5 AM to 9 PM. Provision of electricity during the day would facilitate irrigation of crops during day time, thereby reducing the difficulties of farmers. Uninterrupted daytime supply of electricity will encourage the farmers in setting up micro irrigation system thereby achieving the objective of Per Drop More Crop and also contributes towards doubling of farmers' income in the State.

Chapter -2

Credit Potential for Agriculture 2023-24

2.1 Farm Credit

The district falls under central Gujarat sub zone with average annual rainfall during the last twenty years being 904 mm. The climate is semi-arid. The soil is mainly of sandy loam and alluvial soil. Agriculture is the main activity of the 70 per cent people in rural areas. The major crops grown are maize and paddy in kharif season and wheat and gram in the rabi season. Besides this different types of pulses, vegetables, oilseeds and cotton, fodder crops are also grown on a fairly large scale. The climatic condition of the district is suitable for cultivation of Rice and Maize. The district is having gross irrigated area of 64 % out of the of 1.67 lakh hectare area available for irrigation.

2.1.1 Crop Production, Maintenance and Marketing

2.1.1.1 Introduction

Panchmahal district is a traditional agricultural economy which constantly depends upon traditional food grain crops. Although there is much scope for cultivation of high value crops like cotton, groundnut, oilseeds, fruits, vegetables, condiments / spices, low value cereals and other crops, farmers are cultivating maize, paddy and wheat on large scale.

Farm Credit includes Crop Loans, Medium Term Loans for agriculture and allied activities, Loans for pre and post-harvest expenses, etc. expended to Individual farmers & Corporates directly engaged in Agriculture and Allied Activities.

2.1.1.2 Infrastructure and linkage support available, planned and gaps

Land Holding Pattern: The 76.94 % of the land holdings comprising 39.81 % of total area are held by small and marginal farmers. (Source: DAO, Panchmahal, 2019)

Category	Number ('000)	Area ('000 Hect.)
Marginal Farmer (agri. land holding up to 1 hectare (2.5 acres))	77.67	32.25
Small Farmer (agri. land holding 1 hectare to 2 hectares)	35.42	50.69
Semi Medium (agri. land holding 2ha to 4 ha) and above	33.89	125.41
Total holding	146.98	208.35

Source: Agriculture census 2015-16

Area and Production of Principal Food and Non-Food crops

Some of the important crops with the details of area and production of principal food crops and non-food crops during last two years are given below:

Crop	Area ('000 ha)		Production ('000 tonnes)	
	2020-21	2021-22	2020-21	2021-22
Paddy	47.44	43.10	62.23	53.27
Wheat	10.98	12.25	24.23	27.22
Maize	68.97	66.87	108.54	105.18
Bajra	2.62	2.43	4.51	4.21
Pulses	20.73	19.46	24.59	25.71
Cotton	9.46	12.64	35.19	49.69
Jowar	0.22	0.07	0.25	0.05
Groundnut	0.83	0.87	1.67	1.45
Oilseeds	4.47	8.38	7.31	12.19
Tobacco	0.82	0.82	1.35	1.35
Others	1.35	0.80	1.60	0.95
Total	167.89	167.69	271.47	281.27

(Source: DAO/DSO, Distt. Statistical Book 2021, Panchmahal)

It may be observed that Paddy, Wheat, Maize & Pulses are the major crops grown in the district. The area in case of Paddy, Maize and Pulses has decreased while area under Wheat, Cotton and Oilseeds has increased during 2021-22. Area and production in case of Wheat, Pulses, Oilseeds and Cotton has increased while Paddy and Maize there was marginal decrease in terms of Area and Production during 2021-22.

2.1.1.3 Assessment of credit potential for 2023-24

Keeping in view developments of the district, Scale of Finance, discussion with stake-holders etc., potential for 2023-24 has been estimated at ₹ 64995.89 lakh as per the details given below. The ground level disbursements for 2020-21 and 2021-22 were ₹30443.00 lakh and ₹38382.00 lakh respectively under agriculture. Activity wise block wise details are given in Annexure I.

(₹lakh)

Sl. No.	Name of the crop	Unit	Scale of Finance*	Assessment of Potential 2023-24	
				Phy. units	Bank Loan
1	Paddy	Ha.	0.677	29334	19859.12
2	Wheat	Ha.	0.483	10835	5233.31
3	Jowar	Ha.	0.124	270	33.48
4	Bajra	Ha.	0.224	400	89.60
5	Maize	Ha.	0.531	34722	18437.38
6	Cotton Desi	Ha.	0.301	2750	827.75
7	Pulses	Ha.	0.276	12650	3491.40
8	Oil Seeds/ Soyabean	Ha.	0.390	2134	832.26
9	Groundnut	Ha.	0.390	420	163.80
10	Other food grains	Ha.	0.290	1314	381.06
11	Fodder crop	Ha.	0.191	3391	647.68
Crop Loan Total					49996.84
	Add: 10% for post-harvest			-	4999.68
	Add: 20% for maintenance of farm assets/ household consumption			-	9999.37
	Grand Total (Crop Production, Maintenance and Marketing)				64995.89

*The Scale of finance is as per the DLTC

2.1.1.4 Critical interventions required for creating a definitive impact

- PMFBY:** GOI vide notification dated 22.4.2020 has revamped PMFBY scheme and has made it Voluntary for all the farmers, including loanee farmers. The GOI has formulated the detailed guidelines regarding the operational procedure to be followed by banks for implementation of PMFBY, especially for opting out and opting in of the farmers for the crop insurance scheme. Total 2005 farmers covered under Kharif and Rabi seasons during 2020-21. (*Agriculture Department, Godhra*)

The Government of Gujarat has also implemented "Mukhya Mantri Kisan Sahay Yojana" for Kharif crop covering 3 risks- Drought, Heavy rain and Unseasonal rainfall. The farmers do not require to pay any monetary share to avail the benefit of the scheme. For Crop loss of 33 % to 60 %, assistance of ₹20000/- per Ha. and for Crop loss above 60 %, assistance of ₹25000/- per Ha. will be eligible for maximum 4 hectares in both Kharif and Rabi season.

2. Interest Subvention:

- Interest Subvention of 1.5% p.a. from Central Government and 2% from State Government (only to the Co-operative Banks) is available to Banks, on their own funds used for short term loans (crop loans and WC loans for animal husbandry and fisheries activities) upto ₹3.00 lakhs per farmer (subject to maximum of ₹ 2.00 lakh

per farmer for WC loan for AH&F activities) will be available provided the lending institutions make available short term credit to farmers @ 7% p.a. Interest subvention @2% will be calculated on the crop loan/WC loan amount from the date of its disbursement/drawal up to the date of actual repayment of the crop loan by the farmer or up to the due date of the loan fixed by the Banks, whichever is earlier, subject to a maximum period of one year. Interest Subvention of 2% p.a. from State Government is available only to the Co-operative Banks on their own funds used for short term loans.

- b) An additional interest subvention @3% and @4% will be available from Central Government and State Government respectively to the prompt payee farmers from the date of disbursement of the short term loan up to the actual date of repayment by farmers or up to the due date fixed by the Bank for repayment of crop loan/WC loan, whichever is earlier, subject to a maximum period of one year from the date of disbursement. Thus, the prompt payee farmers can get short term loans @ 0% interest during the year 2021-22. This benefit would not accrue to those farmers who repay after one year of availing such loans.

Interest subvention to small and marginal farmers against Negotiable Warehouse Receipts

In order to discourage distress sale by farmers, to encourage them to store their produce in warehouses, the benefit of 2% p.a. interest subvention will be available to banks on their own funds involved for extending credit support upto ₹ 3.00 lakh at 7% interest per annum to small and marginal farmers having Kisan Credit Card for a period of up to six months post-harvest against negotiable warehouse receipts for keeping their produce in warehouses accredited by Warehousing Development Regulatory Authority (WDRA). Subvention (incentive) for prompt repayment will not be available to the farmers for loans extended against NWRs.

- 3) Soil Health Card:** State Government has launched an innovative programme to provide every farmer a Soil Health Card in a Mission mode for keeping readymade information on fertility of their soil for fertilizers recommendation and for crop planning in succeeding year. The card will carry crop wise recommendations of nutrients/fertilizers required for farms, making it possible for farmers to improve productivity by using appropriate inputs. Soil health being an important factor in agriculture production, productivity and quality of production. The soil testing laboratories working in the state covering all the districts, provide free of charge, soil testing facilities along with testing of soil micronutrient to the farmers of all the districts of the state. The Soil Health Card is valid for three years. About 2222 farmers have got the soil health card during 2019-20 in the district. (*Agriculture Department, Godhra*)
- 4) Seeds:** Gujarat State Seed Corporation Ltd. has made production of 2.53 lakh quintal seeds during 2019-20. The Corporation has constructed its own scientific storage godown having capacity of 1.84 lakh quintals of seeds at various district/taluka places of the state. Gradually the farmers are switching to the certified seeds available from Govt and private companies. The seed replacement ratio was 40 to 45% in 2018-19. As such there is good scope to improve the SRR in district. The total use of all chemical fertilizers in the district was 70555.50 MT in 2018-19. (*Source: Dir.Extn. Agri*)
- 5) Post-Harvest Facilities :** In Gujarat the regulated market yards have made satisfactory progress. Gujarat State agriculture Marketing Board is organizing training programmes for various Govt. functionaries in the district and also providing computer network connection to APMCs under “Agmarknet” scheme of GOI. There are 7 APMCs in the district. There are facilities of grading and sorting through private players. Good number of MSME units are situated in the district to absorb the goods produced by the farmers by way of value addition.

- 6) **RuPay Cards to farmers** : There are 297000 cultivators in the district out of which 91910 farmers are covered under Rupay KCC. The cards are being given by the banks to farmers. (DLCC)
- 7) **Implementation of PM-KISAN and KCC saturation status** : During the year 2020-21 against the target of 39493 for issuance of KCC 35190 new KCCs have been issued. Cumulatively, 91910 KCCs (31 %) have been issued to cultivators. (DLCC)

2.1.1.5 Suggested Action Points

a. Banks

- To bring all Small and Marginal farmers into formal credit network by issue of KCCs. Create awareness amongst farmers about proper use of KCC. Presently, most of the farmers are drawing total limit sanctioned in one go, instead of need based drawal.
- Provide credit to farmers under negotiable Warehouse receipt Scheme
- Banks may explore extending credit for developing processing and marketing activities, wherever adequate infrastructure facilities have been created by way of assistance from NABARD for setting up of godowns, cold storage units, market yards, etc.
- Formulate Area Development Schemes dovetailed with Govt. Sponsored programme and collaborate with entrepreneurs for financing.

b. State Government

- Setting up of Soil testing centers at each block headquarters and issuing of Soil Health Cards to all farmers.
- Provide better extension facilities for adoption of modern technologies / scientific cultivation practices by the farmers. Provision of infrastructure facilities like warehousing, marketing infrastructure etc.
- Supply of quality seeds may be ensured and farmers may be encouraged to use HYV seeds which require less water. Organic farming needs to be promoted on a large scale.
- Awareness about Electronic National Agriculture Market (e-NAM)
- Area expansion through diversification of low yielding cereal crops into oilseeds crops.
- Encourage promotion and popularization of Farmer Producer Organizations in the interest of farmers.
- Expansion of APMCs with modern facilities is necessary taking into account increased food production

Farmers Producers Organisations – FPOs will be game changer in future which is the best option for small and marginal farmers to use their limited resources in cost effective and meaningful manner. By organizing SF and MF on same platform for mitigating the problems like quality, productivity, post harvest management, processing, storage and low price realization etc. Farmers Producers Organisations are expected

- To create supportive ecosystem for small and marginal farmers to facilitate development of vibrant and sustainable income oriented farming for overall socio-economic development and wellbeing of agrarian communities.
- To educate farmers for efficient, cost-effective and sustainable resource use and realize higher returns through better liquidity and market linkages for their produce and become sustainable through collective action.
- To provide quality inputs, production techniques, processing and value addition, market linkages, credit linkages and use of technology etc.
- To develop agriculture entrepreneurship skills of farmers to become economically viable and self-sustaining.

Chapter 2.1.2. Water Resources

2.1.2.1. Introduction

Panchmahal is situated in Eastern Central Gujarat region and geological formation in the district is alluvial, loamy, sandy black soil. Nearly 37% of cultivated area is irrigated and about 63% of the agriculture is dependent upon rains. All the blocks fall under safe category. Ground water in this area is tapped through dug wells, dug-cum bore wells and bore wells. The quality of ground water is suitable for irrigation throughout the district. There are eight perennial rivers viz. Panam, Goma, Orsang, Mahisagar, Neshri, Kunkaran, Veri and Sukhi passing through the district. The rainfall ranges between from 770 mm to 880 mm. Apart from rains other sources of irrigation are surface water, ground water, canals and tanks.

Taluka wise assessment of Dynamic ground water resources

(Units in mcm)

Sr No.	Taluka	Total Annual GW recharge	Natural Discharge during Non Monsoon season	Net annual GW availability	Irrigation	Dom & Ind. Uses	Total	Projected Demand for homes & Industries up to 2025	GW availability for future irrigation	State of Development %	Category
1	Godhra	9321.29	466.06	8855.22	2760.90	712.00	3472.90	931.00	5163.32	39.22	Safe
2	M. Hadaf	3694.40	184.72	3509.68	1589.35	442.00	2031.35	579.00	1341.33	57.88	Safe
3	Halol	6604.37	330.22	6274.15	2591.25	565.00	3156.25	739.00	2943.90	50.31	Safe
4	Jambughoda	1248.89	62.44	1186.45	583.00	105.00	688.00	138.00	465.45	57.99	Safe
5	Shehara	8169.92	408.50	7761.42	2343.00	670.00	3013.00	876.00	4542.42	38.82	Safe
6	Kalol	8188.15	409.41	7778.74	3043.50	556.00	3599.50	727.00	4008.24	46.27	Safe
7	Ghoghamba	4119.92	206.00	3913.93	1848.93	520.00	2368.93	680.00	1385.00	60.53	Safe

As per the CGWB, 2020, the stage of GW development is 25.85%. The net GW availability is 31954.49 ham.

2.1.2.2 Infrastructure and linkage support available, planned and gaps

Farmers are shifting towards growing of vegetables and fruits crops by taking benefit of Micro Irrigation System provided by Gujarat Green Revolution Company Ltd. (GGRC) which helps in saving and judicious use of water. There is a need to popularize the Micro Irrigation system at village level so that more and more small and marginal farmers avail benefit.

GGRC implements Micro Irrigation Scheme in Gujarat State through reputed authorized Micro Irrigation System suppliers, who supply and install the Micro Irrigation System and also provide agro services pertaining to Micro Irrigation System. It is aimed to bring second Green Revolution in the State by saving of water, electricity and enhancing agriculture productivity resulting in the farmers prosperity at large. GGRC has already provided drip and sprinkler irrigation systems to 8614 farmers covering 13751 ha. area in the district upto March 2021.

With a view to improving farm productivity, GOI has planned to spend ₹50,000 crore over the next five years under the Pradhan Mantri Krishi Sinchai Yojana (PMKSY). The scheme envisages the concept of “water for every farm” and “per drop more crop” to which NABARD is a key stakeholder. Micro-irrigation projects “Har Khet Ko Pani” and end-to-end irrigation solutions will be the key focus of this scheme.

2.1.2.3. Assessment of credit potential - 2023-24 (in both physical and financial terms)

The area under Micro Irrigation is increasing over the years due to its long term benefits. Further, additional infrastructure in the form of check dams created in the district coupled with expectation of good monsoon may enhance demand for all the activities under minor irrigation. There is more scope for Micro Irrigation in Ghoghumba, Kalol and Halol blocks where area under vegetable and spices is increasing. Based on above facts, investments under the “Water Resources” Sector during 2023-24 are assessed as under:

(₹Lakh)

Sr. No.	Activity	Units	Unit cost	PLP -2023-24		
				Phy. Unit	TFO	Bank Loan
1.	Dug well (2.5 m X 20 m)	Nos.	1.9	692	1169.48	935.58
2.	Shallow Tube well (150 m)	Nos	1.09	460	501.40	401.12
3.	Pump sets 15 HP	Nos.	0.61	481	292.45	233.96
4.	Pump House	Nos.	0.35	206	72.10	57.68
5.	Lift Irrigation	Ha.	1.45	638	925.10	740.08
6.	Drip Irrigation (6X6 mtrs)	Ha.	0.44	661	290.84	232.67
7.	Sprinkler (8x8) 32mm	Ha.	0.86	614	527.12	421.70
8.	Pipe based MI-6x6-16 mm	Ha.	0.59	525	311.22	248.98
9.	Renovation of wells	Nos.	0.66	608	401.28	321.02
10.	Solar Pumpsets Shallow well Model II (162mm dia and 150 mt. depth)	Nos.	5.40	103	556.20	444.96
11.	Bore well + Pumpset (6" dia)	Nos.	3.30	166	547.80	438.24
	Total		-		5594.99	4475.99

Activity-wise and block-wise potential projected for the activity is indicated in Annexure I.

2.1.2.4. Critical interventions required for creating a definitive impact

- At district level canal irrigation covers about 9.30 per cent area and remaining 90.70 percent area is irrigated by seasonal rains and available ground water.
- The net ground water availability is sufficient for existing irrigation wells.
- There is sufficient power availability for operation of pumps. Promotion of Solar pumping is being tried by the district administration.
- The GOG has created a number of check dams (8000-9000) for the purpose of water conservation / irrigation. The process of repairs to damaged check dams due to incessant rains/floods may have to be expedited by Irrigation Department, so that the water storing and recharge of water is improved.
- The District Irrigation Plan (DIP) has been prepared. This will facilitate more structured and planned approach for developing of irrigation potential of the district. The works of Lift Irrigations schemes, Exploratory Tubewells by GWRDC and ERM, weir works by State Irrigation Deptt. and few works under Watershed Component have been planned under DIP.

2.1.2.5. Suggested Action Points

a. State Government

- Harvesting and conservation of rain water in the fields / farm ponds through ridge formation on keyline contours is a must. This will ensure greater withstanding of crops during droughts. Undertaking massive programme of harnessing run off in small rivulets /nallah through construction of check dams will help in recharging ground water that can be used in lean periods.
- For recharge of ground water, recharge wells may be mandatorily constructed by the farmers availing subsidy under various land based schemes.
- Efforts are required to be made through extension services to give impetus to micro irrigation methods.

- For creating awareness about judicious use of water and water conservation, line departments may propagate Water Conservation message at each and every forum, specifically at village level.
- State Govt. to prioritize work of Command Area Development to efficiently use available water resources.
- Use of pipeline needs to be popularized to optimize the use of available water as the existing system of channels or flood irrigation involves wastage of precious water.

b. Banks

- Banks may finance more number of water saving devices like drip and sprinkler irrigation systems in all blocks. Introduction of Drip and Sprinkler irrigation in feasible horticulture and vegetables growing areas may be encouraged.
- Solar irrigation pumps are also eligible for 60% capital subsidy under MNRE subsidy scheme. This scheme can be very useful for farmers who are yet to get agriculture electricity connections.
- Proposals under micro irrigation credit linked subsidy scheme under Gujarat Green Revolution Company may be expeditiously sanctioned by the banks.

2.1.3 - Farm Mechanisation

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 agri products.

Scope of Farm Mechanization

As in the rest of India, there has been a steady shift from animal power to electro-mechanical sources of power in Gujarat although the rate of change has been slower than that of the leading agricultural States. There is a linear relationship between availability of farm power and farm yield. Therefore, there is a need to increase the availability of 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. About 90% of power comes from tractors, engines and motors. The sale of tractors is on the rise and there are a good number of manufacturers making good quality farm implements. Although, the sale of tractors in India cannot be taken as the only measure of farm mechanization but largely it reflects the level of mechanization. There is a good scope to set up custom hiring among farmers having land holdings less than 4 ha in general and SF/MF in particular. There is huge potential for introducing improved equipment for performing various farm operations for cultivation of rice, wheat, pulses and cotton in Gujarat. Use of improved implements has potential to increase productivity up to 30 per cent and reduce the cost of cultivation up to 20 per cent. Effective use of agriculture machinery helps to increase productivity & production of output, undertake timely farm operations and enable the farmers to quickly rotate crops on the same land. By raising a second crop or multi-crops from the same land, there is improvement in the cropping intensity and making agricultural land commercially more viable. Mechanization also helps in animal husbandry, dairying and fisheries.

2.1.3.2 Infrastructure and linkage support available, planned and gaps

As per report published by Directorate of Economics and Statistics Govt. of Gujarat, total 7,73,221 Nos. of tractors were registered and kept for use in the State as on 31 March 2019. Government of India is implementing “Sub Mission on Agricultural Mechanization (SMAM)” to promote the usage of farm mechanization and increase the ratio of farm power to cultivable unit area up to 2.50 kW/ ha from National average of 2.02 kW/ha. Financial assistance is provided under SMAM to the farmers for purchase of different agriculture machinery. State government is also supporting for purchase of farm machinery. To avail the benefits of these schemes, the farmers need to apply through the i-khedut portal (<https://ikhedut.gujarat.gov.in/>). State sponsored subsidy schemes are given below.

- Government of Gujarat provides financial assistance to the farmers for purchase of Tractors and Power Tillers i.e. for Tractor up to 40 PTO HP and 60 PTO HP up to ₹45000 and ₹60000 respectively, per beneficiary. Similarly for Power Tillers, it is up to 50 % of cost, up to ₹45000 per beneficiary.
- Technical experts like mechanical or agricultural engineer's/extension officials for creating awareness and guidance.
- Facilities for repairs and service and diesel outlets.
- Skilled manpower for operation and maintenance of the machines.

2.1.3.3 Assessment of Credit Potential for financial year 2023-24

The gross cropped area of the district is 232775 ha with cropping intensity of 121%. The number of operational land holdings of Small / Marginal Farmers are 113090 covering

82940 ha of land and of others (more than 2 ha) are 33,890 covering 125410 ha of land. These farmers are potential clients for Farm Mechanization activities and hold good scope for bank financing in the state.

(₹Lakh)

Sr. No.	Activity	Unit	Unit Cost (₹Lakh)	Assessment for 2023-24		
				Unit (Nos.)	TFO	Bank Loan
1.	Mini Tractors	No.	3.30	505	1666.50	1333.20
2.	Power Tillers	No.	2.00	475	950.00	760.00
3.	Threshers	No.	2.00	552	1104.00	883.20
4.	Rotavators	No.	1.20	442	530.40	424.32
5.	Paddy Trans planter	No.	2.70	257	693.90	555.12
	Total		-	-	4944.80	3955.84

Block-wise potential projected for this activity is indicated in Annexure I.

Ground level credit flow to this sector was ₹ 7189.36. lakh, ₹2802.62 lakh and ₹3527.86 lakh for the financial years 2018-19, 2019-20 and 2020-21 respectively.

Farm mechanization can play a big role in enhancing farmers' income. Land holding pattern shows that 75.75% of small and marginal farmers are covering 36.22% of total land holdings, thus remaining 24.25% farmers are having 63.78% of land holdings. The purchase of tractor involves higher investments and hence farmers would be able to earn part of the income by way of custom hiring charges also. The cost of labour is on the rise and the availability of labour force is decreasing. The demand for this activity is likely to increase. Custom Hiring of high value equipments such as Combined Harvesters, Tractors etc., may be thought of. Scientific farming through very high farm mechanization can result in enhancing farmers income.

2.1.3.4 Critical intervention required for creating a definitive impact

- Introduction of mechanization in other areas like primary and secondary tillage operations, plant protection, harvesting of crops, digging of root crops, threshing, winnowing, chaff cutting, grain cleaning, grading and handling etc. is required. Equipment for these operations need to be popularized and credit support to be extended.
- Technical experts like mechanical or agricultural engineer's/extension officials for creating awareness and guidance
- Good network of dealers in tractors and other mechanical devices of various brands are available in the district. Similarly, after sales service i.e. repairs and replacement of spare parts is made available at each block at affordable cost.
- Migration of labour is a common phenomenon in the district. Farm labours may be provided livelihood opportunities in post harvest period.

2.1.3.5. Suggested Action Points

a. State Government:

- The farmers having operational holding of less than 5 acre of perennial irrigated land may be discouraged to own the tractors, as the same may not be economical. In order to facilitate significant increase in farm power availability to Small & Marginal land holdings, one custom hiring Centre needs to be established in each gram panchayat. Crop specific machinery needs to be prescribed.
- Entrepreneurs within SF/MF and their family members may be identified, nurtured, trained and motivated to set up such hiring centres for use in a specified catchment.
- There is a need to popularize power tillers as well as Mini tractors to facilitate various farm operations and introduction of mechanization in areas like tillage operations, plant

protection, harvesting of crops, digging of root crops, threshing, winnowing, chaff cutting, grain cleaning and grading etc.

- Technical guidance and support for new farm machinery may be provided by the extension agencies. Awareness to be created among farmers about choice of farm machinery, its operation and maintenance. (Action : KVKs, RSETIs)
- As part of the “Swatch Bharat Abhiyan”, the mechanized composting units may be thought of for disposal of huge farm waste in a productive and income generation model, beside creating the clean, hygienic and “Zero Waste” environment.
- Inculcate habit of custom hiring of costly farm equipments like combined harvesters, high-power tractors, threshers etc; in order to reduce the cost of cultivation vis-à-vis increase in the income of farmers a step towards achieving the target of doubling the farmers income by 2022.

b. Banks:

- Banks may consider financing of servicing/repairing units to be set up by unemployed youth by popularising Agri clinics / Agri business centers scheme.
- Banks may give more thrust on financing of power tillers and mini tractors which will be used more by Small/Marginal Farmers.
- Banks may finance the eligible and viable SHGs for post-harvest / processing equipments like cleaners, seed drills, cono weeders, graders, dryers etc. for income generation to SHG members.
- Financing FPOs and PACS for farm mechanization activities and creating community assets for encouraging “Pay and Use” practices by potential farmers.

2.1.4 Plantation and Horticulture

2.1.4.1. Introduction

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. 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.

Agro climatic conditions of the district are conducive for development of various horticulture crops. Horticulture crops occupy around 20% of area under cultivation in the district. The predominant horticulture crops are, fruits like mango, citrus, banana; vegetables like cluster beans, cucurbits, cow pea; spices like red chilli, garlic, turmeric and Flowers like marigold and rose.

Area and production of major horticulture crops during last three years is presented below.
(Area in Ha. and Production in MT)

Sr. No.	Crop	2018-19			2019-20			2020-21		
		Area	Production	Productivity	Area	Production	Productivity	Area	Production	Productivity
1.	Fruits	5354	65725	12.28	4797	55891	11.65	4672	53530	11.46
2.	Vegetables	9636	151276	15.70	7250	109580	15.11	12768	186034	14.57
3.	Spices	2480	26456	10.67	2410	19561	8.12	2105	17833	8.50
4.	Flowers	776	6786	8.74	773	6907	8.94	788	7607	8.98
		18246	250243	13.71	15230	191939	12.60	20333	265004	12.60

(Source: Department of Horticulture)

It may be observed that Area and Production in case of fruits and vegetables varies with decrease in productivity. Productivity under flowers remains almost same over the period. However there is substantial decrease in production and productivity of spices despite a marginal decrease in area of cultivation under spices.

2.1.4.2 Infrastructure and linkage support available, planned and gaps

- “I-khedut” a portal which enables farmers to apply online for various subsidy schemes, to provide information on list of dealers providing equipment, latest technical information, APMC market price, etc. has been launched by Government of Gujarat and the same is operational.
- **Mission for Integrated Development of Horticulture (MIDH):** The Government of India scheme implemented in the State aims adopts an end-to-end holistic approach covering pre-production, production, post-harvest management, processing and marketing to assure appropriate returns to growers / producers. In districts not covered under MIDH, MIDH components are covered under State Govt. schemes.
- Gujarat State Horticultural Mission (GSHM), a registered Society, has been formed for implementation of “National Horticultural Mission (NHM)” in the state. The mission is being implemented in 21 potential districts and covers important crops of the State viz, Mango, Sapota, Aonla, Banana, Papaya, Lime, Cumin, Fennel, Flowers etc.
- State Government has schemes on cultivation, border plantation, Inter cropping & crop rotation, Replacement of low value agricultural crops, Quality Planting material, Micro

Irrigation system, Cultivation of new crops, High Density plantation, Cultivation in compact block according to cluster approach.

- The Horticulture Department has been playing a vital role for area expansion, increasing production and productivity of horticultural crops by implementing several schemes. The Central Horticulture Experiment Station (CHES), Vejalpur is actively involved in development and dissemination of horticultural technology specially tailored for the needs of population especially the tribals.
- Two Plug Nurseries for vegetables have been set up in Sehera and Godhra blocks.
- Central Horticultural Experiment Station(CHES), Vejalpur is making available improved variety of fruit planting material for farmers in the area.
- Cold storage capacity of 1300 MT has been developed recently at Halol Block.

2.1.4.3 Assessment of Credit Potential for 2023-24

(₹Lakh)

Sr. No.	Activity	Unit Cost	PLP 2023-24		
			Units (Ha.)	TFO	Bank Loan
1	Mango (Kesar)	1.49	3224	4803.76	3843.01
2	Ber	0.58	154	89.32	71.46
3	Chikoo	1.29	777	1002.33	801.86
4	Lime	1.45	874	1267.30	1013.84
5	Cust. Apple	1.14	463	527.82	422.26
6	Pomegranate	1.44	144	207.36	165.88
7	Amla	0.90	256	230.40	184.32
8	Vegetables	0.23	4007	921.61	737.29
9	Guava	1.10	583	641.30	513.04
10	Medicinal & Aromatic Aromatic Plants	0.94	153	143.82	115.06
	Total			9835.02	7868.02

Ground level credit flow to this sector are ₹419.47 lakh, ₹73.83 lakh and ₹73.96 lakh for the financial years 2018-19, 2019-20 and 2020-21 respectively.

Horticulture crops such as fruit bearing trees can be planted on periphery of the land to increase the income of the farmers. Due to increase in per capita income and shift in consumption pattern of the population has provided a big opportunity to the small and marginal farmers for earning high income through high value horticultural crops. This will help in achieving goal of doubling of income of these farmers.

2.1.4.4 Critical interventions required for creating a definite impact

- Extension services for Technology Transfer, horticulture crops with drip irrigation
- Promotion of Organic Farming, Provision of quality raw material, planting material
- Post-harvest crop management techniques, Cold Storages/godown/processing facility

2.1.4.5 Suggested Action Points

a. State Government:

- Bringing more area under horticulture crops, encouraging dry land horticulture by popularizing drip and related irrigation system for water conservation,
- Strengthening fruits and vegetables marketing societies, preventing crop losses in glut periods, training farmers in post-harvest, packing and orchard management
- Production and supply of quality planting material & setting up of tissue culture units.
- Promotion of small growers collectives / organization and promoting of spices crops like Garlic.

- Establishment of supply chain infrastructure for Post Harvest Management, packing, grading, cold storage, ripening chambers and marketing is required. More outlets for procurement, processing, storage and sale of horticulture produce will reduce post-harvest losses.
- There is scope to promote nurseries. Government may give thrust for setting up of public and private nurseries.
- Government to popularize corporate / contract farming, Hi-tech horticulture and organic farming of medicinal and aromatic plants on cluster basis and development of standard package of practices for organic cultivation and medicinal plants.
- FPOs may be encouraged to take up input procurement and output marketing activities.

b. Banks:

- Banks may facilitate credit flow to private nurseries, tissue culture units, creation of post-harvest marketing facilities, installation of micro irrigation systems etc. Banks may encourage agri-graduates with finance for establishing agri-clinics and agro service centers.
- Banks may encourage JLGs taking up vegetables and flowers cultivation on leased lands.
- Creation of cold storage facility and processing facilities would attract more area under cultivation of floriculture, vegetables and fruits.

c. Others:

- Awareness about various Commercial horticulture schemes of NHB and NMPB may be increased.
- KVK may demonstrate new agricultural techniques and ATMA may arrange for field level exposure 3visits of new farmers to the field of successful farmers.
- Develop and suggest integrated production systems especially for marginal farmers with components like livestock, fisheries, etc.

2.1.5 Forestry and Waste Land Development

2.1.5.1. Introduction

Forests are essential for sustenance of life as well as for maintenance of ecological, biological and environmental equilibrium. Besides, its role is crucial in meeting the fuel wood, fodder, small timber and other forest produce requirements of the rural population. 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 which is envisaged through sustainable interventions. As per State of Forest Report, 2019 the total Forest and tree cover in Gujarat is 7.61% of the State's geographical area which is far below the recommendations of the National Forest Policy, 1988. According to rainfall pattern, the State is divided into eight agroecological zones wherein maximum area of the State is in Arid zone while minimum area is under heavy rainfall zone.

The total geographical area of the district is 328214 ha out of which Forest cover is 68576 ha. Forests account for 20.89 % of the geographical area. Besides, an area of 26630 hectares which includes – Other Fallows (5189 ha), current fallows (9199 ha) and other wastelands (12242 ha) can also be counted for forestry and waste land development. (Source: DSO, Godhra)

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 is 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
<p>➤ Agri- Component comprises of Foodgrains; Horticulture Crops viz. Fruits, Vegetables, Flowers, Medicinal & Aromatic Plants; Animal husbandry – Livestock Animals, SGP, Poultry, etc.</p> <p>➤ Silvi - Component comprises of Woody Perennial or Trees including Bamboos which is a grass – Primarily grown for timber, fodder & fuel wood, Non-Timber Forest Products</p> <p>➤ Pastoral - Component comprises of fodder grasses</p> <p>➤ Agro - Components only comprises of food grain component</p>			

2.1.5.2 Infrastructure and linkage support available, planned and gaps

As per the National Wasteland updation project, area under wastelands in Gujarat is 2174039 ha which is about 10 percent of the geographical area. The State Forest Department is implementing various afforestation programmes like Joint Forest Management apart from various schemes under Social Forestry. For decentralized nurseries financial support is being provided by the Forest department.

The District is having 124 Saw Mills, 01 each of Veneer & Ply Wood Mill, Katha factory & 2 Khair Sawing unit totaling to 128 units depending on forest produce. High quality seedling

production centers have been established to increase productivity and yield of wood in agro-forestry. These can provide planting stock to farmers at concessional rates. (Source: Forest Statistics 2017-18)

Forestry also includes farm forestry, social forestry, jatropha cultivation, bamboo plantations. Afforestation of waste lands by planting indigenous species will help in increasing the forest cover. As on 31 March 2018, 198 Joint Forest Management (JFM) Societies were available of which 186 JFMSs were registered under the Societies Registration Act with a total area of 38796 ha with them. The main function of these societies is to protect the forest from illegal tree felling.

The Forest department is implementing a scheme for rehabilitation of degraded farmlands which is for private farmlands, especially those with medium to low productivity. These are selected for tree plantation in block or on the bunds. The Department undertakes raising of plants, digging of pits and planting in the farm at its cost.

Gujarat State Forest Development Corporation Ltd. is appointed as the sole agent of Government to purchase, sell and transport NTFPs in Gujarat. It is engaged in collection, processing and marketing of Non Timber Forest Produce. They have an Ayurvedic and herbal manufacturing project under the brand name Dhanvantari.

Government of India has formulated national agroforestry policy in 2014 to give impetus to agroforestry in the country. GoI may promote agro-forestry and farm forestry by incentivizing these activities. Afforestation of wastelands also needs to be incentivized so that large tracts of such land can be brought under tree plantation.

2.1.5.3. Assessment of Credit Potential for 2023-24

Assessment for the year 2023-24 has been made at ₹863.64 lakh. The block-wise, item-wise, potential credit requirement has been indicated in Annexure I.

(₹Lakh)

Sr. No.	Activity / Spices	Unit	Unit cost	PLP 2023-24		
				Phy. Units	TFO	Bank Loan
1.	Farm Forestry – Eucalyptus , Sag	Ha	0.56	192	107.52	91.39
2.	Waste Land Development- Eucalyptus, Subabul	Ha	0.60	234	140.40	119.34
3.	Jatropha Cultivation 2x2	Ha	0.71	616	437.36	371.76
4.	Bamboo Cultivation	Ha	0.43	533	227.59	193.45
5.	Teak 2 x 2	Ha	1.34	77	103.18	87.70
	Total		-	-	1016.05	863.64

2.1.5.4. Critical Interventions required for creating definitive impact.

- The fact that area under forest cannot be expanded offers opportunities for planting trees in low productivity wastelands and farmlands. Development of this sector can receive a boost through flow of institutional finance. There exists a lot of scope for flow of institutional finance for activities like agroforestry, wasteland development, forest nursery, etc.
- Panchmahal forest consists of Dry Teak, Very Dry Teak, Dry deciduous scrub and Dry Mixed Deciduous tropical forest. Jambughoda Wildlife Sanctuary with an area of 13038 ha is situated in the district. Forest trees having long term potential like teak, eucalyptus and bamboo are being planted in forest areas.
- Incentive for undertaking agroforestry and farm forestry activities to motivate farmers to avail credit for such activities.

- Transfer of technology from lab to land is very slow in this sector due to which farmers remain unaware of the technology developed by research institutes.
- Farmers are unable to get remunerative prices for their produce due to the absence of organized marketing facilities and other forward linkages.
- Government of Gujarat is encouraging farmers by organizing 'Van Mahotsav' at Village and Block levels which ensures active participation of people. Under Hariyali scheme 100 trees are being planted and maintained in each village.
- State Government is implementing 'Van Bandhu Kalyan Yojana' for tribal development in the district.
- Providing training to small and marginal farmers to take up planting of forestry species through suitable forms like agroforestry, farm forestry, silvipasture, etc.
- Availability of finance for setting up nurseries to individuals/SHGs

Forest ecosystems are under impact of climate change. Afforestation on wastelands will help in mitigating adverse effects of climate change. Afforestation projects need to be implemented by government/NGOs/PRIIs through support from Green Climate Fund/Adaptation Fund/National Adaptation Fund for climate change.

Ministry of Environment, Forest and Climate change, GoI has issued model guidelines for liberalizing felling and transit regime for tree species grown on non-forest/private land. Ten commonly grown agroforestry species -1) Eucalyptus 2) Poplar 3) Casuarina 4) Subabul 5) Silver oak 6) Acacia mangium 7) Melia dubia 8) Prosopis species 9) Salix alba 10) Gmelina arborea have been requested to be exempted of felling and transit permit.

2.1.5.5. Suggested Action Points

a. State Government:

- Credit linked subsidy needs to be provided as incentive to involve farmers/ Corporates/ NGOs and other interested entities who would be encouraged to go in for cultivation of forestry species.
- Timely availability of good quality planting material is one of the constraints.
- Information about Government schemes such as Rejuvenation of Degraded Land through Forestry, Kisan Nursery Scheme, Social Forestry Schemes, etc. also needs to be disseminated among village panchayats.
- Value addition to forest based products need to be encouraged and facilitated, training and other infrastructural support could be provided. There is potential for promoting forest-based cottage industries in Gujarat.
- Explore the possibility of contract farming for raising Pulpwood Plantation in the wastelands.
- Government may consider the possibility of allotting the wasteland to the SHGs on lease basis for cultivation of forestry species for NTFPs and those having commercial value coupled with imparting suitable training.
- The need to make available easy finance for setting up nurseries to individuals/SHGs have to be addressed. Banks may finance SHGs/individuals for setting up of nurseries.
- The waste lands may be utilized to produce bio-diesel. Further, production of bricks from molasses and rice husks may be encouraged.
- In all natural resource management programmes, planting of forestry species needs to be incorporated as a component.

b. Banks

- Banks may finance for commercially viable tree species viz., Neem, Casuarina, Teak, Jatropa, Pongamia, Forest Nursery, Eucalyptus, Subabul, etc.
- Banks may finance SHGs/individuals for setting up of nurseries.
- The bankers may also seek help from the NGOs to prepare bankable projects in the backward areas for cultivation of varieties of Bamboo which could be used as a raw material for Paper industry and Bamboo craftsmen in the tribal belts.

2.1.5.6. Other related matters

- Farm forestry, agro forestry and other trees plantation and forestry on wasteland, periphery of the land can be used to enhance farmers' income. Forest based village and cottage industries also offer scope for increasing farmers' income.
- Besides this collection of non-wood forest products, forest based village & cottage industries, commercial nurseries etc. will show positive results in this direction.
- Forestry projects for addressing climate change issues needs to be implemented through support under Green Climate Fund and National Adaptation Fund for Climate Change.
- Historically the district used to have very dense forest in the Mughal era. Now there is need to take efforts to formulate Forestry development project along with tourism so that green cover of the district is maintained and State Govt. will also have a source of income for them. A specific project under RIDF may be formulated for the same.

Consultancy support is available from NABARD Consultancy Services (NABCONS) for preparation of DPRs, techno-economic appraisal of projects, monitoring and evaluation, capacity building, Third Party Monitoring, Impact Evaluation Studies, Climate Change, Banking & Financial Services, etc.

2.1.6. Animal Husbandry - Dairy

2.1.6.1. Introduction

Dairy farming is one of the major subsidiary activities in the district providing employment opportunities to the rural poor. The total milk production in the District in 2019-20 was 15.292 Million Tonne. The per capita availability of milk per day in the district is 1430 gm as against the State average of 617 gms per day and recommended intake of 250 -300 gms per day. The Panchmahal dairy union has installed Milk processing capacity of around 11.00 lakh liters/day, however during peak period highest milk processed per day was 13.98 lakh liters. Dairy is required to bring milk from neighboring districts for processing purpose. Thus, there is a good scope for increasing the milk production in the district. (Source : 37th AH survey, Gujarat 2019-20)

The District is having good and high-yielding breeds of cattle and buffaloes. Gir and Kankrej breeds of cows and Jafarabadi breed of buffaloes are well known for their high milk yielding capacity. The climate is conducive for adaptability of cross breed and up-graded bovines. As per the breeding policy of the State, indigenous breeds with good genetic potential for milk production (like Gir, Kankrej, Jaffrabadi, Surti, Mehsana and Banni) will be maintained pure and breeding programme will be based on principles of selective breeding for improved milk production. Crossbreeding with Jersey or Holstein Friesian will be used throughout the State for cross breeding of non-descript animals. In view of different geographical factors and local preferences, pure breeding or upgradation with local established breed will be preferred. As per the latest livestock census data, the district is having 2.96 lakh indigenous cows which includes 1.08 lakh inmilk and 1.87 lakh milch (Source : 37th AH survey, Gujarat 2019-20)

The Panchamrut dairy had highest milk procurement of 13.98 lakh liters/day out of which 8.18 lakh liters was procured from Panchmahal region during 2018-19.(Source: Panchmahal Dairy Union) The district ranked 5th in Gujarat in total milk production category. (Source : 37th AH survey, Gujarat 2019-20)

Dairy animals -Population/Productivity/ Share in total Production - District & State

Sr. No.	Description	Place	Cows (CB)	Cows (Indigenous)	Buffaloes	Goats
1	No. of productive Animals ('oo')	Panchmahal	1782	2956	7127	5016
		Gujarat	30199	51799	99672	50890
2	Productivity (milk yield per day per animal) (kg)	Panchmahal	8.14	3.96	4.05	0.41
		Gujarat	9.37	4.46	5.23	0.49
3	Share (%) in total milk production	Panchmahal	4.49	4.88	5.23	7.92
		Gujarat	27.58	21.16	49.09	2.17

2.1.6.2 Infrastructure and Linkage support available, planned and gaps

Available infrastructure:

Veterinary Poly Clinic/ Dispensary Units (Hospitals)	1 / 22	A.I. Centres	688
Disease Diagnostic Veterinary Centers	06	Animal Market/ Semen Bank*	01/01
Mobile Veterinary Dispensary units	11	Dairy Coop Societies	1066
Milk Collection Centers	1066	Mobile Disease Diagnostic Lab	01

* Under construction (Source : DSO, Godhra and Panchmahal Dairy Union, 2020)

- Area under fodder cultivation during 2018-19 was 22500 ha and the fodder production was about 3681.61 MT.
- There is one animal market at Shehera.
- There are 1066 dairy cooperatives in the district covering 593 villages with a membership of 136800. Average daily procurement by these cooperatives was 9.18 lakh liters per day during 2018-19 and the capacity utilisation is 91%. The products manufactured are Flavored Milk, Ghee, Shrikhand, Butter Milk and Milk Powder. There are 02 milk chilling centers at Chopra and Narukot with a capacity of 1.50 lakh liters and 40000 liters per day respectively. There are 110 bulk milk coolers at various places with a capacity of 1000 to 1500 liters respectively The average capacity utilization of these bulk milk coolers during 2018-19 was around 80%.
- During 2018-19, the Union has supplied 67482 MT of cattle feed and Vaccines and medicines are also provided by the Milk Union. For preventing Foot and Mouth disease and Deworming, 10.35 lakh and 7.57 lakh animals had been vaccinated / treated respectively. A total number of 2395 Fertility Improvement camps were conducted by Team of 10 Doctors of Panchmahal Dairy Union covering 1,49,00 animals approx.. New Calf rearing center was commissioned at Shehera with a capacity to accommodate 200 animals approx.
- Milk Union had arranged artificial inseminations through its 688 AI centers for cows/buffaloes. Out of the 6.04 lakh artificial inseminations, pregnancy diagnosis of 4.04 lakh animals was done in Panchmahal region. Out of these inseminated ones, 2.01 lakh animals were found conceived.
- Vaccination for major diseases is easily available.

Panchmahal Dairy Union is conducting Animal Breed Improvement Programme; Progeny Testing Programme; Milk Productivity Enhancement Programme; Fertility Improvement Programme, Animal Treatment and Disease Prevention Services, Animal Nutrition, Awareness Programme for Members. Calf rearing center is situated at Gaman Bariana Muvada village of Sehera. Godhra plant has started production of Sweet items like Kaju Katri, Pedha etc.

Schemes of State Govt./Central Govt.

- Government of Gujarat is providing subsidy on interest for establishment of 1 to 4 milch animal farm by small farmers, landless and poor families.

- Department of Animal Husbandry, GoG scheme for Self-employment - 12 milch animals farm along with shed
- Scheme for maintaining of pregnant milch animal
- Grant for construction of Dudh Ghar at women oriented dairy cooperative societies.
- Fodder Minikits under Integrated Fodder Development Scheme / Fodder Minikits for SC sub plan / Tribal Area Sub Plan (TASP)
- Cattle shed subsidy scheme
- Assistance for power driven chaff cutter under TASP
- New Gujarat Pattern Scheme – Grant for economic development of tribal milk producers and milk co-op societies

Infrastructure planned

- i. Godhra Plant to introduce new products of “Paneer”, “Lassi” and “Flavored Milk – Amul Tru” and Tetra packing facility for milk.
- ii. A chilling center will be established in Sehehra taluka under clean-milk production approach
- iii. Talaja plant to start production of Ice cream
- iv. Panchamrut Parlours will be started at the taluka centers within the milk shed area;
- v. Milk adulteration detection machines will be set up at all chilling centers of the milk union for examining all types of adulteration in milk.

2.1.6.3 (A) Assessment of Potential for financial year 2023-24

(₹Lakh)

Sr.No.	Activity	Unit Size	Unit Cost	Units	PLP 2023-24	
					TFO	Bank Loan
1.	Cows (Gir)	2 Nos.	1.20	4971	5965.20	4772.16
2.	CB Cows	2 Nos.	1.20	4811	5773.20	4618.56
3.	Buffaloes Jafarabadi	2 Nos.	1.40	4901	6861.40	5489.12
4.	Cattle shed (20 animal)	Nos.	1.38	1332	1838.16	1470.53
	Total		-	-	20437.96	16350.37

Block-wise and activity-wise potential projected for this activity is indicated in Annexure –I.

Ground level credit flow to this sector are ₹ 6609.37 lakh, ₹2367.45 lakh and ₹3527.86 lakh for the financial years 2018-19, 2019-20 and 2020-21 respectively.

2.1.6.3 (B) Assessment of potential for Working Capital (WC) -KCC – Dairy for 2023-24

In the Budget 2018-19 the Union Government had announced their decision to extend the facilities of Kisan Credit Card (KCC) to Animal Husbandry farmers and Fisheries (AH & F) farmers to help them meet their working capital (WC) requirements. In pursuance of the same RBI and NABARD advised that Scale of Finance for Animal Husbandry (Dairy, Poultry, Sheep-Goat-Piggery) and Fisheries will be fixed at District level by District Level Technical Committee(DLTC).

The Scale of Finance(SOF) for Animal Husbandry (Dairy, Poultry, Sheep-Goat-Piggery) and Fisheries for the District was fixed in DLTC meeting held on 11.11.2021 (Activity-wise SOF given in Annexure V) Keeping the above in view, Potential for Bank Loan towards WC for Dairy Sector for 2023-24 has been worked out in consultation with the major Banks and Animal Husbandry department of the District as given below:

S No.	Type of Animal	Total No. of Animals	No. of items reckoned for 01 Unit**	Unit Cost (₹Lakh) **	No. of Units of items available (3)/(4)	% age of Col.(6) for which potential for Bank Credit is envisaged	No. of Units of Animals for which potential for Bank Credit is envisaged (6)x(7)/100	Amount of Bank Loan (₹Lakh) (5)x(8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Cow	326100	1	0.132	326100	10	32610	4304.52
2	Buffalow	443300	1	0.132	443300	10	44330	5851.56
								10156.08
<i>@ Source: 37th Annual Survey AH Gujarat 2018-19</i>								
<i>**As per Scale of Finance fixed in DLTC of District</i>								

(Note : % age of col 5 for which bank credit is envisaged at col 7 has been taken at 10% in this tribal dominated district)

Block-wise and activity-wise potentials are indicated in Annexure I.

2.1.6.4 Critical intervention required for creating a definitive impact

- The Panchmahal Dairy Union is conducting the 'Fertility Improvement Programme' and 'Calf Rearing Programme' aimed at nurturing the young ones, improvement of animal health and reduce infertility. This programme may be scaled up for creating greater awareness of producing quality animals.
- Arrangements for availability of quality animals needs to be done at each taluka level.
- Farmers may be encouraged for taking high yielding and nutritional fodder cultivation for increasing milk yield
- Area Based Scheme for purchase of Milch animals by dairy farmers for entire district has been formulated and more farmers are likely to opt for dairy farming.
- Assistance may be provided for setting up of vermi-composting units among Dairy farmers.

2.1.6.5. Action Points

a. State Government:

- Government may set up Animal Breeding center in the district and AH training centers at the block level.
- The Government may increase the strength of veterinary doctors and staff so that proper veterinary services can be provided to beneficiaries in interior parts of district. DAH may bridge the gap in the veterinary institutional infrastructure by setting up additional veterinary dispensaries manned by veterinary graduates.
- Availability of good quality animals at fair prices has become difficult in the absence of cattle marketing infrastructure. Establishment of specialized cattle markets by APMCs may be considered.
- There is a need to promote alternate source of feed and fodder to meet out the shortage of fodder. Assistance for Azolla cultivation among dairy farmers, setting up of Cattle feed units, setting up of Fodder Banks is required.
- Establishing Milk Collection Centers, chilling plants /bulk milk cooling units in all talukas through Milk union for enhancing the milk collection and ensuring supply of quality of milk to dairy processing plant.
- The department may develop fodder demonstration plots under irrigated condition in all the veterinary centers and give thrust to cultivation of green fodder, subabul, etc.

- To take care of the health needs of the animals, 01 full-fledged veterinary center per taluka needs to be set up.

b. Banks:

- Banks need to step up financing for the activity as the credit flow to the sector is not commensurate with the rapid pace of demand and potentials available in the district.
- Proper identification of the beneficiary by the banks before sanctioning the loan and purchase of milch animals is essential for successful development of dairy sector.
- The banks may encourage setting up of mini-dairy units of 5 animals and above by individuals and SHGs with cost of shed, equipments and fodder cultivation as an integral part of the scheme.

2.1.7 Animal husbandry - Poultry Development

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. The commercial layer population was 151400 during 2018-19. As per the 36th Survey Report on Major Livestock products 2018-19, Directorate of animal husbandry, the total Population of desi/ local birds is 409200 numbers. Egg production during the year 2019-20 was about 338.21 lakhs including production from desi birds. The per capita availability of district is 25 eggs per annum. Per capita availability of eggs in the State for the year 2018-19 was 28 and country as a whole was 84. As the population of the State are primarily vegetarian, the actual demand is less, as against the nutritional requirement of 183 eggs per annum. The per capita availability of meat is 0.553 Kg per annum. Problems in availability of labour and its high cost led to closure of many farms. (Source 37th AH Survey – Gujarat)

2.1.7.2 Infrastructure and linkage support available, planned and gaps

- Department of AH - Poultry is located at Dahod and the requirement of chicks, feed, medicines and vaccines is met mostly from hatcheries in Anand & Kheda districts.
- Insurance companies are reluctant to insure the poultry projects.
- The reluctance on the part of banks and the entrepreneurs are also a limiting factor in promotion of poultry farming.
- Required extension support, Research Institutions support and Private extension support for production and productivity enhancement.
- Majority of population of the District is preferring vegetarian diet. However, good percentage of non-vegetarian community / population residing in main city, therefore, demand for poultry products may rise in coming years. Further, due to increased demand for protein rich diet there is a good scope for poultry activity.

2.1.7.3 Assessment of potential for 2023-24 (Physical and financial terms)

The Scale of Finance(SOF) for Animal Husbandry (Dairy, Poultry, Sheep-Goat-Piggery) and Fisheries for Panchmahal District was fixed in DLTC meeting held on 11.11.2021 (Activity-wise SOF given in Annexure V) Keeping the above in view, Potential for Poultry activity and Bank Loan towards WC for Poultry sector for the year 2023-24 has been worked out in consultation with the Banks and Animal Husbandry department of the District as given below:

Sr.No	Activity	Unit (No)	Unit cost	PLP 2023-24		
				Physical Units	TFO	Bank Loan
A.	Term Loan					

(₹ lakh)

Sr.No	Activity	Unit (No)	Unit cost	PLP 2023-24		
				Physical Units	TFO	Bank Loan
1.	Broiler (100 birds/unit)	Nos.	0.36	428	154.12	123.30
2.	Layers (300 birds/unit)	Nos.	1.36	115	156.40	125.12
	Term Loan					248.42
B.	Working capital					
1.	Broiler (100 birds)	Nos.	0.066	428	28.25	28.25
	Poultry Total (A+B)				338.77	276.67

Ground level credit flow to this sector are ₹ 34.00. lakh and ₹309.36 lakh for the financial years 2019-20 and 2020-21 respectively.

Block-wise and activity-wise potentials are indicated in Annexure I.

2.1.7.4 Critical intervention required for creating a definitive impact

- Department of AH may provide adequate Extension services to Panchmahal District.
- Promotion of hatcheries/veterinary medicines outlets from reputed agencies may improve the overall performance of the sector.
- Insurance companies may be guided and motivated to cover the poultry projects.
- Required extension support, Research Institutions support and Private extension support for production and productivity enhancement.
- Activity like Backyard poultry along with farming can help farmers in increasing their income. Further, due to increased demand for protein rich diet there is a good scope for poultry activity.

2.1.7.5 Suggested action points

State Government:

- There is a need to establish independent AH-Poultry Department offices in the district
- Extension support / research institutions and private extension support is required
- The focus of the GoI is on promotion of improved desi poultry while ensuring the biosecure environment. Such an approach also provides opportunity for small farmers, especially weaker sections to derive benefit out of poultry production and promotes inclusive growth. Department of Animal Husbandry may promote establishment of backyard poultry farms with low input technology birds in the light of incentives available under GoI scheme.
- The Department of Animal Husbandry may provide training to the beneficiaries on poultry activity to enable them to avail of financial assistance from banks especially under government sponsored schemes.
- AH department may conduct training programmes for entrepreneurs on commercial poultry farming and backyard Poultry.
- AH Department should make arrangement for door-step expert advice.

Banks

- Banks may finance for small units of poultry sheds and poultry equipments to farmers who would be taking up the activity.
- Scope for contract farming i.e. tripartite agreement with processors / banks and farmers needs to be explored.

Insurance companies and others:

- Insurance companies may devise suitable insurance product, so that poultry projects are suitably insured.
- Steps may be taken to bring about awareness of bio-security and ensure minimum distance of 600 m between 2 units that would prevent spreading of epidemics like avian flu.etc.

2.1.8. Animal Husbandry - Sheep Goat and Piggery Development

2.1.8.1 Introduction

The sheep and goat population in the district is 1000 and 3.32 lakh respectively (Source: AH census 2012). The estimated average meat production per year from sheep and goat is about 229 MT. This region with 26290 Tonnes (7.92 %) of goat milk production ranked 4th in overall goat milk production in Gujarat. The estimated production of wool in the district was 2 MT and Panchmahal region contributes around 0.09% of wool produced in Gujarat.. (Source : 37th AH Survey – Gujarat)

This district being tribal has good scope for Goat and Sheep rearing which is predominantly practised in hilly and remote tribal areas. Goat rearing activity with Surti breed is practised in tribal dominated rural areas. There is ample scope for improving the entrepreneurship skills and scientific knowledge. This activity on very moderate scale is undertaken by farmers in Ghoghumba and Jambughoda blocks. Goat rearing activity was recently taken up by few farmers through JLG mode which has helped them to increase their earnings. Of the total Geographical area of 315946 Ha, permanent pasture or grazing land available is 7885 Ha constituting 2.50% of the geographical area giving good scope for Goat and Sheep rearing schemes. These lands provide grazing fields for the sheep. Animals are available in local shanties. Animal Husbandry Department extends veterinary facilities.

2.1.8.2 Assessment of potential for financial year 2023-24

Sr.No	Activity	Unit	Unit cost	(₹Lakh)		
				PLP 2023-24		
				Physical Units	Total Financial Outlay	Bank Loan
A.	Term Loan					
1	Goat Rearing (10+1)	No.	0.45	2027	912.15	729.72
2	Sheep Rearing (20+1)	No.	0.75	169	126.75	101.40
	Subtotal				1038.90	831.12
B.	Working capital					
1.	Goat Rearing (10)	33200	0.066	16600		1095.60
2.	Sheep Rearing (10)	100	0.066	50		3.30
	Subtotal					1098.90
Sheep , Goat & Piggery Total (A+B)						1930.02

Block-wise and activity-wise potentials are indicated in Annexure I.

2.1.8.3 Infrastructure and linkage support Available, Planned and gaps

1. This activity has very good potential in tribal dominated blocks. Financial assistance/ loans may be provided to the farmers through JLG mode. This may help in achieving doubling of Farmers income by 2022 through this additional activity.
2. Veterinary infrastructure available in the district is discussed in dairy chapter

2.1.8.4 Critical intervention required for creating a definitive impact

- Availability of good quality animals at fair prices has become difficult in the absence of marketing infrastructure. Establishment of sheep & goat markets by APMCs may be considered by availing subsidy under AMI scheme.

2.1.8.5. Action Points: State Government & Banks

- A modern abattoir can be established either under private sector or as a joint venture with participation from Government of Gujarat.
- Taking into growing demand financing to this activity may be done through JLG mode. Experiment in this regard done in Ghoghumba block has shown very good results.
- Scope for contract farming : tripartite agreement with processors/ banks and farmer may be tried.

2.1.9 Fisheries

2.1.9.1 Introduction

Holistic development of fisheries through involvement of fisher community and fish farmers keeping in view the sustainability, bio-security and environmental concern are planned priorities in enhancement of fisheries production from the district. The Inland Fisheries resources of the district are divided into capture and culture fisheries. Capture fisheries refers to exploitation of naturally available resource without much stock manipulation viz rivers, reservoirs and large lakes. Culture fisheries involves inland aquaculture of fish and prawn in small and confined water bodies viz. existing ponds, tanks as also newly confined excavated ponds in water retaining soils. Inland fisheries too are now recognized as a powerful income and employment generating activity as it stimulates growth of numerous subsidiary industries and is a source of protein rich nutritious food, besides being a foreign exchange earner.

Panchmahal being a land locked district, there exist scope for fresh water fisheries. The flow of water in the river bed is not sufficient for culture fisheries. Therefore, the capture fisheries are possible in the reservoir of Panam and Deo Dams. These reservoirs are given on lease basis for fishing activity. For the development of reservoir fisheries, particularly for tribal area, the reservoirs have been reserved for the Tribal Federation, Tribal Fisheries Cooperatives Societies and Tribal beneficiaries which are allotted on fees fixed by the Fisheries Deptt.

2.1.9.2 Infrastructure and linkage support available, planned and gaps

- There are 7061 fishermen in the district. There are 45 village ponds having approx. 349 ha of area. There are 03 reservoirs and 11 irrigation tanks having total 15000 ha of area which is also used for fisheries development. There were 14 Tribal Fisheries Cooperative Societies as on 31 March 2017 with 3235 members. The undivided Panchmahal district has 815 non mechanized boats. There were 07 ice factories with capacity of 75 TPD and 3 cold storages with capacity of 09 tones. Total fish production as per available data is 2635 MT. (Source: DSA 2016 – DSO, Godhra & Fisheries Department, Dahod)
- Fisheries Department, Godhra has one fish seed rearing farm at Godhra. Seasonal spawn rearing is done in ponds/ constructed ponds at Rayanwadia, Panam, Vinzol, Vanscot, Dhanitra, Karavai, Dedavada etc. Doubling of farmers' income cannot be achieved by agriculture crop production alone. Suitable encouragement and boost for the development of fisheries sector will help in increasing income of the fish farmer community. Gujarat Fisheries Central Co-op. Association Ltd. is trying to improve the socio-economic conditions of the fishermen community in the State. GFCCA is the main carrier of all governmental and institutional assistance to the fishermen in the State. It is also the major implementing agency of the developmental project mooted by the Government in the fishery field.
- Govt. of Gujarat supports most of the activities associated with fisheries e.g. development and exploitation of fresh water fisheries, help in marketing of fresh water fish, fishing boats, construction and supply of tin boats, different sizes of aquarium and colour fish, etc., production and distribution of fish seeds-spawn, fry and fingerling of Indian Major Carps. It also implements Group Accidental Insurance Scheme for the fishermen farmers.
- Desilting of ponds lake, deepening of tanks and reservoirs to improve fish production
- Establishment of fish/prawn disease diagnostic labs
- Training programmes to fish farmers with exposure visits / demonstrations

Infrastructure plan for 2023- 24

1. Desilting of ponds lake, deepening of tanks and reservoirs to improve fish production
2. Establishment of fish/prawn disease diagnostic labs

3. Training programmes with exposure visits / demonstrations to motivate fish farmers.

Infrastructure Gaps

- Regular desilting of tanks required for taking up inland fisheries activities.
- Weak embankment of the lakes/tanks, non-provision of shutters in the canals
- Non-availability of suitable land for development of fish ponds and hatcheries in the district. Fish processing facilities, marketing outlets etc. are not available in the district

2.1.9.3 (A) Assessment of potential for 2023- 24

The potential for bank loan under Inland Fisheries for the year 2023- 24 is assessed at ₹155.98 lakh as given in the following table:

(₹lakh)						
Sr. No.	Activity	Unit (Nos./Ha)	Unit cost	Phy Units	TFO	Bank Loan
1.	Fish Ponds(Renovation)	Ha	3.50	10	35.00	29.75
2.	Reservoir unit-small boat / net	Nos.	1.65	90	148.50	126.23
	Total		-	-	183.500 00	155.98

The activity-wise and block-wise potential projected for this activity is indicated in Annexure I.

2.1.9.3. (B) Assessment of potential for Working Capital (WC) -KCC – Fishery, for 2023-24

The Scale of Finance(SOF) for Animal Husbandry (Dairy, Poultry, Sheep-Goat-Piggery) and Fisheries for this District was fixed in DLTC meeting held on 11.11.2021 (Activity-wise SOF given in Annexure V) Keeping the above in view, Potential for Bank Loan towards WC for Fishery in the District for the year 2023-24 has been worked out in consultation with the major Banks and Fisheries department of the District as given below:

S No.	Item	Total No. of Items @	No. of items reckon ed for 01 Unit**	Unit Cost (₹Lakh) **	No. of Units of items available (3)/(4)	% age of Col.(5) for which potential for Bank Credit is envisaged	No. of Units for which potential for Bank Credit is envisaged (6)x(7)/100	Amount of Bank Loan (₹Lakh) (5)x(8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Fishes Pond	46	1	1.32	46	30	14	18.48
2	Small boat/net	440	1	0.28	440	30	132	36.30
								54.78
@As per data of Fisheries department of the district, 2018-19								
**As per Scale of Finance fixed in DLTC of District								

Block-wise, credit potentials are indicated in Annexure I

2.1.9.3 Critical intervention required for facilitating definite impacts

- Village ponds are very good resource to undertake effective fish culture which can generate employment at village level. Existing Fishermen Societies may be strengthened and formation of new societies may be encouraged.
- Marketing and service unit facilities should be created. One Fish market at district headquarters Godhra need to be set up.
- There is a need for deepening of tanks and reservoirs to improve fish production.
- The activities like fresh water prawn farming, ice box supply for fish preservation, fish drying may be encouraged.
- Tanks in the district need desilting at regular intervals for taking up inland fisheries activities.
- Non-strengthening of embankment of the lakes/tanks, non-provision of shutters in the canals are the bottlenecks.
- Non-availability of suitable land for development of fish ponds and hatcheries in the district. Fish processing facilities, marketing outlets etc. are not available in the district

2.1.9.4 Suggested action points

A) Area Based Schemes

Department of Fisheries, Panchmahal may prepare Area Based Schemes for identified region of the district having availability of backward and forward linkages in association with NABARD and other Stakeholders with monitoring mechanism for upgrading the schemes including midterm course correction, if warranted.

Skill development training

Specific training programme for up gradation of skills of SF/MF/SHGs/JLGs on culture cum capture fishery in small and medium reservoirs and lakes need to be planned by the District Fisheries Department, GOG by availing the financial assistance under NFDB schemes, which have been merged under an Umbrella of Blue Revolution.

B) Pradhan Mantri Matsya Sampada Yojana (PMMSY)

The PMMSY has been approved at a total estimated investment of ₹20,050 crore to be implemented over a period of 5 years from FY 2020-21 to FY 2024-25 The Central share of ₹9407 crore, State share of ₹4880 crore and beneficiaries contribution of ₹5763 crore for the all States/UTs in India. The scheme intends to address critical gaps in fish production and productivity, quality, technology, post-harvest infrastructure and management, modernization and strengthening of value chain, traceability, establishing a robust fisheries management framework and fishers' welfare. The Centrally Sponsored Scheme (CSS) Component is further segregated into Non-beneficiary oriented and beneficiary orientated sub-components/activities under the following three broad heads:

(i) Enhancement of Production and Productivity

- (ii) For the implementation of the scheme Cluster or area-based approach will be used to get optimal outcomes with requisite forward and backward linkages and end to end solutions.
- (iii) To enhance production and productivity, quality, productive utilization of wastelands and waters for Aquaculture various technologies like Re-Circulatory Aquaculture Systems, Cage Cultivation etc. will be used.
- (iv) To increase the bargaining power of fishers and fish farmers Collectivization would be done through Fish Farmer Producer Organizations

(ii) Infrastructure and Post-harvest Management

- (i) Aqua parks may be developed for hub of multifarious fisheries activities / facilities
- (ii) During ban/lean period Annual Livelihood support would be provided to fishers etc.

(iii) Fisheries Management and Regulatory Framework

- (i) Social, physical and financial security for fishers and fish ranchers
- (ii) Active fisheries management and administrative structure

C) Fisheries and Aquaculture Infrastructure Development Fund (FIDF)

The Deptt. of Fisheries, Ministry of Agriculture and Farmers Welfare (MOAFW), GOI created FIDF and its implementation from the financial year 2018-19 to 2022-23, however considering the infrastructure created for the fisheries as also facilitating quality enhancement of the associated fish and fisheries economic activities & employment opportunities under fisheries, it is likely that the FIDF may be extended beyond 2022-23 at appropriate time. Presently the FIDF has a total fund size of ₹7522.48 crore comprising of ₹5266.40 crore to be raised by the Nodal Loaning Entities (NLEs) beneficiaries' contribution of ₹1316 crore and budgetary support of ₹939.48 crore. National Bank for Agriculture and Rural Development (NABARD), National Cooperatives Development Corporation (NCDC) and all scheduled banks are the designated NLEs in disbursal of the fund. The terms of credit under FIDF include a maximum repayment of 12 years inclusive of moratorium of 2 years.

Under FIDF, MOAFW, GOI has urged the coastal States to pay attention to Deep Sea fishing, post harvesting, cage culture and export promotion. FIDF provide concessional finance to the eligible entities, cooperatives, entrepreneurs, fishermen and individuals for development of identified infrastructure by States. The Department of Fisheries, MOAFW, GOI under the FIDF provides interest subvention up to 3% per annum for providing the concessional finance by the NLEs at the interest rate not lower than 5% per annum.

NABARD is one of the Nodal Loaning Entities (NLEs) and have sanctioned ₹1260.28 crores involving 35 projects and disbursed ₹365.70 crores up to 2021-22. Further, 4 proposals worth ₹600 crores received from various Eligible Entities (EEs) as on 20 June 2022 are in various stages of sanction.

Present status of FIDF involving NABARD in Gujarat State and potential in district

The Commissionerate of Fisheries, Government of Gujarat has been sanctioned 3 projects viz. Fishing Harbour of Navbandar, Sutrapada and Veraval phase II with term loan of ₹450 crores under FIDF. Further, 1 proposal on development of Fishing Harbour at Madhawad, Gir-Somnath district involving term loan of ₹150 crore is under process in NABARD.

The State Govt. may avail funds under FIDF for development of cold storage, fish markets and hatcheries, aquaculture, infrastructure for inland fisheries for Panchmahal district.

The plans and programmes under PMMSY, FIDF, NFDB, National Fisheries Research Institutions, GFCCA, other cooperative institutions etc. jointly will greatly facilitate banking sector in accelerating credit flow, doubling the fishermen income and also capital formation in fishery sector of the district.

2.1.9.5 Other related matters

1. The Department of Fisheries may consider organizing fishermen and fisher women into Self Help Groups.
2. Specific training programme for upgradation of skills of SF/MF, SHGs/ JLGs on Culture cum Capture fishery and Ornamental fish rearing etc., specific to district be planned

2.1.10 Farm Credit – Others – Bullocks, Carts, Two Wheelers etc.

2.1.10.1 Introduction

Animals are considered to be backbone of rural economy in India. Draught animals (or Working animals) play a dominant role in our rural economy. Apart from the manual labour the traditional cultivation in India is based on use of animal power. This localized resource is exhaustible and available with farmers and which is yet to be optimized properly. Bullocks, buffaloes and camels are the major draught animals for field operations.

The work animals and carts provide vast employment opportunities to the unemployed rural youth. Draught animals provide more power than all our powerhouses do. Replacing them would entail a huge investment in electricity alone, over and above the loss of farm economy of manure and cheap fuel especially in a scenario where there are large number of small and marginal farmers. Further, the work animals/animal driven carts are employed both in agricultural operations as well as in transportation of goods and human beings. Animal power can also be used for water-lifting, milling, logging, etc. Providing two wheelers to farmers for commuting between home, farm and market is now considered as a farm activity. Banks have launched their own schemes for the purpose.

2.1.10.2 Infrastructure and linkage support available, planned and gaps

The district is having more tribal population. Majority of the population is very poor. They do not even have animals for ploughing their land. Therefore, Government Department may bring about a suitable subsidy scheme to provide draught animals at reasonable cost.

2.1.10.3 Assessment of Potential for the Financial year 2023-24

Assessment for the year 2023-24 has been made at ₹ 2388.00 lakh.

(₹Lakh)						
Sr. No.	Activity	Unit	Unit cost	Units (No.)	TFO	Bank Loan
1.	Bullocks (Pair-Kankrej)	Nos.	0.60	619	371.40	297.12
2.	Bullock Carts (tyre)	Nos.	0.80	459	367.20	293.76
3.	Two wheelers	Nos.	0.70	2967	2076.90	1661.52
4.	Misc. Agricultural advances	Nos.	0.50	339	169.50	135.60
	Total		-	-	2985.00	2388.00

2.1.10.4 Critical interventions required for creating a definitive impact

The number of land holdings of SF/MF are 108090 covering 76820 ha of land and of others (more than 2 ha) are 35232 covering 135241 ha of land (*Source DSO Panchmahal*). These SF/MF are potential clients for Bullocks/Carts activities and hold good scope for bank financing. As such, these SF/MF depend on bullocks for farming and also for transportation purposes.

2.1.10.5 Suggested Action Points

State Government

- The credit gap could be filled by increasing financing under Schemes of Animal Husbandry Department and Tribal Sub Plan.
- Farmers need to be encouraged to use the bullock carts of pneumatic tyre carts.
- Veterinary hospitals, doctors should also be available at every taluka.

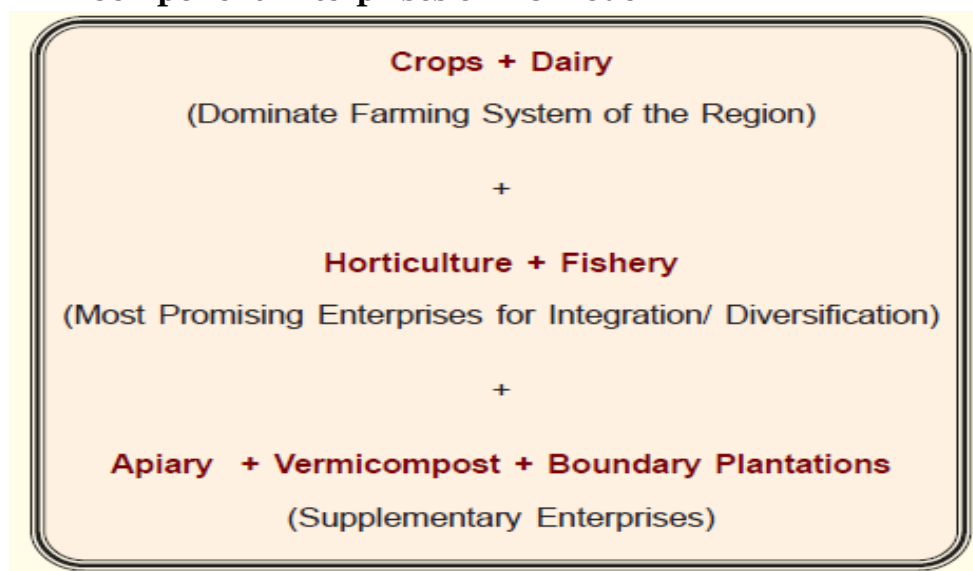
2.1.11 Integrated Farming System

2.1.11.1 Introduction

Indian agriculture is bestowed with combination of crop + livestock in the farming system. The integrated farming systems are not new to India as natural integration of components in the form of mixed systems namely, crop+dairy, crop+dairy+fishery, crop+goatary+poultry, crop+fishery etc. are present and dominant in many parts of India. However, due to natural integration, complementarity among components or enterprises could not be maximized leading to low productivity and profit from these systems. Migration of family members especially from marginal and small farmers for want of employment during the lean season happens frequently in many parts of country due to the inherent nature of low profitability from the naturally integrated systems. Further, due to lack of proper complementarity in the existing systems, farmers depend far more on market inputs for crop and livestock production, which again contributes for higher production cost. In order to overcome the above lacunae in the present system, Integrated Farming systems with location specific need based integration of components/enterprises are essential to meet the basic objectives of IFS. Integration of components such as crops, horticulture, dairy, poultry, goatary, aquaculture, apiary etc. can be done for improving the production, profitability, employment and nutrition in a sustainable way.

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.

2.1.11.2 Component Enterprises of IFS Model



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.

The advantages of IFS are indicated below:

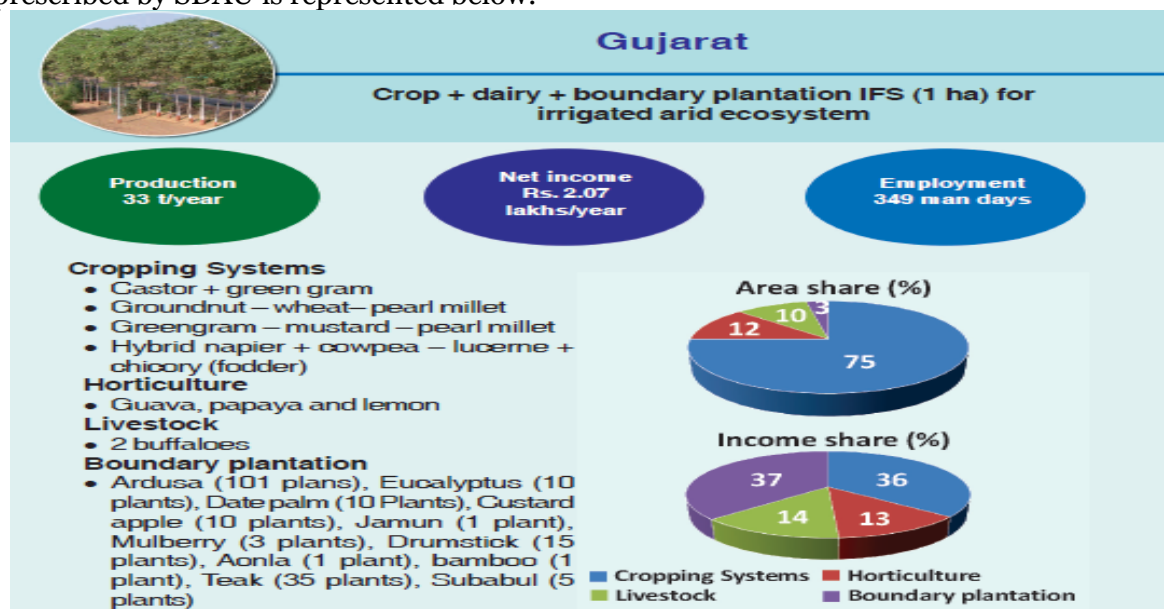
- IFS by virtue of intensification of crop and allied enterprises provides opportunity to increase economic yield per unit area per unit time.
- Each and every inch of land area is effectively utilized. Growing of perennial fodder legume trees in the border and watercourses is a recommended practice in IFS. This helps in supplementing legume fodder as well as enriches soil nutrients by fixing the atmosphere nitrogen.
- Soil fertility and productivity enhancement through organic waste recycling and increased sustainable farm income.
- IFS supplements in meeting the energy and timber needs of rural households and also timber needs of construction sector in a cost effective manner.
- In IFS, farmers are bound to get regular income. When farmer feel that his/her standard of living is on par with others, it will act as a booster to continue agricultural profession without any reluctance among most of the farmers.

2.1.11.3 Policy support

The developmental programmes of Government of India, State Govt. National Horticulture Board etc. such as Agri-implement subsidies, Agriculture support schemes for Farm Mechanization, Horticultural aid schemes for setting up of nutritional gardens, Animal Husbandry Aid Scheme, Fisheries Aid Scheme which directly or indirectly support Integrated Farming Systems.

2.1.11.4 State IFS 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 of 25 States/UTs of India. State specific IFS models are available from the link given here: http://www.iifsr.res.in/sites/default/files/prog_files/Bulletin_IFS_July_2020.pdf. Location specific IFS models were also evolved by SAUs. An IFS model for Gujarat prescribed by SDAU is represented below:



2.1.11.5 District IFS Models

Panchmahal district is a traditional agricultural economy which constantly depends upon traditional food grain crops. Although there is much scope for cultivation of high value crops like cotton, groundnut, oilseeds, fruits, vegetables, condiments / spices, low value cereals and other crops.

In Panchmahal, as per the discussions with KVK, Vejalpur, the most suitable model of IFS is Crop + Horticulture + Dairy + Poultry + Vermicompost + Apiculture.

Based on the discussion with line departments, the IFS model for 1 Ha. land area suggested for the district is as under:

Component	Area (ha.) / Livestock (Nos.)
Crops (Paddy, Maize, Tur, Groundnut)	0.6
Dairy (2 HF CB cows)	0.03
Horticulture (mango and vegetables)	0.3
Agro – forestry (teak and bamboo)	Border plantation
Vermi-compost	0.02
Farm pond	0.04

The credit potential is projected under respective sectoral chapters.

2.1.11.6 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.

2.2 Agriculture Infrastructure

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

2.2.1.1 Introduction

Warehousing plays a very vital role in promoting agriculture marketing, rural banking, financing and ensuring Food Security in the county. It enables the markets to ease the pressure during harvest season and to maintain uninterrupted supply of agricultural commodities during off season. Hence, it solves the problems of glut and scarcity, which are the usual problems in agricultural marketing. Though warehousing is an independent economic activity, yet is closely linked with production, consumption and trade. Warehousing promotes grading of produce, standardization and quality control. These factors make it the most important auxiliary service for development of trade and commerce. The different types of scientific storage structures are as follows:

1. Warehouses/Godowns- Covered buildings for storing produce, agri inputs such as fertilizers, pesticides etc
2. Market Yards – Mandi where assembling, grading sale and purchase of agricultural produce is performed.
3. Silos – Vertical storage structures used for storing food grains
4. Cold Storage Units/Cold Chains- Temperature controlled structures and transport equipment for storing and distributing perishable produce.

Infrastructure and Linkage Support Available, planned and gaps

1. Grameen Bhandaran Yojana (GBY) was constituted by GoI under NABARD in the year 2001 with an aim to reverse the declining trend of investment in agriculture sector by encouraging private and cooperative sector to invest in the creation of storage infrastructure for the development of the agriculture sector. Over the years, GBY has been instrumental in development of existing storage and warehousing infrastructure. There are 25 godowns in Panchmahal District constructed under GBY having capacity of 20400 MT.
2. The Warehousing Development and Regulatory Authority (WDRA) was constituted in the year 2010 under the Warehousing (Development and Regulation) Act, 2007 with an aim to promote orderly and targeted growth of the warehousing business.
3. The Agricultural Marketing Infrastructure (AMI) sub-scheme of ISAM is being implemented by the Ministry of Agriculture and Farmers' Welfare, Government of India. The AMI sub-scheme of ISAM is applicable for new credit linked projects, where term loan has been sanctioned by eligible financial institutions from 22.10.2018 onwards. NABARD is the channelizing agency for release of subsidy @ 25% to 33.33% of the capital cost for institutions eligible for refinance by NABARD or any other FI such as State Financial Corporations (SFCs) approved by DAC&FW. The Ministry of Agriculture & Farmers' Welfare, Govt. of India, have approved the continuation of AMI sub-scheme of ISAM up to 30 September 2022.
4. Agri Marketing Infrastructure Fund (AMIF), with a corpus of ₹ 2,000 crore for AgriMarket Infrastructures, has been created with NABARD for development and upgradation of agricultural marketing infrastructure in Gramin Agricultural Markets and Regulated Wholesale Markets. AMIF would provide the State/UT Governments subsidized loan for their proposal for developing marketing infrastructure in 585 Agriculture Produce Market Committees (APMCs) and 10,000 Grameen Agricultural Markets (GrAMs). States may also access AMIF for innovative integrated market infrastructure projects including Hub and Spoke mode and in Public Private Partnership mode. In these GrAMs, physical and basic infrastructure will be strengthened using MGNREGA and other Government Schemes. In this scheme, the interest subsidy will be provided by DAC&FW to NABARD in alignment with annual budget releases during 2018-19 and 2019-20 as well as up to 2024-25. The Scheme being demand driven, its progress is subject to the demands from the States and proposals received from them.

5. In case of FPOs, the credit guarantee may be availed from the facility created under FPO promotion scheme of DAC&FW. All loans under this financing facility will have interest subvention of 3% per annum up to a limit of ₹2 crore. This subvention will be available for a maximum period of 7 years. The extent and percentage of funding to private entrepreneurs out of the total financing facility would be fixed by the National Monitoring Committee. NABARD is extending Special Refinance Facility at 3% p.a. for transforming PACS as MSC; the facility would be eligible for 3% interest subvention.
6. Farmers depositing their produce in the accredited warehouses are provided with a NWR (Negotiable Warehouse Receipt) which can be used as a collateral to avail bank finance. This gives farmers the much needed marketing freedom allowing them to achieve higher remuneration for their produce. The ushering in of IT backed e-NWR (Electronic NWR) which creates a centralized digital repository of stored produce seeks to bring in transparency in warehousing transactions.
7. The integration of e-NWR on the e-NAM portal allows farmers to remotely sell their warehoused produce online at any mandi.
8. RBI has enhanced loan limit per borrower under e-NWR from ₹50 lakhs to ₹75 lakhs under priority sector lending norms. This shall lead to faster adoption of warehousing and scientific storage by farmers.
9. Despite a year ravaged by COVID-19 pandemic, agriculture and rural sector came out as the bellwether sector of the Indian economy. With high growth rates seen in sub-sectors of food processing, fisheries, the demand of warehousing infrastructure is bound to go up on the back of higher exports as well as retail consumption.
10. The pandemic has led to significant growth of businesses operating on Inventory based marketplace model which works on stockpiling of produce. This creates huge potential for warehousing to develop.
11. The setting up of Agriculture Infrastructure Fund with a total corpus of ₹1 lakh crore will channel flow of funds for creation of post-harvest management infrastructure and community farming assets through interest subvention (3% per annum) and credit guarantee (under CGTMSE for loans up to ₹2 Crores).
12. Availability of land, entrepreneurial mindset, skilled workforce in creation and maintenance of godowns is essential for ensuring success of warehousing.
13. Good transport connectivity through land, air and sea routes creates potential for enhancement of intra and international trade. The coming up of National Infrastructural Pipeline, Dedicated Freight Corridor seeks to enhance existing transport capacity.
14. Coming up of Mega Food Parks on hub and spoke model in the state seek to integrate value chains. Backward linkage necessitates development of storage and warehousing infrastructure.
15. The enhancement of MSPs by the GoI creates potential to usher in prosperity for the farmers.

Existing Capacity

Details	Taluka	Capacity (MT)	Number of Units
Warehouses/Godowns	Godhra	16927	18
	Halol	2099	4
	Shahera	594	2
	Ghoghumba	781	1
Market Yards			6
Cold Storage Units/ Cold Chains			1

2.2.1.1 Assessment of credit potential for the period 2023-24

Assessment for the year 2023-24 has been made at ₹7026.56 lakh. The block-wise, item wise potential credit requirement during the year 2023-24 has been indicated in the Annexure –I.

(₹ Lakh)

Sr. No.	Activity	Unit Cost	Physical Units (Nos.)	Total Financial Outlay	Bank Loan
1.	Cold Storage (500MT)	75.00	31	2325.00	1860.00
2.	Rural Godown (200MT)	18.76	175	3283.00	2626.40
3.	Rural Godown (160MT)	15.12	210	3175.20	2540.16
	Total			8783.20	7026.56

2.2.1.4 Critical interventions required for creating a definitive impact

1. Agencies /institutions are to be specified who would implement the actions suggested especially those are integral to achieving the potentials so mapped.
2. Accreditation of warehouses to Warehousing Development and Regulatory Authority (WDRA) for issuing Negotiable Warehouse Receipts may be ensured. NABARD Consultancy Services (NABCONS) is also facilitating the same as an accreditation agency.
3. **Creating awareness among the farmers on benefits of NWR/e-NWR :** There is need for creation of awareness among the entrepreneurs and farmers regarding the Negotiable Warehouse Receipt System and availability of pledge loan facility in the district. Godowns owned by PACS must be brought under e-NWR system.
4. **Streamlining supply chains :** Clusters may be identified and FPOs may be promoted on large scale bringing in economies of scale. e-NAM registration may be facilitated to bring in efficient price discovery.
5. Setting up of **Agricultural Economic Zones (AEZs)** on the lines of Special Economic Zones (SEZs) may be allowed by the Government

2.2.2 Land Development, Soil Conservation and Watershed Development

2.2.2.1 Introduction

Land Development activity aims at making land suitable for sustainable agriculture, preventing the soil erosion, leading to improvement in soil productivity and fertility through various measures. Unsustainable use of land, including imbalanced use of chemical fertilizers, leads to land degradation, which necessitates substantial investment in land development activities for improvement in chemical and biological properties of soil.

Panchmahal district falls under Middle Gujarat agro-climatic zone. Major soil type of district is medium black soil and Sandy loam soil is minor soil type. Mineral contents of these soils are high in Potassium, medium in Nitrogen, low in Phosphorus and Sulphur with marginal deficiency in Zinc and Magnesium, and high deficiency in Iron.

The River Mahi originating in Southern Rajasthan is passing through Panchmahal, Vadodara, Kheda and Anand districts in Gujarat and is draining into the Arabian Sea at the Gulf of Cambay. Even though Mahi basin has a high density of trees and is characterized by rich biodiversity, an undulating topography coupled with sandy and sandy loam soil renders the area highly susceptible to land degradation and erosion. Absence of vegetation leads to formation of deep gullies and ravines in the commons and private lands. Dug wells and bore wells are major source of irrigation. As per stage of ground water development all the talukas are classified as safe. However, high levels of nitrate and Flouride are reported in Ground water

Depending on rainfall, topography, agro-climatic zone, source of irrigation, stage of ground water development, quality of ground water and cropping pattern of the district, land development sector encompasses the following sub activities

- On farm development works - Land levelling, bunding, trenching
- Water Management – farm ponds
- Soil and Water Conservation – field level activities- bunding and trenching

Gujarat State Watershed Management Agency (GSWMA), the State Level Nodal Agency in partnership with technical institutions like Agricultural Universities, Krishi Vigyan Kendra etc and social enterprises such as NGO, Academic institutions like IRMA, NID, NIFT, EDII etc. is implementing the Integrated Watershed Management Programme (IWMP) in Gujarat by undertaking capacity building of all stakeholders and preparing an appropriate strategy to execute the plans in a time bound manner .

2.2.2.2 Infrastructure and linkage support available, planned and gaps

- Technical expertise at National Research Centre for Horticultural Crops , Godhra offers solutions to farmers
- Extension services are offered by Krishi Vigyan Kendra (KVK) at Godhra
- There are 3 soil testing laboratories in the district being operated by APMC Godhra and Science colleges
- Credit potential exists for post watershed treatment activities in watershed areas
- GOI extends subsidy to farmers for soil and water conservation measures like bunding, trenching, farm ponds under National Mission for Sustainable Agriculture
- Soil health cards are issued to farmers based on soil testing under National Mission for Sustainable Agriculture to encourage balanced use of fertilizers
- Three IGWDP – CPI watersheds - Samalkua (1012 Ha), Undava (1077) and Damavav (1124 Ha) were successfully completed in Ghoghumbha block
- NABARD is implementing a watershed project in Richiya – Chelwada villages of Ghoghumba Block with Asha Deep Foundation as implementing agency
- NABARD will be extending concessional refinance for 5 years in its ongoing and recently completed watershed based on banking plan.

2.2.2.3 Assessment of Credit Potential for 2023-24

Potential for land development activities like bunding, trenching, land levelling and farm ponds is arrived at as ₹360.92 Lakh for 2023-24.

(₹Lakh)

Sr. No	Activity	Unit (ha/ Nos)	Unit Cost	Phy. Units	TFO	Bank Loan
1.	Bunding and Trenching (as field level soil and water conservation activities)	Ha	0.21	654	137.34	109.87
2.	On farm Development Work(OFD) – Land Levelling	Ha	0.29	626	184.04	147.24
3.	Farm Ponds as water harvesting structures(20Mx20Mx2M)	No	0.81	161	129.77	103.81
	Total				451.15	360.92

2.2.2.4 Critical intervention required for creating a definitive impact

- Creation of awareness among the farmers about land development activities by extension service agencies like ATMA and KVK
- Motivation of farmers to undertake water management activities like farm pond for improvement along with cropping system of pulses millets and oil seeds for improvement

in water use efficiency , cropping intensity and income security

- Farmers should be encouraged to undertake water harvesting structure like farm ponds for harvesting rain water in medium black soils and recharge of ground water in Sandy loam soils.
- Coordination between banks and government agencies about providing technical and credit support to individual farmers for land development and water management activities in forums like BLBC and DLCC
- Extension of bank credit in those areas where watersheds projects are being implemented through close interaction with the implementing government departments and NGOs.
- Promotion of land levelling, bunding, trenching and farm ponds through bank credit
- Extension of bank credit for on farm development works like land levelling and bunding in command area of completed RIDF irrigation projects in district
- Focused research on integrated farming system for sustainable land use and income security for farmers

2.2.2.5 Suggested Action Points

- Creation of awareness amongst farmers about soil testing and Facilitation of interpretation of soil test results by KVK, Farmers Training Centre(FTC) and ATMA
- Desiltation of upstream of Checkdams and desiltation of 315 tanks for ground water recharge under MGNREGA.
- Given that district receives medium intensity monsoon rain fall and hard rock is the major hydrogeology, it can be harnessed through construction of checkdams , nala bunds and percolation tanks for artificial recharge of ground water and improvement in quality of ground water.
- Setting up mobile soil-testing labs and brick and mortar labs under PPP mode

2.2.2.6 Other related matters

- Through proper management of land, productivity and fertility can be enhanced, leading to quality produce. Farmers need to be motivated for getting soil tested once in 2 years for balanced use of fertilizers, leading to reduction in cost and soil health improvement.
- KVKs and Anand Agriculture University to create awareness and conduct demonstration on *Nano Urea* for adoption of Nano Urea by farmers, leading to judicious use of Nitrogen fertilizers , cost advantage and reducing ground water pollution

2.2.3 Agri. Infrastructure –Others

2.2.3.1 Introduction

1. Agricultural Biotechnology is an area of agriculture science that involves techniques such as genetic engineering, tissue culture, molecular diagnostics etc. to modify living organisms. The idea behind the same is to develop genetically modified crops/other organisms, with qualities such as drought-resistance, disease resistance, higher nutritional content, and development of biological pesticides and bio-fertilizers- in effect leading to higher and more stable crop yields.
2. Agriculture biotechnology can thus address the growing stress on food-production and unique challenges faced by small and marginal farmers, especially those living in tough climatic conditions.

3. To engender the gains of increased agriculture productivity to both consumers and producers in a fair manner, it is vital to strengthen forward linkages in agri-supply chain. **e-NAM-** the pan-India electronic trading portal which networks the existing APMC Mandis to create a unified national market for agriculture commodities- will help in better price-discovery for farmers.
4. In terms of revised Priority Sector Guidelines, issued by Reserve Bank of India *vide* Circular No. RBI/FIDD/2020-21/72 dated 04 September 2020 (updated on 26 October 2021), investments such as Tissue-culture labs, seed production units, Bio fertilizer / bio-pesticide units, vermi-compost units, etc. have been classified as '**Agriculture infrastructure items under agriculture credit**', **thus helping in facilitating greater availability of credit for these activities.**

2.2.3.2 Infrastructure and Linkage support available, planned and gaps:

- A. **Seed Processing:** Seed processing is a crucial step in refining post-harvested seed to its purest form for replanting purposed and human/animal consumption. Bio-Agriculture techniques yield better results than traditional techniques while maintaining the stability and fertility of soil. High yielding seeds significantly enhance the productivity potential and provide resistance from adverse environmental stress such as droughts and salinity. GUJCOMASOL federation is engaged in procurement, processing and marketing of various groundnut, castor, mustard seed, cottonseed etc. on a massive scale. They have 03 seeds processing plants. In the private sector too, Gujarat has the support for quality seeds procurement and processing. For example, GASCO Seeds has been recognized as pioneer in seed industry in Saurashtra region. It produces seeds of Hybrid Bajra, wheat, castor, pulses and vegetables. The availability of good quality seeds is required to be further enhanced. For that, access of farmers to retail network of good quality seeds and HYV seeds needs to be increased, while curbing the menace of fake and uncertified seeds. Awareness drives of farmers with KVKs can also be undertaken, so that they understand the authentic certification of seeds. Interestingly, in a few parts of the country, there has been deployment of advanced traceability certification through block-chain technology to ensure that farmers are not cheated with fake and uncertified seeds. Government can consider the same.
- B. **Tissue Culture:** Tissue culture is a technology for rapid propagation of plants using tissue of selected mother plants with desirable traits wherein large number of true to type plants can be produced under controlled conditions in Laboratory. Some of the advantage of using the technique of tissue culture are that there is production of exact copies of plants that have desirable traits; disease and pest free planting material; biochemical and reproductive mechanisms in plants and also of large scale production of artificial seeds through somatic embryogenesis.

Gujarat Biotechnology Research Centre established Plant Tissue Culture laboratory for the development of tissue culture protocol of agricultural, medicinal and commercially important plants of the State. These include fruiting crops such as Banana, Date palm, pomegranates and guava. It is also pertinent to note that out of 93 commercial Tissue culture production units recognized by the Department of Biotechnology (DBT), and Govt. of India under the National Certification System for Tissue Culture Raised Plants (NCS-TCP), 18 are located in Gujarat. NCS-TCP is being implemented by Department of Biotechnology (DBT), Govt. of India since 2006, as per the Gazette of India Notification under the Seeds Act, 1966 and has been instrumental in building capabilities of the tissue culture companies for producing quality planting material and also enhancing their market reach through a certification process.

- C. **Agriculture biotechnology** encompasses a range of scientific tools including genetic engineering, to different aspects of agriculture in order to create, improve/modify plants, animals and microorganisms. It has, for example, emerged as a new source of genetic diversity for crop improvement and has led to the development of drought tolerant crop

varieties. In 2021-22, Gujarat Government unveiled a new Biotechnology Policy (2022-2027) offering up to 25% financial support on the capital investments in the sector. The policy looks to create about 1.2 lakh new employment opportunities, while attracting estimated investment of over ₹20,000 crore in the sector. The new policy will also encourage projects such as pre-clinical testing, genome sequencing in private sector, plug & play facilities, private sector BSL-3 lab-vaccine development and manufacturing, testing and certification laboratories. For facilitating the development of biotechnology in the State, Government of Gujarat has constituted **Gujarat State Biotechnology Mission**, under the aegis of Department of Science and Technology. **Gujarat Agricultural Biotechnology Institute**, Surat (affiliated to Navsari Agricultural University) with target to promote the career goals of students in agri-biotechnology and strengthen the linkages of academic with industry.

e-NAM: Gujarat State Agricultural Marketing Board is the implementing agency of e-NAM. Apart from being a pan-India electronic trading portal, e-NAM provides **single-window service for all APMC related information and services**, such as commodity arrivals and prices, buy and sell trade offers etc. Farmers can access the information on e-NAM easily through their mobile phones from anywhere. It is an interface to create a national network of physical mandis, which can be accessed online. In Gujarat, 9400 traders, 6800 commission agents, 110 FPOs and 8,68,888 farmers are linked through e-NAM. Members of an FPO located in Modasa, Gujarat (FPO: Girimala Farmers Producers Company Ltd.) have greatly benefitted from e-NAM as they have realized higher prices through it, than they would through local markets and also benefitted from shorter payment cycle, post the sale of their produce.

2.2.3.2 Assessment of potential for the financial year 2023-24

(₹Lakh)

Sr. No.	Activity	Units (Nos.)	Unit Cost (₹Lakh)	PLP 2023-24		
				Phy. Units	TFO	Bank Loan
1.	Tissue Culture Labs	Nos.	75.00	3	225.00	180.00
2.	Seed production plots	Nos.	17.00	19	323.00	258.40
3.	Bio fertilizer plants	Nos.	32.00	4	128.00	102.40
4.	Vermi-compost Unit	Nos.	0.20	440	88.00	70.40
	Total		-	-	764.00	611.20

2.2.3.4 Critical Interventions required for creating a definitive impact:

It is vital to utilize the existing network of academia and universities/KVKs, to disseminate awareness and knowledge among farmers towards use of good quality and certified seeds, bio-fertilizers, high yield variety crops etc. Basic knowledge of biotechnology such as vermi-compost making and of bio-fertilizers should be shared with farmers' collective groups and efforts be undertaken to create "model demonstration agro-biotech farms".

Biotechnology Industry of Gujarat needs the right policy and financial nudge for it to thrive. Thus, it requires a clear policy (which has been unveiled recently) and a simplified process for uptake of loans. This will bolster the investments in Biotechnology in Gujarat.

2.2.3.5 Suggested Action Points

There is need for convergence of certain existing key schemes with special clauses on promotion of agri-biotechnology. Existing schemes such as those on development of watershed/wadis, promotion of organic farming, catalyzing of some innovative farm projects on niche technologies (FSPF) etc. can be chosen and focus can be given on agri-biotech promotion. Similarly, new schemes can also be designed to promote agri-biotechnology through involvement of grass-root level institutions and efforts of Universities.

End-to-end monitoring of such schemes and projects is extremely important to arrive at any mid-course corrections on any parameters and to continually assess the benefits of agri-biotech related infrastructure on the income & productivity of beneficiaries, through a structured cost-benefit analysis.

Encouraging the interface of Industry with grass-roots level institutions is also crucial, and this can help in fostering of the agri-innovation centres.

All FPOs should be linked with e-NAM and they need to be encouraged to actively use the same, in inter-state APMC trading as well. High-speed infrastructure facilities and assaying labs also need to be setup within the market yard. Categorical information during trading through e-NAM, such as highest bid price of produce should be sent to all participating farmers to increase the effectiveness of the e-NAM and deepen its popularity.

2.3 Agriculture - Ancillary Activities

2.3.1 Food and Agro processing

2.3.1.1 Introduction

Food processing industry in Gujarat is increasingly seen as potential source for driving the Gujarat economy. A well-developed food processing industry is expected to increase the farm gate prices, reduce wastages, ensure value addition, promote crop diversification and generate employment opportunities for unskilled, semi-skilled and skilled manpower as well as export earnings. It brings about synergy between consumers, industry and agriculture community. In addition to it, a large middle class, increasing income, growing trend of nuclear family, change in eating habits, globalization, opening of markets provide conducive environment for food processing. It has been observed that consumers are spending more than 30% of their income on food products. Food processing has been identified as one of the sunrise sector. It is also a major employment provider, contributing to 11.4 per cent of organised manufacturing employment.

Gujarat is leading state with impressive agriculture performance contributing about 14.2% to the States GVA. The State has identified Agro and Food Processing industries as one of the thrust industries in Industrial Policy for 2020. The State has also identified 'Development of agro & food processing clusters and establishment of integrated food processing parks to cater value chain' as a strategic intervention under the implementation roadmap of 'Strategy for Government of Gujarat to enable India to become a USD 5 trillion economy'. Food processing sector is also a major driver of State's exports and contributing more than USD 5 billion to the exports income.

Ministry of Food Processing Industries (MoFPI), GoI, is implementing various schemes through banks. Gujarat Agro Industries Corporation (GAIC), Government of Gujarat has been appointed as nodal agency by MoFPI for the state of Gujarat. Small and suitable activities related to fruits and vegetables post-harvest management are also being supported by Government of Gujarat through the portal **i-Khedut** for a centralised distribution of subsidy. Thus, the bank loan requirement may also increase due to such initiative.

2.3.1.2 Infrastructure and Support Services

Food processing is a link between primary sector (agriculture) and secondary sector (manufacturing). Therefore, in addition to general infrastructure facilities like power, water, transport, the infrastructure like storage/ warehousing, silo, cold storage & cold chain, APMC markets for raw material availability, quality control laboratories, machinery and equipments play an important role in growth and development of the food industry. The growth of this sector requires support services of licensing agencies, training and skill development institutes, marketing and branding services, etc.

A brief status of Gujarat's Food Processing Industry is as under

- More than 30,000 food processing units are operating in Gujarat providing employment to over 1 million people.
- Under the Agri-Export Zones scheme of Agricultural and Processed Food Export Development Authority (APEDA), the State Government has earmarked 03 Agriculture Export Zones for mangoes and vegetables (Ahmedabad to Valsad) for value-added onions (Saurashtra) and for Sesame seeds.
- Ministry of Food Processing Industries (MoFPI) has awarded Final approval to 02 Mega Food Parks projects in Surat & Mehsana and 05 Agro Processing Cluster in Banaskantha, Kutch, Daman, Bhavnagar and Navsari district. MoFPI has also accorded In-principle approval to Adani Ports for setting up of Special Economic Zone Ltd.
- A total of 28 cold chain projects have been approved by the Ministry in Gujarat and these Projects are being implemented under MoFPI assistance

2.3.1.3 Assessment of Credit Potential for 2023-24

Food Processing potential in Gujarat State is broad-based covering almost the entire spectrum of “food”, as outlined below:

- a) Agri / Horticulture Infrastructure Projects: Onion Cold Storage, Fresh Fruits-Pack house, Vegetables-Pack house, Mechanized Grain handling and storage at port, Food Parks, Terminal Markets, Spices and Isabgol Irradiation center.
- b) Export Oriented Processing: Peanut Butter, De-hulled Sesame seed & Roasted Sesame oil, Roasted, salted & coated nuts, Integrated Shrimp farming & processing.
- c) Value added Processing based on local resources: Tomato, Potato Flakes & Powder, Specialty grades- Guar Gum powder, Refined Sugar, Egg Powder, Baker's Yeast, Fish oil extraction.
- d) Natural Resources based Opportunities: Natural food colors, Medicinal Herbs extraction, Neem / Tobacco Oil base Bio-Pesticides, Food Processing Enzymes, and Fish meal base bio-fertilizer.
- e) Newer Technology Base Projects / Opportunities: Spices Cryo grinding, Freeze Dried Fruit processing Unit, Instant Vegetables in Retort Pouches, Potato Fabricated Chips.
- f) Innovative Opportunities: Organic Milk & Milk Products, Ice Cream Balls, Castor Derivatives base Perfumery raw materials, Banana Fibre extraction and Textiles production.

As per the revised priority sector guidelines, loans for food and agro-processing up to an aggregate sanctioned limit of ₹ 100 crore per borrower from banking system shall be classified under Agriculture – Ancillary activities. Creation of clusters is gaining momentum because they are increasingly considered as viable option for improved productivity of produce suitable for processing and export development. It is not possible to use standard unit cost for food processing industries. However, one can follow MSME guidelines for food processing units complying with the following MSME criteria.

There are 1045 small Food Processing Units functioning in the district which are mainly involved in Papad/Pickel making, Haldi/Spices Powder making etc. Assessment for the year 2023-24 has been made at **₹2880.40 lakh**. The block-wise, item-wise potential credit requirement during the year 2023-24 has been indicated in the Annexure I.

(₹Lakh)						
Sr. No.	Activity	Unit	Unit Cost	Phy. Units	TFO	Bank Loan
1.	Food Grain Grading, Processing, Marketing Unit	Nos.	56.00	18	1008.00	806.40
2.	Food Grain – Atta Making units	Nos.	11.25	50	562.50	450.00
3.	Haldi Spice processing	Nos.	5.00	38	190.00	152.00
4.	Working Capital for new & existing units	Nos.	20.00	92	1840.00	1472.00
	Total				3600.50	2880.40

2.3.1.4 Region wise scope:

- a) **South Gujarat:** Being the hotspot for horticulture crops and orchards like Mango, Sapota, Banana, Cashewnut, Papaya etc. & vegetables like Ladyfingers, Yam, creeper crops, etc., the area offers good scope for mooted clusters of pack house and storage facilities along with processing and marketing.
- b) **North Gujarat:** Being the hotspot for spices and medicinal plants like Cummin seed, Saunf, Chilly, Coriander, Isabgol, Castor and horticulture crops like Potato, lemon, etc., the region offers much scope for organised approach and export of the commodities including value addition.

- c) **Saurashtra:** Kesar mango, Peanut processing, Cummins, Onion, Garlic, Lemon, etc. are the main crops where the focused approach on processing may help to improve the market conditions.
- d) **Central and Eastern Gujarat:** These regions may also have potential to capitalise on the production of Tobacco, Banana, Potato, Rice, Maize, Wheat, Pulses, etc., where appropriate Agro and Food processing clusters may be promoted.

2.3.2 Agricultural Ancillary Activities - Others

2.3.2.1 Introduction

Agricultural ancillary activities have unique credit needs which needs to be addressed by financial institutions. Towards fulfilling these needs RBI through its Master Directions FIDD.CO.Plan.BC.5/04.09.01/2020-21 on 'Priority Sector Lending' has declared that, Loans to Primary Agriculture Credit Societies (PACS) by banks, loans to Micro Finance Institutions (MFIs) for on-lending in agriculture sector, Loans under Agri Clinic and Agri Business Center (ACABC) scheme are included in other ancillary activities of agriculture. Under ancillary activities, the following activities are considered:

- i. Loans up to ₹5 crore to co-operative societies of farmers for disposing of the produce of members.
- ii. Loans upto ₹50 crore to Start-ups, as per definition of Ministry of Commerce and Industry, GoI that are engaged in agriculture and allied services.
- iii. Loans for setting up of Agriclincs and Agribusiness Centres. (ACBC)
- iv. Loans for Food and Agro-processing up to an aggregate sanctioned limit of ₹100 crore per borrower from the banking system.
- v. Loans to Customer Service Units managed by individuals, institutions or organizations who maintain a fleet of tractors, bulldozers, well-boring equipment, threshers, combines etc., and undertake farm work for farmers on contract basis.
- vi. 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.
- vii. Loans sanctioned by banks to MFIs for on-lending to agriculture sector.
- viii. Loans sanctioned by banks to registered NBFCs (other than MFIs) for on-lending as per RBI conditions
- ix. Loans sanctioned by banks to registered NBFCs (other than MFIs).
- x. Outstanding deposits under RIDF and other eligible funds with NABARD on account of priority sector shortfall.

Loans to Cooperative Societies of farmers for disposing of their produce

Primary Agriculture Cooperative Credit Societies (PACS) undertake a wide variety of operations such as lending, inputs sales, consumer goods sales, farm produce purchase and processing. Following the implementation of Vaidyanathan Committee reforms, PACS are eligible to avail credit facility from any financial institution other than the apex institution to which these are affiliated. Such lending by commercial banks will qualify as priority sector advance under other ancillary activities of agriculture. PACS may also avail credit from NABARD subsidiary under the product "PACS as Multi-Service Centre"

xi. Aggregation of Agri produce

The total number of operational land holdings in the State was 53.21 lakh (2015-16). Land holdings up to 2 Ha accounted for 68.31% of the total land holdings and 34% of the area in

the State, while the land holdings ≥ 10 Ha accounted for 0.75% of the total holdings and 5.91% share of the area. The land holding size in the State averaged at 2.03 Ha compared to the all-India average of 1.08 Ha. The state ranks fifth in the country in terms of average size of landholding.

Nearly 76% farm holdings in Panchmahal District are less than 2 ha covering about 36% of the cultivated area. There is also a predominance of marginal farmers with 52% holding with only 13% of land area. Aggregation of produce by these farmers will put bargaining power in their hands while dealing with the buyers of their produce. All such loans up to ₹5 crore to co-operative societies of farmers for disposing of the produce of members shall be classified as priority sector loans.

• **Agri-Clinics and Agri-Business Centre's Scheme (ACABC)**

Agri-Clinics: Agri-Clinics are envisaged to provide expert advice and services to farmers on various technologies including soil health, cropping practices, plant protection, crop insurance, post-harvest technology and clinical services for animals, feed and fodder management, prices of various crops in the market etc. which would enhance productivity of crops/animals and ensure increased income to farmers.

Agri-Business Centres: Agri-Business Centres are commercial units of Agri-ventures established by trained agriculture professionals and are envisaged to provide services to farmers on maintenance, repair and custom hiring of farm equipment's, sale of inputs and other services in agriculture and allied areas including post-harvest management and market linkages for income generation and entrepreneurship development.

2.3.2.2 Infrastructure and linkage support available, planned and gaps

- Few PACS have been selected under PACS Development Cell of PDCCB and suitable guidance is provided to them. They have taken up new income generating activities.
- PACS to function as 'One Stop Shop' for meeting all the credit requirements of farming community, thereby also enhancing their own business operations and financial viability.
- In the district 137 PACS / LAMPS are functioning with total membership of more than 30000 farmers.

2.3.2.3 Assessment of Credit Potential for 2023-24 for Loans to Coop Societies of Farmers, Loans to PACS/FSS/LAMPS)

(₹.Lakh)					
Sr. No	Activity	Unit Cost	Units (Nos.)	TFO	Bank Loan
1.	Loans to PACS/FSS/LAMPS	19.00	72	1368.00	1094.40
2.	ACABC Finance	10.00	4	40.00	32.00
Total				1408.00	1126.40

2.3.2.4 Critical interventions required for creating a definitive impact

Shortages of skilled and dedicated agriculture labours / manpower is an emerging challenge faced by the agriculture sector. Also the old and traditional agri-practices have lost their relevance into present high-tech agriculture activities. It is therefore imperative to frame policies for making agriculture interesting and remunerative for rural youths.

2.3.2.5 Suggested Action Points

- Agriculture background to come forward for their contribution to the farming community. The Scheme may be deliberated in BLBC / DLCC meetings for wider acceptance by banks and also for discussion on any operational issues.

- Producer Organizations may be encouraged to take up food & agro processing activities for value addition and ultimately for better realization of value of their produce. Banks can also have their own strategy for provision of the required support to farmers in a holistic manner. NABARD has initiated steps in this direction in providing necessary financial support for promotion and formation of few FPOs in the district.

2.3.2.6 Other Related Matters

- Dissemination of knowledge and information of various schemes benefitting the rural community may be given wide publicity by banks.

2.3.2.7 Credit Potential for Others

- **Loans to Individuals and SHGs/JLGs:** Generally, financial institutions take security for giving loans. In this process, a large section of society gets deprived of getting loans at subsidised rate of interest from the Banks for undertaking economic activities. NABARD took lead in this matter and pioneered the concept of SHG and JLG. The poor were united in the form of groups and it showed to the world that poor as a group are loan worthy. Group mode of loaning paved the way for giving finance to poorest of poor and improve their social and economic condition. Moreover, it has proved to be a good proposition for banks also with good rate of recovery from groups.
- **Loans to distressed persons to prepay non-institutional lenders (other than farmers):** In order to get small, quick loans without resorting to much paperwork people took loans from non-institutional lenders to meet their emergent requirements on a very high rate of interest. Payment of such a high rate of interest is a big burden on the poor people which create lot of problem in their family life. However, those people can take loan from financial institutions to prepay their debt taken from private lenders. Based on the ground level situation in the district as also discussions held with bankers and other agencies involved in implementation and financing under the sector, potential for 2023-24 has been estimated and activity-wise and block-wise details are given in Annexure-I.
 - *In terms of revised RBI Master circular on PSL, loans not exceeding ₹50,000/- per borrower financed directly by banks to individuals and their SHG/JLG, provided the individual borrower's household annual income in rural areas does not exceed ₹1,00,000/- and for non-rural areas it does not exceed ₹1,60,000/-.*
 - *Loans to distressed persons (other than farmers included under "Loans to distressed farmers indebted to non-institutional lenders") not exceeding ₹1,00,000/- per borrower to prepay their debt to non-institutional lenders.*
 - *Loans sanctioned to State Sponsored Organizations for SCs/ STs for the specific purpose of purchase and supply of inputs and/or the marketing of the outputs of the beneficiaries of these organizations are covered under the sector "Others".*
- **Pradhan Mantri Jan Dhan Yojana (PMJDY)** - During the year 2014-15, a campaign for Pradhan Mantri Jan Dhan Yojana (PMJDY) was launched to cover all population not under banking fold. As of now each such households has at least one basic savings account in the bank. As a part of second phase, each such account holder is being provided an overdraft facility of upto ₹ 10,000/- through such accounts. Age limit of 18-60 years has been revised to 18-65 years and there will not be any conditions attached for overdraft upto ₹2000/-. This overdraft facility will act as an important safety net for poor households in the district. Overdraft facility extended in such accounts will be eligible to be reckoned as priority sector finance. In Gujarat, Banks have opened 1,60,58,724 number of PMJDY accounts as per SLBC data for quarter ended March 2021 and in the Panchmahal district 684098 number of PMJDY accounts have been opened till quarter ended March 2021.

2.3.2.7 Infrastructure and linkage support available, planned and gaps

- Banks have already started advancing loans under JLG financing. In Ghoghumba block with small loans under JLG mode few tribals have purchased goats and this activity is picking up in the area.
- Few Private sector banks are financing under JLG mode by utilizing services of MFIs.
- Infrastructure and network of Gujarat Livelihood Promotion Company (GLPC) is already available for assisting SHGs / Sakhi mandals.
- Necessary manpower deployment may be done with GLPC to fully concentrate on the work related to formation and credit linking of SHG groups.

2.3.2.8 Assessment of Potential for financial year 2023-24

(₹Lakh)

Sr. No	Activity	Unit (No.)	Unit Cost	PLP 2023-24		
				Physical Units	TFO	Bank Loan
1.	Fresh loans to SHGs	No.	1.00	646	646.00	516.80
2.	Repeat loans to SHGs	No.	1.00	796	796.00	636.80
3.	Loans to JLGs	No.	0.40	469	187.60	150.08
4.	Loans to distressed	No.	1.00	348	348.00	278.40
5.	Loans under PMJDY	No.	0.50	341	170.50	136.40
6.	Overdraft under PMJDY	No.	0.10	428	42.80	34.24
7.	Govt. sponsored SC/ST	No.	0.50	95	47.50	38.00
8.	Misc.PMEGP,VBY,GBCDC	No.	0.50	56	28.00	22.40
Total					2266.40	1813.12

2.3.2.9 Critical interventions required for creating a definitive impact

SHGs may be provided small overdraft facility for urgent consumption needs during the time of crisis.

2.3.2.10 Action points for stake holders –

State Government:

- DRDA can play proactive role to identify the distressed persons willing to repay to non-institutional lenders and extending loans to State sponsored organizations for SC /ST.

Banks:

- Banks may advance loans to SHGs and sanction CC limits to credit link matured groups.
- Banks may consider option of hiring services of MFIs for undertaking financing under SHG and JLG mode so that timely follow-up with the borrower can be made. This will obviate the issue of staff shortage and address the issue of timely recovery of loans.
- Branch network of BGGB, PDCB and all other commercial banks can be fruitfully utilized for lending under Joint Liability Groups and PMJDY.
- Since all these activities are towards providing financial assistance to weaker section of the society and fall under the Social Welfare schemes, banks may assist such borrowers.

Other Related Matters

Banks are required to take more pro-active roles for financing JLGs since NBFC- MFIs are expanding their network and coverage with doorstep service to borrowers for small loans.

Special Refinance Scheme for Transformation of PACS as MSC

Primary Agriculture Cooperative Societies (PACS) are grass root level Cooperative institutions primarily involved in meeting the credit requirements of the farmer members. With a view to rejuvenating the PACS, many initiatives have been undertaken by NABARD and one such initiative has been taken up for supporting PACS as MSC from the year 2011 onwards through direct credit as well as through refinance to CCBs/StCBs to make them a self-sustainable entity. Positive impact and the benefits derived by the members of PACS as well as limitations in implementing the program were assessed by NABARD and accordingly the operational methodology, coverage of investments and terms of refinance have since been revised

Further, with the proposed Agriculture Infrastructure Fund (AIF) scheme under Aatmanirbhar Bharat initiative of GoI, for establishing decentralized farm-gate Post Harvest Management infrastructure wherein PACS have been included as one of the eligible institutions for interest subvention, it is envisaged that PACS can now play a major role in physical and financial supply chain of commodities by working as spokes to the Gramin Agriculture Markets (GrAMs). With investments in post-harvest infrastructure, it is hoped that farmers would be able to reduce post-harvest losses and increase their value realization for the produce.

Objective

Transformation of 35,000 PACS into MSC in a phased manner spanning over three years with an objective of PACS acting as enabling institutions for meeting the national goal of doubling of farmers' income. The target proposed for FY21 is transformation of 5,000 PACS and for subsequent years it shall be 15,000 PACS during FY22 and 15,000 PACS during FY23.

₹5000 crore has been earmarked under this special dispensation for the year 2020-21.

Eligible PACS

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

Eligible financial institutions

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

Eligible Purposes

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

Refinance assistance

Refinance assistance is provided to the banks under pre-sanction procedure wherein banks are required to submit the projects through StCB for approval of NABARD. Before sanction of the same, NABARD appraises these projects to determine their technical feasibility, financial viability and bankability.

Interest rate on refinance will be 3%. However, the ultimate interest rate to be charged from PACS should not be more than 1% over & above the interest rate charged by NABARD and can be shared by StCB & CCB as per the mutually agreed terms. Repayment period of refinance will be up to 7 years.

CHAPTER 3

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

3.1 Introduction

Definition: Ministry of Micro Small and Medium Enterprises, Government of India, defines MSMEs as under:-

Micro	The investment in plant and machinery or equipment does not exceed ₹1 Crore and turnover does not exceed ₹5 crores.
Small	The investment in plant and machinery or equipment does not exceed ₹10 crore and turnover does not exceed ₹50 crore.
Medium	The investment in plant and machinery or equipment does not exceed ₹50 crore and turnover does not exceed ₹250 crore.

With around 63.4 million units in the country, MSMEs contribute around 6.11% of the manufacturing GDP and 24.63% of the GDP from service activities as well as 33.4% of India's manufacturing output. They have been able to provide employment to around 12 crore persons and contribute around 45% of the overall exports from India.

Their capacity to foster entrepreneurship and generate large scale employment opportunities at comparatively low capital cost is pivotal to reducing disproportionate and often disguised employment in agricultural sector in the country. MSMEs also complement large industries which develop core industrial and private sector research in the host region. Health of MSME sector is important for inclusive socio-economic development of the country and putting it on the path of high income country.

3.2 Infrastructure and linkage support available planned and gaps

Importance of MSME sector to economy and employment has been duly realised by policy makers. This has resulted into several policy initiatives aimed at maintaining and improving the sector's health. The sector is eligible for credit under priority sector lending norms. Public procurement policy earmarks 25% of annual procurement by Central Ministry /Department / PSUs to be done from MSE Sector.

Schemes such as PMEGP (Prime Minister's Employment Fund Generation Programme), provision of collateral free credit through credit guarantee fund for MSEs (CGTMSE), (ASPIRE) A Scheme for Promotion of Innovation, Rural Industries & Entrepreneurship), ESDP (Entrepreneurship and Skill Development Programmes), SFURTI (Scheme of Fund for Regeneration of Traditional Industries), MSE-CDP (Micro and Small enterprises Cluster Development Programme), Scheme for providing financial assistance to Khadi institutions under MMDA, The National Scheduled Caste and Scheduled Tribe Hub, Ministry of MSME UNIDO, GEF-5 Project on 'Promoting Market Transformation for Energy Efficiency in Micro, Small & Medium Enterprises' have been launched by Government of India to support MSME sector.

Government of Gujarat, under industrial policy 2020, also provides assistance to MSMEs through several schemes such as Scheme for Assistance to MSME, Dr. Baba Saheb Ambedkar Udhayog Uday Yojna for SC/ST Entrepreneurs of MSME, Scheme for Assistance for Mini-Cluster Development etc supports the sector in state.

These schemes are designed after identification of weaknesses and shortcomings of MSME enterprises and are aimed at bridging the gaps in access to credit; improving skill, competitiveness and bargaining power of the sector and creation of assured markets.

In spite of all these schemes and measures by governments and RBI, gaps remain in the achievement of goals. Major obstacles include poor knowledge among beneficiaries, information gap, lack of skill and professionalism, competition from e-commerce websites, insufficient capacity to take advantage of technology, lack of innovation, poor

access to formal credit as well as cyclical nature of availability of funds, absence of standardised policies, legal compliance burden, poor delivery of services at the field level, corruption etc.

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

The sector, with focus of government but limited access to formal credit, provides a big opportunity for banks. More so in the state of Gujarat. The geographical, infrastructural and entrepreneurial competencies of the state puts it among top ten states in the country in terms of size of MSME sector. Bank's can and have been tapping into this large market and generating business. With disbursement of 94,815 crore of loan to MSME sector, the target of 94,365 crore for FY 22 in the state was crossed in the quarter ending December 2021 itself. The trend of MSME financing in Gujarat state during last 3 years is tabulated below: -

Loan Outstanding to MSMEs

(₹lakhs)

Details	31 March 2021	31 March 2021	31 March 2022
Gujarat	1,29,03,176	1,35,15,964	1,82,38,911
Panchmahal	49516	68279	80854

NPA trend in MSME sector

Details	31 March 2020	31 March 2021	31 March 2022
Gujarat	6.84 %	5.83 %	5.11 %
Panchmahal	6.83%	4.35%	5.33 %

(Source: SLBC, Gujarat)

3.3.1 Assessment of Potential for financial year 2023-24

(₹Lakh)

Sr. No.	Activity	Units (No)	Unit Cost	Phy. Units	TFO	Bank Loan
A. Term Loan (TL)						
1.	Micro enterprises	Nos.	25.00	560	14000.00	11200.00
2.	Small enterprises	Nos.	250.00	35	8750.00	7000.00
3.	Medium enterprises	Nos.	750.00	7	5250.00	4200.00
	Total Term Loans				28000.00	22400.00
B. Working capital (WC)						
1.	Micro enterprises	Nos.	5.00	560	2800.00	2240.00
2.	Small enterprises	Nos.	50.00	35	1750.00	1400.00
3.	Medium enterprises	Nos.	100.00	7	700.00	560.00
	Total Working Capital				5250.00	4200.00
	Total MSME					26600.00

3.4 Critical interventions required for creating a definitive impact and Suggested Action Points

While the story of MSME sector has been relatively brighter in comparison, it is not without dark chapters and to reach the bright light at the end of tunnel, focussed and better conceptualised interventions are needed that can improve access to formal capital, strengthen global competitiveness, bridge gaps in infrastructure, decrease compliance burden, provide speedier and reliable dispute resolution mechanism, enhance skill set and training quality of manpower and use modern technology to the sector's benefit.

3.5 Other related matters

To get it right, policy making should ensure continuous and concurrent consultation with stakeholders and put extra focus on poor regions and sections of population to ensure inclusive and balanced development. It needs to seep into the psyche that the progress of India into a high income country and industrial powerhouse will depend a lot on getting the MSME dream right.

Chapter 4

Credit Potential for Export Credit, Education and Housing

4.1. Credit Potential for Export Credit

4.1.1. Introduction

Exports play an important role in a country's economy. A healthy balance between foreign trade and exchange reserves to maintain the country's export growth should be a constant endeavor. Exports also have a correlation with the prevailing industrial environment with quality standards, competitive pricing and attractive packaging playing key roles. Exports are a national priority for the Government and private sectors which is recognized by all. In terms of RBI guidelines, financing for exports is available for "Pre-shipment/Packing Credit" and "Post-shipment Credit". Domestic banks may sanction export credit for incremental export over corresponding date of the preceding year upto 2 % of ANBC and CEOBE subject to a sanctioned limit of ₹40 crore per borrower.

District Export promotion committee is set up in the district to focus export promotion and review trade related issue. The committee will certainly give a boost for export sector in the district.

4.1.2. Assessment of credit potential for financial year 2023-24

The physical and financial projections for the year 2023-24 is given as under. The block-wise, sector-wise potentials for 2023-24 are given in Annexure I.

(₹Lakh)

Sr. No.	Activity	Unit	Unit Cost	Assessment of Potential - 2023-24		
				Phy. Unit	TFO	Bank Loan
1.	Pre-shipment Finance Packing credit	Nos.	60.00	03	180.00	144.00
2.	Post-shipment	Nos.	35.00	03	105.00	84.00
	Total	-		-	285.00	228.00

The ground-level disbursement during the year 2019-20 in the district was ₹22 lakh only.

4.1.3. Availability of Infrastructure, Critical gaps & Interventions required

There is no specific export zone in the district. However, the District Export Promotion Committee is organizing awareness camps for promising entrepreneurs to take up the export oriented business activities. There will be potential for export of agri produce, however due to lack of processing facilities the same is unrealizable. The district is well connected with major cities like Ahmedabad, Vadodara, Indore etc. There exists good infrastructure of roads, railway and other transportation facilities. There is also GIDC at Halol block. However, there is a need to develop infrastructure facilities such as storage/ cold storage and certification set up etc for promoting export of agriculture/horticulture, dairy, fisheries products.

4.1.4. Suggested Action Points

State Government:

- Creating godowns and cold storages
- There is a need for creating Quality control through international level grading/ sorting/ packaging.
- FPOs/Micro, Small and Medium Exporters should be properly trained by MSME/ export organizations. Training and exposure visits to be arranged.
- State Government and other stakeholders may develop the data base on export vis-a-vis the share of agri-commodity export in total export.

- Exporters may be encouraged to avail the export credit insurance facilities extended by Export Credit Guarantee Corporation (ECGC).
- Necessary infrastructure like grading, standardization, processing and quality control etc. for export of agriculture produce may be set up in the tribal dominated district.

Banks and others:

- 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. Intense dialogue/ discussions may be initiated with various bodies connected with the sector on a regular basis to bring in policy changes from time to time.

4.2. Credit Potential for Education

4.2.1. Introduction

India has the world's largest population of about 500 million in the age bracket of 5-24 years, which provides a great opportunity for the education sector. In light of this fact, it becomes important that we as a nation, focus on the 3 Es of Education, Employment and Employability lest the demographic dividend becomes a demographic burden. While the 3 Es are inextricably linked, the 'E' of Education is the foundation stone for the other two and hence assumes prime importance.

The Education Loan Scheme aims at providing financial support from the banking system to deserving/ meritorious students for pursuing higher education in India and abroad. After introduction of the scheme in 2010, new modifications have been incorporated in the scheme that now states that loans to individuals for educational purposes, including vocational courses, not exceeding ₹20 lakh will be considered as eligible for priority sector classification.

4.2.2 Infrastructure and linkage support available, planned and gaps

- There are 1865 No. of Govt. and private schools in Panchmahal. 36 technical institutes and 21 other colleges for pursuing graduation. One engineering college has also been started functioning recently in the district.
- Maize Research Centre of Anand University is located in the District Headquarter
- Many students from the district prefer to study in nearby big cities like Vadodara, Anand and Ahmedabad.

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

(Rs. Lakh)						
Sr. No.	Activity	Unit	Unit Cost	Phy. Unit	TFO	Bank Loan
1.	Higher Education	Nos.	10.00	101	1010.00	909.00
2.	Education – Tech. and others	Nos.	6.00	223	1338.00	1204.20
	Total		-	-	2348.00	2113.20

The Block-wise assessment of credit potential for Education sector is given in Annexure I. The ground level disbursement reported under education sector in the district for last 04 financial years is ₹ 275.00 lakh, ₹ 928.00 lakh, ₹ 1145.00 lakh and ₹ 479.00 Lakh.

4.2.4 Critical Intervention required for creating a definitive impact

- The key challenges like providing equitable access, mixed higher education outcomes in terms of quality, relevance and excellence have to be addressed.
- Reduce "Distance to Institute" by opening new institutes in rural/semi-urban areas.

- Use of technology to enable low cost models of education, delivered through online, foster digital content, invest in ICT, quality online education access with a quick turnaround.
- The target, 'Primary School for all villages', should be achieved during the next five years.
- Steps need to be taken at policy-making level to popularize education loans.

4.2.5 Suggested Action Points

State Government

- To bring transparency, grading and placement, records of the students may be made available to banks by various educational institutes, so that bank may consider financing these students.
- Availability of Education loans may be suitably publicized in educational institutes.

Banks

- Banks may tie up with Colleges in the district.
- Banks may consider sanctioning of education loans in a timely manner.
- Banks may give wide publicity to Education Loan scheme.

4.3 Credit Potential for Housing

4.3.1 Introduction

Housing Finance under priority Sector lending cover the following:

- Loans to individuals up to ₹ 35 lakh in metropolitan centres (with population of ten lakh and above) and loans up to ₹ 25 lakh in other centres for purchase/construction of a dwelling unit per family provided the overall cost of the dwelling unit in the metropolitan centres and at other centres should not exceed ₹ 45 lakh and ₹ 30 lakh respectively.
- Loans for repairs to damaged dwelling units of families up to ₹10 lakh in metropolitan centres and up to ₹ 6 lakh in other centres
- Bank loans to any governmental agency for construction of dwelling units or for slum clearance and rehabilitation of slum dwellers, subject to a ceiling of ₹ 20 lakh per dwelling unit.

The loans sanctioned by banks for housing projects exclusively for the purpose of construction of houses for economically weaker sections and low-income groups, the total cost of which does not exceed ₹10 lakh per dwelling unit.

4.3.2. Assessment of potential for financial year 2023-24

(Rs. Lakh)						
Sr. No.	Activity	Unit	Unit Cost	Phy. Unit	TFO	Bank Loan
1.	Housing Loan	Nos.	20.00	461	9220.00	7376.00
2.	HL for renovation / enlargement	Nos.	5.00	653	3265.00	2612.00
	Total		-	-	12485.00	9988.00

Block-wise details are given in Annexure I. The ground level disbursement reported under the housing sector in the district for last 04 financial years is ₹ 13701.00 lakh, ₹ 9463.00 lakh, ₹ 5329 lakh and ₹ 10107 lakh respectively.

4.3.3. Infrastructure and linkage support available, planned and gaps

- Gujarat Housing Board (GHB) has started one project where LIG, MIG – I, MIG – II and HIG flats are under construction. 24 banks have entered into MoU with GHB. This will further boost this sector.

- Prolonged regulatory process hampers timely launch and completion of the project.
- New building construction is done in Halol and Godhra blocks. There is a scope for financing fresh Housing loan for the purchase of flat/construction of house and renovation of flats.

4.3.4. Suggested Action Points:

State Government:

- Govt. may reserve land exclusively for housing projects.
- Single window and time-bound regulatory process to speed up the pace of activity in the sector.
- State Government may think of offering incentives to private developers.

Banks:

- Banks may tie up with reputed builders for easy finance access to the potential buyers in their schemes.
- Softening of home loan rates will give a boost to this sector.

Chapter 5

Credit Potential for Infrastructure

5.1.1 Introduction

Infrastructure is the sum total of basic facilities and services required for proper utilization of resources (physical & human) for the development of an area. Infrastructure development plays a significant role in economic growth and poverty alleviation, more so, in the rural area. Rural infrastructure comprises of core infrastructure viz., irrigation, connectivity (road, power, IT), transportation, energy (generation, transmission, distribution), post-harvest and social infrastructure viz., drinking water, sanitation, sewerage, health, housing and education.

Investment in rural infrastructure fosters agricultural growth, creates new economic opportunities and activities, generates employment and income, and improves delivery of other rural services. Therefore, in 1995-96, Rural Infrastructure Development Fund (RIDF) was created in NABARD to facilitate public investments for rural infrastructure. State Governments avail RIDF assistance for creation of wide variety of rural infrastructure covering 39 activities, under three broad categories, viz., Agriculture and related sectors, Rural connectivity and Social sectors. The cumulative loan assistance sanctioned under the fund to the Government of Gujarat since inception of RIDF stands at ₹ 35225 crore under 63172 projects.

Over the years, RIDF has emerged as a preferred source of funding for State governments. This led to creation of many other funds in NABARD for supporting specific rural infrastructure activities viz. Warehouse Infrastructure Fund, Food processing Fund, Long term Irrigation Fund, Dairy Processing and Infrastructure Development Fund, Micro Irrigation Fund, Fisheries and Aquaculture Infrastructure Development Fund, NABARD Infrastructure Development Assistance etc. The details of sanction and disbursement since inception under various infrastructural funds are given as under :

(Rs. crore)

NABARD Infrastructure Fund	Sector	Projects Sanctioned since inception		Disbursement Amount
		Number	Amount	
RIDF	Agriculture Related	30056	25009	21865
	Social Sector	21473	7594	5780
	Rural Connectivity	11643	2622	2232
	Total	63172	35225	29877
LTIF		1	3611	3611
NIDA		9	1704	594
FIDF		3	450	-
WIF		10	470	383
MIF		1	764	297
FPP		7	97	68
FAIDF		3	450	0
Total		63206	42771	34830

5.1.2 Infrastructure and linkage support available, planned and gaps:

In Gujarat, major share (70%) of RIDF assistance has gone for creation of irrigation infrastructure followed by social sector (20%) and rural connectivity (10%). Some of the major RIDF projects that are under implementation include SAUNI (Saurashtra Narmada Avtaran Irrigation) Yojana which involves construction of four links under various packages in the drought prone Saurashtra region and Expansion of the network of Narmada Main Canal viz., Saurashtra and Kutch Branch Canals & construction of Subminors for delivering

water to the last mile farmer. RIDF has therefore proved an exemplary financial intervention for boosting Agricultural production and productivity in the State.

5.1.3 Projects sanctioned under RIDF in the district .

(₹ lakh)

Sr. No	Sector	No. of projects sanctioned	Loan Sanctioned
1	Irrigation	2	21553.630
2	Drinking Water Supply	3	14862.74
3	Health Centres/Anganwadis	687	7128.49
4	Underground Drainage	5	1130.220
5	Rural Roads	339	13830.52
6	Godowns (Seed)	4	1601.39
7	Rural Educational Institutions	285	1629.00
8	Godowns(Grass)	5	238.00
	Total	1330	61973.99
*Multi District Projects			
1.	Solarisation of 137 Feeders – SKY project	1	36969.00

*Multi District Projects –Panchmahal being one of them.

5.1.4 Impact of the above projects implemented under RIDF

Due to various projects that have been undertaken under RIDF over the years in the district e.g. Road construction, construction of check dams, Irrigation projects like Panam sub canal, Underground Sewerage system, Construction of Public Health Centers most of the basic infrastructure required for living of rural masses has been created , which have had a positive impact on the life of the rural people.

5.1.5 Infrastructure supported under WIF in Gujarat

Warehouse Infrastructure Fund was introduced to support projects for construction of scientific warehouse infrastructure with a view to storing the excessive food grain production, meet the demand of increased procurement under Food Security Act 2013 and enhance shelf life of the perishable goods. Availability and easy accessibility of storage infrastructure enables the farmers to avoid distress sale and sell the produce at higher market rate as per convenience.

In Gujarat, NABARD has partnered with Government of Gujarat for creation of storage capacity of 8.35 Lakh MT with a cumulative sanction of ₹51542 Lakh under WIF. This includes construction of small warehouses (100 -500 MT) by PACS at village levels and mid-sized & large warehouses (1000 MT – 5000 MT) at block levels by Gujarat State Civil Supplies Corporation and Gujarat State Seed Corporation . As on 31 March 2022, capacity of 6.51 lakh MT has been created with utilization of ₹38277 Lakh out of the sanctioned loan of ₹46956 lakh. Additionally, a modern cold storage unit with a capacity of 5000 MT in Prantij, Sabarkantha has been constructed by a private entity with a support of ₹1900 Lakh loan under WIF.

5.1.6 Critical intervention required for creating a definitive impact:

- **Irrigation:** There is a need for lift irrigation and drip irrigation projects. Projects for completing the works of distribution system/ branch canals, canal lining / modernization, filling up reservoirs through pipeline/ water conveyance schemes, for reaching the water to tail-end areas of projects which are presently not achieving full efficiency, Micro irrigation under existing irrigation projects are the priority areas.

- **Water recharge:** Irrigation department with the help of Agriculture Department may organise village level camps to demonstrate the low cost water recharge model which fruitfully utilizes rain water flowing into a small pit.
- **Watershed approach:** This has shown wonderful results in Ghoghumba and Jambughoda blocks. Due to adoption of watershed approach ground water level has increased and the villagers are taking multiple crops in a year. Replication of this model by the district administration is absolutely necessary.
- **Agriculture, Land Development & Soil Conservation:** Rainfall in the district is scanty and most of the rain falling on the surface tends to flow away rapidly, leaving very little for the recharge of ground water. This highlights the need to implement measures to ensure that the rain falling over a region tapped fully for recharging the groundwater aquifers or storing it for direct use. There is potential to invest in 100 water harvesting structures (village tanks) and 200 Check dams' structures through State Government intervention.
- **Soil Testing Centres:** Government of Gujarat has taken up the programme for issue of soil health cards for all farmers. This requires a lot of infrastructure in the form of establishing soil testing centres. A minimum of one soil testing centre for each taluka is required.
- Other purposes such as natural resources conservation through land levelling, establishment of research station on reclamation of problematic soils, also needs Government support.
- **Horticulture:** Establishment of horticultural nurseries and ventilated storage facilities for garlic/ onion, tissue culture labs for banana/ potato, facilities for production of organic agri inputs.
- **Research stations:** Establishment of research station for off season vegetables and floriculture cultivation in poly-house, establishment of AEZ for floriculture.
- **Training infrastructure:** Strengthening of training infrastructure facilities at Farmers Training Centre (district level) and Farm Information and Advisory Centres (FIACs - at Block Level) also are required to be taken up by the State government in potential districts.
- **Agri processing / Warehousing/Marketing:** District has very good production of paddy and corn. Necessary infrastructure for standardization, grading, sorting, processing and storage is required.
- **Modernization of APMCs** need to be taken up by Government on a priority basis which will pave way for creation of scientific storage, market and other facilities for farmers.
- **Rural Haats:** Establishment of Rural Haats initially at Block level will give opportunity to farmers and members of Self Help Groups to market their product / products.
- **Animal Husbandry /Dairy development:** There is lot of scope for Financing Animal Husbandry activities or sale/purchase of animals. However, poor quality of animals are available. Therefore, there is an urgent need to set up one Animal Breeding Centre in this region. Govt. has allotted land and declared assistance in this regard recently to Panchmahal Dairy Union in Shehra block. Other infrastructure like construction of animal hostels, veterinary dispensaries and Artificial Insemination centres, bulk milk coolers, Hi-tech breeding Centre, cold chain facilities, etc. need to be set up.
- **Solar/ Wind Energy:** The forest and hilly terrains of Jambughoda and Ghoghumba are suitable for installation of Solar panels and Wind Mills on a large scale. As many tourists are visiting Jambughoda Wild life sanctuary, installation of Wind Mills and Solar energy generating units will be an added attraction and will encourage more Rural Tourism.

5.1.7 Suggested Action Points

- The other basic major infrastructure requirements such as Rural Roads, Rural Drinking Water Supply Schemes, Rural Tourism, Agri Resource Centers, Health and Sanitation, Rurban Projects, etc., have been assessed as critical gap, which can be financed under the State Government budgetary support.
- Many of the infrastructure activities identified above need to be taken up on a priority basis by the State Government which can be funded by NABARD under RIDF. Further, some of the projects can be taken up by State owned corporations which can be financed by NABARD under NABARD Infrastructure Development Assistance (NIDA) outside the borrowing powers of the State Government.

5.2 Social Infrastructure Involving Bank Credit

5.2.1 Introduction

Standard of living is an integral element of human development. The provision of drinking water, sanitation, education and health defines the quality of life of an individual. Accessibility to these services shape the day-to-day life of people and have long-term impact in terms of longevity, productivity and earning capacity of an individual.

Amidst a steady economic growth in the last two decades, Government of India has come up with numerous schemes and programs to address the challenges of creating a robust Social infrastructure. These include providing quality potable water to rural areas using Piped drinking water supply, enhancing rural sanitation under the Swachh Bharat campaign, providing universal elementary education under Right to Education, nutrition & health facilities using anganwadis and community health centres and training for gainful employment in Skill development centres.

Reckoning the importance of social infrastructure for development in its latest Priority Sector Lending Classification as on 04 September 2020, RBI has brought bank loans up to a limit of ₹5 crore per borrower for building social infrastructure, namely, schools, health care facilities, drinking water facilities and sanitation facilities in Tier II to Tier VI centres under the ambit of PSL norms. Also, bank credit to Micro Finance Institutions (MFIs) extended for on-lending to individuals and members of SHGs/JLGs for water and sanitation facilities will be eligible for categorization as priority sector under 'Social Infrastructure'.

5.2.2 Infrastructure and linkage support available, planned and gaps

The provisioning of drinking water, sanitation, education, and health defines the quality of life of an individual. Villagers need good quality potable water as much as anyone else in the country.

Social Infrastructure	Gujarat State	District	Remarks
Primary Schools	44545 (73 per 1 lakh population)	1569	DSO, Godhra 2019-20
High School	11478 (19 per 1 lakh population)	301	DSO, Godhra 2019-20
Hospitals / Dispensary	1968 (3 per 1 lakh population)	11/65	As per Soc. & Eco review 2017-18
Drinking Water (Households covered under Tap Water)	8408796 (69% household)	121463	Statistical Abstract of Gujarat 2019

(Source: District & State Statistical Book & Socio-Economic Review 2019 & Gujarat Dev.prog 2020-21)

5.2.3 Assessment of potential for the financial year 2023-24

Panchmahal is one of the tribal-dominated backward districts of Gujarat. Considering the preference of the Central Govt. to priorities available resources for such region, the assessment of credit potential has been worked for the 2023-24 as under.

(₹Lakh)

Sr. No.	Activity	Unit	Unit Cost	Physical Units	TFO	Bank Loan
1.	Secondary school	Nos.	70.00	4	280.00	224.00
2.	Primary Schools	Nos.	25.00	7	175.00	140.00
3.	Hospital Taluka Level	Nos.	125.00	5	625.00	500.00
4.	Drinking water RO plant	Nos.	5.00	88	440.00	352.00
5.	Toilets /sanitation	Nos.	0.22	546	120.12	96.10
	Total			-	1640.12	1312.10

5.2.4 Critical intervention required for creating a definitive impact:

- Though schools are available in a few villages, children are required to walk long distances. Infrastructure available in existing schools needs to be upgraded i.e. lights, fans, science laboratory, safe drinking water, sanitation, library, compound wall, etc.
- There are no major Hospitals with all round facilities and care available at Taluka level. People have to travel long distances to reach the district headquarters or have to travel to the nearby cities of Vadodara and Ahmedabad for treatment of major ailments and hospitalization.
- Provision of safe drinking water and sanitation facilities is the need of hour in remote villages.

5.2.5 Suggested Action Points

- State Govt. may consider the setting up of full-fledged Medical Centres / Hospitals at the Taluka level. For this few NGOs/ Trusts may take lead. Bankers may arrange for providing finance for the same.
- Renovation of old schools is one of the most important area of concern, which needs to be addressed on priority basis.
- Bank to disseminate information to the customers and offer the bank loans under rural sanitation projects, drinking water plants etc. by fulfilling the national objective of 'Swachh Bharat Abhiyan'.

5.3 Credit Potential for Renewable Energy

5.3.1 Introduction

Renewable energy is generally defined as energy that comes from resources which are naturally replenished on a human timescale such as sunlight, wind, rain, tides, waves and geothermal heat. Renewable energy replaces conventional fuels in four distinct areas: electricity generation, air and water heating/cooling, motor fuels, and rural (off-grid) energy services. The pressure of increasing population on the one hand and limitations in providing energy in the required quantity from conventional fossil sources on the other hand, has become one of the most burning issues for the country. Renewable sources of energy are going to play an increasingly important role in the future.

Gujarat is the second largest producer of wind power in India. 590 MW capacity of "Solar Park" is located at village Charanka, District Patan in Gujarat spread across 5,384 acres. India's NTPC Ltd. plans to set up a 5 Gigawatt solar park in the western state of Gujarat, which would be the biggest in the country, as the top electricity generator shifts toward cleaner energy. The total biomass potential for Gujarat is about 1,800 MW from crop residue and about 140 MW from forest residue.

With the Government of India committing itself to installing 175 GW of renewable energy capacity by 2022, the Gujarat government identified 1,00,000 hectares of wasteland near Khavda, 72 km north of Bhuj, close to the international border with Pakistan in Kutch, for an energy park. Gujarat is also the 2nd largest producer of wind power in India. 600 MW capacity of "Solar Park" is located at village Charanka, District Patan in Gujarat spread across 5,385 acres. In a boost to Gujarat's efforts to promote renewable energy, Gujarat demonstrated the potential to generate 2,000 MW power through biomass. If the State puts its wasteland to use power generation through biomass, generation can go up to 5,000 MW. Furthermore, the State of Gujarat has launched a progressive and future-looking electric vehicles (EV) policy today. One out of every three passenger cars manufactured in India come from Gujarat. The State's announcement will provide a fillip to the electric mobility ecosystem in the country.

Revised Priority Sector guidelines issued by RBI vide their Circular dated 04th September 2020 & revised on 11th June 2021

Bank loans up to a limit of ₹30 crore to borrowers for purposes like solar based power generators, biomass-based power generators, wind mills, micro-hydel plants and for non-conventional energy based public utilities, viz., street lighting systems and remote village electrification etc., will be eligible for Priority Sector classification. For individual households, the loan limit will be ₹10 lakh per borrower, will come under Priority Sector.

5.3.2 Infrastructure and linkage support available, planned and gaps

In Panchmahal district, a Solar Photovoltaic Power Generating System is utilized for providing continuous uninterrupted power and operation of few Milk Collection Centres. The Ministry of Non-conventional Energy Sources (MNES) had installed the system at Kalol, Halol, Rampura, Morva, Bagodol Milk collection centres. The similar effort needs to be replicated. The district has a sizable potential for participating in this sector, particularly solar energy. Major areas of interest can be biomass power, water heating system, and solar pumping system. Excess solar power generated through rooftop solar panels can be sold to the main electricity grid and it can become a good source of income to farmers.

5.3.3 Assessment of Potential for the financial year 2023-24

(₹Lakh)						
Sr. No.	Activity	Units	Unit cost	Phy. Units	TFO	Bank Loan
1.	GAIC (3 cu.mt) Bio Gas	Nos.	0.28	583	163.24	97.94
2.	KVIC (3 cu.mt) Bio Gas	Nos.	0.25	582	145.50	87.30
3.	Solar water heater systems (100 lpd)	Nos.	0.40	383	153.20	122.56
4.	Solar Pumping system with AC motor	Nos.	2.91	84	244.44	146.66
5.	Resi. Rooftop solar system (2 kW)	Nos.	0.76	84	63.84	38.30
	Total				770.22	492.76

Thus the use of non-conventional sources of energy will help in generation of income through savings to the majority of the population residing in rural areas. Use of these resources will also help in maintaining the proper ecological balance of natural resources and the generation of additional income for farmers.

5.3.4 Critical interventions required for creating definitive impact

- Development of Solar Cities across the State is priority of the State Govt. GEDA is taking initiatives for development of solar water heating and lighting, wind mills and bio gas.
- Gujarat Government has launched Suryashakti Kisan Yojana (SKY) for farmers to use solar energy for irrigation purpose and sell the surplus power via the grid. For

installation of solar panels, farmers will have to pay only 5% of while Central & State Govt. will provide a subsidy of 60% and 35% respectively. State Govt. will provide low-cost loans to the farmers for 7 years.

- GOI has launched a programme for promoting 30000 solar pumping systems per year in the country for the purpose of irrigation. The pumps have to be purchased from empanelled manufacturers of MNRE. The pattern of assistance in the form of capital subsidies at various rates is mentioned in the guidelines. Banks/Agriculture Department should create awareness about such schemes among farmers.
- As per GOI, Department of Financial Services instructions to Public Sector banks the cost of rooftop solar PV plant/ system to be included in a home loan.

5.3.5 Suggested Action Points

State Government

- A composite scheme of small cattle shed with five milch animals and a biogas plant could be prepared by DRDA for financing to SHGs. The Tribal Sub-plan, Gujarat Scheduled Cast Dev. Corporation, Gujarat Minority Financial Development Corporation and Gujarat Backward Class Development Corporation which are generally supporting dairy activity providing financial assistance to the eligible beneficiaries, could also support such a composite scheme.
- Banks and GAIC / Gujarat Energy Development Agency (GEDA) and KVIC have to reorient their focus to educate the farmers about biogas and its benefits.
- Information, promotion, training, and education packaged to take energy ideas to the vast and varied base of energy consumers. Reaching out through the school Energy Education Programme.

b. Banks and others:

- Banks to finance the products of solar energy which can cater to the basic needs of cooking, heating, and lighting especially for the weaker section.
- Banks may design suitable credit products and create awareness about subsidy schemes.
- GEDA in association with milk cooperatives may plan for the popularization of Community Based Biogas plants.

5.3.6 Other Related Matters

By adopting the use of biogas and solar pumping systems, the precious and hard-earned money of farmers can be saved. The expenditure on diesel and electricity can be saved and the renewable energy can be put to use instead of the fossil fuel. This will help in reduction of greenhouse gases and address global warming issues. The farmers can even be motivated to work towards earning of carbon credits and help in doubling of farmers' income by 2022.

CHAPTER-6

INFORMAL CREDIT DELIVERY SYSTEM

6.1 Introduction

Micro finance occupies a pivotal position in the Socio- economic development of India and stands as one of the most promising and cost-effective tools in the fight against global poverty. India ranks first in terms of percentage growth rate of borrowers and gross loan portfolio (GLP) as per the Microfinance Barometer 2017 which ranked the world's top 10 countries in Microfinance based on loan portfolio. Microfinance is playing a crucial role in development of Indian Economy by enhancing credit access for rural households through its initiatives , which have a major stake in bringing the unbanked women to the mainstream by including them into the domain of SHG- BLP on a continuous basis . Being one of the most effective tools of reducing poverty Microfinance has a significant role in bridging the gap between the formal financial institutions and the rural poor.

Among the various models, the SHG - Bank Linkage Programme (BLP) helped extensively to empower the poor, especially rural women, through providing savings and credit windows from banks. NABARD has truly played the role of an enabler in the Microfinance Drive helping it to evolve rapidly into a global movement dedicated to providing access to a range of financial services to the financially excluded through various products and delivery channels. The bank led SHG-BLP, pioneered by NABARD, has grown from small pilot programme of 500 SHGs in 1992 to the largest microfinance programme of the world, with an outreach spanning more than 14.19 crore rural households. As on 31 March 2022, there were 118.93 lakh SHGs with aggregate bank deposits of over ₹47240 crore, annual loan offtake of more than ₹99729 crore and loan outstanding over ₹151051 crore.

For making SHG Bank linkage programme more client friendly and addressing some emerging issues, NABARD suggested certain product level changes under SHG -2 by reiterating thrust on savings with introduction of voluntary savings, smooth flow of credit with sanction of cash credit limit to SHGs, improved risk mitigation mechanism.

(Source-Micro Finance Booklet 2020-21).

6.2 Status of SHG-BLP in the district

Sr.No.	Particulars	Status As on 31.03.2022
1	Potential for formation of SHGs	11046
2	No. of SHGs promoted	8346
3	No. of SHGs savings linked	8346
4	Total Amount of Savings	1223.20
5	Average Savings per Group-State average is ₹14000	14652
6	No. of SHGs credit linked	2197
7	Amount of loan outstanding as on 31 March 2022	1585.20
8	No. of SHGs credit linked during 2021-22	1657
9	Amount of credit sanctioned during 2021-22	1898.22
10	Amount of credit disbursed during 2021-22	1585.07
11	Credit disbursed per SHG during 2021-22	0.96
12	Of which no. of SHGs who availed fresh loans	582
13	No. of SHGs who availed repeat loans	1075
14	Recovery position of SHG loans	93%
15	NPAs under SHG finance (%)	7%

Gujarat Livelihood Promotion Company (GLPC), an executive arm of Mission Mangalam and the implementation agency for NRLM, is playing a major role in the state in implementing the micro finance programme by organizing the poor into self-help groups. GLPC is implementing the scheme for interest subvention in Gujarat in coordination with Ministry of Rural Development, GoI. In district, apart from GLPC, NGOs viz. Ashadeep

Foundation and Adivashi Vikas Mandal were involved in the formation and handholding of SHGs through NABARD supported Wadi, Watershed programmes and other programmes.

6.3 Outreach of SHG programme in the district

Based on the 2011 census, the rural households in the district are estimated at 247168 and the poor families as per Tendulkar Committee report are estimated at 134954(BPL). The number of poor rural household's families including marginally poor has been arrived at by taking 140% of the above to draw a potential of formation of SHGs in the district. As on 31 March 2022, about 68240 (40%) of rural households have been covered under the SHG Bank Linkage programme and it is expected that the entire rural population would be covered under the programme by March 2025.

6.4 Issues related to micro finance

Although 8346 SHGs have been savings linked in the district, a mere 2197 SHGs have availed credit facilities from the banks as on 31 March 2022. The declining number of SHGs being financed by banks every year is a cause of concern. Some of the issues that are hampering the programme in the district are given below:

- There is a huge gap between savings and credit linkage of SHGs
- Lack of awareness and motivation among the SHG members
- Bankers' apathy towards credit linkage of SHGs
- Lack of awareness about micro insurance/pension and other govt. sponsored schemes
- Focus on group formation for availing subsidy from Government
- Regular drop out of SHG members due to migration
- Rotation of leadership within the SHG
- Heavy dependence on Bank Mitras
- Women are reluctant to spend time and travel to attend training programmes

6.5 Estimation of potential under SHG-BLP

Out of the total potential for promotion of 11046 SHGs in the district, as on 31 March 2022, 8346 SHGs have been promoted and savings linked in the district, thereby leaving a gap for promotion of further 2700 SHGs. The number of SHGs credit linked stood at 2197. The block wise details of potential available for promotion and savings linkage of SHGs in the district is furnished below in **paragraph 6.7**. Similarly, the potential for credit linkage of the SHGs is furnished in **paragraph 6.8**. SHG credit linkage target for the State for 2022-23 is 25000.

6.6 Financing through Joint Liability Groups (JLGs)

A lot of emphasis is being laid by the GOI for providing hassle free credit to landless farmers. Accordingly, besides SHG-BLP, NABARD made efforts in innovating and reaching out to the landless farmers through JLG scheme of financing and extends grant support for formation and nurturing of JLGs with 4-10 members, to banks and other JLG promoting agencies. Apart from extending 100% refinance support to Banks, NABARD also extends financial support for awareness creation and capacity building of all stakeholders of the programme. The groups are basically mid-segments clients engaged in similar economic activities like crop production and who are willing to jointly undertake to repay loans taken by the groups. The JLG mode of financing serves as collateral substitute for loans provided to small, marginal, tenant farmers, oral lessees, share croppers, etc. It enables the banks to reach farmers through group / cluster approach, facilitates peer education and credit discipline. Considering an estimated number of 1.08 lakh small and marginal farmers/agricultural labourers in the district, there is potential for financing of 8000 JLGs (considering average 05 members per JLG). So far, a cumulative number of 70 JLGs have been financed to the tune of ₹35.00 lakh by different banks in the district. The banks are expected to extend financial support to a minimum of 450 JLGs during 2022-23, including 90 JLGs of tenant farmers. A project of 50 JLGs has been sanctioned to Panchmahal DCCB during 2021-22.

Business Model on Financing JLGs through RRBs - NABARD has developed a business model on financing JLGs through RRBs. In order to scale up the JLG performance, NABARD has entered into MoU with 2 RRBs of the State.

Women Self Help Group (WSHG) programme

WSHG is a programme of Government of India for formation, financing and nurturing of SHGs in backward and Left Wing Extremism affected districts. At present the programme is being implemented in Dangs, Dahod and Union Territory of Dadra & Nagar Haveli (D&NH).

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

Sr. No.	Name of the block	Total potential for promotion of SHGs	No. of SHGs savings linked as on 31 March 2022	Balance potential as on 31 March 2022	No. of SHGs to be promoted and savings linked during 2022-23	No. of SHGs to be promoted and savings linked during 2023-24
1	GHOUGHAMBA	1887	1767	120	72	48
2	GODHRA	1806	1161	645	387	258
3	HALOL	1447	915	532	319	212
4	JAMBUGHODA	625	575	50	30	20
5	KALOL	1577	942	635	381	254
6	MORVA (H)	1803	1753	50	30	20
7	SHEHERA	1901	1233	668	400	267
	Dist. Total	11046	8346	2700	1619	1079

6.8 Block wise potential for credit linkage of SHGs

Sr. No.	Name of the block	SHGs (credit linked) as on 31 Mar. 2022	SHGs to be credit linked during				SHGs to be credit linked during			
			2022-23				2023-24			
			Fresh		Repeat		Fresh		Repeat	
			No.	Amount (₹ lakh)	No.	Amount (₹ lakh)	No.	Amount (₹ lakh)	No.	Amount (₹ lakh)
1	GHOUGHAMBA	401	54	54.00	595	595.00	54	54.00	649	649.00
2	GODHRA	574	290	290.00	166	166.00	290	290.00	456	456.00
3	HALOL	186	239	239.00	136	136.00	239	239.00	375	375.00
4	JAMBUGHODA	220	23	23.00	267	267.00	23	23.00	290	290.00
5	KALOL	397	285	285.00	96	96.00	285	285.00	381	381.00
6	MORVA (H)	128	23	23.00	623	623.00	23	23.00	646	646.00
7	SHEHERA	291	300	300.00	183	183.00	300	300.00	483	483.00
	Dist. Total	2197	1214	1214.00	2066	2066.00	1214	1214.00	3280	3280.00

(Source : GLPC, Panchmahal)

ANNEXURE-I
ACTIVITY WISE/BLOCK WISE Physical and financial projections 2023-2024

(Rs.Lakhs)

Sr. No.	Activity	Unit size	Unit Cost	% of BL net of margin		Ghoghamba	Godhra	Halol	Jambughoda	Kalol	Morva	Shehra	Total for district
I	Credit Potential for Agriculture												
A	Farm Credit												
i	Crop Production , Maintenance and Marketing												
1	Paddy	Ha	0.68	1	Phy	4212	4185	4155	4155	4155	4172	4300	29334
					BL	2851.52	2833.25	2812.94	2812.94	2812.94	2824.44	2911.10	19859.12
2	Wheat	Ha	0.48	1	Phy	500	3000	700	85	1850	200	4500	10835
					BL	241.50	1449.00	338.10	41.06	893.55	96.60	2173.50	5233.31
3	Jowar	Ha	0.12	1	Phy	10	150	10	10	70	10	10	270
					BL	1.24	18.60	1.24	1.24	8.68	1.24	1.24	33.48
4	Bajra	Ha	0.22	1	Phy	10	50	10	10	300	10	10	400
					BL	2.24	11.20	2.24	2.24	67.20	2.24	2.24	89.60
5	Maize	Ha	0.53	1	Phy	8190	5710	4710	1595	1505	5402	7610	34722
					BL	4348.89	3032.01	2501.01	846.95	799.16	2868.46	4040.91	18437.38
6	Cotton Desi	Ha	0.30	1	Phy	200	350	1100	550	500	20	30	2750
					BL	60.20	105.35	331.10	165.55	150.50	6.02	9.03	827.75
7	Pulses	Ha	0.28	1	Phy	3500	2150	3500	500	1000	1000	1000	12650
					BL	966.00	593.40	966.00	138.00	276.00	276.00	276.00	3491.40
8	Oil seeds/ Soyabean	Ha	0.39	1	Phy	109	650	500	200	400	200	75	2134
					BL	42.51	253.50	195.00	78.00	156.00	78.00	29.25	832.26
9	Ground nut	Ha	0.39	1	Phy	150	100	10	10	25	50	75	420
					BL	58.50	39.00	3.90	3.90	9.75	19.50	29.25	163.80
10	Other food grains	Ha	0.29	1	Phy	200	195	175	155	195	199	195	1314
					BL	58.00	56.55	50.75	44.95	56.55	57.71	56.55	381.06
11	Fodder crops	ha	0.19	1	Phy	500	500	480	451	510	500	450	3391
					BL	95.50	95.50	91.68	86.14	97.41	95.50	85.95	647.68
	Crop LoanTotal					8726.10	8487.36	7293.96	4220.96	5327.73	6325.72	9615.02	49996.84
13	Post harvest/HH/Consumption (+ 10% of crop loan total)					872.61	848.74	729.40	422.10	532.77	632.57	961.50	4999.68
14	Repairs/Maint of farm assets (+20% of crop loan total)					1745.22	1697.47	1458.79	844.19	1065.55	1265.14	1923.00	9999.37
	Total Crop loan					11343.94	11033.56	9482.14	5487.24	6926.05	8223.43	12499.53	64995.89

PLP 2023-24
Panchmahal District

Sr. No.	Activity	Unit size	Unit Cost	% of BL net of margin		Ghoghamba	Godhra	Halol	Jambughoda	Kalol	Morva	Shehra	Total for district
ii	Water Resources												
1	Dug Well	Nos.	1.69	0.8	Phy	95	94	102	100	101	100	100	692
					BL	128.44	127.09	137.90	135.20	136.55	135.20	135.20	935.58
2	Shallow Tube wells	Nos.	1.09	0.8	Phy	65	75	66	62	65	62	65	460
					BL	56.68	65.40	57.55	54.06	56.68	54.06	56.68	401.12
3	Pump sets 15 HP	Nos.	0.61	0.8	Phy	75	70	68	68	70	68	62	481
					BL	36.48	34.05	33.08	33.08	34.05	33.08	30.16	233.96
4	Pump House	Nos.	0.35	0.8	Phy	32	33	30	30	24	27	30	206
					BL	8.96	9.24	8.40	8.40	6.72	7.56	8.40	57.68
5	Lift Irrigation	Ha	1.45	0.8	Phy	89	95	95	92	87	90	90	638
					BL	103.24	110.20	110.20	106.72	100.92	104.40	104.40	740.08
6	Drip Irrigation (6 x6 mtrs)	Ha	0.44	0.8	Phy	98	96	97	95	92	93	90	661
					BL	34.50	33.79	34.14	33.44	32.38	32.74	31.68	232.67
7	Sprinkler (8 x 8) Lat size 32 mm	Ha	0.86	0.8	Phy	95	90	87	84	82	89	87	614
					BL	65.25	61.81	59.75	57.69	56.32	61.13	59.75	421.70
8	Porous Pipe based MI system 6X6	Ha	0.59	0.8	Phy	77	71	70	76	75	77	79	525
					BL	36.52	33.67	33.20	36.04	35.57	36.52	37.46	248.98
9	Renovation of wells	Nos.	0.66	0.8	Phy	89	88	88	88	88	85	82	608
					BL	46.99	46.46	46.46	46.46	46.46	44.88	43.30	321.02
10	Solar Pumpsets (Shallow wells) Model II	Nos.	5.40	0.8	Phy	14	14	14	16	15	15	15	103
					BL	60.48	60.48	60.48	69.12	64.80	64.80	64.80	444.96
11	Borewells + Pumpsets	Nos.	3.30	0.8	Phy	23	25	25	25	22	22	24	166
					BL	60.72	66.00	66.00	66.00	58.08	58.08	63.36	438.24
	WR Total				Phy	752	751	742	736	721	728	724	5154
					BL	638.25	648.20	647.17	646.22	628.53	632.44	635.19	4475.99
iii	Farm Mechanisation (FM)												
1	Mini Tractors 20 HP	Nos.	3.30	0.8	Phy	72	76	72	71	71	71	72	505
					BL	190.08	200.64	190.08	187.44	187.44	187.44	190.08	1333.20
2	Power Tillers	Nos.	2.00	0.8	Phy	72	69	68	67	69	64	66	475
					BL	115.20	110.40	108.80	107.20	110.40	102.40	105.60	760.00
3	Threshers	Nos.	2.00	0.8	Phy	80	78	76	78	80	80	80	552
					BL	128.00	124.80	121.60	124.80	128.00	128.00	128.00	883.20
4	Rotavator	Nos	1.20	0.8	Phy	66	62	66	62	62	62	62	442
					BL	63.36	59.52	63.36	59.52	59.52	59.52	59.52	424.32

PLP 2023-24
Panchmahal District

Sr. No.	Activity	Unit size	Unit Cost	% of BL net of margin		Ghoghamba	Godhra	Halol	Jambughoda	Kalol	Morva	Shehra	Total for district
5	Paddy Transplanter	Nos	2.70	0.8	Phy	37	37	37	36	34	37	39	257
					BL	79.92	79.92	79.92	77.76	73.44	79.92	84.24	555.12
	FM Total				Phy	327	322	319	314	316	314	319	2231
					BL	576.56	575.28	563.76	556.72	558.80	557.28	567.44	3955.84
iv	Plantation / Horticulture (PH)												
1	Mango 7.5 x 7.5	Ha	1.49	0.8	Phy	460	455	455	452	466	471	465	3224
					BL	548.32	542.36	542.36	538.78	555.47	561.43	554.28	3843.01
2	Ber	Ha	0.58	0.8	Phy	25	22	20	20	20	22	25	154
					BL	11.60	10.21	9.28	9.28	9.28	10.21	11.60	71.46
3	Sapota (Chikoo)	Ha	1.29	0.8	Phy	110	115	105	115	102	111	119	777
					BL	113.52	118.68	108.36	118.68	105.26	114.55	122.81	801.86
4	Lime	Ha	1.45	0.8	Phy	125	124	125	124	125	123	128	874
					BL	145.00	143.84	145.00	143.84	145.00	142.68	148.48	1013.84
5	Custered Apple	Ha	1.14	0.8	Phy	65	70	71	67	66	65	59	463
					BL	59.28	63.84	64.75	61.10	60.19	59.28	53.81	422.26
6	Pomegranate	Ha	1.44	0.8	Phy	20	22	22	20	20	20	20	144
					BL	23.04	25.34	25.34	23.04	23.04	23.04	23.04	165.89
7	Amla	Ha	0.90	0.8	Phy	35	36	39	37	38	35	36	256
					BL	25.20	25.92	28.08	26.64	27.36	25.20	25.92	184.32
8	Vegetables	Ha	0.23	0.8	Phy	600	585	589	565	523	577	568	4007
					BL	110.40	107.64	108.38	103.96	96.23	106.17	104.51	737.29
9	Guava	Ha	1.10	0.8	Phy	82	80	82	85	83	85	86	583
					BL	72.16	70.40	72.16	74.80	73.04	74.80	75.68	513.04
10	Medicational & Aromatic plants	Ha	0.94	0.8	Phy	16	19	21	22	25	26	24	153
					BL	12.03	14.29	15.79	16.54	18.80	19.55	18.05	115.06
	PH Total				Phy	1538	1528	1529	1507	1468	1535	1530	10635
					BL	1120.55	1122.52	1119.50	1116.67	1113.68	1136.91	1138.18	7868.02
v	Forestry and Wasteland Development												
1	Farm Forestry	Ha	0.56	0.85	Phy	35	28	29	28	25	24	23	192
					BL	16.66	13.33	13.80	13.33	11.90	11.42	10.95	91.39
2	Waste Land Dev.	Ha	0.60	0.85	Phy	32	36	35	34	32	34	31	234
					BL	16.32	18.36	17.85	17.34	16.32	17.34	15.81	119.34
3	Jatropha Cultivation	Ha	0.71	0.85	Phy	87	89	88	88	88	88	88	616
					BL	52.50	53.71	53.11	53.11	53.11	53.11	53.11	371.76
4	Bamboo Plantation	Ha	0.43	0.85	Phy	77	78	78	75	76	75	74	533
					BL	27.95	28.31	28.31	27.22	27.58	27.22	26.86	193.45

PLP 2023-24
Panchmahal District

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5	Teak 2 x 2	Ha	1.34	0.85	Phy	12	12	12	10	11	10	10	77
					BL	13.67	13.67	13.67	11.39	12.53	11.39	11.39	87.70
	Forestry and WD Total				Phy	243	243	242	235	232	231	226	1652
					BL	127.10	127.38	126.74	122.39	121.44	120.48	118.11	863.64
vi	Animal Husbandry - Dairy												
1	Cows Gir	2 Nos.	1.20	0.8	Phy	692	713	708	719	710	719	710	4971
					BL	664.32	684.48	679.68	690.24	681.60	690.24	681.60	4772.16
2	CB Cows HF	2 Nos.	1.20	0.8	Phy	710	677	683	683	683	701	674	4811
					BL	681.60	649.92	655.68	655.68	655.68	672.96	647.04	4618.56
3	Buffaloes Jafarabadi	2 Nos.	1.40	0.8	Phy	707	708	698	705	698	693	692	4901
					BL	791.84	792.96	781.76	789.60	781.76	776.16	775.04	5489.12
4	Cattle Shed (20 animal)	Nos.	1.38	0.8	Phy	188	188	189	192	191	192	192	1332
					BL	207.55	207.55	208.66	211.97	210.86	211.97	211.97	1470.53
	Total Dairy				Phy	2297	2286	2278	2299	2282	2305	2268	16015
					BL	2345.31	2334.91	2325.78	2347.49	2329.90	2351.33	2315.65	16350.37
5	WC - KCC Dairy		0.13		BL	1450.87	1450.87	1450.86	1450.87	1450.87	1450.87	1450.87	10156.08
	Grand Total Dairy					3796.18	3785.78	3776.64	3798.36	3780.77	3802.20	3766.52	26506.45
vii	AH - Poultry												
1	Broilers (100 birds per unit)	Nos.	0.36	0.8	Phy	62	59	59	62	62	62	62	428
					BL	17.86	17.00	17.00	17.86	17.86	17.86	17.86	123.30
2	Layers Cage (300 layers per unit)	Nos.	1.36	0.8	Phy	17	15	15	17	17	17	17	115
					BL	18.50	16.32	16.32	18.50	18.50	18.50	18.50	125.12
	Total Poultry				Phy	79	74	74	79	79	79	79	543
					BL	36.36	33.32	33.32	36.36	36.36	36.36	36.36	248.42
3	WC - KCC Poultry				BL	4.03	4.05	4.03	4.05	4.05	4.02	4.02	28.25
	Grand Total Poultry					40.39	37.37	37.35	40.41	40.41	40.38	40.38	276.67
viii	AH- Sheep , Goat,Piggery,etc.												
1	Goat Rearing (10+1)	Nos.	0.45	0.8	Phy	292	287	285	292	287	292	292	2027
					BL	105.12	103.32	102.60	105.12	103.32	105.12	105.12	729.72
2	Sheep Rearing (20+1)	Nos.	0.75	0.8	Phy	33	21	21	31	21	21	21	169
					BL	19.80	12.60	12.60	18.60	12.60	12.60	12.60	101.40
	Total S/G/P				Phy	325	308	306	323	308	313	313	2196

PLP 2023-24
Panchmahal District

Sr. No.	Activity	Unit size	Unit Cost	% of BL net of margin		Ghoghamba	Godhra	Halol	Jambughoda	Kalol	Morva	Shehra	Total for district
					BL	124.92	115.92	115.20	123.72	115.92	117.72	117.72	831.12
3	WC - KCC S/G/ Piggery				BL	156.99	156.99	156.99	156.99	156.99	156.99	156.99	1098.90
	Grand Total S/G/P					281.91	272.91	272.19	280.71	272.91	274.71	274.71	1930.02
ix	Fisheries Development												
1	Renovation of Fish Ponds	Ha	3.50	0.85	Phy	2	1	1	2	1	2	1	10
					BL	5.95	2.98	2.98	5.95	2.98	5.95	2.98	29.75
2	Reservoir units - small boat\ net	Nos.	1.65	0.85	Phy	13	13	12	13	12	13	14	90
					BL	18.23	18.23	16.83	18.23	16.83	18.23	19.64	126.23
	Total Fisheries				Phy	15	14	13	15	13	15	15	100
					BL	24.18	21.21	19.81	24.18	19.81	24.18	22.61	155.98
3	WC - KCC Fisheries				BL	7.83	7.83	7.82	7.83	7.82	7.83	7.82	54.78
	Grand Total Fisheries					32.01	29.04	27.63	32.01	27.63	32.01	30.43	210.76
x	Farm Credit - Others												
1	Kankrej Bullocks (2)	Nos.	0.60	0.8	Phy	88	91	87	95	85	85	88	619
					BL	42.24	43.68	41.76	45.60	40.80	40.80	42.24	297.12
2	Bullock carts Tyres	Nos.	0.80	0.8	Phy	65	65	65	66	68	68	62	459
					BL	41.60	41.60	41.60	42.24	43.52	43.52	39.68	293.76
3	Two wheelers	Nos.	0.70	0.8	Phy	425	429	425	426	427	415	420	2967
					BL	238.00	240.24	238.00	238.56	239.12	232.40	235.20	1661.52
4	Misc. Agricultrual advances	Nos.	0.50	0.8	Phy	55	46	47	48	48	49	46	339
					BL	22.00	18.40	18.80	19.20	19.20	19.60	18.40	135.60
					Phy	633	631	624	635	628	617	616	4384
	Farm Credit others Total				BL	343.84	343.92	340.16	345.60	342.64	336.32	335.52	2388.00
	Total Farm Credit (I to X) (A)				BL	16681.01	16356.21	14773.57	10806.59	12193.13	13536.45	17786.30	102133.27
	of which Total term loan					5337.07	5322.65	5291.43	5319.34	5267.08	5313.02	5286.78	37137.38
B.	Agriculture Infrastructure												
i	Construction of storage												
1	Cold Storage units(500 MT)	Nos.	75.00	0.8	Phy	4	4	5	5	5	4	4	31
					BL	240.00	240.00	300.00	300.00	300.00	240.00	240.00	1860.00
2	Rural Godowns (200 MT)	Nos.	18.76	0.8	Phy	25	25	25	25	25	25	25	175
					BL	375.20	375.20	375.20	375.20	375.20	375.20	375.20	2626.40

PLP 2023-24
Panchmahal District

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3	Rural Godown (160 MT)	Nos	15.12	0.8	Phy	30	30	30	30	30	30	30	210
					BL	362.88	362.88	362.88	362.88	362.88	362.88	362.88	2540.16
	Total Const. of Storage				Phy	59	59	60	60	60	59	59	416
					BL	978.08	978.08	1038.08	1038.08	1038.08	978.08	978.08	7026.56
ii	Land Development, Soil Conservation, Watershed Development												
1	Bunding and Trenching (as field level soil and water conservation activities)	Ha	0.21	0.8	Phy	95	95	94	92	91	92	95	654
					BL	15.96	15.96	15.79	15.46	15.29	15.46	15.96	109.87
2	On Farm Development Works (OFD) Land Levelling	Ha	0.29	0.8	Phy	88	85	91	92	90	90	90	626
					BL	20.70	19.99	21.40	21.64	21.17	21.17	21.17	147.24
3	Farm Ponds (20x20x1.5mts)	Nos	0.81	0.8	Phy	22	24	22	25	21	24	23	161
					BL	14.19	15.48	14.19	16.12	13.54	15.48	14.83	103.81
	Total LD				Phy	205	204	207	209	202	206	208	1441
					BL	50.84	51.43	51.38	53.21	50.00	52.10	51.96	360.92
iii	Other Agriculture Infrastructure												
1	Tissue Culture Labs	Nos	75.00	0.8	Phy	0	1	1	0	1	0	0	3
					BL	0.00	60.00	60.00	0.00	60.00	0.00	0.00	180.00
2	Seed Production Unit	Nos	17.00	0.8	Phy	3	3	3	2	3	3	2	19
					BL	40.80	40.80	40.80	27.20	40.80	40.80	27.20	258.40
3	Bio Fertilizer plant	Nos	32.00	0.8	Phy	1	0	0	1	0	1	1	4
					BL	25.60	0.00	0.00	25.60	0.00	25.60	25.60	102.40
4	Vermi Compost Unit	Nos	0.20	0.8	Phy	66	62	63	62	62	62	63	440
					BL	10.56	9.92	10.08	9.92	9.92	9.92	10.08	70.40
	Total Agricultrue Infra.				Phy	70	66	72	65	66	66	66	466
					BL	76.96	110.72	110.88	62.72	110.72	76.32	62.88	611.20
	Total Agri. Infrastructure (B)				Phy	334	329	339	334	328	331	333	2323
					BL	1105.88	1140.23	1200.34	1154.01	1198.80	1106.50	1092.92	7998.68
C	Agriculture - Ancillary activities												
i	Food and Agro processing												
1	Foodgrain Grading , processing & Marketing etc.	Nos	56.00	0.8	Phy	3	3	3	3	2	2	2	18
					BL	134.40	134.40	134.40	134.40	89.60	89.60	89.60	806.40

PLP 2023-24
Panchmahal District

Sr. No.	Activity	Unit size	Unit Cost	% of BL net of margin		Ghoghamba	Godhra	Halol	Jambughoda	Kalol	Morva	Shehra	Total for district
2	Food Grain - Aatta Making Units	Nos	11.25	0.8	Phy	8	8	6	6	8	7	7	50
					BL	72.00	72.00	54.00	54.00	72.00	63.00	63.00	450.00
3	Modern Haldi, masala etc.	Nos	5.00	0.8	Phy	5	6	6	5	6	5	5	38
	spice processing				BL	20.00	24.00	24.00	20.00	24.00	20.00	20.00	152.00
4	Working Capital Requirement	Nos	20.00	0.8	Phy	12	13	13	14	14	12	14	92
					BL	192.00	208.00	208.00	224.00	224.00	192.00	224.00	1472.00
	Total Food & Agro processing				Phy	28	30	28	28	30	26	28	198
					BL	418.40	438.40	420.40	432.40	409.60	364.60	396.60	2880.40
ii	Agri Ancillary Activities - Others												
1	Loans- PACS/FSS/LAMPS/PO	Nos	19.00	0.8	Phy	12	10	10	10	10	10	10	72
					BL	182.40	152.00	152.00	152.00	152.00	152.00	152.00	1094.40
2	ACABC Finance	Nos	10.00	0.8	Phy	1	1	0	1	0	0	1	4
					BL	8.00	8.00	0.00	8.00	0.00	0.00	8.00	32.00
	Total others				Phy	13	11	10	11	10	10	11	76
					BL	190.40	160.00	152.00	160.00	152.00	152.00	160.00	1126.40
	Total Agri Ancillary (C)				Phy	41	41	38	39	40	36	39	274
					BL	608.80	598.40	572.40	592.40	561.60	516.60	556.60	4006.80
I	TOTAL AGRICULTURE (A+B+C)					18395.69	18094.84	16546.31	12553.00	13953.53	15159.55	19435.82	114138.75
	WC AH+ F - KCC (D)					1619.72	1619.74	1619.70	1619.74	1619.73	1619.71	1619.70	11338.01
	GROSS TOTAL (A+B+C+D)					20015.41	19714.57	18166.01	14172.74	15573.25	16779.26	21055.52	125476.76
	of which ATL												49142.86
II	Micro, small and Medium Enterprises												
	Term Loans												
i	Term Loans												
1	Micro Enterprises	Nos	25.00	0.8	Phy	80	80	80	80	80	80	80	560
					BL	1600.00	1600.00	1600.00	1600.00	1600.00	1600.00	1600.00	11200.00
2	Small Enterprises	Nos	250.00	0.8	Phy	5	5	5	5	5	5	5	35
					BL	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	1000.00	7000.00
3	Medium enterprises	Nos	750.00	0.8	Phy	1	1	1	1	1	1	1	7
					BL	600.00	600.00	600.00	600.00	600.00	600.00	600.00	4200.00
	Total TL Mfg sector				Phy	86	86	86	86	86	86	86	602

PLP 2023-24
Panchmahal District

Sr. No.	Activity	Unit size	Unit Cost	% of BL net of margin		Ghoghamba	Godhra	Halol	Jambughoda	Kalol	Morva	Shehra	Total for district
					BL	3200.00	3200.00	3200.00	3200.00	3200.00	3200.00	3200.00	22400.00
	Working Capital												
i	Working Capital												
1	Micro Enterprises	Nos	5.00	0.8	Phy	80	80	80	80	80	80	80	560
					BL	320.00	320.00	320.00	320.00	320.00	320.00	320.00	2240.00
2	Small Enterprises	Nos	50.00	0.8	Phy	5	5	5	5	5	5	5	35
					BL	200.00	200.00	200.00	200.00	200.00	200.00	200.00	1400.00
3	Medium Enterprises	Nos	100.00	0.8	Phy	1	1	1	1	1	1	1	7
					BL	80.00	80.00	80.00	80.00	80.00	80.00	80.00	560.00
	Total WC - Mfg Sector				Phy	86	86	86	86	86	86	86	602
					BL	600.00	600.00	600.00	600.00	600.00	600.00	600.00	4200.00
II	TOTAL MSME					3800.00	3800.00	3800.00	3800.00	3800.00	3800.00	3800.00	26600.00
III	Credit Potential for Export Credit												
1	Preshipment / Packing credit	Nos	60.00	0.8	Phy	1	1	1	0	0	0	0	3
					BL	48.00	48.00	48.00	0.00	0.00	0.00	0.00	144.00
2	Post shipment	Nos	35.00	0.8	Phy	1	1	1	0	0	0	0	3
					BL	28.00	28.00	28.00	0.00	0.00	0.00	0.00	84.00
					Phy	2	2	2	0	0	0	0	6
	Total Export Credit				BL	76.00	76.00	76.00	0.00	0.00	0.00	0.00	228.00
IV	Credit Potential for Education												
1	Higher Education loans	Nos	10.00	0.9	Phy	14	17	14	14	13	15	14	101
					BL	126.00	153.00	126.00	126.00	117.00	135.00	126.00	909.00
2	Education loans - Tech,others	Nos	6.00	0.9	Phy	30	35	35	30	33	30	30	223
					BL	162.00	189.00	189.00	162.00	178.20	162.00	162.00	1204.20
	Total Education Credit				Phy	44.00	52.00	49.00	44.00	46.00	45.00	44.00	324.00
					BL	288.00	342.00	315.00	288.00	295.20	297.00	288.00	2113.20
V	Credit Potential for Housing												
1	Housing Loan	Nos	20.00	0.8	Phy	61	76	67	62	65	65	65	461
					BL	976.00	1216.00	1072.00	992.00	1040.00	1040.00	1040.00	7376.00
2	Housing Loan Renovation	Nos	5.00	0.8	Phy	95	94	91	92	96	93	92	653
					BL	380.00	376.00	364.00	368.00	384.00	372.00	368.00	2612.00

PLP 2023-24
Panchmahal District

Sr. No.	Activity	Unit size	Unit Cost	% of BL net of margin		Ghoghamba	Godhra	Halol	Jambughoda	Kalol	Morva	Shehra	Total for district
	Total Housing Credit				Phy	156	170	158	154	161	158	157	1114
					BL	1356.00	1592.00	1436.00	1360.00	1424.00	1412.00	1408.00	9988.00
VI	Social Infrastructure involving bank credit												
1	Madhyamik school	Nos	70.00	0.8	Phy	1	1	0	0	1	1	0	4
					BL	56.00	56.00	0.00	0.00	56.00	56.00	0.00	224.00
2	Prathamik school	Nos	25.00	0.8	Phy	1	1	1	1	1	1	1	7
					BL	20.00	20.00	20.00	20.00	20.00	20.00	20.00	140.00
3	Hospital Taluka level	Nos	125.00	0.8	Phy	1	1	1	1	0	1	0	5
					BL	100.00	100.00	100.00	100.00	0.00	100.00	0.00	500.00
4	Drinking water RO plants	Nos	5.00	0.8	Phy	13	12	15	15	12	12	9	88
					BL	52.00	48.00	60.00	60.00	48.00	48.00	36.00	352.00
5	Toilets /sanitation	Nos	0.22	0.8	Phy	78	78	78	78	82	77	75	546
					BL	13.73	13.73	13.73	13.73	14.43	13.55	13.20	96.10
	Total Social Infrastructure				Phy	94	93	95	95	96	92	85	650
					BL	241.73	237.73	193.73	193.73	138.43	237.55	69.20	1312.10
VII	Renewable Energy												
1	GAIC(3 cu.mt)	Nos.	0.28	0.6	Phy	85	82	81	85	84	82	84	583
					BL	14.28	13.78	13.61	14.28	14.11	13.78	14.11	97.94
2	KVIC(3 cu.mt)	Nos.	0.25	0.6	Phy	85	82	84	80	84	82	85	582
					BL	12.75	12.30	12.60	12.00	12.60	12.30	12.75	87.30
3	Solar water heater sytems (100 lpd)	Nos.	0.40	0.8	Phy	56	52	55	55	55	55	55	383
					BL	17.92	16.64	17.60	17.60	17.60	17.60	17.60	122.56
4	3 HP Solar Pumpset with AC motor	Nos..	2.91	0.6	Phy	14	11	11	11	15	12	10	84
					BL	24.44	19.21	19.21	19.21	26.19	20.95	17.46	146.66
5	Resi. Rooftop Solar system 2 kW	Nos.	0.76	0.6	Phy	12	12	12	12	12	12	12	84
					BL	5.47	5.47	5.47	5.47	5.47	5.47	5.47	38.30
	Total Renewable energy				Phy	252	239	243	243	250	243	246	1716
					BL	74.87	67.39	68.49	68.56	75.97	70.10	67.39	492.77
VIII	Credit potential for others												
1	Fresh Loans to SHG	Nos	1.00	0.8	Phy	98	98	94	89	89	89	89	646
					BL	78.40	78.40	75.20	71.20	71.20	71.20	71.20	516.80

PLP 2023-24
Panchmahal District

Sr. No.	Activity	Unit size	Unit Cost	% of BL net of margin		Ghoghamba	Godhra	Halol	Jambughoda	Kalol	Morva	Shehra	Total for district
2	Repeat Loans to SHGs	Nos.	1.00	0.8	Phy	116	116	116	112	112	112	112	796
					BL	92.80	92.80	92.80	89.60	89.60	89.60	89.60	636.80
3	Loans to JLGs	Nos.	0.40	0.8	Phy	67	67	67	67	67	67	67	469
					BL	21.44	21.44	21.44	21.44	21.44	21.44	21.44	150.08
4	Loans to Distressed	Nos.	1.00	0.8	Phy	55	55	52	45	49	48	44	348
					BL	44.00	44.00	41.60	36.00	39.20	38.40	35.20	278.40
5	Loans under PMJDY	Nos.	0.50	0.8	Phy	40	50	51	50	50	50	50	341
					BL	16.00	20.00	20.40	20.00	20.00	20.00	20.00	136.40
6	Overdraft under PMJDY	Nos.	0.10	0.8	Phy	70	70	71	70	70	70	7	428
					BL	5.60	5.60	5.68	5.60	5.60	5.60	0.56	34.24
7	Govt. sponsored SC/ST	Nos.	0.50	0.8	Phy	12	15	15	12	14	14	13	95
					BL	4.80	6.00	6.00	4.80	5.60	5.60	5.20	38.00
8	Misc. PMEGP, VBY, GBCDC	Nos.	0.50	0.8	Phy	5	5	5	10	10	11	10	56
					BL	2.00	2.00	2.00	4.00	4.00	4.40	4.00	22.40
	Total others				Phy	463	476	471	455	461	461	392	3179
					BL	265.04	270.24	265.12	252.64	256.64	256.24	247.20	1813.12
	TOTAL PRIORITY SECTOR					26117.04	26099.94	24320.34	20135.66	21563.50	22852.15	26935.31	168023.94

Annexure II
Overview of Ground Level Credit - Agency-wise & Sector-wise -2019-20, 2020-21, 2021-22 & target - 2022-23

(Rs. Lakhs)

Sr. No.	Agency / type of Loan	2019-20		2020-21		2021-22		2022-23
		Target	Achievement	Target	Achievement	Target	Achievement	Target
1)	CROP LOAN							
	CBs	25221.12	13730.70	27743.27	16502.00	29407.82	22389.00	31911.00
	CCB/SCB	5553.44	2990.00	6108.78	3466.00	6475.31	4598.00	6993.00
	SCARDB	360.83	0.00	396.91	0.00	420.73	0.00	454.00
	RRB	12391.18	9271.78	13630.29	10425.00	14993.32	11395.00	16193.00
	Sub total (A)	43526.57	25992.48	47879.25	30393.00	51297.18	38382.00	55551.00
2)	TERM LOAN (MT+LT)							
	CBs	19366.48	14685.39	21132.31	21654.00	22400.27	25761.00	31370.00
	CCB/SCB	1340.18	706.00	1453.49	257.00	1530.69	536.00	1653.00
	SCARDB	454.86	316.07	498.10	393.00	527.99	401.00	571.00
	RRB	4499.48	1130.43	4901.87	1002.00	5392.06	2373.00	5823.00
	Sub total (B)	25661.00	16837.89	27985.77	23306.00	29851.01	29071.00	39417.00
3)	Total Agricultural Credit							
	CBs	44587.60	28416.09	48875.58	38156.00	51808.09	48150.00	63281.00
	CCB/SCB	6893.62	3696.00	7562.27	3723.00	8006.00	5134.00	8646.00
	SCARDB	815.69	316.07	895.01	393.00	948.72	401.00	1025.00
	RRB	16890.66	10402.21	18532.16	11427.00	20385.38	13768.00	22016.00
	Sub total (A) + (B) = C	69187.57	42830.37	75865.02	53699.00	81148.19	67453.00	94968.00
4)	NON FARM SECTOR							
	CBs	34747.69	43903.11	38245.44	40223.00	40507.73	64060.75	45405.00
	CCB/SCB	120.30	160.00	132.33	26.00	426.15	149.15	212.00
	SCARDB	155.87	0.00	171.47	0.00	123.63	0.00	233.00
	RRB	2393.99	1047.52	2633.39	1819.00	2719.76	4378.00	3566.00
	Sub total (D)	37417.85	45110.63	41182.63	42068.00	43777.27	68587.90	49416.00
5)	OTHER PRIORITY SECTOR							
	CBs	3496.85	583.32	3823.66	859.00	4053.08	6282.27	6993.00
	CCB/SCB	32.09	0.00	35.30	1095.00	37.41	1311.00	40.00
	SCARDB	30.11	0.00	33.10	0.00	35.09	0.00	38.00
	RRB	334.43	85.39	367.88	69.00	404.67	376.34	437.00
	Sub total (E)	3893.48	668.71	4259.94	2023.00	4530.25	7969.62	7508.00
6)	GRAND TOTAL							
	CBs	82832.14	72902.52	90944.68	79238.00	96368.90	118493.02	115679.00
	CCB/SCB	7046.01	3856.00	7729.90	4844.00	8469.56	6594.15	8898.00
	SCARDB	1001.67	316.07	1099.58	393.00	1107.44	401.00	1296.00
	RRB	19619.08	11535.12	21533.43	13315.00	23509.81	18522.34	26019.00
	GRAND (C+D+E)	110498.90	88609.71	121307.59	97790.00	129455.71	144010.52	151892.00

Annexure-III

Sub -sector wise and Agency-wise Credit Flow under Agriculture and allied activities for 2019-20, 2020-21, 2021-22 and target for 2022-23

(Rs. Lakhs)

Sr.No	Particulars Agencies/ Activiites	2019-20				2020-21				2021-22				2022-23 (targets)			
		CBs	Coops	RRBs	Total	CBs	Coops	RRBs	Total	CBs	Coops	RRBs	Total	CBs	Coops	RRBs	Total
I.	Crop loans	13730.70	2990.00	9271.78	25992.48	16551.54	3466.00	10425.48	30443.02	22389.00	4598.00	11395.00	38382.00	31910.46	7447.72	16192.79	55550.97
II	Term Loans																
a	MI	453.52	0.00	0.00	453.52	16.72	0.00	0.00	16.72	416.63	0.00	0.00	416.63	2160.18	421.24	961.83	3543.25
b	LD	264.33	0.00	0.00	264.33	3171.92	3.00	0.00	3174.92	5471.86	0.00	20.00	5491.86	0.00	0.00	0.00	0.00
c	FM	2693.62	57.00	52.00	2802.62	3110.84	36.70	63.80	3211.34	5510.79	15.85	309.95	5836.59	8968.86	693.04	1803.33	11465.23
d	P&H	73.83	0.00	0.00	73.83	0.56	0.00	0.00	0.56	258.25	0.00	0.00	258.25	528.22	0.00	0.00	528.22
e	DD	1054.95	660.50	652.00	2367.45	3079.48	248.00	25.68	3353.16	7079.48	447.85	1225.68	8753.01	7734.69	141.53	1996.08	9872.30
f	Poultry	34.00	0.00	0.00	34.00	1270.91	0.00	0.00	1270.91	1670.91	0.00	430.56	2101.47	0.00	0.00	0.00	0.00
g	S/G/P	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
h	Fisheries	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
i	F/WLD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
j	SG/MY	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	687.96		30.54	718.50
k	BG	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l	Others	10111.25	305.00	426.00	10842.25	10954.25	362.40	911.72	12228.37	5353.08	473.20	386.91	6213.19	11290.34	967.57	1031.65	13289.56
	Sub-total-II	14685.50	1022.50	1130.00	16838.00	21604.68	650.10	1001.20	23255.98	25761.00	936.90	2373.10	29071.00	31370.00	2223.38	5823.43	39416.81
	Grand Total (I+II)	28416.20	4012.50	10401.78	42830.48	38156.22	4116.10	11426.68	53699.00	48150.00	5534.90	13768.10	67453.00	63280	9671.10	22016.22	94967.78

Annexure – IV
Indicative unit costs (for major activities of the district) as arrived at by NABARD for its internal use

Sr. No.	Name of the Sector / Activity	Unit Cost (Rs)	Unit size	Sr. No.	Name of the Sector / Activity	Unit Cost (Rs)	Unit size
1	2	3	4	1	2	3	4
1	Water Resources			6	ANIMAL HUSBANDRY		
a	Dug Well (2.5 X20 M) / Bore well + P. set	169000/300000	Nos.	(i)	Dairy Development		
b	Shallow Tube well 75 /150 mtrs	77000/ 109000	Nos.	a	Indig. Cows Gir/Kankarej	120000	2 animals
c	Pumpset (15 HP)/ Pumphouse	60800/35000	Ha.	b	CB Cows Jersey	91000	2 animals
d	Drip irrigation (6x6)	44000	Ha.	c	CB Cows HF	120000	2 animals
e	Sprinkler Irri. Mini (8x8)32 mm	85851	Nos.	d	Buffaloes Mehsani	130000	2 animals
f	Pipe based MI (6 x 6) 16 mm	59280	Nos.	e	Buffaloes Jafrabadi	140000	2 animals
g	Sub. Pumpset (15 HP) / Solar PS (SW) Model II	60800/540000	Nos.	f	Buffaloes Surati	90000	2 animals
h	Rennovation / Deepning of well	66000	Nos	g	Cattle Shed (20 animals)	125000	1 No.
2	Land Development			h	Bulk Coolers	1500000	2000 litres
a	Land Leveling	29400	Ha	i	Fodder Cultivation	16000	Ha
b	Waste Land Devp.	76800	Ha	j	Bulk Milk chilling unit	2400000	5000 liters
c	Farm Pond (20x20x1.5 mts)/ Water Mg	80600	Ha	k	Refrigerated vans	2000000	Nos.
d	Contour /earthen bunding OFD	21000	Ha	(ii)	Poultry Development		
e	Water lining	27000	Ha	a	Layer Birds (cage system)	136000	300 Nos.
f	Fencing, Reg. 5 ft	117900	Ha	b	Broiler Birds (Deep Litter)	36000	100 Nos.
g	Vermiculture Hatcheries (under NPOF)	800000	150 TPA	c	Rabbit Rearing	5500	6 Nos.
h	Vermicompost Unit	20000	Nos	d	Hatchery (2.5 lakh)	2200000	Nos.
3	FARM MECHANISATION			(iii)	Sheep / Goat		
a	Rotavator	120000	Nos.	a	Sheep (20 + 1)	75000	Nos.
b	Power Tiller	200000	Nos.	b	Goat (10+1)	45000	Nos.
c	Threshers	200000	Nos.				
d	Paddy Transplanter	270000	Nos.	7	FISHERIES		
e	Mini Tractor 20 HP	330000	Nos.	a	Non mechanized boats(wooden)	220000	Nos.
				b	Reservoir fishing unit -small boat+ne	150000	Nos.
4	PLANTATION / HORTICULTURE			c	4 Stroke Engines upto 10HP	160000	Nos.
a	Mango 7.5 X 7.5	149000	Ha	d	Fire Glass Boats	500000	Nos.
b	Sapota 10x10	128600	Ha	e	Fish Pond (new)	700000	Ha
c	Lime 3x3	145000	Ha	f	Rennovation of old pond	350000	Ha
d	Cus Apple 5x5 / Ber	114000/ 58000	Ha				
e	Amla 4x5	90000	Ha				
f	Vegetables	23000					
g	Guava 3x6	110050	Ha	8	STORAGE GODOWNS / MARKET YARDS		
h	Medicinal / Aromatic Plants (others)	94000	Ha	a	Cold Storage Units 160/200/300	15600/15300/15000	MT
i	Nursery Small (4 guntha)	400000	Ha	b	Cold Storage Unit Avg. cost	15000	MT
j	Others (Pomegranate) 5x5	144000	Ha	c	Rural Godowns 160 /200 /300	9460/9380/9200	MT
5	FORESTRY / WASTE LAND DEVP.				Avg cost Ru.Godowns	9200	MT
a	Farm forestry	56000	Ha	9	BIO GAS /Solar Pumping Systems		
b	Social Forestry - Waste Land Developme	60000	Ha	a	GAIC /KVIC 3.0 cum size	28000/25000	Nos.
c	Farm Forestry (Bamboo, etc) 5x5	42700	Ha	b	Vermi Hatchery	800000	150 TPA
d	Teak 2 x 2	133650	Ha	c	Solar Shallow well 1/2/3 HP AC	145350/290700/436050	Nos.
e	Jatropha Plantation 2x2	71000	Ha	d	Solar deep well 1/2/3 HP AC	193800/290700/484500	Nos.
	OTHER ALLIED ACTIVITIES			10	OTHER ALLIED ACTIVITIES		
a	Tilting Cart Model-I Aaruni Shreshtha	80000	single	a	Bullock Pair Kankrej	60000	Nos.
b	Tilting Cart Model-I Aaruni Super	38500	single	b	Bullock Pair Gir	35000	Nos.
c	Tilting Cart Model-I Aaruni Adhyatan	38500	single	c	Bullock carts Tyres	80000	Nos.
d	Tilting Cart Model-I Aaruni 2 wheel	16500	single	d	He Buffalo (pair)	80000	Pair
e	Camel Cart-Conventional	11000	single	e	Camel(single)	35-50000	single
f	Camel Cart-Steel and wooden body	27500	single	f	Two wheelers	70000	single
g	Horse Cart	9000	single	g	Bullock Cart Improved (wood steel body pneu. wheels)	35000	single
h	Bullock Cart Conventional(desai wood wooden wheel)	30000	single	h	-do- Improved (Steel body pneumatic wheels)	40000	single
i	-do- Improved (Sag wood pneumatic wheels)	38000	single				

Note: Above mentioned units costs are only indicative and based on the viability of the project, the banks may decided about the unit cost / loan amount.

PLP 2023-24
Panchmahal District

Annexure – V									
Scales of Finance for major crops fixed by District Level Technical Committee (DLTC) for 2022-23									
Name of the District : Panchmaha (SoF per Ha)									
Main Crops				Aurvedic /aeromatic plants - Scale of finance					
Sr No.	Name of Crop	Irrigated (Rs.)	Unirrigated (Rs.)	Sr. No.	Crop name	(Rs.)	Sr No.	Crop name	(Rs.)
1	2	3	4	1	2	3	1	2	3
1	Paddy (High yielding)	67700	37100	1	Ardushi	6700	21	Kavensali	8600
2	Paddy (local)	33700	33700	2	aamla	45900	22	Kalihari	201600
3	Maize (Desi)	53100	48300	3	Ashvgandha	7800	23	Kalmedh	8600
4	Maize (Hybrid)	48300	48300	4	Atish	25400	24	Kvochibich	6900
5	Groundnut	38400		5	Brahmni	8000	25	Kulaki	19200
6	Cotton	30100	90750	6	Bugrj	12300	26	Lemongrass	75800
7	Tobacco	57300	0	7	Ulga	22400	27	Mekoy	10100
8	Hybrid Bajra (Rainy season)	22400	0	8	Buch	30800	28	Medihina	19000
9	Ragi (Nachni)	11100	0	9	Sitroleta	63500	29	Montha	64700
10	Hybrid Jowar	12400	0	10	Kesterbins	13300	30	Mulothi Likbori	18500
11	Udad	24200	0	11	Chandrasur	7400	31	Palmaroza	24000
12	Tur	32200	0	12	chireeta	18800	32	Palcholi	23700
13	High Yielding wheat	48300	0	13	Kolas	10900	33	Pipli	44800
14	Groundnut (summer season)	51600	0	14	Datura	7500	34	Sarpghandha	23900
15	HY Bajra Summer season	30600	0	15	Gavarpath	62700	35	Solva	262100
16	Gram (Chandadal)	29000	0	16	Goodmar	19000	36	Sadabahar	7400
17	Ginger	73700	0	17	Gilo	14600	37	Sonamukhi	16000
18	Raydo (Raee)	30500	0	18	Esabgul	7100	38	Safed mushdi	252000
19	Sugercane	140600	0	19	Jojoba	39200	39	Satavar	5500
20	Banana	74500	0	20	Jatamasi	19200	40	Tilshi	10800
21	BananaTissue	157300	0						
22	Castor	48300	0						
23	Sunflower Soyabean	38600	0						
24	Chilly	33700	0						
25	Garlic / Potato	77600	0						
26	Onion	61300	0						
27	Dhana	19500	0						
28	Vegetables	27600	0						
29	Rajko (Fodder)	19100	0						
30	Cumin (Jira)	30500	0						
31	Fennel seeds	22400	0						
32	Hybrid tomato / Hybrid Chilly	77600	0						
33	Green Gram Mung	24200	0						
34	Sesame (Til) / Guwar	13200	0						
35	Maize Rabi season (Deshi)	40300	0						
36	Maize Rabi season (Hybrid)	48300	0						
				SOF for AH - Dairy, Poultry, SGP and Fisheries /1 Unit					
							Rs.		
				1	Cow/buffalo		15000		
				2	Goat 10+1		8000		
				3	Sheep 10+1		8000		
				4	Poultry (100 birds)		19800		
				5	Fishery 1 unit 1 Ha		242000		
				6	Reservior Water 1 ha		132000		
				7	Non Mech. Boat		27500		
				8	Mechanised Boat		60500		

List of Abbreviations

ACP	Annual Credit Plan	DTPC	District Tourism Promotion Council
ACABC	Agri Clinic and Agri Business Centre	EDP	Entrepreneurship Development Programme
ADS	Area Development Scheme	e-NAM	e-National Agriculture Market
AEZ	Agri. Export Zone	FIF	Financial Inclusion Fund
AH	Animal Husbandry	FLC	Financial Literacy Centre
AMRUT	Atal Mission for Rejuvenation and Urban Transformation	FLCC	Financial Literacy and Credit Counselling Centres
AIF	Agriculture Infrastructure Fund	FM	Farm Mechanization
AMI	Agriculture Marketing Infrastructure	FPF	Food Processing Fund
APMC	Agricultural Produce Market Committee	FPO	Farmer Producers' Organization
APY	Atal Pension Yojana	FSPF	Farm Sector Promotion Fund
APEDA	Agricultural and Processed Food Products Export Development Authority	GCA	Gross Cropped Area
AI	Artificial Insemination	GCF	Green Climate Fund
ATMA	Agricultural Technology Management Agency	GIA	Gross Irrigated Area
BC	Business Correspondent	GLC	Ground Level Credit
BF	Business Facilitator	GoI	Government of India
BLBC	Block Level Banker's Committee	HYV	High Yielding Variety
BPL	Below Poverty Line	ICT	Information and Communications Technology
BSBDA	Basic Savings Bank Deposit Account	IWMS	Integrated Watershed Management Scheme
CAT	Capacity Building for Adoption of Technology	JLG	Joint Liability Group
CBs	Commercial Banks	KCC	Kisan Credit Card
CBS	Core Banking Solution	KVIB/KVIC	Khadi and Village Industries Board/ Khadi and Village Industries Commission
CCF	Climate Change Fund	KYC	Know Your Customer
CDR	Credit Deposit Ratio	KVK	Krishi Vigyan Kendra
CGTMSE	Credit Guarantee Fund Trust for Micro and Small Enterprises	LBR	Lead Bank Return
CISS	Capital Investment Subsidy Scheme	LDM	Lead District Manager
CRAR	Capital to Risk weighted Asset Ratio	LEDP	Livelihood and Enterprise Development Programmes
DAP	Development Action Plan	LWE	Left Wing Extremism
DBT	Direct Benefit Transfer	MEDP	Micro Enterprise Development Programme
DDD-GKY	Deen Dayal Upadhyaya-Grameen Kaushal Yojana	MFI	Micro Finance Institution
DCCB	District Central Cooperative Bank	MIDH	Mission for Integrated Development of Horticulture
DCC	District Consultative Committee	MI	Minor Irrigation
DCP	District Credit Plan	MNRE	Ministry of New and Renewable Energy
DDM	District Development Manager	MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act
DIDF	Dairy Processing and Infrastructure Development Fund	MSME	Micro, Small and Medium Enterprises
DLRC	District Level Review Committee	MoRD	Ministry of Rural Development
DLTC	District Level Technical Committee	MSC	Multi Service Centre
DRDA	District Rural Development Agency	NABARD	National Bank for Agriculture and Rural Development
NBFC	Non-Banking Financial Company	PPP	Public Private Partnership
NDDB	National Dairy Development Board	PRI	Panchayati Raj Institution
NEFT	National Electronic Fund Transfer	PWCS	Primary Weavers Cooperative Society
NFDB	National Fisheries Development Board	RBI	Reserve Bank of India
NAFCC	National Adaptation Fund for Climate Change	RIDF	Rural Infrastructure Development Fund
NHB/ NHM	National Horticulture Board/ National Horticulture Mission	RNFS	Rural Non-Farm Sector
NIDA	NABARD Infrastructure Development Assistance	RKBY	Rashtriya Krishi Bima Yojana
NIA	Net Irrigated Area	RKVY	Rashtriya Krishi Vikas Yojana
NRLM	National Rural Livelihood Mission	RRB	Regional Rural Bank
NRM	National Resource Management	RUDSETI	Rural Development & Self Employment Training Institute

PLP 2023-24
Panchmahal District

NSA	Net Sown Area	RSETI	Rural Self Employment Training Institute
NSSO	National Sample Survey Organisation	SAMIS	Service Area Monitoring and Information System
NWR	Negotiable Warehouse Receipt	SAO	Seasonal Agriculture Operation
OFPPF	Off-Farm Promotion Fund	SCARDB	State Cooperative Agriculture & Rural Development Bank
OPS	Other Priority Sector	SDI	Skill Development Initiative
PACS	Primary Agricultural Cooperative Society	SF/MF	Small Farmer / Marginal Farmer
PCARDB	Primary Cooperative Agriculture & Rural Development Bank	SFAC	Small Farmers' Agri-Business Consortium
P & H	Plantation & Horticulture	SHG	Self Help Group
PKVY	Paramparagat Krishi Vikas Yojana	SHPI	Self Help Group Promotion Institution
PMFBY	Pradhan Mantri Fasal Bima Yojana	SIDBI	Small Industries Development Bank of India
PMJDY	Pradhan Mantri Jan Dhan Yojana	SMAM	Sub Mission on Agricultural Mechanization
PMJJBY	Pradhan Mantri Jeevan Jyoti Bima Yojana	SLBC	State level Banker's Committee
PMKVY	Pradhan Mantri Kaushal Vikas Yojana	SRI	System of Rice Intensification
PMMY	Pradhan Mantri Mudra Yojana	SRLM	State Rural Livelihood Mission
PMRY	Prime Minister's Rozgar Yojana	StCB	State Cooperative Bank
PMSBY	Pradhan Mantri Suraksha Bima Yojana	TDF	Tribal Development Fund
PMKSY	Prime Mantri Krishi Sinchayee Yojana	WDF	Watershed Development Fund
PODF	Producer Organisation Development Fund	WDRA	Warehousing Development and Regulatory Authority
POPI	Producer Organisation Promoting Institution	WIF	Warehouse Infrastructure Fund
POS	Point of Sale	WSHG	Women Self Help Group

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As on 31st March 2022:

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► **Investments made:** INR 148.21 crore in 9 start-ups

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"The objective of NABSAMRUDDHI is to provide credit facilities to legal entities for the promotion, expansion, commercialisation and modernisation in non-farm & agri allied activities including microfinance, MSME, housing, education, transport, etc."

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► Agri/Food processing

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NABARD, Regional Office 1-1-61, RTC 'X' Road, P.B. No. 1863 Hyderabad- 500020, Telangana

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NABFOUNDATION

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 - ▶ Term loan
 - ▶ Pledge Financing (eNWR)
- › Term lending for Corporates/ NBFCs/ MFIs
- › Soft loans for Agri Startups

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ISO-9001:2015 COMPANY

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- › Watershed Development
- › Irrigation & Water Resources
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- › Natural Resource Management
- › Food Processing
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- › Skills for Livelihood
- › International Business
- › Value Chain Development
- › Infrastructure Monitoring
- › Climate Change

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NABFINS Limited

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- › 63% of shares held by NABARD, with other shareholders being Government of Karnataka and Public Sector Banks
- › Mission - To be a trusted client centric financial institution advancing hassle free services to the low income households and the unorganised sector
- › The company has a range of financial products and services including financing of SHGs in partnership with NGOs and JLGs directly through its branches
- › Operating across in 16 States of India and touching lives of more than 5.50 lakh households with a commitment towards their socio-economic empowerment and furthering the cause for financial inclusion

Registered Office: #3072, 14th Cross, K R Road, Banashankari 2nd stage, Bengaluru - 560 070, Karnataka, India

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Building Trust for Rural Prosperity

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- › Offers credit guarantee through the Trusts under its Trusteeship
- › Two sovereign Credit Guarantee Schemes offered:
 - ▶ FPO Financing
 - ▶ Under Animal Husbandry Infrastructure Development Fund (AHIDF)
- › Credit guarantee given against the credit offered by the Eligible Lending Institutions registered under the Scheme