



संभाव्यतायुक्त ऋण योजना 2022-23

Potential Linked Credit Plan 2022-23

बरनाला जिला
BARNALA DISTRICT

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

पंजाब क्षेत्रीय कार्यालय, चण्डीगढ़
PUNJAB REGIONAL OFFICE, CHANDIGARH



दृष्टि

ग्रामीण समृद्धि के लिए राष्ट्र का विकास बैंक

ध्येय

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

Vision

Development Bank of the Nation for Fostering Rural Prosperity

Mission

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

संभाव्यतायुक्त ऋण योजना 2022-23
Potential Linked Credit Plan 2022-23

बरनाला जिला
BARNALA DISTRICT



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

पंजाब क्षेत्रीय कार्यालय, चण्डीगढ़
PUNJAB REGIONAL OFFICE, CHANDIGARH

प्राक्कथन

संभाव्यतायुक्त ऋण योजना (पीएलपी), ऋण से संबंधित विकास और विभिन्न हितधारकों के लिए संभावित जानकारी के स्रोत के रूप में वर्षों से प्रासंगिक बनी हुई है। इस दस्तावेज़ का उद्देश्य अर्थव्यवस्था के विभिन्न क्षेत्रों के तहत जिलेवार भौतिक संभाव्यता की पहचान करना और बैंक ऋण के माध्यम से संभाव्यतानुसार अधिक से अधिक वित्तपोषण करना है। जिले में उपलब्ध बुनियादी ढांचे, क्षमता के पूर्ण दोहन के लिए आवश्यक अतिरिक्त बुनियादी ढांचे, गत वर्षों में बैंक ऋण प्रवाह के प्रचलन, आदि और राज्य सरकार की योजनाओं के फोकस को ध्यान में रखते हुए संभाव्यता का आंकलन किया जाता है। यह दस्तावेज़ जिला स्तर पर वार्षिक ऋण योजना तैयार करने के लिए रोड मैप प्रदान करता है और बुनियादी ढाँचे एवं संस्थागत अंतराल को भी उजागर करता है जिसे जिले में दूर करने की आवश्यकता है।

मैं इस बात पर प्रकाश डालना चाहूंगा कि कोविड-19 महामारी के दौरान, कृषि ही एकमात्र ऐसा क्षेत्र था जिसने दृढ़ता के साथ अपनी मजबूती दर्शाई और राष्ट्रीय स्तर (3.60%) के साथ-साथ पंजाब (6.30%) के लिए सकारात्मक विकास दर दर्ज की। महामारी के दौरान, नाबार्ड ने वित्त वर्ष 2020-21 और वित्त वर्ष 2021-22 के दौरान पंजाब में ग्रामीण वित्तीय संस्थानों (RFI) को क्रमशः ₹1500 करोड़ और ₹1300 करोड़ की विशेष चलनिधि सहायता (Special Liquidity Support) प्रदान की। इसी तरह, राज्य दुग्ध विपणन संघ (MILKFED) को ऋण सुविधा प्रदान की गई। इन पहलों ने किसानों को इनपुट आपूर्ति और विपणन सहायता सुनिश्चित करने के लिए अति आवश्यक चलनिधि सहायता प्रदान की।

महामारी के दौरान वित्त वर्ष 2020-21 में, पंजाब में ग्रामीण बुनियादी ढांचे को बढ़ावा देने के लिए आरआईडीएफ के तहत वित्तपोषण को दोगुना कर दिया गया। इसके अलावा, राज्य में सूक्ष्म सिंचाई निधि का संचालन किया गया। लॉकडाउन के दौरान, एसएचजी सदस्य और एफपीओ अपने उत्पादों का विपणन नहीं कर पा रहे थे, इसलिए, नाबार्ड पंजाब ने ई-कॉमर्स प्लेटफॉर्म "फ्लिपकार्ट - समर्थ" पर उनके उत्पादों के ऑनलाइन विपणन के लिए अवसर प्रदान करने की पहल की।

अर्थव्यवस्था में विकास के लिए पूंजी निवेश पहली आवश्यकता है। राज्य में राजकोषीय बाधाओं को देखते हुए, पूंजीगत व्यय में संकुचन हुआ था जो कि कोविड लॉकडाउन के कारण और बढ़ गया था। इसी तरह, सामान्य रूप से प्राथमिकता क्षेत्र और विशेष रूप से कृषि में जमीनी स्तर पर ऋण प्रवाह (जीएलसी) स्थिर रहा है। वित्त वर्ष 2020-21 में मीयादी ऋण (Term lending) संचालन के वितरण में 13% का संकुचन देखा गया है। हालांकि, अनलॉकिंग की शुरुआत के साथ, एएनबीए (आत्मनिर्भर भारत अभियान) के तहत भारत सरकार द्वारा प्रदान किए गए राजकोषीय प्रोत्साहन के साथ-साथ वित्त वर्ष 2021-22 के लिए पंजाब सरकार द्वारा पूंजीगत व्यय के लिए बढ़े हुए बजटीय परिव्यय और आरआईडीएफ के तहत रुपये 600 करोड़ के रिकॉर्ड बुनियादी ढाँचे के सहयोग के साथ नाबार्ड ने ऋण समावेश में वृद्धि के लिए एक सार्थक वातावरण बनाया है। इन बुनियादी ढांचे और सहायता पद्धतियों के साथ बैंकों (आरएफआई) को एटीएल परिचालनों के लिए जीएलसी प्रवाह को बढ़ाने के अवसर का उपयोग करना चाहिए।

यह दस्तावेज़ जिले के सभी हितधारकों और विभागों को शामिल करते हुए एक विस्तृत परामर्श प्रक्रिया की परिणति है। 2022-23 के लिए प्राथमिकता क्षेत्र के तहत ब्लॉक-वार और क्षेत्र-वार ऋण क्षमता का अनुमान बरनाला जिले के लिए ₹648276.08 लाख है।

जैसा कि आप जानते हैं कि नाबार्ड डीडीएम जिला स्तर पर पीएलपी तैयार करने, मॉनिटरिंग और

समन्वय में महत्वपूर्ण भूमिका निभाता है। नाबार्ड ने बदलते आर्थिक और प्रशासनिक परिदृश्य में केंद्रित विकासात्मक पहलों के लिए राज्य में पांच डीडीएम क्लस्टर कार्यालय (अमृतसर, बठिंडा, लुधियाना, जालंधर और पटियाला) स्थापित किए हैं। यह व्यवस्था जीएलसी, सरकारी योजनाओं तथा किसानों और ग्रामीण क्षेत्रों के लिए अन्य विकास पहलों की मॉनिटरिंग और योजना की मौजूदा प्रणाली को और मजबूत करेगी।

मैं पीएलपी तैयार करने की प्रक्रिया में मार्गदर्शन करने के लिए उपायुक्त महोदय को हार्दिक धन्यवाद देता हूँ। मैं संबंधित जानकारी प्रदान करने के लिए भारतीय रिजर्व बैंक, अग्रणी जिला प्रबन्धक, बैंकर्स, संबंधित विभागों के अधिकारियों और अन्य हितधारकों को भी धन्यवाद देना चाहता हूँ। मुझे पूर्ण विश्वास है कि सभी संबंधित एजेंसियों के संगठित प्रयासों से इस दस्तावेज में दर्शाई गई जिले की दोहन-योग्य सम्भाव्यताओं को पूर्णतः वास्तविकता में बदला जा सकेगा। इस दस्तावेज को भविष्य में और अधिक प्रभावी बनाने के लिए आपके बहुमूल्य सुझाव और प्रतिक्रिया आमंत्रित हैं।

(डॉ. राजीव सिवाच)

मुख्य महाप्रबंधक

नाबार्ड, पंजाब क्षेत्रीय कार्यालय, चंडीगढ़

Foreword

Potential Linked Credit Plan (PLP), as a source of information on credit related developments and potential for various stakeholders has been gaining relevance over the years. The document aims to identify the district- wise physical potential under various sectors of the economy and the extent to which such potential can be financed through bank credit. Potential assessment is done taking into consideration the infrastructure available in the district, additional infrastructure required for full exploitation of potential, focus of the State Govt. planning, past trend in the flow of bank credit, etc. The document, provides the road map for Annual Credit Planning exercise at the district level and also highlights the infrastructural and institutional gaps which needs to be plugged in the district.

I would like to highlight that during COVID - 19 pandemic, agriculture was the only sector which remained strong and registered a positive growth rate at national level (3.60%) as well as for Punjab (6.30%). During the pandemic, NABARD provided Special Liquidity Support of ₹1500 crore and ₹1300 crore to Rural Financial Institutions (RFIs) in Punjab during FY 2020-21 and FY 2021-22, respectively. Similarly, credit facility was extended to State Milk Marketing Federation (MILKFED). These initiatives provided much needed liquidity support to ensure input supply and marketing support to the farmers.

During the FY 2020-21, funding under RIDF was doubled to support rural infrastructure in Punjab during pandemic. Further, Micro-Irrigation fund was operationalised in the State. During the lockdown, the SHG members and FPOs could not market their products, hence, NABARD Punjab took the initiative to provide opportunities for marketing of their products online on e-commerce platform "Flipkart – Samarth".

Capital investment is a prerequisite for growth in an economy. In view of fiscal constraints in the State, there had been a contraction in capital expenditure which got exacerbated by COVID lockdown. Similarly, the Ground Level Credit (GLC) flow towards the priority sector in general and towards agriculture in particular has been stagnant. The disbursement towards term lending operations has witnessed a contraction of 13% in FY 2020-21. However, with the onset of unlocking, fiscal stimulus provided by Government of India under ANBA (AatmaNirbhar Bharat Abhiyaan) coupled with increased budgetary outlay for capital expenditure by Government of Punjab for FY 2021-22 and record infrastructure support of ₹600 crores under RIDF by NABARD has created an enabling environment for increased credit absorption. Therefore, with the infrastructure and support systems at place the banks (RFIs) must use the opportunity to increase GLC flow towards ATL operations. This document is a culmination of an elaborate consultative process involving all the stakeholders and departments in the district. The block - wise and sector - wise credit potential under priority sector for 2022-23 has been estimated at ₹648276.08 lakh for Barnala district.

As you are aware that NABARD DDM plays the key role in preparation of PLPs, monitoring and coordination at district level. NABARD has setup five DDM Cluster

Offices (Amritsar, Bathinda, Ludhiana, Jalandhar and Patiala) in the State for focussed developmental intervention in changing economic and administrative landscape. It will further strengthen the existing arrangement of planning and monitoring of GLC, Govt. schemes and other development initiatives for farmers and rural areas.

I express my sincere thanks to the Deputy Commissioner for guiding the process of PLP preparation. I would also like to thank RBI, LDM, Bankers, officials of line departments, and other stakeholders for providing the relevant information. I am sure that all the concerned agencies would make concerted efforts to realize the exploitable potential assessed in this document. I look forward to your valuable suggestions and feedback in making this document more effective in the future.

(Dr. Rajiv Siwach)
Chief General Manager
NABARD, Punjab Regional Office, Chandigarh

POTENTIAL LINKED CREDIT PLAN 2022-23 INDEX

Chapter	Particulars	Page No
	Executive Summary	i-ii
	Sector/Sub Sector wise Projections – 2022-23(Appendix A and B)	iii-iv
	District Map	V
	District Profile	vi-vii
	Banking Profile	viii-ix
	Methodology of preparation of PLP	x-xii
1	Important Policies and developments	1-16
2	Credit Potential for Agriculture	17-49
2.1	Farm Credit	17-37
2.1.1	Crop Production, Maintenance and Marketing	17-20
2.1.2	Water Resources	20-22
2.1.3	Farm Mechanisation	22-25
2.1.4	Plantation and Horticulture including sericulture	25-26
2.1.5	Forestry and Waste Land Development	26-28
2.1.6	Animal Husbandry - Dairy	28-30
2.1.7	Animal Husbandry - Poultry	30-32
2.1.8	Animal Husbandry - Sheep, Goat, Piggery etc.	32-33
2.1.9	Fisheries	33-35
2.1.10	Farm Credit - Others – Bullock, Carts , Two wheelers etc	35-36
2.1.11	Integrated Farming Systems	36-37
2.2	Agriculture Infrastructure	37-42
2.2.1	Construction of Storage facilities and Marketing Infrastructure	37-39
2.2.2	Land Development, Soil Conservation, Watershed Development	39-41
2.2.3	Agriculture Infrastructure – Others	41-42
2.3	Agriculture Ancillary Activities	43-49
2.3.1	Food and Agro Processing	43-45
2.3.2	Agriculture Ancillary Activities - Others	45-49
3	Credit Potential for Micro, Small and Medium Enterprises (MSME) A. Term Loans B. Working Capital	50-53
4	Credit Potential for Export Credit, Education and Housing	54-59
5	Credit Potential for Infrastructure	60-67
6	Informal Credit Delivery System	68-71
	ANNEXURES	
Annexure I	Activity wise & Block wise physical and financial projections	72-87
Annexure II	An overview of Ground Level Credit Flow – Agency wise and sector wise –2018-19, 19-20, 20-23 and target for 2021-22	88-89
Annexure III	Sub-sector wise and Agency wise credit flow under Agriculture and allied Activities 2018-19, 19-20, 20-23 and target for 2021-22	90
Annexure IV	Indicative unit costs for 2022-23 for major activities of the district as arrived at by NABARD for its internal use.	91-96
Annexure V	Scale of finance for major crops fixed by State Level Technical Committee.	97-98

EXECUTIVE SUMMARY

Introduction:- NABARD, in 1988-89, took the initiative of preparing the district-wise Potential Linked Credit Plans (PLPs) to guide banks in their credit planning exercise. The PLPs map the potential in priority sectors which could be exploited with institutional credit within a specified time frame. PLPs are intended to provide a meaningful direction to the flow of credit to different sectors at the ground level taking into account all relevant factors. The various linkage and other support required to be provided by line departments to facilitate credit flow as planned are also listed in the PLPs. The theme for PLP 2022-23 is **“Collectivization of Agricultural produce for Enhancing Farmer’s Income”**.

The basic objective of Potential Linked Credit Plan is to map the existing potential for development and evolve an appropriate mechanism for harnessing the identified potential over a specified time frame. In view of new guidelines of RBI regarding credit planning, this document has been prepared in consultation with all stake holders, which would facilitate the task of preparation of annual credit plan, its implementation and achievement thereof.

District Profile: - Barnala district was carved out of Sangrur district on 19 November 2006 vide notification dated 8 November 2006. It has geographical area of 1410 sq. km. It has 3 blocks with 128 inhabited villages and has total population of 5.95 lakh with population density of 402 persons/per sq. km. It has pre dominantly an agriculture based economy. Paddy and Wheat are the two major crops and the district occupied top position in the state in its production and productivity.

Total potential for different investment activities for the year 2022-23 has been estimated at ₹6,48,269.56 lakh which is 4.9% more than that of PLP projections of previous year. These estimates have been arrived at keeping in view the present and projected infrastructure, potential for new and emerging areas, health of financial institutions, credit absorption capacity, past trends, Govt. of India policy regarding term lending, Reserve Bank of India’s new guidelines on priority sector lending and related factors. Under Annual Credit Plan, Agriculture and allied activities constituted major chunk of advances. PLP 2022-23 projections are 17.86% more than that of Annual Credit Plan of ₹550000 lakh for the year 2021-22.

1. Policy Initiatives: - Various steps have been initiated by the Govt .of India, Punjab Govt., RBI and NABARD relating to agriculture, rural development, MSME and Credit Innovations to facilitate growth of agriculture and rural areas.

2. Govt. Sponsored Programme with bank credit: - Many schemes of Govt. of India are being implemented through NABARD besides other schemes like NRLM, PMEGP & SC/ST Corporation etc. which are implemented with the help of banks. Promotional programmes are implemented with the help of NGOs/VAs and banks so as to help unemployed rural youth to take up wage employment or set up of their own units. Due to a robust financial inclusion mechanism, district has reported 100% coverage of the households under PMJDY (Source-www.pmjdy.gov.in).

3. Credit Potential

Total potential for different investment activities for the year 2022-23 has been estimated at ₹6,48,276.08 lakh. These estimates include ₹280728.23 lakh towards crop production, ₹107358.04 lakh towards term loan for Agriculture and allied activities, ₹39180.26 lakh towards Agriculture Infrastructure and ₹5698.89 lakh towards Ancillary Activities. Thus a total of ₹4,32,965.42 lakh which is 67% of the total projections have been estimated towards

Agriculture Sector. MSME with its credit potential at ₹1,04,281.00 lakh is at second position. And also projections have been estimated in Export Credit at ₹937.50 lakh, Education at ₹11400.00 lakh, Housing at ₹26385.00 lakh, Renewable Energy at ₹839.66 lakh, Others at ₹59985.00 lakh and Social Infrastructure at ₹11482.50 lakh.

Past Trends in GLC Flow: - The credit flow under priority sector during last three years in the district is given below:

(₹ Lakh)

Year	Crop Loan	Term Loan for Agri & Allied	Total Agriculture	MSME	OPS	Total Priority Sector
2018-19	243487.63	26574.06	270241.69	37476.33	27342.53	335060.55
2019-20	246482.27	29560.58	276042.85	39655.00	57070.99	372768.84
2020-21	322923.47	21098.24	344021.71	31786.93	48538.72	424347.36
2021-22 (Targets)	296309.71	123690.29	420000.00	44000.00	86000.00	550000.00

Thrust Areas for 2022-23:

- The need of the hour is capital formation in Agriculture sector and for that purpose, term lending component under Agriculture sector needs to be enhanced. Keeping this in mind, increased weight-age to Agriculture Term loan for Agriculture & Allied activities has been given, which covers Food and Agro Processing, Kisan Gold Card, financing to PACS/FPO etc.
- Further, the theme for the year 2022-23 PLP viz. "Collectivization of Agricultural produce for Enhancing Farmers' Income" gives emphasis on promotion of FPOs/ transformation of PACS, accordingly much emphasis has been given on promotion of FPOs and transformation of PACS into Multi Service Centres.

Focus Areas for District's Development:

- The district has already achieved top positions in the productivity of wheat and paddy in the State in recent past, so now focus area for district's development in agriculture sector is the promotion of integrated farming. Already a number of farmers in the district have benefitted by doing integrated piggery and fishery. The successful model of these farmers needs to be emulated across the district, so that dependent of farmers on wheat paddy cycle can be reduced and their income can be increased.
- Sustainable model of Paddy cultivation with lesser water consumption such as Direct Seeding of Rice needs to be promoted. Also, farmers need to be sensitized about not cultivating water guzzling varieties of Rice such as PUSA-44 and instead opt for short duration paddy varieties such as PR-126, 128 etc.

Development Initiatives of NABARD in the district

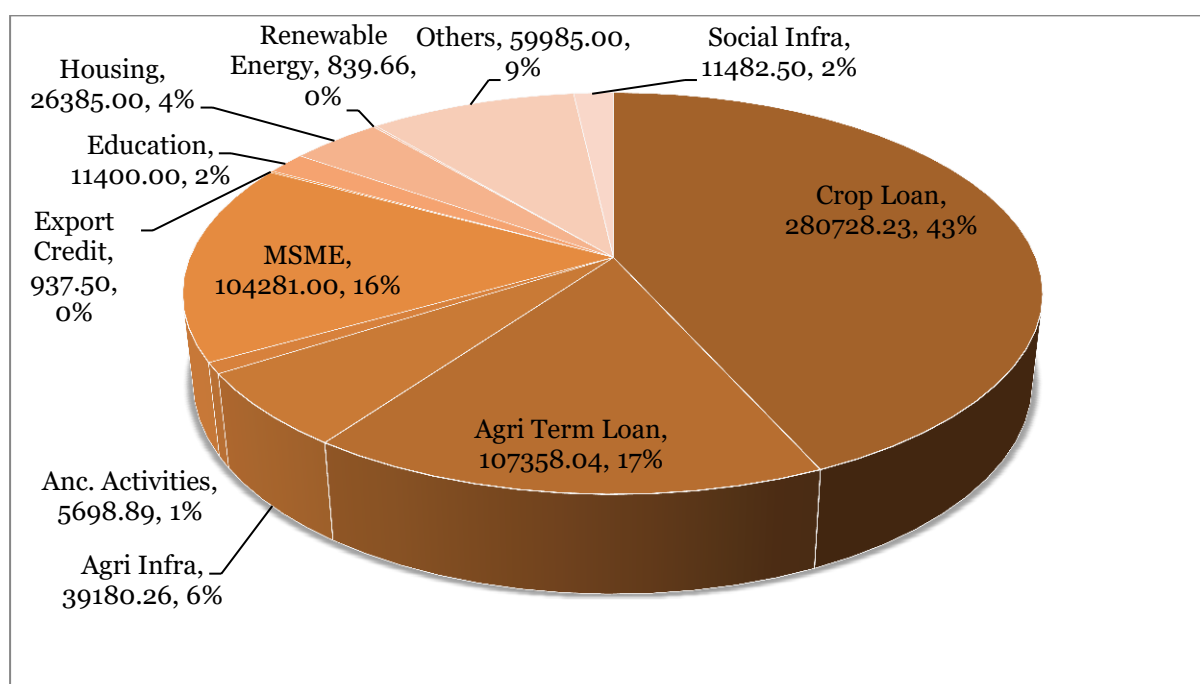
- Support to Water Supply Schemes in 116 out of 128 villages in the district under RIDF.
- Promotion of JLGs with grant support to Sangrur CCB.

Appendix – A
Broad Sector-wise PLP Projections – 2022-23

(₹ lakh)

Sr. No.	Particulars	PLP Projections
A	Farm Credit	
I	Crop Production, Maintenance and Marketing	280728.23
II	Term loan for Agriculture and Allied Activities	107358.04
	Sub Total	388086.27
B	Agriculture Infrastructure	39180.26
C	Ancillary Activities	5698.89
I	Credit Potential for Agriculture (A+B+C)	432965.42
II	Micro Small and Medium Enterprises	104281.00
III	Export Credit	937.50
IV	Education	11400.00
V	Housing	26385.00
VI	Renewable Energy	839.66
VII	Others	59985.00
VIII	Social infrastructure Involving Bank credit	11482.50
	Total Priority Sector	648276.08

Pie Chart showing sector-wise projections



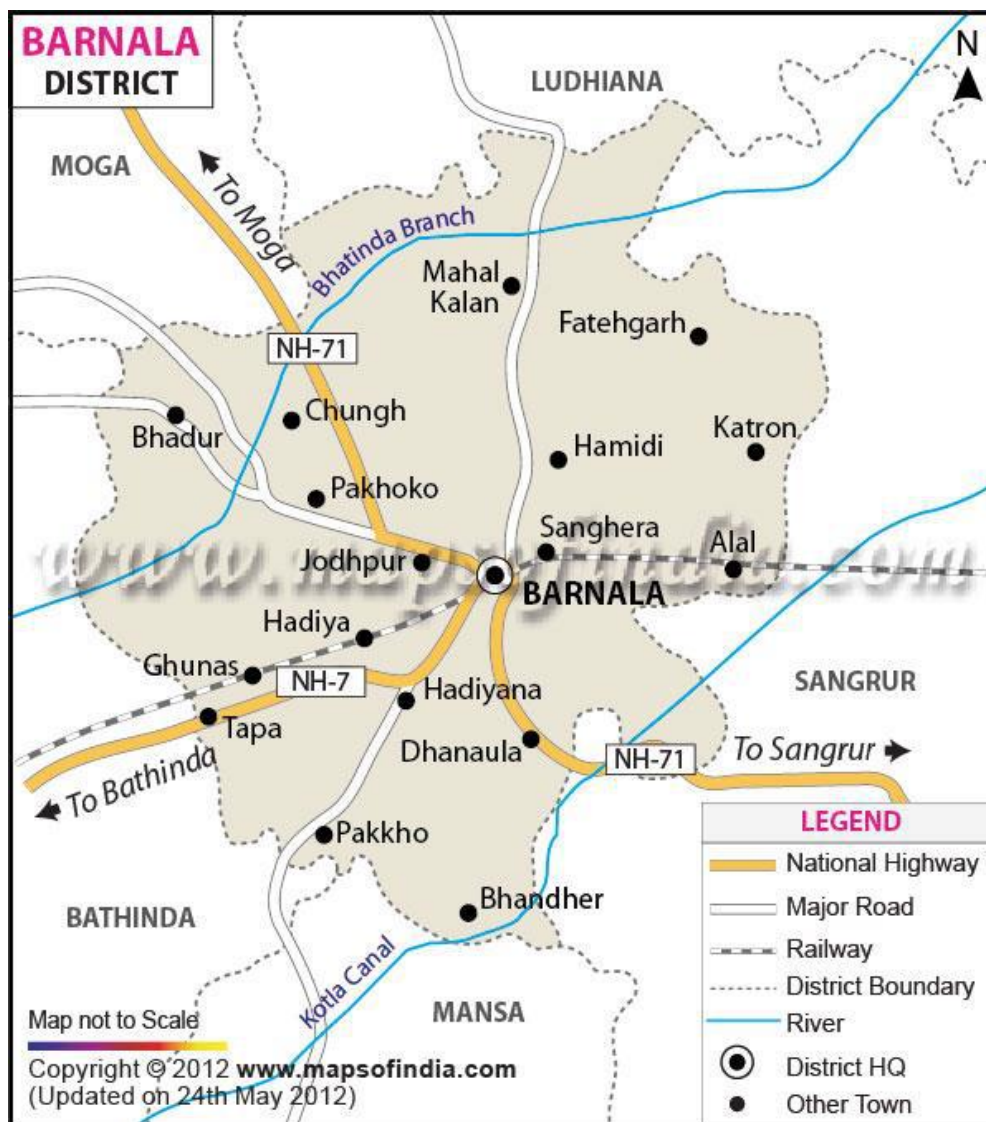
Appendix-B

Summary of Sector/ Sub-sector wise PLP Projections (2022-23)

(₹ lakh)

Sr. No.	Particulars	PLP projection
I	Credit potential for agriculture	
A	Farm Credit	
i	Crop Production, Maintenance and Marketing	280728.23
ii	Water Resources	3210.30
iii	Farm Mechanization	17740.69
iv	Plantation & Horticulture	2058.07
v	Forestry & Waste Land Development	581.40
vi	Animal Husbandry - Dairy	20464.95
vii	Animal Husbandry - Poultry	7476.08
viii	Animal Husbandry –Sheep, Goat, Piggery etc.	1248.75
ix	Fisheries	1603.80
x	Others – Gold Card, Bullock, Bullock cart etc.	52974.00
	Sub Total	388086.27
B	Agriculture Infrastructure	
i	Construction of storage facilities (Warehouses, Market yards, Godowns, Silos, Cold storage units/ Cold storage chains)	15233.25
ii	Land development, Soil conservation, Watershed development	21683.37
iii	Others (Tissue culture, Agri bio-technology, Seed production, Bio pesticides/ fertilizers, Vermi composting)	2263.64
	Sub Total	39180.26
C	Ancillary Activities	
	Food and Agro processing	3346.89
	Others (Loans to PACS for farmers disposing their produce, ACABCs, Loans to PACS / FSS/ LAMPS, Loans to MFIs for on lending)	2352.00
	Sub Total	5698.89
	Total Agriculture	432965.42
II	Micro Small and Medium Enterprises	
	MSME – Working Capital	9481.00
	MSME – Investment Credit	94800.00
	Total MSMSE	104281.00
III	Export Credit	937.50
IV	Education	11400.00
V	Housing	26385.00
VI	Renewable Energy	839.66
VII	Others (Loans to SHGs/ JLGs, PMJDY, SC/ST etc.)	59985.00
VIII	Social Infrastructure involving bank credit	11482.50
	Total Priority Sector	648276.08

District Map



District Profile

District -	Barnala	State -	Punjab	Division -	Patiala		
1. PHYSICAL & ADMINISTRATIVE FEATURES		2. SOIL & CLIMATE					
Total Geographical Area (Sq.km)	1410	Agro-climatic Zone					
No. of Sub Divisions	2	Central Western Plain of Southern Punjab					
No. of Blocks	3	Climate		Flat topography with semi arid climatic conditions			
No. of Villages (Inhabited)	158	Soil Type					
No. of Panchayats	124	Sandy to sandy loam					
3. LAND UTILISATION [Ha]		4. RAINFALL & GROUND WATER					
Total Area Reported	141000	Rainfall [in mm]	Normal	Actual (last 5 years avg.)	2017	2018	2019
Forest Land	1000		500	438.9	339	569	404
Area Not Available for Cultivation	6000	Variation from Normal		-161	69	-96	
Permanent Pasture and Grazing Land	0	Availability of Ground water [Ha]		Net annual recharge		Net annual draft	
Land under Miscellaneous Tree Crops	1000			57919	122092	Balance	
Cultivable Wasteland	0	-64173					
Current Fallow	1105	5. DISTRIBUTION OF LAND HOLDING					
Other Fallow	0	Classification of Holding		Holding		Area	
Net Sown Area	125000			Nos.	% to Total	Ha.	% to Total
Total or Gross Cropped Area	247000	<= 1 Ha		6715	17	877	1
Area Cultivated More than Once	122000	>1 to <=2 Ha		6215	15	5087	4
Cropping Intensity [GCA/NSA]	198	>2 Ha		27450	68	118836	95
		Total		40380	100	124800	100
6. WORKERS PROFILE [in '000]		7. DEMOGRAPHIC PROFILE [in '000]					
Cultivators	60	Category	Total	Male	Female	Rural	Urban
Of the above, Small/Marginal Farmers	NA	Population	595	317	278	405	190
Agricultural Labourers	40	Scheduled Caste	192	101	91	133	59
Workers engaged in Household Industries	5	Scheduled Tribe					
Workers engaged in Allied Agro-activities	NA	Literate	360	202	158	234	126
Other workers	103	BPL					
8. HOUSEHOLDS [in '000]		9. HOUSEHOLD AMENITIES [Nos. in '000 Households]					
Total Households	116	Having brick/stone/concrete houses		103973	Having electricity supply		108908
Rural Households	77	Having source of drinking water		112276	Having independent toilets		97294
BPL Households	10	Having access to banking services		NA	Having radio/tv sets		99579
10. VILLAGE-LEVEL INFRASTRUCTURE [Nos]		11. INFRASTRUCTURE RELATING TO HEALTH & SANITATION [Nos]					
Villages Electrified	124	Anganwadis			Dispensaries		39
Villages having Agriculture Power Supply	124	Primary Health Centres		11	Hospitals		4
Villages having Post Offices	45	Primary Health Sub-Centres			Hospital Beds		445
Villages having Banking Facilities	36	12. INFRASTRUCTURE & SUPPORT SERVICES FOR AGRICULTURE					
Villages having Primary Schools		Fertiliser/Seed/Pesticide Outlets [Nos]			Agriculture Pumpsets [Nos]		
Villages having Primary Health Centres	124	Total N/P/K Consumption [MT]		58000	Pumpsets Energised [Nos]		29507
Villages having Potable Water Supply	124	Pesticides Consumed [MT]			Soil Testing Centres [Nos]		1
		Agriculture Tractors [Nos]		370	Plantation nurseries [Nos]		2
		Power Tillers [Nos]			Farmers' Clubs [Nos]		10
		Threshers/Cutters [Nos]			Krishi Vigyan Kendras [Nos]		1
13. IRRIGATION COVERAGE [Ha]		14. INFRASTRUCTURE FOR STORAGE, TRANSPORT & MARKETING					
Total Area Available for Irrigation (NIA + Fallow)	125105	Rural/Urban Mandi/Haat [Nos]		13	Wholesale Market [Nos]		5
Irrigation Potential Created		Length of Pucca Road [Km]		1612	Godown [Nos]		
Net Irrigated Area (Total area irrigated at least once)	124000	Length of Railway Line [Km]		NA	Godown Capacity [MT]		
Area irrigated by Canals / Channels	57000	Public Transport Vehicle [Nos]		81	Cold Storage [Nos]		
Area irrigated by Wells	67000	Goods Transport Vehicle [Nos]		210	Cold Store Capacity [MT]		
Area irrigated by Tanks	0	16. AREA, PRODUCTION & YIELD OF MAJOR CROPS					
Area irrigated by Other Sources	0	Crop		2018-19	2019-20		Avg. Yield T/ha/MT
Irrigation Potential Utilized (Gross Irrigated Area)	246012		Area (Ha)	Prod. (MT)	Area (Ha)	Prod. (MT)	Yield (Kg/Ha)
15. AGRO-PROCESSING UNITS		Rice	114000	567000	114000	525000	4605
Type of Processing Activity	No of units	Wheat	115000	641000	114000	599000	5254
Food (Rice/Flour/Dal/Oil/Tea/Coffee)	553	Cotton	2000	1500	1500	1200	800
Spices (Masala Powders/Pastes)	17	Moong	200	100	100	100	1000
Cotton (Ginning/Spinning/Weaving)	12	18. INFRASTRUCTURE FOR DEVELOPMENT OF ALLIED ACTIVITIES					
Milk (Chilling/Cooling/Processing)	92	Veterinary Hospitals/Dispensaries [Nos]		67	Animal Markets [Nos]		
Animal feed (Cattle/Poultry/Fishmeal)	48	Disease Diagnostic Centres [Nos]			Milk Collection Centres [Nos]		
17. ANIMAL POPULATION AS PER CENSUS 2019 [in '000]		Artificial Insemination Centers [Nos]		67	Fishermen Societies [Nos]		0
Category of animal	Total	Male	Female	Animal Breeding Farms [Nos]		Fish seed farms [Nos]	
Cattle - Cross bred	49	2	47	Animal Husbandry Tng Centres [Nos]		Fish Markets [Nos]	
Cattle - Indigenous	16	6	10	Dairy Cooperative Societies [Nos]		Poultry hatcheries [Nos]	
Buffaloes	145	8	137	Improved Fodder Farms [Nos]		Slaughter houses [Nos]	
Sheep - Cross bred	1	-	-	19. MILK, FISH, EGG PRODUCTION & THEIR PER CAPITA AVAILABILITY			
Sheep - Indigenous	-	-	-	Fish	Production [MT]	1544	Per cap avail. [gm/day]
Goat	11	2	9	Egg	Production [Lakh Nos]	11.26	Per cap avail. [nos/p.a.]
Pig - Cross bred	2	-	-	Milk	Production ['000 MT]	256	Per cap avail. [gm/day]
Pig - Indigenous	1	-	-	Meat	Production [MT]	NA	Per cap avail. [gm/day]
Poultry - Cross bred	1166	539	627				
Poultry - Indigenous	6	2	4				
Sources (if not mentioned):		Item Nos. 1, 6, 7, 9 & 10 - Census 2011; Item Nos. 2, 3, 5, 12, 13 & 14 - Dept. of Agr./Dir. of Eco. & Stat.; Item No. 4 - Dept. of Agr./Water Resources; Item No. 8 - BPL Survey; Item No. 15 - District Ind Centre/Dir. of Eco. & Stat.; Item No. 16 - DACNET; Item No. 17 - AH Census 2019; Item Nos. 18 & 19 - Dir. of Animal Hus./Dir. of Eco. & Stat.					

DISTRICT PROFILE

Barnala district was carved out of Sangrur district on 19 November 2006 vide notification dated 8 November 2006. It has geographical area of 1410 sq. km. It has 3 blocks with 124 inhabited villages and has total population of 5.95 lakh with population density of 402 persons/per sq. km. It has pre dominantly an agriculture based economy. Paddy and Wheat are the two major crops and the district occupied top position in the state in its production and productivity.

(a) Predominant economic activities of the district

The district has mainly agrarian economy with a few industries located in and around Barnala block. It has substantial number of Rice Shellers as paddy is main crop. Rearing of Milch Animals is the major economic activity after agriculture and of late Bee- Keeping, Vermi compost are also being undertaken by the farmers.

(b) Major Food/Commercial and Plantation /Horticulture crop

Wheat and Paddy are two major crops and now slowly area under Cotton and Sugarcane is increasing. Ber and Gauva are important horticulture crops. Paddy is major crop of kharif season. It is grown in more than 100 lakh hectare in the district every year. The major variety grown is PUSA 44 and other varieties grown are PR-106, 111, 114, 118, 1121 and Basmati. Seeds are made available by Punjab Seed Corporation at subsidized rates besides the seeds available with private traders.

(d) Special/additional /other features of the district relevant to credit estimates

Support to State Extension Programme for Extension Reforms on the pattern of Agriculture Technology & Management Agency (ATMA) project is in operation in the district. It aims at identification of location specific needs of farmers community, to set up priorities for sustainable agriculture development with Farming Systems Approach and to promote, collaborate and coordinate among various line depts. so as to facilitate empowerment of farmers /producers. A few progressive farmers who were sent for exposure training under the programme have taken up cultivation of Soya, Medicinal Plants and ornamental fishery.

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

Majority of agriculture credit is in the form of short term loan/KCC. The need of the hour is capital formation in Agriculture sector and for that purpose, term lending component under Agriculture sector needs to be enhanced.

(f) Critical interventions required for harnessing the potential estimated under PLP 2022-23

The district has good productivity of wheat and paddy in the state. Proper storage and transportation of food grains needs immediate attention. There is need for creating awareness about multi-chamber cold storages among entrepreneurs. Further, given the ground Water exploitation in the district, urgent measures need to be taken up for recharging the ground water and adopting crop diversification.

Banking Profile

District -	Barnala	State -	Punjab	Lead Bank -	SBI
-------------------	----------------	----------------	---------------	--------------------	------------

1. NETWORK & OUT REACH (As on 31/03/2021)

Agency	No. of Banks/Soc.	No. of Branches				No. of non-formal agencies associated			Per Branch Outreach	
		Total	Rural	Semi-urban	Urban	mFIs/mFOs	SHGs/JLGs	BCs/BFs	Villages	Households
Commercial Banks	17	107	49	55					1.20	1084.11
Regional Rural Bank	1	14	12	2					9.14	8285.71
District Central Coop. Bank	1	16	11	5					8.00	7250.00
Coop. Agr. & Rural Dev. Bank	1	2		2					64.00	58000.00
Primary Agr. Coop. Society	82	82	82						1.56	1414.63
Others										
All Agencies	102	221	154	64		nil	694		0.58	524.89

2. DEPOSITS OUTSTANDING

Agency	No. of accounts					Amount of Deposit [Rs. Lakh]				
	31-Mar-19	31-Mar-20	31-Mar-21	Growth(%)	Share(%)	31-Mar-19	31-Mar-20	31-Mar-21	Growth(%)	Share(%)
Commercial Banks	N.A.	N.A.	N.A.			379129	417040	478258	14.68	104.04
Regional Rural Bank	N.A.	N.A.	N.A.			21560	23841	24445	2.53	5.32
Cooperative Banks	N.A.	N.A.	N.A.			23662	18823	24503	30.18	5.33
Others										
All Agencies						424351	459704	527206	14.68	100

3. LOANS & ADVANCES OUTSTANDING

Agency	No. of accounts					Amount of Loan [Rs. '000]				
	31-Mar-19	31-Mar-20	31-Mar-21	Growth(%)	Share(%)	31-Mar-19	31-Mar-20	31-Mar-21	Growth(%)	Share(%)
Commercial Banks	N.A.	N.A.	N.A.			263264	276002	353697	28.15	104.67
Regional Rural Bank	N.A.	N.A.	N.A.			22776	24183	24679	2.05	7.30
Cooperative Banks	N.A.	N.A.	N.A.			35253	37735	36994	-1.96	10.95
Others										
All Agencies						321293	337920	415370	22.92	100

4. CD-RATIO

Agency	CD Ratio		
	31-Mar-19	31-Mar-20	31-Mar-21
Commercial Banks	69.43	66.18	73.96
Regional Rural Bank	105.64	101.43	100.96
Cooperative Banks	148.98	200.47	150.98
Others			
All Agencies	75.71	73.51	78.79

5. PERFORMANCE UNDER FINANCIAL INCLUSION (No. of A/c's)

Agency	During 2020-21		Cumulative	
	Deposit	Credit	Deposit	Credit
Commercial Banks	N.A.	N.A.	N.A.	N.A.
Regional Rural Bank	N.A.	N.A.	N.A.	N.A.
Cooperative Banks	N.A.	N.A.	N.A.	N.A.
Others				
All Agencies	N.A.	N.A.	N.A.	N.A.

6. PERFORMANCE TO FULFILL NATIONAL GOALS (As on 31/03/2021)

Agency	Priority Sector Loans		Loans to Agr. Sector		Loans to Weaker Sections		Loans under DRI Scheme		Loans to Women	
	Amount [Rs. Lakh]	% of Total Loans	Amount [Rs. Lakh]	% of Total Loans	Amount [Rs. Lakh]	% of Total Loans	Amount [Rs. Lakh]	% of Total Loans	Amount [Rs. Lakh]	% of Total Loans
Commercial Banks	281156	66	202386	59	146893	84	N.A.	N.A.	N.A.	N.A.
Regional Rural Bank	68084	16	67503	20	12541	7	N.A.	N.A.	N.A.	N.A.
Cooperative Banks	75107	18	74132	22	15900	9	N.A.	N.A.	N.A.	N.A.
Others							N.A.	N.A.	N.A.	N.A.
All Agencies	424347	100	344021	100	175334	100	N.A.	N.A.	N.A.	N.A.

7. AGENCY-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS

Agency	2018-19			2019-20			2020-21			Average Ach[%] in last 3 years
	Target [Rs. Lakh]	Ach'ment [Rs. Lakh]	Ach'ment [%]	Target [Rs. Lakh]	Ach'ment [Rs. Lakh]	Ach'ment [%]	Target [Rs. Lakh]	Ach'ment [Rs. Lakh]	Ach'ment [%]	
Commercial Banks	341598	254668	74.55	365158	283679	77.69	387558	281156	72.55	74.93
Regional Rural Bank	42432	37539	88.45	42532	38999	91.69	44882	68084	151.70	110.61
Cooperative Banks	90763	42862	47.22	90763	50090	55.19	91560	75107	82.03	61.48
Others										
All Agencies	474793	335060	70.57	498453	372768	74.79	524000	424347	80.98	75.45

8. SECTOR-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS

Broad Sector	2018-19			2019-20			2020-21			Average Ach[%] in last 3 years
	Target [Rs. Lakh]	Ach'ment [Rs. Lakh]	Ach'ment [%]	Target [Rs. Lakh]	Ach'ment [Rs. Lakh]	Ach'ment [%]	Target [Rs. Lakh]	Ach'ment [Rs. Lakh]	Ach'ment [%]	
Crop Loan	258348	243487	94.25	279261	246482	88.26	292810	322923	110.28	97.60
Term Loan (Agr)	114597	26754	23.35	114822	29561	25.75	123690	21098	17.06	22.05
Total Agri. Credit	372945	270241	72.46	394083	276043	70.05	416500	344021	82.60	75.04
Non-Farm Sector	33249	37476	112.71	34561	39655	114.74	35600	31787	89.29	105.58
Other Priority Sector	68599	27342	39.86	69809	57071	81.75	71900	48539	67.51	63.04
Total Priority Sector	474793	335060	70.57	498453	372769	74.79	524000	424347	80.98	75.45

9. RECOVERY POSITION

Agency	2018-19			2019-20			2020-21			Average Rec. [%] in last 3 years
	Demand [Rs. '000]	Recovery [Rs. '000]	Recovery [%]	Demand [Rs. '000]	Recovery [Rs. '000]	Recovery [%]	Demand [Rs. '000]	Recovery [Rs. '000]	Recovery [%]	
Commercial Banks	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Regional Rural Bank	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cooperative Bank	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Others(PADB)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All Agencies	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Sources : Lead Bank & SLBC

BANKING PROFILE

(i) Lead Bank of the district: State Bank of India

(ii) Loans disbursed under priority sector: ₹ 424347.36 lakh during 2019-20 at an increase of 13.83% over the previous year.

(iii) Banking network, deposits and advances: There are 107 branches of 17 Commercial banks, 16 branches of Sangrur Central Cooperative Bank, 14 branches of Punjab Gramin Bank and 2 Primary Cooperative Agriculture Development Banks in the district. As such, there are 139 branches in all, out of which 72 are rural and 67 are semi urban branches. There are 82 PACS in the district.

(iv) Performance Parameters

The data relating to banking profile of the district has been given on a separate sheet titled 'Banking Profile'. However, the analysis on various items relating to targets and achievements is given in the following paragraphs.

- The deposits of all the banks which stood at ₹527206 lakh as on 31.03.2021 increased from ₹459704 lakh as on 31.03.2020. As such there was increase of 14.68% in deposits during 2020-21.
- The loans outstanding of all the banks which stood at ₹415370 lakh as on 31.03.2021 increased from ₹337920 lakh as on 31.03.2020. As such there was increase of 22.92% in loans outstanding during 2020-21.
- The CD ratio of all the agencies in the district was above the desired level of 60% as on 31.03.2021. The overall CD Ratio of the district increased to 78.79% as on 31.03.2021 in comparison to 73.51% as on 31.03.2020.
- The priority sector advances as on 31.03.2021 stood at 94.43% as against the mandate of 40%. The direct loan to agriculture was 76.56% as against the mandate of 18%.
- The overall percentage achievement of the Annual Credit Plan during the year 2020-21 was 80%.

(v) Traditionally, involvement of women in income-generating activities other than wage employment and farming in the district is almost negligible owing to various socio-cultural factors. NABARD has taken initiative under NFS promotional schemes/District Rural Industries Project (DRIP) and conducting Rural Entrepreneurship Development Programme (REDPs)/ Skill Development Initiatives (SDIs) for women.

(vi) Service Area Monitoring and Information System (SAMIS)-The Service Area and Monitoring Information System (SAMIS) was introduced in 1991. The submission level has almost reached 100% for all the returns due to persistent efforts made by the LDM office.

(vii) Initiatives towards Institutional Development

Performance of the banks under DAP/MoU : NABARD has continued with the exercise of preparation of Development Action Plan (DAP) and execution of Memorandum of Understanding (MoU) and accordingly DAPs have been prepared by the DCCB and PCADB and MoUs executed. Due to improved performance of DCCB Sangrur, which is also operating in Barnala, on various DAP/MoU parameters as also other factors of bank's functioning, DCCB has been put under "A" Category. The performance of PCADB is monitored regularly in the DLMRC meetings held at quarterly intervals.

(viii) Financial Inclusion and employment generation

The district has achieved 100% financial Inclusion in the first phase of the programme. The lead bank of the district viz. State Bank of India has set up a Rural Self Employment Training

Institute (RSETI) at Barnala city. Both Punjab Gramin Bank and Sangrur CCB have opened one FLC each in the district.

Methodology for Preparation of Potential Linked Credit Plans (PLPs)

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

Objectives of PLP

The objectives of PLP are

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

Methodology

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

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

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

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

S.No.	Sector	Methodology of estimation of credit potential
1	Crop loans	<ul style="list-style-type: none"> • Collection of data on Gross Cropped Area for a period of 10 years and data on land holdings • Distribution of Gross Cropped Area between Small Farmer/Marginal Farmer and Other farmers based on the total land occupied by small and marginal farmers on one hand and other farmers on the other. • Make assumption to cover 100% of Small/Marginal Farmers and 20% to 50% of Other Farmers; • Study the cropping pattern • Estimation of credit potential taking into account Scale of Finance and also the KCC guidelines in vogue • Block-wise allocation of potential taking into account credit absorption capacity in a particular block, cropping pattern, etc.
2	Water Resources	<ul style="list-style-type: none"> • MI potential is the area that can be brought under irrigation by ground and surface water; • Collection of data on ultimate irrigation potential, area already brought under irrigation and balance potential available under groundwater and surface water for the district • While fairly clear estimates are available for ground water and its present and future utilization, surface water estimates for individual districts are difficult to get; • Estimation of potential to be attempted block-wise based on categorization of blocks, type of rock formation, suitability of MI structures, projects planned by State Govt. etc. • Preference of farmers for different MI structures like dug wells, bore wells, DCBW, etc. is to be taken into account. • The potential for MI sector is defined in terms of numbers for DW, BW and TW, and in terms of an area for lift irrigation, sprinkler and drip systems.
3	Farm Mechanisation	<ul style="list-style-type: none"> • The potential estimate for farm mechanization takes into account irrigated and unirrigated cropped area in the district, economic life of tractor, optimum use of tractor, per acre use of tractor, replacement of tractors per year, assessment of availability of drought animal power/power tiller by using conversion factors; • Calculation of requirement of number of tractors assuming one tractor per 30 acres and 45 acres of irrigated and unirrigated cropped area; • Adjustment of tractor potential with land holdings • Based on the cropping pattern, topography etc similar assessment is made for power tillers, combine Harvesters etc
4	Plantation and Horticulture	<ul style="list-style-type: none"> • 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

S.No.	Sector	Methodology of estimation of credit potential
		<p>treated and brought under plantation crops;</p> <ul style="list-style-type: none"> • Feasibility and possibility of shifting from food crops to plantation crops; • Estimation of replanting by taking into account approximate economic life of a few plantation crops • Estimation of potential for rejuvenation of existing plantation
5	Animal Husbandry – Dairy	<ul style="list-style-type: none"> • Collection of data on number of milch animals as per the latest census • Estimation of milch animals for the reference year by assuming 30% calving, 50:50 sex ratio, 40% calf mortality and 50% culling for buffaloes and 40% calving, 50:50 sex ratio, 20% calf mortality and 50% culling for CBCs and 30% calving, 50:50 sex ratio, 20% calf mortality and 50% culling for Indigenous cows; • 1/6th of the animals are assumed to be good quality animals and 60% of the good quality animals in milk and 60% of animals in milk are on 2nd and 3rd lactation. 50% of the number of animals so arrived are assumed to be animals available for bank finance.

Utility

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

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

Limitations and constraints

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

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

Chapter 1

Important Policies and Developments

1.1 Policy Initiatives - Government of India

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

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

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

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

Proposals relating to Fisheries sector:

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

Tax Proposals on Agriculture Products:

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

Achievements and Milestones during the COVID-19 pandemic

- Pradhan Mantri Garib Kalyan Yojana (PMGKY):
 - Valued at ₹2.76 lakh crore
 - Free food grain to 80 crore people
 - Free cooking gas for 8 crore families
 - Direct cash to over 40 crore farmers, women, elderly, the poor and the needy
- Aatma Nirbhar Bharat package (ANB 1.0):
 - Estimated at ₹23 lakh crore – more than 10% of GDP
 - PMGKY, three ANB packages (ANB 1.0, 2.0 and 3.0), and announcements made later were like 5 mini-budgets in themselves
 - ₹27.1 lakh crore worth of financial impact of all three ANB packages including RBI's measures – amounting to more than 13% of GDP
- Structural reforms:
 - One Nation One Ration Card
 - Agriculture and Labour Reforms
 - Redefinition of MSMEs
 - Commercialisation of the Mineral Sector
 - Privatisation of Public Sector Undertakings
 - Production Linked Incentive (PLI) Scheme
 - 2 Made-in-India vaccines – medically safeguarding citizens of India and those of 100 plus countries against COVID-19 & 2 or more new vaccines expected soon

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

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

1. NABARD extended additional re-finance support of ₹30,000 crore, in addition to ₹90,000 already being provided, for meeting crop loan requirement of Rural Cooperative Banks and RRBs.
2. ₹2 lakh crore credit boost to 2.5 crore farmers under Kisan Credit Card Scheme.
3. ₹1 lakh crore under Agri Infrastructure Fund for creation of farm-gate infrastructure for farmers.
4. ₹10,000 crore towards the scheme for Formalisation of Micro Food Enterprises (MFE) to be implemented over a period of five years from 2020-21 to 2024-25.
5. ₹20,000 crore for fishermen through Pradhan Mantri Matsya Sampada Yojana (PMMSY). ₹11,000 crore for activities in Marine, Inland fisheries and Aquaculture along with ₹9000 crore for Infrastructure i.e. Fishing Harbours, Cold chain, Markets, etc.
6. To support private investment in Dairy Processing, value addition and cattle feed infrastructure, an Animal Husbandry Infrastructure Development Fund (AHIDF) of ₹15,000 crore was set up.
7. 10,00,000 ha to be covered under Herbal cultivation in next two years with outlay of ₹4,000 crore to lead to ₹5,000 crore income generation for farmers.

8. “Operation Greens” run by Ministry of Food Processing Industries (MOFPI) will be extended from Tomatoes, Onion and Potatoes (TOP) to ALL fruit and vegetables. 50% subsidy on transportation from surplus to deficient markets and 50% subsidy on storage, including cold storages, to be provided. This will lead to better price realisation to farmers, reduced wastages and affordability of products for consumers.
9. ₹65,000 crore to be provided to ensure increased supply of fertilizers to farmers to enable timely availability of fertilisers in the upcoming crop season.
10. The GoI, launched the Pradhan Mantri Garib Kalyan Yojana (PMGKY) for ensuring food security through public distribution system, direct benefit transfers to widows, pensioners and women.
11. Besides, the cash support, for better price realisation on farmers’ produce during the ongoing pandemic, GoI has substantially increased the MSP vis-à-vis the cost of cultivation and enhanced the number of commodities to be procured through the state agencies.

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

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

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

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

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

Objectives

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

A provision of ₹200 crores has been made for the scheme in the budget 2021 and 16 States

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

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

1.2 Policy Initiatives – Reserve Bank of India

The following major initiatives have been taken by the RBI:

- Instructions were issued to all Commercial Banks, Regional Rural Banks, Small Finance Banks, Urban Cooperative Banks, State Cooperative Banks, DCCBs, NBFCs on COVID 19 Regulatory Package – Asset Classification and Provisioning to relax repayment pressure and improving access to working capital by mitigating the burden of debt servicing, prevent the transmission of financial stress to the real economy, and ensure continuity of viable businesses and households. The detailed instructions with regard to asset classification and provisioning were issued by RBI, vide circular dated 17 April 2020 and 23 May 2020, respectively.
- In the wake of the nationwide lockdown due to outbreak of COVID -19 pandemic and the resultant restrictions imposed on movement of people, many farmers were not able to travel to bank branches for payment of their short term crop loan dues. Instructions were issued to all Public and Private Sector Scheduled Commercial Banks to extend the benefit of IS of 2% and PRI of 3% for short term crop loans upto ₹3 lakh to farmers whose accounts had become due or shall become due between March 1, 2020 and May 31, 2020, vide circular dated 21 April 2020.
- The Reserve Bank had made recommendations on the required financial parameters with sector specific benchmark ranges for such parameters to be factored in the resolution plans and accordingly, set up an Expert Committee with Shri K. V. Kamath as the Chairperson. The Expert Committee submitted its recommendations to RBI on September 2020. Accordingly, all lending institutions shall mandatorily consider the key ratios while finalizing the resolution plans in respect of eligible borrowers vide circular dated 07 September 2020.
- RBI extended Interest Subvention (IS) and Prompt Repayment Incentive (PRI) for Short Term Loans for Agriculture including Animal Husbandry, Dairy and Fisheries for extended period up to 31 August 2020 on account of Covid-19, vide circular dated 4 June 2020.
- Master circular on Deendayal Antyodaya Yojana and National Rural Livelihoods Mission (DAY-NRLM) was suitably updated by incorporating the modifications, vide circular dated 18 September 2020.
- Government of India (GoI), vide Gazette Notification S.O. 2119 (E) dated June 26, 2020, notified new criteria for classifying the enterprises as Micro, Small and Medium enterprises. The new criteria are classification of enterprises, composite criteria of investment and turnover for classification, Calculation of investment in plant and machinery or equipment and Calculation of turnover. This will come into effect from July

1, 2020, vide circular dated 02 July 2020.

- In view of the continued need to support the viable MSME entities on account of fallout of COVID-19 and to align these guidelines with the Resolution Framework for COVID-19 related Stress announced for other advances, RBI decided to extend the scheme i.e., existing loans to MSMEs classified as 'standard' to be restructured without a downgrade in the asset classification, vide circular dated 06 August 2020.

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

1.3 Policy Initiatives - NABARD

1.3.1 Long-Term Refinance

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

1.3.2 Short-Term Refinance

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

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

Initiatives taken during the year (2020-21)

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

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

- i. **PACSS as Multi Service Centers (MSCs)** - NABARD introduced Special refinance scheme to saturate all the potential PACS for conversion as Multi Service Centres, over a period of three years commencing from the year 2020-21. The scheme intends to develop all the potential PACS as Multi Service Centres (MSCs) over a period of three years commencing from the year 2020-2021 by providing

concessional refinance to StCBs at 3% to support PACS to create quality infrastructure (capital assets) and increase their business portfolio in tune with needs of members. Under this line of credit, NABARD has envisaged transformation of 35,000 PACS in three years commencing with the transformation of 5,000 PACS in FY21. During 2020-21, 3055 PACS were given in-principle sanction by NABARD with estimated Project cost of ₹1,760.82 crore and estimated loan of ₹1,568 crore.

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

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

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

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

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

1.3.4 Rural Infrastructure Development Fund (RIDF)

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

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

8. Important Funds:

A. Micro Irrigation Fund (MIF)

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

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

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

B. Long Term Irrigation Fund (LTIF)

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

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

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

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

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

E. Rural Infrastructure Assistance to State Governments (RIAS)

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

1.3.5 Initiatives on micro Finance

- Revision of grant support to JLGPIs: To incentivise promotion of JLGs, the grant assistance to JLGPIs was enhanced from ₹2,000/- to ₹4,000/- per JLG.

- **MEDP/LEDP:** To strengthen NABARD's efforts at skilling SHG members, the grant assistance was enhanced for MEDPs to ₹1.00 lakh and for LEDPs to ₹ 8.80 lakh (Farm Sector) and to ₹ 7.15 lakh (Off Farm Sector).
- For 2020-21, the number of MEDPs has tripled and LEDPs doubled from previous year to augment supply for skills required for rural employment.
- **NABFINS as JLGPI:** NABFINS was sanctioned a pilot project as a JLGPI in five States of Assam, Chhattisgarh, Madhya Pradesh, Maharashtra and Jharkhand for a period of three years.
- **MY PAD MY RIGHT:** NABFOUNDATION, through LEDP channel, was sanctioned the Project 'My Pad My Right' for ₹1.99 crore for sanitary pad making machine for producing/marketing the pads to provide livelihood opportunities to SHGs and improve menstrual hygiene of rural women. During 2020-21, an amount of ₹1.59 crore has been utilized and machines have been installed in 33 districts.
- **EShakti:** As on 31 March 2021, the project was being implemented in 281 districts. The data pertaining to 12.33 lakh SHGs (140.91 lakh members in 1.67 lakh villages was on-boarded to EShakti portal). From 2021-22, the project will be implemented in 130 districts of 16 States/UTs for a focused approach to reduce the credit gap. EShakti portal was used for sending 40 lakh health advisory SMS to SHG members and during the pandemic, the SHGs were also engaged for making face masks, hand sanitizers, PPE kits, etc. for earning additional income.

1.3.6 Financial Inclusion

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

Financial Literacy:

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

Banking Technology:

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

Regulatory requirements:

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

Connectivity and Power Infrastructure:

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

New initiatives taken during the year 2020-21:

- i. Green PIN facility at ATMs and/or microATMs for RuPay Kisan Card activation was launched under which one-time implementation and application development cost for enabling Green PIN facility is reimbursed.
- ii. Scaling up of the Centre for Financial Literacy (CFL) Project (a Pilot Project of

Reserve Bank of India) to 200 CFLs which envisages one CFL per 3 blocks.

- iii. Support for on-boarding to Bharat Bill Payment System (BBPS) was launched to encourage banks to give rural customers benefits of online bill payments. One-time integration cost of the Bank with the Bharat Bill Payment Operating Unit (BBPOU) will be reimbursed.
- iv. Support extended to RCBs, in addition to CBs and RRBs for opening Kiosk outlets in unbanked villages of North Eastern States through BCs for providing comprehensive financial services in unbanked villages with population less than 500.
- v. The support for components under connectivity and power infrastructure schemes viz. VSAT deployment, Mobile Signal Boosters deployed and solar power unit / UPS deployment has been extended to all districts.

1.3.7 Farm Sector Policy – Important Initiatives

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

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

II. FPO Promotion

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

III. FSPF – Innovations & Technology Transfer

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

IV. Fostering Partnership

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

V. Climate Action

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

VI. COVID-19 Initiatives

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

1.3.8 Off Farm Sector Initiatives

1. Initiatives during COVID-19

- A mega project on "Rapid Reskilling and Quick Employment for 10,000 Reverse Migrants" was supported in Uttar Pradesh (Raebareli, Gorakhpur, Mirzapur, Maharajganj and Allahabad), Bihar (Muzaffarpur, Vaishali, Rohtas and Gaya) and Jharkhand (Hazaribagh).
- NABARD collaborated with NSDC affiliated training institutes for capacity building of rural youth in new age skills like Mechatronics, Arc welding, Refrigeration, etc.
- NABARD supported projects for training rural women in the manufacturing of face masks and PPE kits that were in much demand to adhere to the Covid-19 protocols.
- NABARD partnered with CSR corporates like Ambuja Cement Foundation, Lupin Human Welfare and Research Foundation, 'TATA Strive' to provide capacity building of rural youth with skills and linking them with placement or self-employment.
- NABARD supported online training programmes to build capacity, develop

entrepreneurship as well as to connect the producers to the markets.

- ☐ Revolving Fund Assistance of ₹5 lakh each to 22 registered OFPOs for restarting their business activities impacted by COVID 19 was provided.
- 2. The rural mart scheme was revised to permit purchase of mobile vans by PACS and Producer Organisations to serve as mobile rural marts.
- 3. Virtual B2B Exhibition was organised for OFPOs to provide opportunities to rural producers to bring their products closer to the use ₹
- 4. Rural/Agri business Incubation Centres - As on date, NABARD has supported 7 Rural/Agri Business Incubation Centres with total financial support of ₹63.29 crore. These 7 centres will provide direct and indirect benefit to about 22 lakh farmers.
- 5. Catalytic Capital Fund (CCF) – To support start-ups in farm and non-farm sector in the stage of ‘Valley of Death’, NABARD sanctioned ₹1.00 crore to MABIF, a NABARD supported RBIC and ₹5.00 crore to NABKisan Pvt Ltd, a NABARD subsidiary, during 2020-21.
- 6. Promotion of GI Products - NABARD extended support for enabling GI registration of 72 products, including Black Pottery (Nizamabad), Wall Hangings (Ghazipur), Soft Stone Jali Work (Varanasi), Gulabi Minakari (Banaras), Handmade Dari (Mirzapur), etc.
- 7. Launching of Sanitation Literacy Campaign - NABARD launched a campaign from 02 October 2020 to 26 January 2021 to create awareness on Water, Sanitation and Hygiene (WASH) to sustain attitudinal changes for adopting safe sanitation and hygiene practices covering about one lakh people in more than 2000 villages benefitted from this awareness campaign.

1.3.9 Agri- Market Infrastructure Fund (AMIF)

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

1.4 Policy Initiatives – State Government

1.4.1 Agriculture

a. Debt waiver

- ₹ 1,712 crore has been allocated for the crop loan waiver scheme during 2021-22. Loans to the extent of ₹1,186 crore of 1.13 lakh farmers and ₹526 crore of landless farm workers to be waived off in the during 2021-22.

b. Free power to farms

- ₹7181 crore allocated towards subsidy for providing free power to the agriculture sector.

c. Total allocation

- The state has allocated 10.9% of its total expenditure towards agriculture and allied activities in 2021-22. This is significantly higher than the average allocation for agriculture by states (6.3%).
- Allocation in agriculture and allied activities hiked to ₹12,902 crores, an increase of ₹2984 crore (30%) from Revised Budget Estimate of FY 2020-21.

d. COOPERATION-CANE GROWERS

- Establishment of the “Punjab Sugarcane Research Development Institute” at Kalanaur (District Gurdaspur) at a cost of ₹47 crore.
- ₹300 crore for support to Cane Growers.
- ₹60 crore proposed for modernization and expansion of Sugar mills of Gurdaspur and Batala.

e. WATER RESOURCES

- Allocated ₹1603 crore to increase the facility of canal water and the productivity of food grains.

f. LIFT IRRIGATION

- In order to provide irrigation facilities to villages Mohewal, Jhinjari, Tarapur and Thappal, the State Government has approved lift irrigation scheme at Sri Anandpur Sahib in Ropar District with a cost of ₹10crore.
- The second Lift irrigation scheme at a cost of ₹15 crore for villages Nard, Misewal, Cheekna of district Rupnagar which is in progress and is likely to be completed by 2021-22.
- Renovation and Modernization of Regulator structures on Canals that are currently under progress has been provided budgetary support of ₹15 crore during FY 2021-22.
- The State proposes to undertake Concrete Lining Rehabilitation, Renovation and Modernization of Lahore Branch System for 347.0 km in the districts of Gurdaspur and Amritsar which shall provide benefit to 150 villages falling under these districts. An allocation of ₹150 crore has been provided for this purpose in 2021-22.

g. FIELD CHANNELS

- Construction work of field channels of Kotla Branch Part-II Project at a cost of ₹477 crore is currently in progress and a budgetary provision of ₹100 crore has been provided during 2021-22 for completion of this project.
- For the integrated project to address water logging problem in south-western districts of Punjab, an allocation of ₹50 crore has been provided for 2021-22.

h. FACILITIES IN KANDI AREAS

- The Government has taken up a new project with a cost of ₹196 crore, for installation and energization of 502 deep tube-wells for irrigation purpose in different blocks of Kandi area- ₹157crore.

i. DRAINAGE

- A budgetary outlay of ₹100crore is proposed for undertaking the following drainage works, flood protection works to be executed along Indo Pak border on river Ravi and its tributaries
 - Flood protection work at village Ujh in Pathankot district to check erosion of culturable land, village abadies and defence installation
 - Canalization of Sakki/Kiran Nallah
 - Construction of flood protection works along left side and right side of River Beas in District Gurdaspur, Hoshiarpur and Kapurthala
 - Integrated Project to address water logging problem in South-Western districts of Punjab.

j. Diversification

- ₹200 crore allocated in the budget 2020-21 for agriculture diversification. Through

promotion of maize cultivation in approx.. 4.00 lakh Ha. area.

- Established the Veterinary College at Rampura Phul and allocation of ₹120 Cr to State Extension Programme, Organic Farming, e-governance and other Centrally Sponsored programs
- An integrated facility for fruits and vegetable is being set up by Punjab Agri Export Corporation Ltd. at Abohar in Fazilka District at a cost of ₹7 crore.
- A budgetary allocation of ₹30 crore made by GoP during FY 2021-22 for providing residue management machines at subsidised rates to individual farmers and co-operative societies under the in-situ Crop Residue Management Program of GoI.

k. Marketing

- An allocation of ₹8.00 crore made by GoP for providing a one-time corpus grant for Agricultural Marketing Innovation Research and Intelligence Centre (AMIRIC) established at Mohali (SAS Nagar) under PAU, Ludhiana during 2021-22.

l. KRISHI VIKAS YOJNA

- An allocation of ₹200 crore in 2021-22 for ensuring more inclusive and integrated development of agriculture and allied services.

m. PANNI BACHAO PAISA KAMAO

- **Direct Benefit Transfer of Electricity** (DBTE) under the banner of “Panni Bachao Paise Kamao” scheme on 6 feeders has been launched. A budgetary provision of ₹10 crore has been made for 2021-22.

n. COMMUNITY UNDERGROUND PIPELINE PROJECT

- A new project for Utilization of treated water for Irrigation through the assistance of NABARD and an amount of ₹40 crore has been earmarked for implementation during FY 2021-22.

o. KAMYAAB KISAN KHUSHAAL PUNJAB” (K3P)

- A new umbrella program “during 2021-22, with an outlay of ₹3,780 crore to be implemented during the next three years. An outlay of ₹1,104 crore has been earmarked for 2021-22.

1.4.2 Animal Husbandry and Dairy Development

- A Multi-speciality Veterinary Hospital and Regional Research Centre is being set up at the cost of ₹62.14 crore at village Sappanwali, district Fazilka- ₹ 18 crore has been allocated in 2021-22 to expedite its completion.
- To protect livestock against contagious diseases, Punjab Veterinary Vaccine Institute, Ludhiana is being upgraded to Good Manufacturing Practices (GMP) as per the WHO Norms at a cost of ₹32 crore and an amount ₹20.22 crore has already been released for its upgradation during 2020-21.
- Free Artificial Insemination is being conducted for 11 lakh eligible Buffalo and Cattle with quality semen under Nationwide Artificial Insemination Programme (NAIP) in all villages of the State.

1.4.3 Fisheries Development

- Proposal to bring additional 350-hectare area and 3,000-hectare area under shrimp and fish culture, respectively during FY 2021-22.
- High productivity fish production technology of Re-circulatory Aquaculture System introduced during the year 2019-20 and to be expanded to 8 units during the FY 2021-22.
- In order to increase the availability of quality fish seed in the State, 5 fish seed farms are being established at Hoshiarpur, SBS Nagar, Ludhiana, Sangrur and Ferozepur and one new government fish seed farm has been initiated in village Killian Wali district Fazilka.

1.4.4 Rural Development

- 2.2% of the expenditure of the State allocated to rural development.
- ₹2,632 crore allocated for rural development sector in the State Govt. in its State Budget for FY 2021-22. The same is 52% higher than the revised budget estimate for 2020-21.
- ₹400 crore allocated to the Mahatma Gandhi National Rural Employment Guarantee Scheme.
- ₹1,175 crore provided in the budget for smart village campaign.
- ₹ 500 crore allocated to convert kutchha roof houses to pucca roof houses in rural areas.

1.4.5 Urban Development

- ₹3,925 crore has been allocated for Urban Development
- ₹ 1,600 crore and ₹1,400 crore allocated for the Smart Cities Mission and AMRUT, respectively.

1.4.6 Education

- ₹13,652 crore allocated towards education sector which is 11% higher in comparison to Revised Budget Estimate for 2020-21.
- ₹11,861 crore earmarked for School Education and ₹100 crore proposed for completing the ongoing constructions/renovation work in Government Colleges for the year 2021-22.
- ₹1,596 crores has been allocated for the Samagra Shiksha Abhiyaan.
- ₹1,064 crores has been allocated for providing grants to various universities.
- Construction of 6,984 Additional Classrooms, 292 Science Laboratories alongwith Lab equipment's, 304 libraries and 319 Art & Craft rooms at a cost of ₹604.07 crore.
- ₹ 100 crore each has been proposed for promoting digital education and Smart Phones by the State Govt. during FY 2021-22.
- A new scheme "Career and Guidance Counselling" is to be launched during FY 2021-22.
- An allocation of ₹50 crores has been provided for in 2021-22 for purchase of computers for Government Primary schools.
- ₹10 Cr have been proposed for developments of playgrounds.
- Improvement of infrastructure in 6 Historical Government Colleges including a special grant of ₹7 crores for Nawab Jassa Singh Ahluwalia College, Kapurthala.
- Allocation of ₹5 crores for setting up a Centre on Guru Granth Sahib at Guru Nanak Dev University, Amritsar.

- An allocation of ₹9.08 crore made by GoP for setting up of chairs i.e. Maharana Pratap Chair; Maharaja Agarsain Chair; Shaheed Udham Singh Chair and Gurdial Singh Chair at Punjabi University, Patiala and Dr. B.R. Ambedkar Chair; Satguru Ram Singh Chair; Sant Baba Prem Singh Ji Murale Wale Chair and Jalianwala Bagh Chair at Guru Nanak Dev University, Amritsar.

1.4.7 Health

- ₹ 4,662 crore allocated towards health and family welfare, which is 15% higher than Revised Budgetary Estimate for FY 2020-21.
- ₹1,060 crore allocated for the National Health Mission.
- ₹324 crores allocated for health insurance under the Ayushman Bharat scheme.

1.4.8 Industries

- Punjab Innovation Mission 2020: ₹10 Crore is proposed for FY 2021-22 under "Financial Assistance to Start-Ups".
- Setting Up of New Sewage Treatment Plants (STPs) and upgradation of Primary Sewage Treatment Plants to Tertiary Treatment Levels at a total cost of ₹ 29 crore are being proposed to be set up by the State Govt. during FY 2021-22.

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

1.5 State Government Sponsored Programmes with Bank Credit

- **Dairy Development Pashudhan Scheme** of Punjab Dairy Development Board had been launched for setting up of new dairy units in the State for sustainable Livestock and employment generation. Dairy units with up to 20 animals can be established under the scheme. Farmers are provided subsidy for purchase of new high yielding Milch Animals. Subsidy up to 25% for General and 33% for SC farmers is available under the scheme. Farmers need to undergo training from training establishments of Punjab Dairy Development Board at first for availing grant assistance under the scheme. However, for availing subsidy under the scheme, credit linkage @ min. 40% of total estimated project cost is mandatory.
- **Promotion of Total Mixed Ration (TMR)** to overcome the labour shortage problem with subsidy up to ₹4.00 lakh per machine @ 50% of cost of ₹8.00 lakh. This scheme is also implemented by Punjab Dairy Development Board and both training and credit linkage is compulsory for availing the grant assistance under the scheme.
- Promotion of automatic milk dispensing units with subsidy @50% subject to the maximum of ₹4.00 lakh to encourage direct marketing of milk by the milk producers to the milk consumers. This scheme is also implemented by Punjab Dairy Development Board and training from any of the training establishments of PDDB is a must for availing the grant assistance under the scheme. Further, a minimum Bank loan of 40% of the total project cost is also required in the scheme. Farmers can purchase a Bulk Milk Chiller of 500 litre capacity, Genset of 7.5 KVA and a double jacketed Stainless-Steel Tank of 500 litre capacity under the scheme.
- Subsidy for promotion of silage making by commercial dairy farmers in Punjab with subsidy upto 25% of the TFO with maximum limit of ₹3.00 lakh per unit.
- Subsidy for Single Row Fodder Harvester is also available from Punjab Dairy Development Board. Maximum grant assistance of ₹0.50 lakh per unit is available under the scheme.

- Subsidy for Self-Propelled Forage Cutter is also available from Punjab Dairy Development Board. Maximum grant assistance of ₹0.50 lakh per unit is available under the scheme.
- Under Compensation for Stubble Management Scheme introduced in FY 2019-20, Govt. of Punjab has been paying @₹100/- per quintal of Non Basmati Paddy as compensation to Small & Marginal Farmers of the State who have not set paddy crop residue on fire in the open fields besides managed this residue by way of in-situ / ex-situ management.

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

Chapter 2

Credit Potential for Agriculture

According to the revised Priority Sector guidelines, Agriculture sector is broadly divided into three sub sectors viz. (i) Farm Credit (ii) Agriculture Infrastructure and (iii) Ancillary activities.

2.1 Farm Credit

Farm Credit includes Crop loans to farmers including loans for plantations and horticulture and loans for allied activities such as water resources, farm mechanization, dairy, poultry, sheep, goat, piggery, fisheries and animal carts etc. Item wise potential is presented as under:

2.1.1. Crop Production, Maintenance and Marketing

1. Introduction – The main crops of the Barnala district are wheat and paddy. The district has been ranking high in the state in the productivity of wheat and paddy. About 87% of the total geographical area is under cultivation with 100% assured irrigation. The Gross Cropped Area of the district is 247000 ha and Net Sown Area is 125000 ha and the cropping intensity in the district is 198%.

To mitigate the problem of deficient rainfall, new short duration varieties of paddy like PR 126, 128 were introduced by PAU which requires lesser quantity of water. To reduce the cost of cultivation in paddy, direct sowing instead of transplantation is also being promoted, which is especially helpful in less labour availability. Diversification of crops especially Maize, Summer Moong for large farmers and High Value Crops for Small Farmers is highlighted in all important fora by Line Departments for the benefit of farmers.

Some of the very significant initiatives taken by GoI recently to mitigate the issues related to the marketing of agricultural produce are as follows:

i. The amendment to Essential Commodities Act

The amendment to Essential Commodities Act, the commodities like cereals, pulses, oilseeds, edible oils, onion and potatoes will be removed from list of essential commodities. This amendment will remove fears of private investors of excessive regulatory interference in their business operations and freedom to produce, hold, move, distribute and supply will lead to harnessing of economies of scale and attract private sector/foreign direct investment into agriculture sector. It will help drive up investment in cold storages and modernization of food supply chain which will lead to export and enhanced income to farmers.

ii. Barrier-free trade in agriculture produce

This will create an ecosystem where the farmers and traders will enjoy freedom of choice of sale and purchase of agri-produce through barrier-free inter-state and intra-state trade and commerce outside the physical premises of markets notified under State Agricultural Produce Marketing legislations. It will also result in reduction of marketing costs for the farmers and help them in getting better prices. Further, the farmers of regions with surplus produce to get better prices and consumers of regions with shortages, lower prices. The farmers will not be charged any cess or levy for sale of their produce under this Act.

iii. One India, One Agriculture Market

It will empower farmers for engaging with processors, wholesalers, aggregators, large retailers, exporters etc., on a level playing field without any fear of exploitation. It will transfer the risk of market unpredictability from the farmer to the sponsor as farmers may grow a specific crops using specific seed and other inputs as agreed between farmers and processor/ exporter, etc and sale of produce at pre-fixed rates. This will attract private sector investment for building supply chains for supply of Indian farm produce to global markets. Farmers will get access to technology and advice for high value agriculture and get ready market for such produce.

Area and production of major crops in the district over last 3 years is as follows: -

Crop	2017-18		2018-19		2019-20	
	Area (Ha)	Prod. (MT)	Area (Ha)	Prod. (MT)	Area (Ha)	Prod. (MT)
Rice	102000	511938	114000	567000	114000	525000
Wheat	114000	544578	115000	641000	114000	599000
Cotton	13000	15730	2000	1500	1500	1200
Moong	300	291	200	100	100	100

(Source: Statistical Abstract of Punjab)

2. Infrastructure and linkage support available, planned and gaps

- The GoI of India has launched a campaign to provide KCC to all eligible PM Kisaan beneficiaries as well farmers engaged in activities relating to Animal Husbandry sector. Further, under the new KCC scheme for Animal Husbandry and Fishery, both Animal Husbandry and Fisheries department are working in collaboration with banks to issue KCC facility to eligible farmers.
- IFFCO, KRIBHCO, Markfed and private dealers have a wide network of outlets for supply of inputs like seeds, diesel, fertilizers and pesticides/insecticides. Tata Krishi Vikas Kendra through its Tata Sansar (Retail outlet), Haryali Kissan Bazaar of DCM Consolidated group and Godrej Adhaar are also supplying agricultural inputs besides providing support services like water and soil testing to the farmers of the area. Procurement of Wheat and Paddy is done by State Govt., FCI, Markfed, Punsup, PSWC, Pvt Traders and PAIC.
- Agriculture Deptt. provides technical guidance and also arranges demonstrations and camps at regular intervals on the use of new technology better scientific techniques of cultivation and post-harvest management of farm produce. The department also provides inputs like fertilizer, pesticides, seeds etc. The seeds in the form of mini-kits of new varieties of various crops are given to farmers free of cost/nominal cost.
- KVK, Handiaya imparts training in hybrid seed production, diversification of crops, soil testing and also on pest management and post-harvest management etc.
- Farm Advisory Service Centre of P.A.U. Ludhiana provides extension services to the farmers like propagation of improved production technology.
- 5 regulated markets/sub-yards and sufficient number of purchase centres are arranged by the Marketing Board during the harvesting season.
- There is urgent need to gradually change the cropping pattern in the district as the water table is declining at a very fast rate and soil health is also deteriorating. State Govt.

should prepare the strategy with the help of PAU Ludhiana and Agriculture Department to sort out this problem.

3. Assessment of Credit Potential for 2022-23:

Potential for the year 2022-23 have been assessed with a view to promote optimum utilization of available resources and is given below:-

Sr. No.	Crops	Area	Scale of finance	Bank loan projections in 2022-23
		ha	₹/ha	₹ lakh
A	Crop Loan			
A	Cereals			
I	Paddy	98000	65234	63700.00
Ii	Wheat	106000	62516	66780.00
iii	Maize	1700	59798	1020.00
	Subtotal			131500.00
B	Pulses	600	38053	228.00
C	Oilseeds	650	51644	318.50
D	Sugarcane	3950	108724	4305.50
E	Cotton	3000	65234	1950.00
G	Other Vegetables	8000	114160	9120.00
H	Other Crops – Fodder	15500	48926	7595.00
I	Others(Barley, Millet, etc.)			60927.79
A	Total Crop Loan			215944.79
B	10% component towards consumption requirement of farmer household			21594.47
C	20% component towards farm maintenance			43188.97
D	Total (A+B+C)			280728.23

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical intervention required for creating definitive impact

- There is urgent need to gradually change the cropping pattern in the district as the water table is declining at a very fast rate and soil health is also deteriorating. State Govt. should prepare the strategy with the help of PAU Ludhiana and Agriculture Department to sort out this problem
- Promotion of short duration varieties of paddy
- Crop diversification with change in cropping pattern of water guzzling wheat-paddy cycle at present to a more sustainable one.
- To provide proper drying facilities for Maize in agriculture markets, so as to promote crop diversification.
- Promotion of solar energy based water pumping system.
- Promotion of Zero Budgeting Natural farming, optimum utilization of chemicals.

- Promotion of Mechanical Transplanter for paddy to cope the shortage of labour as well as increasing the number of plants per acre.
- Promotion of Soil and Water Testing labs, so that proper nutrient management may be ensured.

5. Suggested Action Points:

Banks

- Efforts may be made to cover all new eligible farmers under KCC scheme especially to cover all farmers engaged in Animal Husbandry and Fishery activities.
- Need to provide credit to oral lessees and share croppers as per RCS notification in cooperative sector and under JLG mode for Commercial Banks and PGB.

Line Departments

- Need for diversification of crops like cultivation of cotton and vegetables etc. and introduction of crop insurance scheme by Govt. to mitigate crop losses of farmers.
- To propagate diversification of crops especially water conserving crops.

6. Other related matters

- Major focus of RKVY in the district - Rashtriya Krishi Vikas Yojna (RKVY) with emphasis is on crop diversification
- Parmapparagat Krishi Vikas Yojna for promotion of organic farming
- National Project on Management of Soil Health & Fertility with emphasis of the scheme is to strengthen the existing soil testing labs, distribution of micronutrients, promotion of organic manures and capacity building.
- National Mission on Agriculture Extension and Technology: The mission includes sub-missions aimed at facilitating/ improvement of agriculture extension, provision of seed and planting materials, focus on farm mechanization and plant protection & quarantine.
- National Mission for Sustainable agriculture for cost minimization, natural resource managements and thereby increasing the net income of the farmers.
- National Food Security Mission for promotion of Pulses and Wheat
- Pradhan Mantri Krishi Sinchai Yojna (PMKSY) for efficient utilization of irrigation facilities in the district under District Irrigation Plan.
- Pradhan Mantri Fasal Bima yojna (PMFBY): Presently PMFBY is not being implemented in the State.

Special Liquidity Facility

NABARD has provided support at very cost effective rate of interest to Cooperative banks and RRBs under Special Liquidity Facilities to meet the funds requirement of banks due to liquidity crunch faced by banks on account of moratorium on repayment of loan and interest by RBI due to COVID 19 pandemic. This support has facilitated the farmers to complete their agriculture operation including post-harvest management of Rabi crop as well as preparation of field & sowing of Kharif crop.

2.1.2 Credit Potential for Water Resources

1. Introduction: Barnala district has three development blocks and 100 percent of the net area sown is irrigated. The major source of irrigation in the district is tubewells. Out of Net

sown area of around 124000 ha, 67000 ha (54 % of Net irrigated Area) was irrigated by tubewells and 57000 ha (46 % of Net Sown Area) by canals. (Source: Statistical Abstract Punjab 2020, Pg 163). Further, all three blocks of the district are under over exploited category, so there does not exist any scope for tapping of anymore groundwater through institutional credit. As per Dynamic Ground Water Resources of India, July 2019 report, the net annual groundwater available in the district is 57919.01 Ha-m and the annual draft is 122092.72 Ha-m. Thus the annual shortfall is 64173.71 Ha-m at present and the stage of ground water exploitation is 210.80%. Barnala and Mehal Kalan Blocks have been identified by CGWA for regulation and control of Ground Water management and development. However, there is good scope for laying underground pipe lines as an efficient system of water conveyance and for installation of sprinkler and drip irrigation sets as water saving devices in the district.

2. Infrastructure and linkage support available, planned and gaps

- Ground Water Cell to provide technical guidance for minor irrigation activities.
- Good network of dealers for diesel engine/ electric motors and for providing after sale services.
- 46% of the total area is being irrigated by canals.
- Good network of suppliers of boring machines.
- Infrastructure gap is predominantly in the field of micro irrigation. Very few dealers keep drip irrigation systems and little technical help related to design of optimum drip irrigation network is available in the district.

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

Potential for the year 2022-23 have been assessed with a view to promote optimum utilization of water resources and is given below.

(₹ lakh)

Sr. No	Activity / Unit	Unit	Unit Cost	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Solar IP sets 7.5 HP	No.	5.50	32	176.00	158.40
2	Solar IP sets 10 HP	No.	7.00	30	210.00	189.00
3	Mini Sprinkler sets 0.40 ha (8X8)	Unit	0.55	500	275.00	247.50
4	Drip Irrigation Closed spaced (1.2x0.6 m)	ha	1.32	700	924.00	831.60
5	Water Channels (UGPL-300 mm RCC)	ha	1.01	600	606.00	545.40
	Water Channels (UGPL-250 mm HDPE)	ha	1.72	800	1376.00	1238.40
			TOTAL	2662	3567.00	3210.30

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical intervention required for creating a definitive impact

- Ground Water exploitation in the district is in critical stage, so urgent measures need to be taken up for recharging the ground water, to promote rainwater harvesting and micro irrigation system.

- Immediate need for changing from puddle method of paddy cultivation to direct seeding of rice for saving on water.
- Need to educate farmers for adoption of water conservation devices, short duration varieties of paddy and the need for diversification.

5. Suggested Action Points:

Line Departments

- There is a need to organize more awareness programmes for popularizing water saving devices.
- Need to popularize scheme for rain water harvesting for farmers.
- Emergent need for change in cropping pattern i.e. switch over from traditional crops to those crops /varieties requiring lesser quantity of water.
- Repairs and maintenance of irrigation canals for last mile availability.
- Promotion of zero tillage equipment
- Promotion of laser levelling for efficient distribution of irrigation water

Banks

- Involvement of banks in financing of water saving devices viz. Sprinkler set, Drip Irrigation etc. especially for horticulture crops.

6. Other related matters

- National Mission on Sustainable Agriculture (NMSA)'s On-Farm Management System (OFWM) is being implemented through Department of Soil and Water Conservation, GoP, wherein addition to Central Government subsidy of 35-50%, State Government also provides additional subsidy under project titled "Project for Matching Irrigation Water Availability and Demand for Improved Productivity through Efficient On-Farm Water Management" for promotion of Drip and Sprinkler irrigation systems, Solar Photovoltaic pumpsets and on-farm water storage tanks.
- State Government also provides subsidy for solar photovoltaic water pumping system.

Long Term Irrigation Fund(LTIF)

Hon'ble FM, in Budget 2016-17, announced setting up of Long Term Irrigation Fund (LTIF) in NABARD with initial corpus of ₹20,000 crore. The objective of the fund is to fund irrigation projects under AIBP languishing due to inadequate provision of fund and for enhancing physical access of water on farm by taking up projects under PMKSY. Ministry of Water Resources (MoWR) identified 99 ongoing AIBP projects for funding under LTIF out of which Punjab has two projects (Kandi Canal Extension (Ph II) and Rehabilitation of Ist Patiala Feeder and Kotla Branch). Subsequently two more projects viz. lining of Sirhind feeder and Shahpurkandi dam were sanctioned under LTIF. Eligible activities include project work and Command Area Development and Water Management works (CADWM) for identified projects.

2.1.3 Farm Mechanization:

1. Introduction: In the district, farm mechanization has been effective through use of tractors and other farm equipment viz. reapers, threshers, cleaners, graders, zero till seed-cum-fertilizer drill, combine harvester etc. Various farm implement viz. multi crop thresher,

seed drill, rotavater, bed planter, tractor mounted sprayer, potato digger, etc. are being financed by banks. Off late machines like Laser Land Leveller and Paddy Transplanters etc are becoming popular amongst farmers. More emphasis is now being laid on use of Happy Seeders for sowing of wheat in the field without burning paddy stubble.

2. Infrastructure and linkage support available, planned and gaps

- As per the State Statistical Abstract 2020, the district has Tractor density of 80 Tractors per 1,000 hectares which is marginally less than state average of 83.
- Availability of large number of dealers specializing in farm machinery
- Availability of local manufacturers making good quality and precision agriculture machinery especially in Sehna and Barnala blocks
- Availability of trained technicians for repair and maintenance of agri machinery
- Handiaya, Dhanaula, Tapa and Pakho in the district are the major centers for manufacturing of agricultural implements, spare parts, harvester combines and threshers.
- District is being covered under MSME Outreach Programme of Govt. of India with Agri-Equipment Manufacturing as main activity. Small cultivators cannot purchase costly machinery like tractors, combine harvesters. Higher cost of production and lower net income make tractors economically unviable to small and marginal farms.
- Lack of proper knowledge of farmer to purchase, operate and maintain farm machinery, especially innovative precision implements, leads to wrong choice and makes it uneconomical and risky.
- Due to the seasonal nature of agriculture, farm machinery remains idle for much of the time causing high depreciation cost.

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

In view of labor shortage, dependence/ usage of machines like Laser Land Leveler and Paddy Transplanters etc. by farmers is increasing. The projections have been made under PLP for the year 2022-23 is as under: -

(₹ lakh)

Sr. No	Activity / Unit	Unit Cost	Phy Units (Nos.)	Fin Outlay	Bank loan
1	Tractor 60 HP (Replacement of old tractor @10%)	8.50	650	5525.00	4972.50
2	Tractor Hi-Tech AC Cabin 4WD	11.20	30	336.00	302.40
3	Second hand tractors	4.00	300	1200.00	1080.00
4	Combine Harvester (self-propelled, multi-crop with Super SMS and AC driver cabin)	30.00	255	7650.00	6885.00
5	Trolley with Hydraulic tripping	2.50	290	725.00	652.50
6	Paddy Transplanter (4-wheeled, riding type with cage wheels & floats)	10.00	66	660.00	594.00

Sr. No	Activity / Unit	Unit Cost	Phy Units (Nos.)	Fin Outlay	Bank loan
7	Rotovator (9 ft)	1.15	150	172.50	155.25
8	Seed Drill 15 tyne	0.55	110	60.50	54.46
9	Zero Tillage Drill	0.62	120	74.40	66.96
10	Multi-crop thresher	1.70	300	510.00	459.00
11	Lazer Land Leveller	3.50	270	945.00	850.50
12	Baler (Square)	12.00	36	432.00	388.89
13	Baler (Round)	4.00	66	264.00	237.66
14	Happy Seeder (Turbo) 11 row planter	1.65	440	726.00	653.40
15	MB Plough 4 Bottom	2.90	85	246.50	221.85
16	Super SMS on Combine Harvestors	1.12	165	184.80	166.32
	Total		3333	19711.70	17740.69

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I. The GLC flow during the last three years is given in Annexure-II and Annexure-III respectively.

4. Critical Intervention required for creating a definitive impact

- With the increasing need for use of precision implements and machinery other than tractor, there is immense potential for enhanced credit flow under the sector.
- The use of specialized precision implements requires development of appropriate skills through training and offers potential for sizeable employment generation for the youth in the sector.
- The policy thrust on post-harvest management and processing is poised to increase the demand for post-harvest equipment/ technology that will help in value addition of agricultural/horticultural produce and in reducing post-harvest losses.

5. Suggested Action Points:

Line Departments

- Need to educate farmers to go for small fuel-efficient machinery and small farmers may be encouraged to purchase second hand tractors.
- Technical guidance for proper usage of new farm machinery, its optimum utilization and maintenance of machines may be provided by Extension Agencies.
- Custom hiring is not developed to the maximum extent. Custom hiring may be suitably organized and popularized. PACS/Farmers Clubs/Water user Association/ State Agencies may be encouraged to provide tractors on custom hiring.
- Kisan clubs may be used to popularize the message of custom hiring of tractors and usefulness of power tillers.

Banks

- Due to unviability of tractors by individual farmers, the banks may finance tractor and other farm machinery for setting up of Common Service Centres by FPO, SHG, JLG etc.
- Minimum Performance Standard norms must be ensured for Tractor and Power tillers by banks as per directive of Ministry of Agriculture, Govt. of India.

- New opportunities in the diversified sectors such as horticulture, medicinal and aromatic plants etc. for precision equipment (for planters, diggers, field level graders etc.), the banks may also finance such equipment/ machinery.

6. Other Related Matters

Some of the important schemes and governmental programs which are implemented in the district as follows:

- Rashtriya Krishi Vikas Yojana (RKVY) RAFTAAR
- Sub Mission on Agriculture Mechanization
- Scheme for promotion of agricultural mechanization for in-situ management of crop residue in the states of Punjab, Haryana, Uttar Pradesh and NCT of Delhi

2.1.4 Plantation and Horticulture:

1. Introduction The district with its agro-climatic conditions offers a good scope for development of peach, ber, guava, grapes, citrus, pear etc. During the year 2019-20, total area under major fruit crops in the district was 322 ha with total production of 6146 MT. Area under various crops was Guava (117 ha), Ber (39 ha), Lime (24 ha), Kinnow (65 ha) and Peach (18 ha). Total vegetable production was 2192 MT in 2019-20(as per Statistical Abstract 2020).

2. Infrastructure and linkage support available, planned and gaps

- The Horticulture Deptt/KVK/NGOs provide technical guidance and training to the farmers.
- Gap: Good quality planting material for Stevia and Safed Musli is not available locally.
- Gap: Need for setting up processing plants for horticulture crops mainly Guava and medicinal plants.

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

Taking into consideration the above facts the exploitable projections under PLP for the year 2022-23 have been assessed as under: -

(₹ lakh)

Sr. No	Activity / Unit	Unit Cost	Unit Area/ No.	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Gauva (6m x 6m)	0.88	ha	85	74.80	67.32
2	Ber	0.81	ha	60	48.60	43.74
3	Kinnow (6mx6m)	0.93	ha	30	27.90	25.11
4	Button Mushroom Unit (250 trays)	2.00	No.	220	440.00	396.00
5	Others -Integrated pack house (9Mx18M)	50.00	No.	7	350.00	315.00
6	Others - Pre-cooling unit (6MT)	25.00	No.	3	75.00	67.50
	Sub Total of Plantation / Horticulture / Sericulture			405	1016.30	914.67
7	Rose (Protected) 800 sq. Mtr	15.13	ha	16	242.05	217.85
8	Poly House Fan Pad System (upto 1000 sq.m)	14.65	No.	16	234.41	210.97

Sr. No	Activity / Unit	Unit Cost	Unit Area/ No.	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
9	Others - Gerbera (protected) 800 sq. Mtr.	16.60	ha	16	265.60	239.04
	Sub Total Floriculture			48	742.06	667.86
10	Nurseries (1 ha)	15.00	No.	11	165.00	148.50
11	Nurseries Hi Tech (4 ha)	100.00	No.	2	200.00	180.00
12	Apiculture-Migratory 100 Colony	9.61	No.	17	163.38	147.04
	Sub-Total of Medicinal/ Aromatic Plants			30	528.37	475.54
	Total of Plantation & Horticulture			483	2286.74	2058.07

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical intervention required for creating a definitive impact

- As there is vast potential for growing of fruits and flowers in the district, there is need to set up food/agro processing units in the district to boost diversification of agricultural crops.
- High Density Guava orchards have huge potential and should be promoted in the district.

5. Suggested Action Points:

Line Departments

- Financing of aromatic/medicinal plant to be encouraged and ensure supply of quality saplings.
- Multi chamber cold storage to be established for horticultural crops.
- Encouragement of contract farming arrangement by corporates in public and private sector.
- Scope for setting up of small processing plants for medicinal and aromatic plants etc.

Banks

- The banks may tap farmers clubs for encouraging farmers to take up these activities.

6. Others related matters

- Mission for Integrated Development of Horticulture (MIDH)** integrates the different ongoing schemes of NHM, NBM, NHB and CDB, etc. MIDH covers entire horticulture sector, which includes fruits, vegetables, root & tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, cocoa and bamboo. The indicative list of activities supported under various schemes of the Mission are protected cultivation (poly house, shade house etc.), Cold storages & Cold chain, nurseries, orchards (area expansion and rejuvenation), horticulture mechanization, IPN, INM, tissue culture & biotechnology, water resources, research, extension, post-harvest management, processing & marketing, support for FPOs/FIGs & FPCs, micro irrigation, some activities under organic farming (as most activities of organic farming are now being covered under Paramparagat Krishi Vikas Yojana), etc. and the subsidy support varies from 30%-90%.
- The State Govt. has been propounding Polyhouses/ net house farming for which subsidy to farmers is made available under State Horticulture Mission (SHM).

2.1.5 Forestry and Waste Land Development:

1. Introduction: In the district area under forest cover is 18 square km (as per Statistical Abstract 2020, pg 204) which constitutes 1.3% of total geographical area of the district and all of this is part of protected forests.

2. Infrastructure and linkage support available, planned and gaps

- To promote sustainable development of forest resources in the state, the State Government has adopted the strategy is to increase tree cover outside conventional forest areas as well as private farm lands through agro-forestry, farm forestry and urban forestry considering land being a constraint.
- Punjab Forest Department is implementing 'Green Punjab Mission' which aimed at increase forest and tree cover of the State from the existing 6% to 15% of the geographical area.
- Plantation material in district is available from Forest Department Nursery, free of cost at present, under Tandurast Punjab Mission. Further, 6 private nurseries also supply plantation material.
- Govt. nurseries supply quality sapling/plants at subsidised rates & also technical support.
- Private nurseries also provide planting material to the farmers.
- The State Govt. has been taking various steps for increasing the green cover of the State. In this direction, 550 trees in all its 12,700 villages were planted in an year marking the 550th Prakash Utsav of Sri Guru Nanak Dev Ji, under the mission 'Tandrut Punjab'.
- Lack of scientific and documented appropriate technology package.

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

Keeping in view the increasing local demand of timber/ wood and environmental necessity to promote this sector, projections under PLP for the year 2022-23 have been assessed as under: -

Sr.No	Activity / Unit	Unit Cost	Unit No/Area	(₹ lakh) Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Poplar Plantation	1.65	ha	100	165.00	148.50
2	Eucalyptus (Clonal)	3.70	ha	130	481.00	432.90
	Total			230	646.00	581.40

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical intervention required for creating a definitive impact

Poplar cultivation can be introduced in the district on a large scale as it has the potential to facilitate doubling the income of the farmers, besides providing an opportunity to facilitate recouping of the nutrients of the soil in a natural way.

5. Suggested Action Points:

Line Departments

- To popularise govt. schemes amongst farmers by forest department and sponsor of cases of prospective farmers to banks.
- There needs to be aggressive awareness building on the economic benefits of various forest species.
- The State Research Organizations/ Agriculture Universities to develop and promote revenue models for species like clonal *Bamboo*, *Melia dubia*, *Casurina*, etc., which start giving yield within 3 years.
- The State Govt. may promote commercial cultivation of *Salix* through subsidized planting material and awareness workshops as a suitable agro-forestry tree under paddy cultivation.
- The wood based industries may promote the sector through suitable contract farming arrangements. The CSR obligations of the industries may be used in creation of awareness.

Bankers

- Insurance companies may consider providing insurance for forestry species through developing new products.
- Training of bankers in appraisal of forestry projects for facilitating easy credit flow to the entrepreneurs.
- Value Chain financing may be taken up through net working with the value chains

6. Other related matters

- Sub-Mission on Agroforestry (Har Medh Par Ped) Scheme is being implemented in the state to encourage tree plantation on farm land along with crops/ cropping system to help the farmers get additional income and make their farming systems more climate resilient and adaptive.
- Nursery Development for quality planting material (NDQPM) under Sub-Mission on Agroforestry assistance shall be given for nurseries (small, big & hi-tech nurseries) for producing quality planting material to meet the requirement of planting material.
- The Punjab State Compensatory Afforestation Fund Management and Planning Authority shall be an instrument to accelerate activities relating to conservation of forests and wildlife, development of infrastructure in these sectors and other allied works.

2.1.6 Animal Husbandry - Dairy:

1. Introduction: Livestock production is an integral part of farming system in Barnala and is playing important role in agrarian economy. This sector plays a significant role to generate alternative source of income and full/part time employment for rural households of the state. State government is making special efforts to develop Punjab as “dairy state of India”. Dairy Development programme comprises of various activities including dairy farming with Cross Bred cows and buffalo breeding. The important breeds of cows being reared by the farmers are Cross breeds of Holstein Friesian and Jersey cross-bred and of buffaloes are graded Murrah, pure Murrah and Nili Ravi. The average milk yield per animal is only 6.76 liters per day (lpd), 10.81 lpd and 9.04 lpd for indigenous cows, cross bred cows and buffaloes respectively. The cattle population as per 2019 Livestock census in the district is as under:

Particulars	No. of Animals as per 2012 Census	No. of Animals as per 2019 Census	%age change
Total Buffaloes	172390	144699	-16%
Total Cows	60744	64601	+6%
Total	233134	209300	-10%

As per the 20th livestock census, the number of cows has increased by 6% in the district in comparison to the previous census, while the number of buffaloes has decreased by 16% in the same period. The decline in number of buffaloes is a cause of concern, while at the same time the increase in number of cows is more towards cross bred cows. No of animals being milked in the district include 0.02 lakh desi cows, 0.24 cross breeds and 0.58 lakh buffaloes. District is famous for highly prized Murrah buffalo which is good for milk production.

2. Infrastructure and linkage support available, planned and gaps

- As per the Statistical Abstract, 2020, the district has a network of 29 veterinary hospitals, 46 veterinary dispensaries, 3 sheep & wool extension centre and 1 mobile dispensary in the district.
- Artificial insemination facility is available at all Veterinary Hospitals and dispensaries.
- Average two villages were served by a veterinary institution.
- Dairy Development Deptt provides training to farmers and sponsor the prospective beneficiaries to banks under Govt. sponsored/general schemes.
- Good quality feed is available.

The milk plant in neighboring Sangrur district with six milk chilling centres has a total capacity of handling 1.50 lakh litre of milk per day. In Barnala district there is one Milk Plant in Private Sector with the name of Best Milk Products Pvt. Ltd Badbar, which has the milk handling capacity of 1.00 lakh liters per day (LPD) and manufactures skim milk powder and ghee at present under the brand name Punjab King, in addition to it, there are two small private milk plants viz., Modern Milk Producers & Milk Chilling Plant Mehalkalan and Malwa Milk Centre Barnala having total capacity of 0.57 lakh LPD are also operating in the district.

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

Keeping in view of the unit cost, past trends, response of the farmers and disbursement in previous years the projections made in PLP for the 2022-23 are as under: -

(₹ lakh)

Sr.No	Activity / Unit	Unit Cost	Unit	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Bulk Milk Cooler (2000 litres)	10.00	No.	30	320.00	288.00
2	Indigenous Milk Product Manufacturing (100 Kg)	13.20	No.	17	224.40	201.96
3	Buffaloes-2 Animals	1.60	No.	900	1440.00	1296.00

Sr.No	Activity / Unit	Unit Cost	Unit	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
4	Cow units CB (2 Animals)	1.60	No.	900	1440.00	1296.00
5	Cow units (5 Animals)	4.00	No.	575	2300.00	2070.00
6	Buffalo Units (5 animals)	4.00	No.	600	2400.00	2160.00
7	Cow units (10 Animals)	7.00	No.	260	1820.00	1638.00
8	Buffalo Units (10 animals)	7.00	No.	200	1400.00	1260.00
9	Buffalo Units (20 animals)	22.00	No.	50	1100.00	990.00
10	Cow units (20 animals)	22.00	No.	45	990.00	891.00
11	Buffalo units/ Cow units (50 animals)	57.23	No.	20	1144.61	1030.15
12	Buffalo units/ Cow units (100 animals)	99.35	No.	5	496.76	447.08
13	Calf rearing (20 animals)	9.70	No.	80	776.00	698.40
14	Calf rearing (50 animals)	24.25	No.	8	194.01	174.61
15	Bulk Milk Cooler (1000 litres)	8.00	No.	42	336.00	302.40
16	Automatic Milk Collection center	1.65	No.	95	156.76	141.08
17	Milking Machine double tit cup	0.75	No.	90	67.50	60.75
18	Milk Parlour for 20 animals	20.00	No.	17	340.00	306.00
19	Fodder harvester (3 wheel)	3.50	No.	30	105.00	94.50
20	Refrigerated Tanker Van (13000 Ltr)	22.00	No.	39	858.00	772.20
21	Cattle Shed (10 buffalos)-40'x60'	4.00	No.	95	380.00	342.00
22	Cattle Shed (20 cows)-60'x70'	6.00	No.	110	660.00	594.00
23	Working Capital – Dairy @20% to be covered under KCC				3410.82	3410.82
	Total			4210	22359.85	20464.95

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical intervention required for creating a definitive impact

- Urgent need for preserving gene pool of domestic cow and buffalo
- Strong action against spurious milk suppliers

5. Suggested Action Points:

Line Departments

- Scope for encouraging the concept of commercial dairy.
- Agri. Clinic/private veterinary Clinic may be established to provide guidance for reproduction, A.I., disease control etc.
- Fodder seed production may be encouraged for high yielding fodder crops.

Banks

- Motivate young agriculture graduates to set up consultancy and business centres.
- Prospective dairy farmers to be encouraged to undertake big commercial dairy of 50 animals and above.
- SHGs and FPOs may be encouraged to undertake dairy farming and fodder cultivation.

6. Other related matters:

- The GoI has launched a stimulus package of ₹15000 crore through Animal Husbandry Infrastructure Development Fund for incentivizing investments by individual entrepreneurs, private companies, MSME, FPOs And Sec 8 companies to establish the dairy processing and value addition infrastructure, meat processing and value addition infrastructure and Animal Feed Plant.
- There is an interest subvention of 3% to all eligible entities and also a cap of 200 basis points on rate of interest above EBLR of lending institutions. Further, there is a credit guarantee coverage of up to 25% to the borrower through NABARD.
- Some of the state government schemes being implemented are:-
 - Establishing New Dairy Unit: Interested Farmers, after having two-weeks training from the department can apply for establishing new dairy unit.
 - Dairy Loan for Commercial Dairy Farms: Loan will be provided to the beneficiaries for purchasing dairy animals (at least 20 animals) at minimum interest rates.
 - Subsidy for Purchase of Machinery at Dairy Farms

2.1.7 Animal Husbandry - Poultry

1. Introduction: The Barnala district has layer and broiler population of 20.92 lakh and 35.92 lakh respectively as per Statistical Abstract 2020. Contract farming in broiler has picked up in the state and there are approx 48 poultry farms under contract farming with production capacity of 4.36 lakh broilers in the district. There is a good demand for eggs and poultry meat in the district. There is no Hatchery unit in the district and chicks are purchased from the neighboring districts/states.

In the wake of disease incidence scare in poultry, there is need for diversification. There is scope for entering into contract by small poultry farmers with big dressing units established in nearby districts. Ample scope exists for integration of poultry farm units with feed manufacturing units. To encourage export units having plan for creation of infrastructure for egg grading, packing and cold storage may be financed.

2. Infrastructure and linkage support available, planned and gaps

- Poultry development centers at Barnala, and Mehalkalan provides technical know-how and training to the poultry farmers.
- Most of the big farmers have their own feed mixing units.
- The supply of day old chicks is short and so there is potential for setting up a hatchery unit.
- Scope for setting up of egg grading and packing unit in view of large scale production of eggs.

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

Keeping in view of the unit cost, past trends, response of the farmers and disbursement in previous years the projections made in PLP for the 2022-23 are as under:-

(₹ lakh)

Sr.No	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Commercial Broilers (5000)	12.00	No.	70	840.00	756.00

Sr.No	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
2	Commercial Broilers (10000)	24.00	No.	50	1200.00	1080.00
3	Commercial Layers (5000)	20.00	No.	34	680.00	612.00
4	Commercial Layers (10000)	40.00	No.	30	1200.00	1080.00
5	Hatchery- Poultry	0.75	No.	90	67.50	60.75
6	Others - Egg and Broiler Cart	0.20	No.	249	49.80	44.82
7	Transport Vehicle Open Cage	8.00	No.	80	640.00	576.00
8	Transport Vehicle Refrigerated	15.00	No.	75	1125.00	1012.50
9	Poultry Feed Mixing Unit (one Ton/hr)	16.00	No.	70	1120.00	1008.00
10	Working Capital	@20%			1246.01	1246.01
	Total			748	8168.31	7476.08

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical Intervention Required

- Processing to be encouraged.
- Brand value to the poultry produced in district should be added on the lines of India Gate Basmati of Dhuri block.
- Indigenous breeds along with resistant breeds such as kadaknath should be promoted

5. Suggested Action Points:

Line Department

- Need for creating awareness about nutrient/protein contents in poultry products.
- Efforts to be made to carve out a “Brand” for poultry products to create niche market.
- Scope for strengthening marketing network of poultry products.

6. Other related matters:

- To give boost to the sector, the GoI has taken decision to provide KCC limit to the Poultry farmers and has directed the banks to provide KCC limit for working capital requirements for the purpose.
- One District One Product (ODOP)- The objective is to convert each District of the country into an Export Hub by identifying products with export potential in the District, addressing bottlenecks for exporting these products, supporting local exporters/manufacturers to scale up manufacturing, and find potential buyers outside India with the aim of promoting exports, promoting manufacturing & services industry in the District and generate employment in the District. For Barnala Meat/Chicken/Poultry products have been identified under ODOP.

2.1.8 Animal Husbandry – Sheep/Goat/Piggery:

1. Introduction: These activities are not being taken up on a commercial basis in the district. Only small units sponsored under SGSY/NRLM, SC/ST Credit Plan etc. are being financed by the banks. Goat and Piggery is mainly undertaken for meat production to meet the local requirements. Reduction in grazing pastures on common lands has restrained the growth of these activities. Piggery being economically viable activity, is taken up in the

district. As per 2019 livestock census, there are 10934 Goats, 1113 Sheep & 2493 pigs in the district.

2. Infrastructure and linkage support available, planned ang gaps

- There are 2 Sheep Extension centers located at Barnala and Mehalkalan.
- One clinical laboratory has also been opened in nearby district Sangrur.
- Lack of assured local market for pigs within district. Farmers mostly have to sell pigs to middle men for further sale in North East India.

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

Keeping in view of the unit cost, past trends, response of the farmers and disbursement in previous years the projections made in PLP for the 2022-23 are as under: -

(₹ lakh)

Sr.No	Activity / Unit	Unit Cost	Unit	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Sheep & Goat Breeding and Rearing (500+25)	25	No.	22	550.00	495.00
2	Goat (20+2)	1.5	No.	65	97.50	87.75
3	Goat (40+2)	2.5	No.	50	125.00	112.50
4	Sheep (20+1)	1.5	No.	10	15.00	13.50
5	Sheep (40+2)	2.5	No.	15	37.50	33.75
6	Pig Breeding Farm (20+4)	8.00	No.	30	240.00	216.00
7	Piggery Unit (10+2)	5.00	No.	15	75.00	67.50
8	Pigger Commercial Rearing Units (3+1)	1.00	No.	15	15.00	13.50
9	Others- Meat Shop	0.25	No.	6	1.50	1.35
10	Working Capital	@20%			207.90	207.90
	Total		No.	228	1364.40	1248.75

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical intervention required for creating definitive impact

- Non availability of Poultry/AH Diagnostic Laboratory in the district
- Limited credit support by banks for bigger units of Piggery farmers.

5. Suggested Action Points:

- Financing under this sector may be encouraged through cluster approach.
- Marketing network to be strengthened.

6. Other related matters

- To give boost to the sector, the GoI has taken decision to provide KCC limit to the Pig/Sheep/Goat farmers and has directed the banks to provide KCC limit for working capital requirements for the purpose.
- Interest Subvention at 2% upto ₹2 lakh is also available under the scheme.

2.1.9 Fisheries:

1. Introduction: Fish contains proteins, vitamins and minerals which are essential in keeping a human being in good health. Fish farming provides best alternative for agriculture. Fish farming is done on agriculture land, low lying areas and in village ponds. The comparatively poor soils such as water logged, alkaline which are unfit for agriculture can also be used for fish farming. Besides a good source of income, it also generates self-employment opportunities. In the district total area brought under fish culture was 586 ha as per Statistical Abstract 2020 (Page No. 232). The activity is concentrated in Barnala block of district. Total fingerling production during the year 2019-20 was approx. 89.42 lakh in Barnala. Main varieties of fish reared in the district are Rahu, Mrigel, Katla, Common Carp, Silver Carp and Grass Carp etc. A few progressive farmers are also engaged in prawn culture.

2. Infrastructure and linkage support available, planned and gaps:

- There are two Govt. seed farms located at Sangrur and Benra (Dhuri Block) which are very near to Barnala district.
- There is one fish pathological laboratory besides a mobile field laboratory which provides facility of soil and water testing to fish farmers at nominal charges.
- A Chetna Kendra for bringing about awareness about fish farming has been set up.
- FFDA provides free training to encourage the farmers to undertake the activity. A Value Addition Training Centre for imparting training for various fish products has also established.

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

Keeping in view of the unit cost, past trends, response of the farmers and disbursement in previous years the projections made in PLP for the 2022-23 are as under:-

(₹ lakh)

Sr.No	Activity / Unit	Unit cost	Unit No/Area	Projections for the year 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Construction of new ponds (Fin Fish) (ha.)	7.00	ha	70	490.00	441.00
2	Renovation of old ponds	3.50	ha	50	175.00	157.50
3	Others- Establishment of Fish Seed Hatcheries	25.00	ha	5	125.00	112.50
4	Others-Integrated Ornamental Fishery unit (1000 sq.mt.)	25.00	No.	12	300.00	270.00
5	Others-Fish Market (Retail Outlet)	60.00	No.	2	120.00	108.00
6	Others-Establishment of small fish Feed Mill	25.00	No.	11	275.00	247.50
	Working Capital	@20%			267.30	267.30
	Total			150	1752.30	1603.80

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical Intervention required for creating definite impact

- Lack of Market in the district.
- Non availability of Laboratory in the district

- Limited credit support by banks for bigger units of Fish farmers.

5. Suggested Action Points:

- Village ponds may be leased out for longer duration so that entrepreneurs can nurture fish ponds with bank loan and derive optimum benefits as state notification provides for such lease up to 10 years.
- Marketing arrangement of fish/fish products to be strengthened.
- Many bankers do not have technical expertise to evaluate project proposals resulting in delay in sanction and/or refusal of loan applications.

6. Other related matters

Punjab State Fisheries Development Board has come out with Vision Document 2030 to guide fisheries sector in Punjab State. The salient features of the vision document are given below:

- Fish production is to be increased to 250,000/- tonnes in next 11 years i.e. upto 2030. To achieve this target, minimum 200 acres area need to be brought under fish cultivation in each district per year and increase in per unit productivity with the help of technology as well as by fish species diversification.
- The total fish seed requirement by 2030 for intensive fish farming will be more than 100-120 crore. With the addition of 10 more fish seed farms, seed production to be increased upto 25-30 crore in department seed farms in next 14 years.
- By 2030, Punjab require about 150,000-200,000 tons of fish feed. To supply the same, it may require at least 8-10 big fish feed mills in private sector in the State.

2.1.10 Farm Credit - Others

1. Introduction- Animal driven carts is an important activity which is generally being undertaken by small and marginal farmers and other landless labourers. The activity is mainly covered under Government sponsored programmes for the people living below the poverty line. The bullock carts are being generally used for carrying out routine farm activities such as carrying of fodder, marketing of products etc. The jhota buggies, bull carts and mule carts are used for transporting goods by landless labourers.

2. Infrastructure and linkage support available, planned and gaps:

- Good network of carpenters/masons for manufacturing of good quality carts and scope for custom hiring by animal driven carts remains throughout the year.
- The existing veterinary infrastructure as discussed under dairy activity is sufficient to take care of health work animals to be financed along with carts.
- Draught animals above three years are easily available.

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

Keeping in view of the unit cost, past trends, response of the farmers and disbursement in previous years the projections made in PLP for the 2022-23 are as under: -

(₹ lakh)

Sr. No	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Work animal	0.40	No	200	80.00	60.00
2	Animal driven cart	0.60	No	150	90.00	67.50
3	Agri Others -Gold Card etc.	7.00	No	10000	70000.00	52500.00
4	Two Wheelers to Farmers	0.60	No	770	462.00	346.50
	Total			11120	70632.00	52974.00

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical Intervention required for creating definite impact

- Inadequate staff for providing extension service in the Department of Agriculture and other supporting departments.

5. Suggested Action Points:

- The banks may finance these activities which are primarily covered under Govt. sponsored programmes.

6. Other related matters

Bullock driven implements are useful like tractor driven ones in reducing drudgery, improving productivity of land and labour. Hence, this need encouragement.

2.1.11 Integrated Farming System

Introduction: There is uncertainty in income and employment in only farm activity i.e. mainly on crop production. Therefore, for supplement farmers' income and increase family labour employment, one should adopt the integration of various agricultural enterprises.

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

- Increased farm income by integration of allied activities and reduced costs through input recycling from by-products of allied enterprises
- Sustainable soil fertility and productivity enhancement through organic waste recycling from animal activities like piggery, poultry and pigeon rearing
- Inclusion of biogas & agro forestry in integrated farming system shall meet the energy needs of rural households. Agro forestry systems will meet timber needs and also reduce soil erosion.

- Cultivation of fodder as intercrop / border crop meets requirement of animals

The various components of IFS are crops, live stocks, birds and trees. The crops may have subsystem like monocrop, mixed/intercrop, multi-tier crops of cereals, legumes (pulses), oilseeds, forage etc. The livestock components may be milch animals, goat, sheep, poultry, bees and the tree components include fruits, timber, fuel and fodder. The IFS components and their composition may vary with irrigation water availability viz., irrigated / rainfed/ irrigated – dry (ID) conditions and also vary with category of the farmer (SF/MF, medium and big farmers). The major factors which need to be considered in choosing an IFS model are soil type, rainfall, its distribution and length of growing season. There is a need for evolving appropriate farming systems for diverse agro-ecological situations.

IFS Models: Based on the outcome of the on-farm trials conducted at various locations the IFS Model in a farm holding of 1.0 hectare in Punjab is as under:

Component	Area allocated in One ha
Crops	0.64
Horticulture	0.19
Kitchen Garden	0.02
Agro-forestry	0.03
Fishery	0.10
Dairy	0.02

Initial investment on IFS components is about ₹5.65 lakh. The broad economics and financial analysis of the model are presented below:

(₹)

Year	1	2	3	4	5
Capital Cost(A)	5,65,000	-	-	-	-
Recurring cost(B)	1,27,485	1,83,583	2,48,320	3,68,103	3,20,250
Total cost(C)	6,92,485	1,83,583	2,48,320	3,68,103	3,20,250
Gross income	2,82,692	3,86,134	5,76,511	7,48,411	7,21,120
Net income	4,09,793	2,02,551	3,28,191	3,80,308	4,00,870

BC Ratio	1.38
IRR	60%
NPW	5,23,600
Payback period	5 years

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

Location specific IFS models were also evolved by SAUs.

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

2.2 Agriculture Infrastructure

2.2.1 Construction of Storage and Marketing Infrastructure (Warehouses/ Godowns, Market yards, Silos, Cold Storage Units/ Cold Storage Chains)

1. Introduction: In the district there are at present 5 regulated markets and 6 sub yards for the marketing of farm produce (Source: Statistical Abstract 2020). 56 rural godowns and 14 cold storages available in the erstwhile Sangrur including Barnala district provide storage facility to the farmers. As district occupies important place in rice and wheat production which offers ample scope for rural godowns.

2. Infrastructure and linkage support available, planned and gaps:

- State Govt., Food Corporation of India, PUNGRAIN, Markfed, PunSup, Punjab State Warehousing Corporation and private traders purchase wheat and paddy during harvesting season.
- Awareness about multi chamber cold storage units has not percolated amongst entrepreneurs as only potato crop is being stored whereas other vegetables, flowers, fruits etc. as also poultry and milk products can also be stored.
- Negotiable warehouse receipt system may be encouraged at district level, as this will reduce distress sale and ensure availability of credit to the farmers immediately after harvest.
- On an average 25 villages are served by each Mandi in the district which is much better than State average of 81 villages per Mandi.
- Also, in terms of area served per Mandi, district performs better at 282 square km per mandi in comparison to State average of 329 sq km per mandi.
 - The district has 56 Storage Godowns with a capacity of 9,56,000 MT, however, given the production of wheat and paddy in the district, there is requirement of 20 Lakh MT storage space. This shortfall needs to be plugged in mainly by Private Sector and the growth of Silos needs to be encouraged in the district as they occupy lesser space and provide better storage facility and longer shelf life of stored produce in comparison to normal godowns.

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

Keeping in view of the unit cost, past trends, response of the farmers and disbursement in previous years the projections made in PLP for the 2022-23 are as under:-

(₹ lakh)

Sr. No.	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	New cold Store (5000 ton)	500.00	No.	15	7500.00	5625.00
2	Rural Godowns (10000 MT)	300.00	No.	24	7200.00	5400.00
3	Rural Markets/Apni Mandis	33.00	No.	7	231.00	173.25
4	Others-Electronic Weighing Centre	17.00	No.	35	595.00	446.25
5	Refrigerated Transported Vehicle (9 MT)	26.00	No.	35	910.00	682.50
6	Others-Grain Cleaning and Grading Units (4 TPH)	65.00	No.	15	975.00	731.25
7	Others-Modernisation of Cold storage (5000 MT)	250.00	No.	5	1250.00	937.50
8	Others-Silos	275.00	No.	6	1650.00	1237.50
	Total			142	20311.00	15233.25

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical intervention required for creating a definitive impact

Insufficient cold storage and cold chain transportation system is a major cause for fruits, vegetables and other perishable products to rot. Most of the cold storage facilities available are for Potato only.

5. Suggested Action Points

Line Departments

- Awareness about proper maintenance of rural godown/cold storages.
- Development of I.T Centres for providing information for market intelligence.

6. Other Related Matters

6.1 Mapping and Geo- tagging of Agri-storage Infrastructure

In the Union Budget 2020-21, Govt. of India had announced that NABARD will 'Map and Geo-tag Agri-warehousing, cold storage and reefer van facilities' across the country. NABARD has contributed significantly towards the creation of scientific storage capacity through financing the State Govts., State Govt. Entities, APMCs and Private sector.

NABARD has completed the process to map all the warehouses by geo tags. In Punjab, approx. 6000 warehouses were geo-tagged during the exercise. With technology set to be the key enabler for development of the warehousing sector, the geo tagged map will be the basic data on which various services through IT enabled platform can be developed and delivered to the farmers.

6.2 Mission for Integrated Development of Horticulture (MIDH),

Credit linked back-ended subsidy is available for Integrated Post Harvest Management infrastructure. Major activities included are Pack house, Integrated pack house with facilities for conveyer belt, sorting, grading units, washing, drying and weighing, Pre-cooling unit, Cold Storage (Construction, Expansion and Modernisation).

Under MIDH subsidy is also available for Establishment of Marketing Infrastructure for horticultural produce in Govt./Private/ Cooperative sector, which covers subsidy for Rural Markets/Apni mandis/Direct markets, Retail Markets / outlets etc.

Silos under Warehouse Infrastructure Fund(WIF)

GoI allocated a separate dedicated corpus (outside allocation under RIDF) for providing affordable credit to the public as well as private sectors to facilitate augmentation of the existing agricultural warehousing infrastructure in the country. This allocation was constituted as Warehouse Infrastructure Fund (WIF). NABARD under WIF has sanctioned the project of grain storage in Silos at 3 locations viz. Sunam, Malerkotla and Ahmadgarh in Punjab with a capacity of 50,000 MT each to PUNGRAIN. All 3 silos have been completed and are used for grain storage.

2.2.2 Land Development, Soil Conservation and Watershed Development

1. Introduction: In Barnala district soil is predominantly alkaline in nature. Overuse of chemical fertilizers, insecticides and pesticides has caused degradation of soil and water, and

there is a need for corrective steps to be taken for sustaining productivity. A number of land development activities can be undertaken through institutional finance viz., reclamation of alkaline soil/saline soil, Underground Pipe Line (UGPL)/water management, sand scrapping, land levelling, water harvesting tanks/watershed management, compost making/vermi compost units, etc. However, so far as bank finance is concerned, little headway has been made under land development except UGPL/water management and purchase of Agricultural land by small and marginal farmers.

2. Infrastructure and linkage support available, planned and gaps

- Department of Agriculture provides guidance for reclamation of degraded / saline/alkaline lands. Soil Testing Officer guides the farmer for growing crops suitable to the soils.
- Divisional Soil Conservation Officer supported by SDSCOs provides technical guidance to farmers about soil conservation measures.
- The machinery required for carrying out operations and pipes are available on hire.
- Govt of Punjab has plan to promote financing of water storage tanks for storing water to be used in drip irrigation with 50 % subsidy for community based projects and laying of underground pipelines with 25% subsidy.
- Under PMKSY component 'Reclamation of Special Problem & degraded soil under Technology & Training', projects for reclamation of special problematic areas and degraded soils are taken up by GoI.

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

Keeping in view the past experience, importance of the above activities, the critical situation of underground water table, the projections have been made under PLP for the year 2022-23 are as under:-

(₹ Lakh)

Sr.No.	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Land Leveling/ Sand scrapping (slope 2-3%)	0.15	ha	1350	202.50	182.25
2	Reclamation of salt affected soil	0.30	ha	1150	345.00	310.50
3	Farm Ponds (30x30x3) brick lined with barbed wire fencing	6.08	No	735	4468.80	4018.62
4	Purchase of Agri Lands by SF/ MF	18.00	Acres	1060	19080.00	17172.00
TOTAL				4295	24096.30	21683.37

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical intervention required for creating a definitive impact

- Land leveling to be adopted on large scale so as to reduce water consumption.
- Demonstration units of Vermicompost technology need to be promoted at District and Block Level, so that awareness may be created about the Soil health management.

5. Suggested Action Points:

Line Departments:

- Need to promote soil and water management techniques through awareness camps.
- Dissemination of information about new land leveling techniques.

Banks

To identify farmers for financing identified activities and provide credit support.

6. Other related matters

State Plan Schemes:

1. Project for Judicious use of available water & Harvesting of Rain water for enhancing irrigation potential in Punjab State.
2. Scheme for enhancing Irrigation Water Efficiency through Community Underground Pipeline System in the state.
3. Project for laying of Underground Pipeline for irrigation from Sewerage Treatment Plants of various Towns/Cities.

Centrally Sponsored Schemes:

1. Scheme on Micro Irrigation (Drip and Sprinkler Irrigation Systems) under PMKSY.
2. Centrally Sponsored Scheme for Micro Irrigation (80:20 GOI: State sharing).
3. Soil Health Card Scheme.

Other Specially Proposed Schemes:

1. Project for Efficient Conveyance of irrigation water through Community Pipeline system under Rashtriya Krishi Vikas Yojana (RKVY).
2. Project for Improvement in Conveyance Efficiency of irrigation water through underground pipeline system under Crop Diversification Plan (CDP).
3. Integrated Watershed Management Programme (IWMP).
4. Project for Matching irrigation water availability and demand for improved productivity through Efficient On-farm Water Management under RKVY.
5. Soil Health Management (SHM) under National Mission for Sustainable Agriculture (NMSA) aims at promoting Integrated Nutrient Management (INM) through judicious use of chemical fertilizers including secondary and micro nutrients in conjunction with organic manures and bio-fertilizers for improving soil health and its productivity.

Special Refinance Scheme in NABARD Watershed and Wadi Project areas

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

2.2.3 Agriculture Infrastructure (Others Tissue Culture, Agri Bio Technology, Vermi Composting, Seed Production, Bio pesticide/ fertilizer etc.)

1. Introduction: This chapters covers the benefits of e-NAM to the farmers and investment opportunities such as Bio fertilizer/Pesticide units, Agri Biotechnology, Tissue culture, Seed Production and Seed Processing, etc. Better seed replacement coupled with high quality seeds can improve productivity. Low Seed Replacement Rate (SRR) and non-availability of quality seeds affects mass production and as result farm income too.

High-tech agriculture mainly refers to agricultural operations involving the latest technologies. It is a capital intensive agriculture since large capital outlay is required towards purchase of specialized equipment, maintenance of assets, training of labour, etc. It uses farming technology to increase yields, ensures high quality (usually pesticide-free) and realizes increased market value. Growing temperate vegetables in a tropical climate and developing disease-resistant plants through genetic engineering are common examples of hi-tech agriculture.

2. Infrastructure and linkage support available, planned and gaps:

- Govt.of India is providing both payment related and trade related incentive to farmers for using eNAM facility.
- Central Sector Scheme for development and strengthening of infrastructure facilities for production and distribution of quality seed.
- Seed Village Programme
- Central Sector Scheme for protection of plant varieties and farmer's rights
- Incentives/subsidy support for adopting high value agriculture production technologies especially under National Horticulture Mission and other programmes of National Horticulture Board.
- Export facilitation and promotional interventions of Agricultural & Processed Food Products Export Development Authority (APEDA) / Marine Products Export Development Authority (MPEDA).
- Low seed replacement rate (SRR) is major constraint in increasing the agriculture production. It was planned by the agriculture department that 20% sowing area of major crops will be brought under certified seeds every year in next five years.
- Integrated Pest Management (IPM) and Integrated Nutrient Management (INM) are the best options to improve pesticides and fertilizer use efficiency.

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

Keeping in view of the unit cost, past trends, response of the farmers and disbursement in previous years the projections made in PLP for the 2022-23 are as under:-

(₹ lakh)

Sr. No.	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Seed Processing Units (20 tpd)	29.00	No.	15	435.00	326.25
2	Vermi-Composting (200 TPA)	13.50	No.	11	148.52	111.39
3	Tissue Culture lab (25 lakh plants p.a.)	250.00	No.	4	1000.00	500.00
4	Bio-production/ Fertilizers (200 TPA)	160.00	No.	4	640.00	576.00
5	Others-Fruit & Vegetable Waste compost unit (100 TPD)	200.00	No.	5	1000.00	750.00
	Total			39	3223.52	2263.64

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

4. Critical intervention required for creating a definitive impact

- People prefer to use synthetic fertilizers instead of bio-fertilisers as vermi-composting demands time and care.
- Vegetable seed production in the country has been vulnerable to vagaries of weather resulting in production of poor quality seeds.

5. Suggested Action Points:

Line Departments:

- Dissemination of information about innovative schemes viz. Biofertilizer, vermi compost through KVK/Extension centers, NGOs.
- Facilitation for certification of organic products and marketing of these products by State Govt.
- The marketing linkage for quality seeds, bio pesticide and bio fertilizer need to be strengthened.

6. Other related matters

Government of India under Capital Investment Subsidy Scheme (CISS) of Soil Health Management Scheme (SHM) of National Mission of Sustainable Agriculture (NMSA) is providing assistance for Setting up of State of art liquid/ carrier based Bio-fertilizer/ Bio-pesticide units of 200 Ton Per Annum (TPA) capacity. 100% assistance is provided to State Govt. / Govt. Agencies upto a maximum limit of ₹160.00 lakh/ unit. Similarly, for individuals/ private agencies assistance upto 25% of cost limited to ₹40 lakh/unit as capital investment.

2.3 Ancillary Activities

2.3.1 Food and Agro Processing

1. Introduction: It is estimated that losses of agricultural produce due to lack of appropriate post-harvest handling are valued at ₹87,800 crore per annum, with crop wise losses pegged at 30-40% in fruits and vegetables, 10-15% in food grains, 5-7% in Milk, 5% in meat products and 10% in eggs. Post-harvest and marketing infrastructure, including grading, packaging, transportation and storage, needs to be created on a large scale. Keeping the above in view, Government of India has come up with a new Central Sector Scheme – Pradhan Mantri Kisan SAMPADA Yojana (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) with an allocation of ₹6,000 crore for the period 2016-20 coterminous with the 14th Finance Commission cycle. The scheme will be implemented by Ministry of Food Processing Industries (MoFPI).

Further, Ministry of Food Processing Industries (MoFPI), in partnership with the State/ UT Governments, has launched an all India Centrally Sponsored PM Formalisation of Micro food processing Enterprises Scheme (PM FME Scheme) for providing financial, technical and business support for upgradation of existing micro food processing enterprises. It is an All India Sponsored Scheme with an outlay of ₹10,000 crore for coverage of 2,00,000 enterprises over 5 years from 2020-21 to 2024-25.

COVID-19 and stimulus Package:

In wake of COVID-19 pandemic Centrally and its resultant impact on the Indian economy, the Finance Minister announced measures to strengthen Agriculture Infrastructure Logistics, Capacity Building, Governance and Administrative Reforms for Agriculture, Fisheries and Food Processing Sectors. ₹ 1 lakh crore Agri Infrastructure Fund for farm-gate infrastructure for farmers which would pave way for : ₹ 10,000 crore scheme for formalisation of Micro Food Enterprises (MFE), ₹ 20,000 crore for Fishermen through Pradhan Mantri Matsya Sampada Yojana (PMMSY), National Animal Disease Control Programme, Setting up of Animal Husbandry Infrastructure Development Fund - ₹ 15,000 crore, Promotion of Herbal Cultivation : outlay of ₹ 4,000 crore, Beekeeping initiatives – ₹ 500 crore and from 'TOP' to TOTAL – ₹ 500 crore.

Diversification Initiatives by State Government

The State Government operates an agricultural mega project policy to facilitate investment in the food and agro processing sector. Project proposals envisaging fixed capital investment of ₹25 crore or above are covered in this policy. Such proposals are offered a number of fiscal and facilitation concessions, including exemption from stamp duty on the purchase of land for designated purpose; 5% exemption on electricity duty for 5 years; 50% exemption from Mandi fees on the purchase of non-FCI (Food Corporation of India) grade paddy for processing in the unit for 10 years, subject to maximum of 50% of fixed capital investment; 100% exemption from mandi fees on the purchase of fruits and vegetables for processing in the plant for 10 years; etc.

Punjab Agro Industries Corporation Limited (PAIC) has also been given the mandate to promote food and agro processing industries in financial collaboration with private investors. PAIC contributes 11% to 26% in the equity capital of such projects.

Potential Food Processing Industries in Punjab

Following thrust areas are identified by NABARD for development in Agro-Processing in the state of Punjab :

- (i) **Grain Based:** Bread & Biscuits, Rice and Starch Mills, Rice bran oil, noodles & baby foods, beer, whisky and health drinks.
- (ii) **Fruit & Vegetable based:** Preserves, candies, pickles, sauces, puree, ketchup, chutneys, syrups, squashes, fruit pulp, juices, vegetables in brine, canned products, dehydrated vegetables, frozen vegetables, bottled and canned mushrooms etc.
- (iii) **Milk based:** Pasteurised milk, sterilised milk, milk shakes, paneer, butter, ghee, variety of sweets, milk powders, yoghurt, acid casein, lactose, etc.
- (iv) **Meat & poultry based:** Dressed poultry, mutton minced, frozen poultry, frozen buffalo meat, sausages, frankfurters, meat balls, nuggets, smoked poultry breasts, etc.
- (v) **Honey based:** Mixed honey, flora specific honey, particle size based honey, honey-ginger, honey - saffron, honey-neem, etc.
- (vi) **Food Parks** should be made a hub for Food and Agro processing units. The setting up of these parks is to be based on potential of the area and requirements of the processing units to tap the potential. This would help to utilise the infrastructure effectively.

Present status of registered Small scale units in Agro and Food Processing in the Barnala District

S.No	Type of Food Industry	No of units	Production(in lakhs)
1	Grain Processing -Flour mills	303	4259.87
2	Grain Processing -Rice mills	231	150565.10
3	Biscuits & Confectionary	55	5747.00
4	Meat products	3	230.00
5	Dairy Products	90	858.00
6	Edible Oil Extraction and refining	6	2865.00
7	Spice Grinding	17	67.00

(Source: DIC, Malerkotla)

2. Infrastructure and linkage support available, planned and gaps

- Lack of regular power supply at reasonable rate.
- The local market for processed vegetables is growing at a limited scale due to consumer preference for fresh vegetables.
- The District Industrial Centre is involved in registration of fruits and vegetable processing units under Small Scale Industries in the district.
- Lack of multi-chamber cold storages to stock different horticulture produce as most of the cold storages in the district are single chamber only and store potato.

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

Keeping in view of the unit cost, past trends, response of the farmers and disbursement in previous years, the projections for Barnala district made in PLP for the 2022-23 are as under:-

(₹ lakh)

Sr.No	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Rice Mill 2.5TPH with parboiling	336.00	No	10	3360.00	2520.00
2	Others - Working Capital	34.00	No	16	544.00	408.00
3	Others- Biscuit Manufacturing Unit (300 MTPD)	35.50	No	7	248.50	186.38
4	Others-Fruit & Veg Based	15.50	No	20	310.00	232.51
	Total			53	4462.50	3346.89

Block wise financial projections for the year 2022-23 are given in Annexure-I.

4. Critical intervention required for creating a definitive impact

- Introduction of agro processing / grading units of vegetables/grains at mandi level in appropriate numbers.
- Introduction of high level of technology.
- Infrastructure viz. quality testing labs, cold chain, etc. availability

5. Suggestions

- The District Industries Centre may organize training programmes for capacity building of unemployed youth to enable them to take up income generating activities.

6. Other related matters

- 100% FDI is permitted under the automatic route in food processing industries.

- 100% FDI is allowed through government approval route for trading, including through e-commerce in respect of food products manufactured or produced in India.

Food processing Fund (FPF)

Food Processing Fund with a corpus of ₹2,000 crore has been established in NABARD to make available affordable credit to the sector. Under this, loan will be provided by NABARD either directly or through consortium arrangements with other financing agencies to State Government Corporations, private limited companies, entrepreneurs etc. at concessional rate of interest for establishing the designated food parks and also for setting up of agro processing units in the designated food parks. PAIC is setting up Mega Food Park in Ludhiana district with an investment of ₹117.00 crore, out of which NABARD has already sanctioned an amount of ₹27.12 crore under FPF.

2.3.2 Agriculture – Ancillary Activities - Others

1. Introduction:

Loans to Cooperative Societies of farmers for disposing of their produce: It has become imperative to provide expert services to farmers in terms of advice, inputs and also marketing to enable farmers to produce their best. As per revised RBI guidelines on Priority Sector lending, 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 Centre (ACABC) Scheme are included in other ancillary activities of agriculture.

2. Availability of Infrastructure, critical gaps and interventions required action points / issues to be addressed:

- There are 82 functioning PACS in the Barnala district, out of which 70 PACS were in profit as on 31.03.2021. Hence, there is good potential available in the district for setting up of Agro Service Centres, Agro Storage Centres, Agro Processing Centre, Agri-information Centre, Agri- Transportation & marketing facilities, Consumer Stores, and also setting up of public distribution system, rice & wheat milling/aata chakki, producer's organisations etc. by PACS. Loan from DCCBs and support to PACS from NABARD under PODF is also available.
- A number of students are opting for agriculture sciences these days. There are training institutes which are grooming these graduates to set up Agri Clinics or Agri Business Centres.
- The banks may finance trainees of R-SETI under Gold Card and Agri Gold Cards.

3. Assessment of potential for the financial year 2022-23 (in both physical and financial terms) under PACS as MSC, MFIs, ACABC, FPOs, etc.

Keeping in view the infrastructure available and policy initiatives taken by GoI, NABARD and State Govt. in order to push agriculture and allied sector, the potential for the year 2022-23 has been assessed as under:

(₹ Lakh)

Sr. No.	Activities	Unit Cost	Unit (No./area)	Projections for 2022-23		
				Phy. Units	Fin. Outlay	Bank Loan
1	Agri. Clinic/ Agri-Business Centre	12.00	No.	60	720.00	540.00
2	Loans to PACS	18.00	No.	60	1080.00	972.00
3	Loans to FPOs	15.00	No.	70	1050.00	840.00
	Total			190	2850.00	2352.00

Block-wise projections are given in Annexure I

4. Critical intervention required for definite impact

- Lack of awareness about 'PACS as MSC Scheme' among PACS.
- Inadequate staff for providing extension services in the Department of Agriculture and other supporting departments.
- Lack of awareness about ACABC Scheme among agricultural professionals.
- State Govt. may consider grant of subsidy to PACS for setting up of Agro Service Centres as they have been very beneficial to the farmers – especially small and marginal farmers.
- Cooperative Department should encourage good working PACS to diversify their lending portfolio into new areas to increase their income.
- Agri Graduates should be sensitized to adopt ACABC Scheme. Punjab Agriculture University (PAU), GADVASU, Line Departments and also banks may encourage agriculture graduates to take up self-employment ventures by setting up Agri-Clinics/ Agri Business Centres.
- There is no MANAGE affiliated training centre in the district, which, hampers the certification for ACABC candidates. MANAGE may tie up with some institute for its certification programme.
- FPOs face difficulty in accessing the credit facilities primarily due to Low capital base. Small Farmers Agribusiness Consortium (SFAC) has launched the scheme of Equity Grant Fund wherein matching equity support (1:1), maximum ₹10.00 lakh is available, provided the FPIs is a Registered FPC as defined in section IXA of Indian Companies Act, 1956 with more than 50 individual shareholders.
- Lack of collateral is another obstacle in accessing credit by FPOs.

5. Suggestion

The banks may finance these activities which are primary covered under Govt. sponsored programmes. Agri clinics and Agri business centres needs to be encouraged by banks and Govt departments.

6. Other related matters

PACS as Multi Service Centres: PACS as Producers' Organisation, can play an important role in providing farmers with the latest farm technology for increasing agriculture production and productivity and for facilitating marketing and storage of produce. This will also ensure that PACS become a self- sustainable entity by providing additional services like custom hiring of agricultural implements, enabling collective purchase of inputs, having good quality storage capacity as per Negotiable Warehouse Receipt System, processing and marketing facilities, etc.

Loan & grant available from NABARD: To saturate all the potential PACS for conversion as Multi Service Centres over a period of three years commencing from FY 2020-21, NABARD has launched PACS as MSC scheme, so that PACS can create quality infrastructure and increase their business portfolio in tune with the needs of its members. The scheme also aims at facilitating PACS to play a proactive role in meeting the national goal of increasing farmers' income by farm gate value addition. Under the scheme, special refinance facility is available to eligible PACS through State Cooperative Banks in which interest rate is available at 3% to StCBs and the ultimate interest rate to be charged to PACS is not more than 4%. The repayment period is of 7 years including a grace period of 6-24 months depending on income generation and type of infrastructure. Further, the scheme can

be clubbed with Agri Infrastructure Fund of GoI and PACS can avail interest subvention of 3%. NABARD had earlier sanctioned projects under the previous version of scheme to Punjab StCB Ltd. for setting up of 650 Agro Service Centres by PACS upto 31.03.2018. Under this sanction, a typical unit has a TFO of ₹ 15.00 lakh. This includes a loan of ₹ 7.50 lakh from NABARD, a subsidy of ₹ 6.00 lakh from Farmers' Commission, Govt. of Punjab and ₹ 1.50 lakh as own contribution by the concerned PACS.

Agri- Clinics & Agri- Business Centres:- 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 are commercial units of agri ventures established by trained agriculture professionals. The GoI has launched subsidy based Credit Linked Scheme for establishment of ACABC. These can be taken up by technically qualified personnel as integrated units providing not only extension services but also providing other support services like hiring/ leasing of farm implements and stocking and sale of inputs etc. for monetary considerations. The ACABC Scheme has also been implemented by NABARD since 2001-02.

Bank loans to MFIs for on-lending: Bank credit to MFIs extended for on-lending to individuals and also to members of SHGs/ JLGs will be eligible for categorisation as priority sector advance under respective categories viz. Agriculture, Micro, Small and Medium Enterprises and 'Others'. The structure of MFIs in India is either SHG model or JLG model and there are large numbers of MFIs who practise one of these models. Micro finance is the provision of the financial services to the poor people with very small business projects. Jalandhar based Midland Microfin Ltd.(NBFC-MFI) has a branch at Barnala which deals with women led JLGs.

Farmer Producer Organisations (FPOs)

Forming a producer organisation can also provide access to timely and adequate finance, build capacity and provide linkages to markets. The GoI had earlier launched a special scheme for formation and promotion of 10,000 FPOs Under the PRODUCE scheme, in Punjab, a total of 69 Farmers Producers Organisations have been promoted through 9 POPIs (Producer Organisation Promoting Institutions) across various districts of the state covering a gamut of activities like agro processing, Dairy, Goatery, vegetable cultivation etc. POPIs will provide handholding support to the FPOs, for which grant support is envisaged in the scheme for 3 years. Role of POPIs also include Membership mobilization, organizing, and registering of FPOs, guiding FPOs to formulate business plans and overall nurturing of the FPOs. Out of the total 69 FPOs, there are 15 FPOs registered/ being registered under Company Act, 22 FPOs under Society Registration Act & remaining 32 under State Cooperative Society Act. NABARD has now decided to upscale the FPO promotion under its various ongoing programmes.

Furthermore, Government of India, Department of Agriculture, Co-operation & Farmers' Welfare, Ministry of Agriculture & Farmers' Welfare vide its operational guidelines dated July 07, 2020 has introduced a new scheme "*Formation and Promotion of 10,000 Farmer Producer Organizations (FPOs)*" for implementation for a period of five years during 2020-24. A gist of the scheme is as under:

- To provide holistic and broad based **supportive ecosystem** to form new 10,000 FPOs to facilitate development of vibrant and sustainable income oriented farming and for overall socio-economic development and wellbeing of agrarian communities.
- To **enhance productivity** through 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 **handholding and support** to new FPOs up to **5 years** from the year of creation in all aspects of management of FPO, inputs, production, processing and value addition, market linkages, credit linkages and use of technology etc.
- To provide effective **capacity building to FPOs** to develop agriculture entrepreneurship skills to become economically viable and self-sustaining beyond the period of support from government.

NABARD, SFAC and NCDC will be Implementing agencies(IAs). Any State govt. department/agency after its approval by DAC & FW can also act as Implementing Agency. IAs will be supported by Cluster- Based Business Organizations (CBBOs). CBBOs will implement the scheme at ground level – form the FPO, register it, prepare business plan and handhold it. A minimum of 300 members will be organised in FIG / SHGs and then FPO will be formed under the scheme. Cluster-based approach shall be adopted for produce or produce mix. Furthermore, FPOs can federate at district level, State level & National level for the product identified as per their requirement of processing, branding and marketing.

Special Refinance Scheme for Transformation of PACS as MSC

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.

Eligible Purposes

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

Refinance assistance

Refinance assistance is provided to the banks at 3% interest rate. 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 MICRO SMALL AND MEDIUM ENTERPRISES (MSME)

3.1 Introduction and Rationale of MSMEs:

- This sector provides large scale employment opportunity esp. in rural and backward areas
- MSME Sector has emerged as a highly potent and vibrant sector of Indian Economy
- This sector assures more equitable distribution of national income and wealth and reducing regional imbalances.
- Under '**Aatma Nirbhar Abhiyan**' MSME sector assumes huge significance. Now, the distinction between Manufacturing and Service sector has been removed and the revised definition will include turnover of the entity along with the investment scale in the unit.

Agency Type	Previous Definition	Revised Definition
Micro	Investment of up to ₹10 Lakh for Service MSMEs and up to ₹25 Lakh for Manufacturing MSMEs.	Investment up to ₹1 Crore and Turnover of less than ₹5 Crore
Small	Investment of up to ₹ 2 Crore for Service MSMEs and up to ₹ 5 Crore for Manufacturing MSMEs.	Investment up to ₹10 Crore and Turnover of less than ₹50 Crore
Medium	Investment of up to ₹ 5 Crore for Service MSMEs and up to ₹ 10 Crore for Manufacturing MSMEs.	Investment up to ₹50 Crore and Turnover of less than ₹250 Crore

The recent prominent initiatives undertaken by Ministry of MSME, GOI are given as under:

1. Credit Guarantee Trust Fund for Micro and Small Enterprises (CGT-MSE).
2. Prime Minister Employment Generation Program (PMEGP).
3. Credit Linked Capital Subsidy Scheme (CLCSS).
4. Start-up India and Stand-up India.
5. Make in India Scheme.
6. Setting up of Micro Units Development and Refinance Agency Ltd. (MUDRA).
7. National Small Industries Corporation (NSIC).
8. Scheme of Fund for Up-gradation and Regeneration of Traditional Industries (SFURTI)

As part of the 'Aatma Nirbhar Abhiyan' Govt. of India has announced the following financial incentives:

- Credit Guarantee of 3 Lakh Crore will rescue MSMEs that need additional funding to meet operational liabilities and restart operations and expected to help MSME in surviving the crisis posed by Covid-19.
- Subordinate Debt for NPAs/Stressed MSMEs amounting to ₹ 20000 Crore will help around two lakh MSMEs having stressed assets in their books.
- The Government has created a Fund of funds with a corpus of ₹ 50000 crore for MSMEs with Growth potential and viability with an objective to infuse equity to expand MSMEs.

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

Implementation of Stand Up India

As parts of its efforts to provide equal opportunities to all, Stand Up India has been launched and each bank branch has been given a target of financing atleast one women and one SC/ST beneficiary with a loan amount ranging between ₹10.00 lakh to ₹ 100.00 lakh. Huge potential under SUI exists in the district as the %age share of women beneficiaries in credit availment is only 6% and weaker section is 9%. Further handholding events will encourage people participation in the scheme.

3.2 Infrastructure and linkage support available, planned and gaps Status of MSME in the district

Barnala district falls under the category of industrially backward districts of Punjab State. The industrial spectrum of the district revolves around Handiaya which has maximum concentration of all large, medium and small scale industries including Trident Industries and Standard Agri Implements. About one-third of the total work force is engaged in manufacturing, construction, mining and other industrial activities. Besides Govt. sponsored programmes, there is a strong need to formulate suitable schemes to address the problem of unemployment. In fact, there is ample scope for setting up small agro/food processing units which do not require much capital investment like rice flakes, instant noodles, energy-giving foods, processing of milk into khoya, desi ghee, paneer etc. and these units can feed to bigger units in addition to local market.

As per industrial profile of district given in Statistical Abstract, Punjab 2020, district has 187 factories employing 11,791 workers with 1785 workers per lakh population of the district. Further, there are 4,747 small scale units in the district with fixed capital of ₹510.59 crore and employing 27,524 workers with a production of ₹4102.53 crore. There are 5 large and medium enterprises in the district with fixed capital investment of ₹4963.89 crore and employing 9,174 workers and annual production of ₹3155.40 crore. Further, there are 117 village industries in the district with project cost of ₹9.02 crore and employing 7860 workers.

- District Industries Centre (DIC) located at Malerkotla (caters to both Sangrur & Barnala districts) organises training programmes in collaboration with NITCON, RCED, Chandigarh and Commercial banks to develop the entrepreneurship skills of the rural people under PMRY (Pradhan Mantri Rozgar Yojana).
- Two Industrial Training Institutes, 2 Industrial Training Schools, one Institute for Engg. and Technology and one Handicraft Training Centre are functioning in the district.

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

Keeping in view of the unit cost, past trends, response of the farmers and disbursement in previous years the projections made in PLP for the 2022-23 are as under: -

(₹ lakh)

Sr.No	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
	Manufacturing sector					
1	Micro Enterprises	100.00	No	110	11000.00	8250.00
2	Small Enterprises	1000.00	No	46	46000.00	34500.00
3	Medium Enterprises	5000.00	No	3	15000.00	11250.00
	Sub – Total			159	72000.00	54000.00
4	Manufacturing sector					5400.00

Sr.No	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
	Working Capital					
	Service sector					
1	Micro Enterprises	100.00	No	80	8000.00	6800.00
2	Small Enterprises	1000.00	No	25	25000.00	21250.00
3	Medium Enterprises	5000.00	No	3	15000.00	12750.00
	Sub – Total			188	48000.00	40800.00
4	Service sector Working Capital					4081.00
	Total MSME			267		104281.00

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

3.4 Critical intervention required for creating a definitive impact in the sector

- The most critical intervention required to create a definitive impact in development of the MSE Sector is the market tie-up of all the Micro and Small Enterprises.
- The banks may consider issuing GCC / SCC to the small and rural artisans and handloom weavers so that besides meeting the working capital needs of these small entrepreneurs, the targets for issuance of SCC/GCC can also be met.

3.5 Suggested Action Points:

Line Departments

- Ample scope for financing milk processing/value addition plants in dairy and also for food processing unit.
- Cluster approach may be adopted for development of traditional crafts/handicrafts.
- Training to prospective entrepreneurs on market trends at regular intervals.
- Power supply to industrial units is erratic especially in summer season.
- DIC may conduct survey for identification of potential blocks for integrated industrial development.
- Improvement in infrastructure facilities at focal points.

Banks

- Adequate and timely credit facility to industrial units
- Cluster approach may be adopted to bring down cost of delivering credit.
- Banks may cover their MSME loans portfolio under CGTMSE.
- The banks may motivate units to avail grant under technology upgradation scheme.
- The banks may finance trainees of R-SETI and PNB-FTC under micro and small enterprises by issuing them SCCs /GCCs /ACCs
- Banks can avail grant assistance under Skill Development Programme of NABARD through nabskill portal for courses conducted by RSETI.

6. Other related matters

As announced by the Punjab Govt in 2021-22 budget:

- ₹ 1928 Crore power subsidy to be provided to industries in Punjab.
- State government will set up a District Bureau of Industry & Investment Promotion in each district to further promote ease of doing business.
- Provision of ₹50 Crore towards capital subsidy to eligible & entitled Industrial unit under various Industrial Policies

CHAPTER-4

Credit Potential for Export Credit, Education and Housing

4.1 Credit Potential for Export Credit-2022-23

4.1.1 Introduction:

Post liberalization, the export sector of Indian economy made comprehensive progress resulting in employment generation, speeding up the process of economic development, bringing newer technologies, integrating Indian economy with global economy in general and contributing to country foreign exchange reserves in particular. New regime strongly believe that states has to be partner in India's export growth story and accordingly it is desired to involve states for export promotion with identification of products and markets suitable for exports keeping in minds the economic profile of each state.

There is renewed focus on improving business environment, attracting foreign investments, enhancing domestic production and promoting exports.

The "Make In India" initiative

Make in India was launched on 25 September 2014 with the objective of job creation and skill enhancement in 25 sectors of the economy, and "to transform India into a global design and manufacturing hub".

Ease of Doing Business

India jumped to 63rd place out of 190 countries in the World Bank's 2020 Ease of Doing Business Index, from 77th in 2019. There is competition among the states of India to improve their current ranking on the ease of doing business index based on the completion percentage scores on 98-point action plan for business reform under make in India initiative.

Ongoing global campaign

The campaign was launched with release of a brochure on the 25 sectors, after foreign equity caps, norms and procedures in various sectors were relaxed, including application of manufacturing application made available online and the validity of licenses was increased to three years.

"Zero Defect Zero Effect" slogan was coined by Prime Minister of India, Narendra Modi, to emphasize on the production mechanism that produces products with no defects with no adverse environmental and ecological effects.

GoI has also announced the Foreign Trade Policy 2015-20 and the same has been extended till September 2021. It is expected that the Policy will create an environment for diversification of Indian exports market and products and give a boost to India's exports. Some of the features of the policy are:

- Merchandise Exports from India Scheme
- Service Exports from India Scheme
- Duty credit scrips to be freely transferable and usable for payment of custom duty, excise duty and service tax.
- Special treatment and privileges to business leaders who have excelled in international trade and have successfully contributed to country's foreign trade.
- Online filing of documents/ applications and paperless trade in 24x7 environment.

Punjab is one such state that is economically developed and can contribute to India's growth in addition to improving its own economic profile. The economic base of Punjab state is largely agricultural and the state is ideal for wheat-growing, rice, sugar cane, fruits and vegetables. Being in country hinterland, Punjab is in disadvantageous situation as far as external sector engagement in terms of merchandize and services exports are concerned. However, it has been the "entrepreneurship skills" and "innate commitment" of the people of state which has been instrumental in progress of Punjab. Punjab export as percentage of India's exports has averaged around 1.6 over the last few years.

In terms of RBI guidelines, financing for exports is available for Pre-shipment / Packing Credit' and 'Post-shipment Credit which refer to any credit facilities including loans and advances extended to exporters by banks.

Punjab Small Industries and Export Corporation Ltd (PSIEC) is the nodal agency for promotion of exports and nominated agency for the implementation of Central Government Scheme known as Assistance to State for Developing Export Infrastructure and Allied activities (ASIDE). PSIEC Ltd. has been setting up a 115-acre Plastic Park at Nidampur, Sangrur

The district has huge potential in export of cotton products – towels, curtains, bed sheets as these products are being manufactured and exported by Trident Group within the district. However, the same is not being reported from the district. It is likely that statistics of this export is included in Ludhiana district as the corporate office of Trident Group is in Ludhiana. Also, the district has potential in export of agriculture equipments and machinery. However, the export potential of the district is yet to be tapped and due to statistical lacunae, there were no exports reported from the district during 2018-19 as per Statistical Abstract of Punjab – 2020.

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

4.1.2 Infrastructure and linkage support available, planned and gaps:

- Most of the items are exported through Inland Container Depot (ICD) at Dhandari Kalan and Sahnewal of Ludhiana district.
- Availability of power supply and other infrastructure requirements needs to be addressed.
- Settling the Pre shipment credit within the stipulated time after the dispatch of goods or converting them into Post Shipment credit may be ensured.
- Due precaution taken in case of the export of agricultural products especially for factors such as domestic and international demand and supply situation, price competitiveness, quality concerns, sanitary & phyto-sanitary requirements and relevant rules & regulations of the importing countries. Temporary restrictive measures sometime adopted by the importing countries in view of non-conformity to any of these standards/rules ruin the unit.
- Setting up of design and research centre for sports industries will boost the exports in the district.

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

The Block-wise Activity-wise projections under the sector during the year 2022-23 are indicated at Annexure – I and the summary is given below.

(₹ lakh)

Sr. No.	Activity / Unit	Unit Cost	Unit No/Area	Potential for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Pre Shipment Credit	200.00	No	3	600.00	450.00
2	Post Shipment Credit	50.00	No	13	650.00	487.50
	Total			16	1250.00	937.50

4.1.4 Critical Intervention Required

- Settling the Pre shipment credit within the stipulated time after the dispatch of goods or converting them into Post Shipment credit may be ensured.
- Exporters may be encouraged to avail the credit export insurance facilities extended by ECGC.
- Collateral security should not be insisted upon as far as possible and Gold Card scheme should be popularized.
- 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.

4.1.5 Suggested Action Points

- There are multiple labour laws in India and it is important to harmonise all the rules and make labour laws more flexible and bureaucratic hurdles should be minimum.
- 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.
- Settling the Pre shipment credit within the stipulated time after the dispatch of goods or converting them into Post Shipment credit may be ensured.
- Micro, Small and Medium Exporters should be properly trained by MSME / export organizations with technical assistance from banks regarding correct filling up of forms.

4.1.6 Other related matters

- The agricultural export policy (AEP) of Punjab aims to more than double the value of its total exports in the financial year 2027-28 from 2017-18.
State government has prepared the Punjab State Export Plan 2021-26 in order to implement 'district as export hub scheme' and 'one district one product scheme'.

4.2 Credit Potential for Education - 2022-23

4.2.1 Introduction:

There are 08 Degree colleges, 11 technical Institutions and Polytechnics, 106 High and 96 senior Secondary Schools, 71 Middle schools and 199 Primary schools in district. There are around 8000 students in degree and technical institutions in the district.

The Educational Loan Scheme aims at providing financial support from the banking system to deserving/ meritorious students for pursuing higher education in India and abroad. The main emphasis is that every meritorious student though poor is provided with an opportunity to pursue education with the financial support from the banking system with affordable terms and conditions.

Loans to individuals for educational purposes including vocational courses up to ₹10 lakh irrespective of the sanctioned amount will be considered as eligible for priority sector and ₹20 lakh for studies abroad.

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

4.2.2 Infrastructure and linkage support, planned and gaps

For the state of Punjab, where there is a tremendous inclination among the students to study abroad, the renewed focus on “education loan” would facilitate enhanced credit flow to the sector.

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

The Block-wise Activity-wise projections under the sector during the year 2022-23 are indicated at Annexure – I and the summary is given below: -

(₹ lakh)

Sr.No.	Activity / Unit	Unit No/Area	Projections for 2022-23		
			Phy Units	Fin Outlay	Bank loan
1	Education Loans	No.	1200	12000.00	11400.00
	Total		1200	12000.00	11400.00

4.2.4 Critical intervention required for creating a definitive impact in the sector

- Skills shortage is accompanied by educated unemployment. Many of these graduates are considered unemployable by industry due to poor skill levels.
- The formal education sector provides no training for emerging sectors such as biotechnology, hospitality, fashion designing, NGOs, etc. as also the gamut of ‘soft skills’ required in the work-place.
- The stress is on written instruction, or theory, and written testing systems, with little applicability to practical work-place situations.

4.2.5 Suggested Action Points

- The private sector should make investment/ charity in the field which can fill a crucial gap in funding. Private funding can also address issues other than resources such as greater industry-institute linkages, research, faculty, etc.
- There is tremendous scope in further liberalizing the process of private participation to attract the best investors and also to provide quality, customization, greater range of courses, and diversity, among others.
- All possible efforts must be made to revitalize the higher education structure.
- Awareness creation of the schemes at the grass root level. The bankers may tap the students in schools and colleges.

4.2.6 Other related matters

The GoI has announced New Education Policy – 2020 which proposes sweeping changes including opening up of Indian higher education to foreign universities, dismantling of the UGC and the All India Council for Technical Education (AICTE), introduction of a four-year multidisciplinary undergraduate programme with multiple exit options, and discontinuation of the M Phil programme. In school education, the policy focuses on overhauling the

curriculum, “easier” Board exams, a reduction in the syllabus to retain “core essentials” and thrust on “experiential learning and critical thinking”. In a significant shift from the 1986 policy, which pushed for a 10+2 structure of school education, the new NEP pitches for a “5+3+3+4” design corresponding to the age groups 3-8 years (foundational stage), 8-11 (preparatory), 11-14 (middle), and 14-18 (secondary). This brings early childhood education under the ambit of formal schooling. The mid-day meal programme will be extended to pre-school children.

4.3 Credit Potential for Housing

4.3.1 Introduction:

Housing, as one of the three basic needs of life, always remains the top priority of any person, government and society at large. As per the census data of 2011, India as a country faces shortage of houses. Further, trend to have second house, may be for self-use or investment purposes, is fuelling the demand for houses in Punjab.

Housing Loan under Priority Sector:

- (i) Loans to individuals up to ₹35 lakh in metropolitan centres and loans up to ₹25 lakh in other centres for purchase/construction of a dwelling unit per family provided the overall cost of the dwelling unit in the metropolitan centre and at other centres should not exceed ₹ 45 lakh and ₹ 30 lakh respectively. The housing loans to banks’ own employees will be excluded.
- (ii) Loans for repairs to damaged dwelling units of families up to ₹5 lakh in metropolitan centres and up to ₹2 lakh in other centres.
- (iii) Bank loans to any governmental agency for construction of dwelling units or for slum clearance and rehabilitation of slum dwellers subject to a ceiling of ₹10 lakh per dwelling unit.
- (iv) 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.
- (v) Bank loans to Housing Finance Companies (HFCs), approved by NHB for their refinance, for on-lending for the purpose of purchase/construction/reconstruction of individual dwelling units or for slum clearance and rehabilitation of slum dwellers, subject to an aggregate loan limit of ₹10 lakh per borrower.
- (vi) Outstanding deposits with NHB on account of priority sector shortfall.

4.3.2. Infrastructure and linkage support available, planned and gaps:

Adequate support services are available in the district to support housing activity.

- Credit linked subsidy will be provided on home loans taken by eligible urban poor (EWS/LIG) for acquisition, construction of house. Beneficiaries of Economically Weaker section (EWS) and Low Income Group (LIG) seeking housing loans from Banks, Housing Finance Companies and other such institutions would be eligible for an interest subsidy at the rate of 6.5 % for a tenure of 20 years or during tenure of loan whichever is lower.
- Banks should not grant finance for construction of buildings meant purely for Government/Semi-Government offices, including Municipal and Panchayat offices. However, banks may grant loans for activities, which will be refinanced by institutions like NABARD.
- Banks had, in the past, sanctioned term loans to Corporations set up by Government like State Police Housing Corporation, for construction of residential quarters for allotment to employees where the loans were envisaged to be repaid out of budgetary allocations.

As these projects cannot be considered to be run on commercial lines, it would not be in order for banks to grant loans to such projects.

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

The Block-wise Activity-wise projections under the sector during the year 2022-23 are indicated at Annexure – I and the summary is given below:

(₹ lakh)

Sr.No	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Housing Loans for Purchase/Construction of house	20.00	No	1375	27500.00	24750.00
2	Housing Loans Repair to dwelling unit	2.00	No	1025	2180.00	1635.00
	Total			2465	29680.00	26385.00

4.3.4 Critical intervention required for creating a definitive impact in the sector

- Vertical space to be adequately utilized for new housing projects instead of horizontal growth as that encroaches upon the agricultural land.

4.3.5 Suggested Action Points

- The banks should extend the credit for the construction in urban areas under the Govt. Awaas scheme
- The interest subvention benefit should be pass on to the beneficiary under the Govt. Awaas scheme.
- Awareness of the schemes should be passed on to the grass root level.

4.3.6 Other related matters

Government Schemes on Housing: -Pradhan Mantri Awas Yojana

- The credit-linked subsidy will be available only for loan amounts upto ₹6 lakh and additional loans beyond ₹6 lakh, if any, will be at non-subsidized rate for EWS and LIG. Interest subsidy will be credited upfront to the loan account of beneficiaries through lending institutions resulting in reduced effective housing loan and Equated Monthly Installment (EMI).
- Middle Income Groups (MIG) with annual incomes of above Rs 6.00 lakhs and up to Rs 18.00 lakhs per year are eligible for interest subsidy on housing loans under the new CLSS (MIG). Beneficiaries are eligible for an interest subsidy of 4% on housing loans of up to Rs 9.00 lakhs of those with an income of Rs 12.00 lakh per year and of 3% on housing loans of up to Rs.12.00 lakh of those earning Rs.18.00 lakh per year.

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

CHAPTER-5**Credit Potential for Infrastructure****5.1.1 Introduction**

Infrastructure development has a key role to play in both economic growth and poverty reduction. Rural infrastructure today comprises of core infrastructure viz. Irrigation, connectivity (road, power, IT), transportation, energy (generation, transmission, distribution), post-harvest storage and social infrastructure viz., drinking water, sanitation, sewerage, health, housing and education.

5.1.2 Infrastructure Indicator

The comparative status of development of infrastructure in the district in relation to the State average has been presented in table below.

Table No. 5.1

Sr. No.	Infrastructure component	District	State	Category
1	Electricity			
a	No. of villages electrified	128 i.e. (100%)	100%	A+
b	Percentage of villages electrified	100%	100	A+
c	Percentage of rural consumers to total consumers	69%	62%	A
2	Transportation			
a	Road density per 100 sq. km.	140	200	B
b	No. of transport vehicles (registered vehicles of all types) per 100 sq. km.	56802	61610	A
c	Villages connected by pucca road	124 i.e. (100%)	12022	A
3	Irrigation			
a	Irrigated area to net cropped area	99.84%	95.88%	A+
b	% Area irrigated through groundwater	93.4%	75%	A
c	% Area irrigated through surface water	6.6%	25%	B
d	No of tubewells per 100 ha of cropped area	25.35	27.23	A
4	Communication			
a	No. of telephone lines per hundred population	8.18	8.73	A
b	Population served per post office	7326	6156	B
c	Average area served per post office (sq. km)	18.38	12.59	
5	Education			
a	Literacy rate	60	69.95	A
b	Literacy rate – Male	65.8	75.63	A
c	Literacy rate – Female	53.4	53.55	A
d	No. of schools (elementary education upto Standard 8 th) per 1 lakh population	40.85	64.47	C
e	No of secondary and Sr. Sec. Schools per 1 lakh population	15.2	16.33	A
f	No. of Degree and professional colleges per 1 lakh population	0.70	0.88	B
g	Teacher Pupil ratio upto Class V	52	42	B
	Class V to Class VIII	25	28	A
6	Health			
a	Birth rate (per 1000 persons)	21.2	20.8	A

Sr. No.	Infrastructure component	District	State	Category
b	Death rate (per 1000 persons)	7.0	7.1	A+
c	Maternal Mortality Rate (MMR) per 1 lakh live births	196	172	B
d	Infant Mortality Rate (IMR) per 1000 live births	52	51	A
e	Life expectancy at birth	67	69.9	A
f	Sub centers/ primary health centers/ community health centers per 1 lakh population	2.05	2.23	A
g	No. of Dispensaries and Hospitals per 1 lakh population	6.75	6.97	A
h	No. of beds in hospitals per 1 lakh population	73.6	103.42	B
i	Doctors (modern i.e. allopathic system) per 1 lakh population	40.05	72.73	C
7	Water Supply			
	% of villages having drinking water supply (fully or partially)	96.5	68.13	A+
8	Agriculture Markets			
	No of agriculture markets per 100 sq. km.	0.34	0.28	A+
9	Agriculture Marketing			
A	No. of regulated markets per 100 sq. km.	0.34	0.28	A+
10	Productivity of major Agriculture Crops in Kg/ha			
	Wheat	5250	4207	A+
	Rice	4677	3952	A+

The above classification of the district is based on following criteria:

Where the district indicator is

100% or more of the State indicator: A+ Where it is between 85% and 99.9% : A

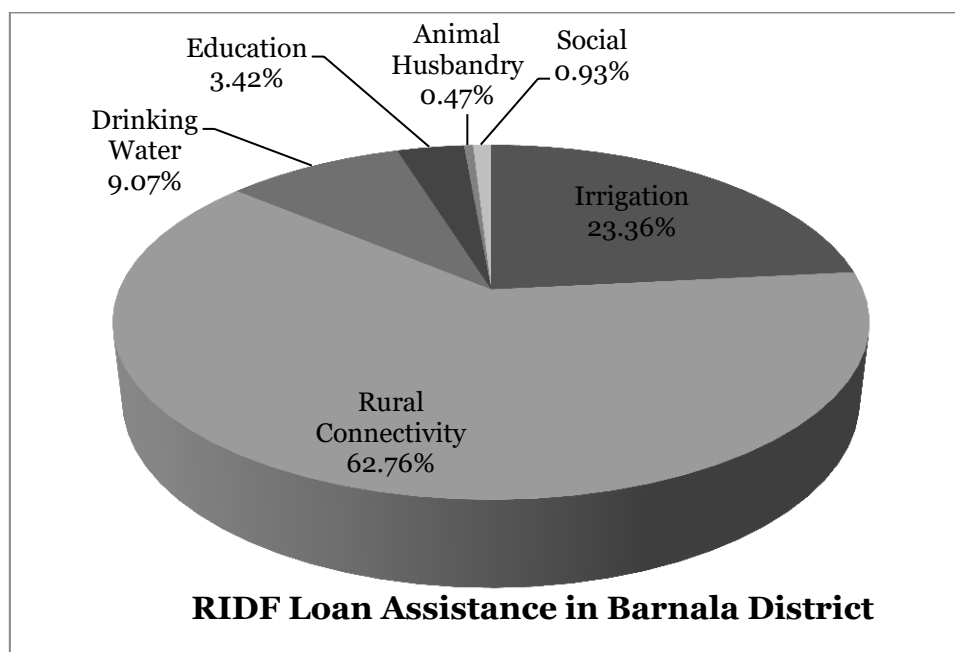
Between 70% and 84.9% : B Between 50% and 69.9% : C Less than 50% :D

5.1.3 Rural Infrastructure Development Fund (RIDF)

With the objective of assisting the State Governments in the completion of ongoing rural infrastructure projects and to take up new infrastructure projects, the Rural Infrastructure Development Fund (RIDF) was set up with NABARD in 1995-96. Priority was given to the incomplete, ongoing projects and new projects which could be completed within 3 years. At present there are 37 activities eligible for financial support under RIDF.

5.1.4. RIDF projects in the district

RIDF projects with a TFO of ₹659.35 crore with an RIDF loan assistance of ₹463.62 crore have already implemented / being implemented in the district over 26 tranches of RIDF. The sectoral composition of different projects as per RIDF assistance is given below:



5.1.5 Impact of Completed Projects

With the implementation of roads & bridges projects connectivity of villages to the main cities has improved with the result, quality of life of farmers has improved considerably. With the implementation of rural drinking water supply schemes, supply of clean drinking water has improved substantially. With the construction of new school buildings and science labs the standard of education has improved in the schools and connected villages. New veterinary hospitals have provided better facilities which improved the service level of these hospitals and treatment of animals have improved.

5.1.6 NABARD Infrastructure Development Assistance (NIDA)

The fund was created to finance Rural Infrastructure Projects outside RIDF. Assistance under NIDA is available for a period of 15 years with 2-3 years repayment holiday. Initially, NIDA was created to support State owned entities. However, the scope of NIDA has been broadened to include PPP projects and refinancing of NBFCs. Public Financial institutions are eligible under NIDA.

5.1.7 Rural Infrastructure Promotion Fund

Recognising the need for capacity building of officials, creation of experimental/critical infrastructure of smaller investments with focus on last mile connectivity benefiting the Community that may generate demand for RIDF funding for other infrastructures of higher order, NABARD has set up a separate fund titled 'Rural Infrastructure Promotion Fund' (RIPF). The objective of the fund is to support the activities required for promotional efforts for RIDF which will include support for conducting knowledge sharing workshops, creation of experimental infrastructure projects by Gram Panchayat, SHGs/SHG Federation, Farmers Clubs/FC Federation, and support for survey of potential assessment/demand survey for new Agri/Rural infrastructure projects.

5.1.8 Pradhan Mantri Krishi Sinchai Yojna (PMKSY)

The major objective of PMKSY is to achieve convergence of investments in irrigation at the field level, expand cultivable area under assured irrigation, improve on-farm water use

efficiency to reduce wastage of water, enhance the adoption of precision-irrigation and other water saving technologies (More crop per drop), enhance recharge of aquifers and introduce sustainable water conservation practices by exploring the feasibility of reusing treated municipal waste water for peri-urban agriculture and attract greater private investment in precision irrigation system.

PMKSY has been conceived amalgamating ongoing schemes viz. Accelerated Irrigation Benefit Programme (AIBP) of the Ministry of Water Resources, River Development & Ganga Rejuvenation (MoWR, RD&GR), Integrated Watershed Management Programme (IWMP) of Department of Land Resources (DoLR) and the On Farm Water Management (OFWM) of Department of Agriculture and Cooperation (DAC).

Though the district is 100% under assured irrigation, the district's Agriculture Department has prepared District Irrigation Plan under PMKSY with focus on per drop-more-crop and identified various activities like rain water harvesting structures, rejuvenation of village ponds to be covered under the plan.

5.1.9 Infrastructure – Public Investment

Sector wise infrastructure requirements & suggested action points:

To give impetus to overall development of the district details about sector wise infrastructure requirement and suggested action points are detailed below-

Agriculture Sector-

- State Govt. and district administration should make efforts to recharge the ground water through various recharging structures. State Govt. should make a plan under RIDF to construct water recharging structures.
- Agro poly-clinic cum training cum soil testing centres needs to be set up in all the blocks of the district.
- Rain water harvesting structures also need be constructed. In view of labour shortage, dependence on usage of machines like Laser Land Leveller and Paddy Transplantors etc. by farmers is increasing and the same needs to be done through Agro Service Centers.
- Need for setting up Agriculture Information Centre/Kiosks and e-trading centers to provide market related information and latest developments relating to agriculture.
- Setting up of center and for grading, certification and bar coding of food grains and modernization of agri. produce market.
- Establishment of automatic grain/pulses handling plants will facilitate and hasten the task of procurement of food grains.
- Arrangement for preservation, processing and packaging facilities for vegetables and fruits to be strengthened to bring about value addition and avoid wastages.

Allied Sector –

- Need for promoting/setting up of multi chamber cold storages for horticulture crops.
- Scope for setting up automatic milk collection units and financing bulk cooling units/refrigerators vans (as installed infrastructure).
- Establishment of Model fish ponds of one hectare.
- Arrangement for preservation, processing and packaging facilities for vegetables and fruits to be strengthened to bring about value addition and avoid wastages.
- Setting up of a hatchery unit for poultry birds and egg processing unit will take care of growing demand for poultry product as presently chicks are being purchased from adjoining district.

- Establishment of market outlets/kiosks for fish/poultry/meat products will help farmers in getting remunerative price of their produce.

Non-Farm Sector -

- Setting up of honey processing unit and medicinal/aromatic processing plants.
- Enough scope for setting up food processing unit i.e. rice flakes, instant noodles, energy giving food etc. as raw material for it is available in abundance locally.

Possible diversified areas

- Gene-banks for improvement in progeny of Dairy Animals
- Integration of micro-irrigation systems with canal/ tubewell irrigation, to conserve and ensure judicious use of available water resources.
- Solar energy based power plants

5.2 Social Infrastructure involving Bank Credit (2022-23)

The potential for private investments through bank credit under this new sector have been assessed for the year 2022-23 based on the credit needs of the district keeping in view the interactions made with various stakeholders.

(₹ lakh)

Sr. No.	Activity / Unit	Unit Cost	Unit No/Area	Projections for 2022-23		
				Phy Units	Fin Outlay	Bank loan
1	Drinking water	50.00	No	90	4500.00	3375.00
2	Schools	100.000	No	53	5300.00	3975.00
3	Hospitals/ Health care facilities	100.000	No	50	5000.00	3750.00
4	Sanitation	0.50	No	120	60.00	45.00
5	Pvt Clinics	5.00	No	90	450.00	337.50
	Total Social Infrastructure involving bank credit			403	15310.00	11482.50

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

Dairy Infrastructure Development Fund (DIDF)

NABARD has sanctioned a total ₹254.41 crore to National Dairy Development Board (NDDB) for 04 Milk Unions of Punjab to modernize the milk processing plants and machinery.

Fisheries & Aquaculture Infrastructure Development Fund (FIDF)

In the Union Budget 2018-19, Government of India had announced the creation of Fisheries and Aquaculture Infrastructure Development Fund (FIDF) with a total corpus of ₹7522.48 crore for a period of 5 years (FY 2018-19 to FY 2022-23). FIDF envisages establishment of Fishing Harbours, Fish Landing Centres, Integrated Cold Chain, Modern fish markets, Fish processing units and other infrastructure facilities.

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 power plants constituted 30.8% of total installed capacity. Promoting renewable energy resources also has a positive impact on the net creation of jobs. 1 MW of RE necessitates the employment of minimum 5 people thereby implying that about 20,000 people would get employment through 4000 MW of RE (*Source:IDFC*)

The Ministry of New and Renewable Energy, GoI also provides financial support for installation of Micro Hydro Power projects upto 100 KW capacities for the benefit of villagers living in the remote & inaccessible hilly areas to meet their local electricity needs in decentralized manner. A support of ₹1,25,000/-per KW is provided.

Department of Financial services has instructed to all Public Sector Banks to encourage home loan/ home improvement loan seekers to install rooftop solar PV plants and include cost of system in their home loan proposals. The rooftop solar systems from 1 kW upto 500 kW or in combination can be set up on the roofs. About 10sq.m area is required to set up 1 kW grid connected rooftop solar system.

Revised priority Sector guidelines issued by RBI vide their Circular dated 23April 2015 & 7 July 2016

Bank loans up to a limit of ₹15 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 will come under Priority Sector. For individual households, the loan limit of ₹10 lakh per borrower will be considered under priority sector.

Punjab has considerable potential in Renewable energy sector. By virtue of its topographic location and agriculture base, the State has an extensive irrigation canal network with potential for small/micro/mini hydro power projects. Source-Wise Estimated Potential and Installed Capacity of Renewable Power in Punjab is given below:

(MWs)

S. No.	Energy Sources	Estimated Potential (2022)	Installed Capacity as on 30.06.2020
1	Small Hydro Power	250	169.55
2	Biomass Power	600	97.50
3	Cogeneration Bagasse	500	436.75
4	Waste to Energy	50	1.50
5	Solar	1000	956
	Total	2400	1661.30

(Source: PEDDA)

Punjab is endowed with vast potential of solar energy with over 300 days of sunshine in a year with insolation level varying between 4-7 KWH/Sq.mtr. Rooftop projects shall be promoted in all sectors including Govt. buildings in order to enhance the share of solar power in the state. The Government is also keen to tap this resource for strengthening power infrastructure in the State by setting up Solar Energy based power projects so as to save the depleting resources for our future generation and to combat global warming, fast depleting conventional sources of energy and resultant increased environmental pollution.

The MNRE scheme Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyaan (PM KUSUM) aims to add solar and other renewable capacity of 25,750 MW by 2022 with total central financial support of ₹34,422 Crore including service charges to the implementing agencies. The Scheme is valid up to December 2022 and consists of three components:

- Component A: 10,000 MW of Decentralized Ground Mounted Grid Connected Renewable Power Plants of individual plant size up to 2 MW.
- Component B: Installation of 17.50 lakh standalone Solar Powered Agriculture Pumps of individual pump capacity up to 7.5 HP.
- Component C: Solarisation of 10 Lakh Grid-connected Agriculture Pumps of individual pump capacity up to 7.5 HP.

5.3.2 Infrastructure and linkage support available, planned and gaps:

- In the district, there are about 1500 biogas plants mainly Deen Bandhu Model of 4-6 cubic metres capacity. Of which, 600 were installed in the year 2015-16 without availing any bank assistance.
- Agriculture Department and Project Officer, Punjab Energy Development Agency provide necessary guidance/training and assistance for installation.
- Solar Water Heating Systems with approx total capacity of 3000 lpd have been in operation at different locations in Barnala & Handiaya.

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

5.3.4

Keeping in view of the unit cost, past trends and response of the disbursement in previous years the projections made in PLP for the 2022-23 are as under: -

(₹ lakh)

Sr.No	Activity / Unit	Unit No/Area	Projections for 2022-23		
			Phy Units	Fin Outlay	Bank loan
1	Bio Gas (6 Cu m)	No	1175	176.26	88.13
2	Solar Off-Grid System (upto 1kw)	No	54	27.04	20.28
3	Solar Hot water system	No	120	600.00	450.00
4	Others-Roof Top Solar Units (1kw)	No	75	75.00	56.25
5	Others- Biomass Gassifier units 200 kw	No	3	300.00	225.00
	Total		1427	1178.30	839.66

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

5.3.4 Critical Intervention required for creating a definitive impact

- Almost all the biogas plants are installed with subsidy support and negligible number is established with the own resources of the beneficiaries.
- Small farmers are handicapped in setting up biogas plants due to non-availability of space in their area.
- Maintenance of solar power generating systems has been considered a major problem by the users. Users find it difficult to locate the maintenance electricians.

- Biogas plants also become non-functional after sometime owing to their poor maintenance by the users.
- There is absence of dedicated NGOs for demonstrating/ popularising non-conventional energy sources

5.3.5 Suggested Action Points:

- Need for creation of awareness among rural masses about activities i.e. Solar heating systems, solar panels etc. under subsidy scheme using mass media like cable TV etc.
- Formulation of model bankable schemes.
- Inclusion of these activities in district credit plan (except bio gas units).

5.3.6 Other related matters

- The state government is encouraging roof top solar units and farm level solar power plants.
- PEDDA is a nodal agency for all programmes under Renewable Energy in Punjab. There is a State Energy Development Agency (PEDDA) and they work at the district level through their technical wing attached to the Deputy Commissioner's Office. Besides providing products and services, PEDDA also organize training and demonstration camps for creating mass awareness.

CHAPTER-6

CREDIT POTENTIAL FOR OTHERS

The activities which are grouped under 'Others' includes loans to individuals and their SHGs/JLGs, loans to distressed persons to prepay non-institutional lenders, Loans to State Sponsored Organizations for Scheduled Castes/ Scheduled Tribes for the specific purpose of purchase and supply of inputs and/or the marketing of the outputs of the beneficiaries of these organizations and loans under other sectors of the economy.

SELF HELP GROUP (SHG)

The SHG-Bank linkage programme initiated by NABARD way back in 1992 has made stupendous progress and provided an enabling environment to the poor and the marginalised to access hassle free credit from the formal banking system in a hassle free manner. The launching of the National Rural Livelihood Mission (NRLM) in Sehna Block of the district has given an impetus to the formation of federations at different level for handholding and continuous guidance to the constituent groups. Further, NRLM has now expanded to cover all three blocks of the district

The block wise details of potential available for promotion and saving linkage of SHGs in Barnala district is given in the following table:

Sr.No.	Name of the block	No. of SHGs savings linked on 31 March 2021	No. of SHGs to be promoted and savings linked during 2021-22	No. of SHGs to be promoted and savings linked during 2022-23
1	Barnala	156	200	200
2	Sehna	111	300	300
3	Mehal Kalan	69	100	100
	Dist. Total	336	600	600

*All three blocks are now being covered under NRLM.

The block wise details of potential for credit linkage of SHGs in Barnala district is given in the following table:

(₹ Lakh)

Sr. No.	Name of the block	SHGs to be credit linked in 2021-22				SHGs to be credit linked in 2022-23			
		Fresh	Amount	Repeat	Amount	Fresh	Amount	Repeat	Amount
1	Barnala	180	67.5	50	37.50	180	67.5	50	37.50
2	Sehna	240	90	50	37.50	200	75	50	37.50
3	Mehal Kalan	80	30	20	15	150	56.25	50	37.50
	District Total	500	187.5	120	90	530	198.75	150	112.50

SHGs role during Covid-19 related lockdown

Several SHGs in Barnala district had tied up with PUNGRAIN for sale of Masks during wheat procurement tenure. A total of 28,000 masks were sold to PUNGRAIN by SHGs in Barnala

district. Further, many SHGs distributed masks free of cost to the needy in villages.

Joint Liability Groups (JLGs)

NABARD has launched the scheme for promotion of **Joint Liability Groups (JLGs)** to develop effective credit products for small/ marginal/ tenant farmers/ oral lessees and sharecroppers as also entrepreneurs engaged in various NFS activities. The JLG mode of financing serves as a collateral substitute for loans provided to the small, marginal, tenant farmers, oral lessees, share croppers, etc., who don't have any collateral to offer to banks. It enables the banks to reach farmers through group approach, adopt cluster approach, and facilitate peer education credit discipline. As on 31 March 2021, cumulatively 745 JLGs were credit linked in Barnala district.

Pradhan Mantri Jan Dhan Yojana (PMJDY)

Every account holder under the scheme was entitled to get a RuPay Debit Card, accidental cover of ₹2 lakh besides and overdraft facility of ₹ 10,000/- subject to satisfactory operation of the SB account.

Pradhan Mantri Jeevan Jyoti Bima Yojna (PMJJBY) for life insurance cover :- Insurance Scheme offering life insurance cover for death due to any reason. ₹ 2 lakh is payable on a subscriber's death due to any reason.

Pradhan Mantri Suraksha Bima Yojna (PMSBY) for accidental/ death insurance: -Benefit under the Scheme are ₹2.00 lakh on death or on total and irrecoverable loss of both eyes or loss of use of both hands or feet or loss of sight of one eye and loss of use of hand or foot and ₹1.00 lakh on total and irrecoverable loss of sight of one eye or loss of use of one hand or foot.

Atal Pension Yojna (APY): -Guaranteed minimum pension of ₹1000/- to ₹5000/- per month will be given at the time of 60 years depending on the contributions by the subscribers.

Debt Swap Scheme: -With a view to mitigating the hardship faced by distressed persons who have borrowed at exorbitant rates from non-institutional sources and help them come out of the vicious debt trap, the Debt Swap Scheme is being implemented under which loans are provided by banks to repay high interest bearing debt of money-lenders.

MAI BHAGO ISTRI SHAKTI SCHEME

The scheme envisages strengthening women especially in rural areas in single/individual capacity or clusters or groups. The objectives of the scheme are to strengthen their activities through training at convenient places. It envisages creation of backward & forward linkages by creating a supply chain for providing raw material to women entrepreneurs with the help of apex/state level organizations.

6.2 Infrastructure and linkage support available, planned and gaps:

- NRLM working in all 3 blocks of district from the year 2019-20.
- Lack of awareness among public especially lower strata of society about the availability of Overdraft/consumption/SHG, JLG facilities from banks.
- A consensus may be arrived at by banks to reduce the gap in number of SHGs who have

opened Saving Bank Accounts with banks and are yet to be credit linked.

- Gaps may be discussed in BLBCs/DCCs meeting to bridge it expeditiously.

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

Keeping in view of the unit cost, past trends, response of the farmers and disbursement in previous years the projections made in PLP for the 2022-23 are as under: -

(₹ lakh)

Sr.No	Activity / Unit	Unit No/Area	Projections for 2022-23		
			Phy Units	Fin Outlay	Bank loan
1	Loans to Matured SHGs	No	150	150.00	150.00
2	Loans to New SHGs	No	530	265.00	265.00
3	Loans to JLGs	No	500	1000.00	1000.00
4	PMJDY Loans	No	4500	4500.00	450.00
5	Loans to distress farmers-debt swap/other individuals-misc.	No	28000	28000.00	28000.00
6	Loans to Start ups other than Agr. or MSME	No	63	25200.00	21420.00
7	Loans to State Sponsored Coop for SCs/STs	No	15000	8700.00	8700.00
	Total (Others)		48743	67815.00	59985.00

Block wise physical and financial projections for the year 2022-23 are given in Annexure-I.

6.4 Critical intervention required for creating a definitive impact

- A suitable MIS be introduced for reporting SHGs/JLGs wise data.
- Banks may sensitize account holders of PMJDY for making transactions so that they may become eligible for overdraft facility up to ₹10,000/-.
- As per study conducted by the Centre of Research in Rural and Industrial Development (CRRID), the Rural credit and financial penetration in Punjab has shown that of the total debt, which the rural households are bearing today, share of commission agents has increased from 16.5 % in 2001 to 22.6 % in 2013 and on an average, every farmer, owes more than ₹2 lakh to the money lenders.

6.5 Suggested action plans

- With a view to mitigating the hardship faced by distressed persons who have borrowed at exorbitant rates from non-institutional sources, the bankers should help them to come out of the vicious debt trap.
- Banks should create awareness amongst their customers and help them come out of the clutches of the money lenders. The government bodies, NGOs and business houses committed to corporate social responsibility have to come forward to be the torch bearers and lend their support to SHGs to break vicious cycle of poverty.

6.6 Other related matters

E-Shakti or Digitisation of SHGs is an initiative of NABARD aimed at digitization of all the SHG accounts thereby helping them access wider range of financial services together with increasing the bank's comfort in credit appraisal and linkage by way of:

- Improving the quality of interface between SHG members and Banks for efficient and hassle free delivery of banking services by using the available technology.
- Facilitate convergence of delivery system with SHGs using Aadhaar linked identity.

ANNEXURE - 1											
ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Avail able	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Credit Potentail for Agriculture											
Farm Credit											
Crop Production, Maintenance, Marketing											
Rice	0.65	Ha.		38000	24700.00	30000	19500.00	30000	19500.00	98000	63700.00
Wheat	0.63	Ha.		39000	24570.00	35000	22050.00	32000	20160.00	106000	66780.00
Maize	0.60	Ha.		700	420.00	500	300.00	500	300.00	1700	1020.00
Sugarcane	1.09	Ha.		1500	1635.00	1200	1308.00	1250	1362.50	3950	4305.50
Rapeseed & Mustard	0.49	Ha.		200	98.00	200	98.00	250	122.50	650	318.50
Cotton	0.65	ha		1000	650.00	1000	650.00	1000.00	650.00	3000	1950.00
Pulses	0.38	ha		200	76.00	200	76.00	200.00	76.00	600	228.00
Vegetables - Other Crops	1.14	Ha.		6000	6840.00	1000	1140.00	1000	1140.00	8000	9120.00
Other crops - Fodder	0.49	Ha.		6500	3185.00	4000	1960.00	5000	2450.00	15500	7595.00
Others- Other Crops (Barley, Millet, etc.)		Ha.			23705.61		18856.15		18366.04		60927.79
CROP LOAN Total A				93100	85879.61	73100	65938.15	71200	64127.04	237400	215944.79
10% component towards consumption requirement of farmer household (B) 20% component towards farm maintenance (C)					8587.96		6593.81		6412.70		21594.47
					17175.92		13187.63		12825.41		43188.97
Total Crop Loan Projection (A+B+C)				93100	111643.49	73100	85719.59	71200	83365.15	237400	280728.23
ii) Term Loan											
Water Resources											

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Available	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Solar IP sets 7.5 HP	5.50	No.	0.900	12	59.40	10	49.50	10	49.50	32	158.40
Solar IP sets 10 HP	7.00	No.	0.900	10	63.00	10	63.00	10	63.00	30	189.00
Micro Sprinkler sets .40 Ha (8X8)	0.55	Unit	0.900	200	99.00	150	74.25	150	74.25	500	247.50
Drip Irrigation Closed spaced(1.2x0.6 m)	1.32	Ha.	0.900	300	356.40	200	237.60	200	237.60	700	831.60
Water Channels (UGPL-300 mm RCC)	1.01	Ha.	0.900	200	181.80	200	181.80	200	181.80	600	545.40
Water Channels (UGPL-250 mm HDPE)	1.72	Ha.	0.900	350	541.80	250	387.00	200	309.60	800	1238.40
Sub Total of Water Resources				1072	1301.40	820	993.15	770	915.75	2662	3210.30
Farm Mechanisation											
Tractor 60 HP(Replacement of old tractor @10%)	8.50	No.	0.900	250	1912.50	200	1530.00	200	1530.00	650	4972.50
Tractor Hi-Tech AC Cabin 4WD	11.20	No.	0.900	10	100.80	10	100.80	10	100.80	30	302.40
Second hand tractors	4.00	No.	0.900	100	360.00	100	360.00	100	360.00	300	1080.00
Combine Harvester (self propelled, multi-crop with Super SMS and AC driver cabin)	30	No.	0.900	100	2700.00	80	2160.00	75	2025.00	255	6885.00

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Available	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Trolley with Hydraulic tripping	2.50	No.	0.90	100	225.00	90	202.50	100	225.00	290	652.50
Paddy Transplanter (4-wheeled, riding type with cage wheels & floats)	10.00	No.	0.90	22	198.00	22	198.00	22	198.00	66	594.00
Rotovator (9 ft)	1.15	No.	0.90	50	51.75	50	51.75	50	51.75	150	155.25
Seed Drill 15 tyne	0.55	No.	0.90	40	19.80	35	17.33	35	17.33	110	54.46
Zero Tillage Drill	0.62	No.	0.90	50	27.90	40	22.32	30	16.74	120	66.96
Multi-crop thresher	1.70	No.	0.90	100	153.00	100	153.00	100	153.00	300	459.00
Lazer Land Leveller	3.50	No.	0.90	100	315.00	80	252.00	90	283.50	270	850.50
Baler (Square)	12.00	No.	0.90	12	129.63	12	129.63	12	129.63	36	388.89
Baler (Round)	4.00	No.	0.90	22	79.22	22	79.22	22	79.22	66	237.66
Happy Seeder (Turbo) 11 row planter	1.65	No.	0.90	180	267.30	130	193.05	130	193.05	440	653.40
MB Plough 4 Bottom	2.90	No.	0.90	30	78.30	30	78.30	25	65.25	85	221.85
Super SMS on Combine Harvestors	1.12	No.	0.90	55	55.44	55	55.44	55	55.44	165	166.32
Sub Total of Farm Mechanisation				1221	6673.64	1056	5583.34	1056	5483.71	3333	17740.69
Plantation / Horticulture / Sericulture											
Gauva (6m x 6m)	0.88	Ha	0.90	30	23.76	25	19.80	30	23.76	85	67.32
Ber	0.81	Ha	0.90	20	14.58	20	14.58	20	14.58	60	43.74

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Available	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Kinnow (6mx6m)	0.93	Ha	0.90	10	8.37	10	8.37	10	8.37	30	25.11
Button Mushroom Unit (250 trays)	2.00	No.	0.90	100	180.00	60	108.00	60	108.00	220	396.00
Others -Integrated pack house (9Mx18M)	50.00	No.	0.90	3	135.00	2	90.00	2	90.00	7	315.00
Others - Pre-cooling unit (6MT)	25.00	No.	0.90	1	22.50	1	22.50	1	22.50	3	67.50
				164	384.21	118	263.25	123	267.21	405	914.67
Sub Total of Plantation / Horticulture / Sericulture											
Rose (Protected) 800 sq. Mtr	15.13	Ha	0.90	6	81.69	5	68.08	5	68.08	16	217.85
Poly House Fan Pad System (upto 1000 sq.m)	14.65	No.	0.90	5	65.93	6	79.11	5	65.93	16	210.97
Others - Gerbera (protected) 800 sq. Mtr.	16.60	Ha	0.90	5	74.70	5	74.70	6	89.64	16	239.04
				16	222.32	16	221.89	16	223.65	48	667.86
Sub Total Floriculture											
Medicinal /Aromatic Plants											
Nurseries (1 Ha)	15.00	No.	0.90	5	67.50	3	40.50	3	40.50	11	148.50
Nurseries Hi Tech (4 Ha)	100.00	No.	0.90	1	90.00	1	90.00	0	0.00	2	180.00
Apiculture-Migratory 100 Colony	9.61	No.	0.90	7	60.54	5	43.25	5	43.25	17	147.04

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Available	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Sub Total of Medicinal				13	218.04	9	173.75	8	83.75	30	475.54
Total of Plantation				193	824.57	143	658.89	147	574.61	483	2058.07
Forestry & Wasteland Dev.										0	0.00
Poplar Plantation	1.65	Ha.	0.90	40	59.40	30	44.55	30	44.55	100	148.50
Eucalyptus (Clonal)	3.7	Ha.	0.90	45	149.85	45	149.85	40	133.20	130	432.90
Sub Total of Forestry & Wasteland Dev.				85	209.25	75	194.40	70	177.75	230	581.40
Animal Husbandry - Dairy											
Bulk Milk Cooler (2000 litres)	10.00	No.	0.90	12	108.00	10	90.00	10	90.00	32	288.00
Indigenous Milk Product Manufacturing (100 Kg)	13.20	No.	0.90	7	83.16	5	59.40	5	59.40	17	201.96
Buffaloes-2 Animals	1.60	No.	0.90	300	432.00	300	432.00	300	432.00	900	1296.00
Cow units CB (2 Animals)	1.60	No.	0.90	300	432.00	300	432.00	300	432.00	900	1296.00
Cow units (5 Animals)	4.00	No.	0.90	200	720.00	200	720.00	175	630.00	575	2070.00
Buffalo Units (5 animals)	4.00	No.	0.90	250	900.00	200	720.00	150	540.00	600	2160.00
Cow units (10 Animals)	7.00	No.	0.90	80	504.00	100	630.00	80	504.00	260	1638.00
Buffalo Units (10 animals)	7.00	No.	0.90	50	315.00	100	630.00	50	315.00	200	1260.00
Buffalo Units (20 animals)	22.00	No.	0.90	20	396.00	15	297.00	15	297.00	50	990.00

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Available	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Cow units (20 animals)	22.00	No.	0.90	15	297.00	15	297.00	15	297.00	45	891.00
Buffalo units/ Cow units (50 animals)	57.23	No.	0.90	10	515.07	5	257.54	5	257.54	20	1030.15
Buffalo units/ Cow units (100 animals)	99.35	No.	0.90	2	178.83	2	178.83	1	89.42	5	447.08
Calf rearing (20 animals)	9.70	No.	0.90	30	261.90	30	261.90	20	174.60	80	698.40
Calf rearing (50 animals)	24.25	No.	0.90	5	109.13	2	43.65	1	21.83	8	174.61
Bulk Milk Cooler (1000 litres)	8.00	No.	0.90	18	129.60	12	86.40	12	86.40	42	302.40
Automatic Milk Collection center	1.65	No.	0.90	35	51.98	30	44.55	30	44.55	95	141.08
Milking Machine double tit cup	0.75	No.	0.90	30	20.25	30	20.25	30	20.25	90	60.75
Milk Parlour for 20 animals	20.00	No.	0.90	7	126.00	5	90.00	5	90.00	17	306.00
Fodder harvester (3 wheel)	3.50	No.	0.90	15	47.25	10	31.50	5	15.75	30	94.50
Refrigerated Tanker Van (13000 Ltr)	22.00	No.	0.90	15	297.00	12	237.60	12	237.60	39	772.20
Cattle Shed (10 buffalos)-40'x60'	4.00	No.	0.90	40	144.00	30	108.00	25	90.00	95	342.00
Cattle Shed (20 cows)-60'x70'	6.00	No.	0.90	50	270.00	30	162.00	30	162.00	110	594.00

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Available	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Total of Animal Husbandry - Dairy				1491	6338.17	1443	5829.62	1276	4886.34	4210	17054.13
Working Capital - Dairy @20%					1267.63		1165.92		977.27		3410.82
Animal Husbandry - Poultry											
Commercial Broilers (5000)	12.00	No.	0.90	30	324.00	20	216.00	20	216.00	70	756.00
Commercial Broilers (10000)	24.00	No.	0.90	20	432.00	10	216.00	20	432.00	50	1080.00
Commercial Layers (5000)	20.00	No.	0.90	12	216.00	12	216.00	10	180.00	34	612.00
Commercial Layers (10000)	40.00	No.	0.90	10	360.00	10	360.00	10	360.00	30	1080.00
Hatchery- Poultry	0.75	No.	0.90	30	20.25	30	20.25	30	20.25	90	60.75
Others - Egg and Broiler Cart	0.20	No.	0.90	89	16.02	80	14.40	80	14.40	249	44.82
Transport Vehicle Open Cage	8.00	No.	0.90	30	216.00	25	180.00	25	180.00	80	576.00
Transport Vehicle Refrigerated	15.00	No.	0.90	25	337.50	25	337.50	25	337.50	75	1012.50
Poultry Feed Mixing Unit (one Ton/hr)	16.00	No.	0.90	25	360.00	25	360.00	20	288.00	70	1008.00

ANNEXURE - 1											
ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Available	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
				271	2281.77	237	1920.15	240	2028.15	748	6230.07
Sub Total of Animal Husbandry - Poultry					456.35		384.03		405.63		1246.01
Working Capital - Poultry @20%											
Sheep/ Goat and Piggery Development											
Sheep & Goat Breeding and Rearing (500+25)	25	No.	0.90	10	225.00	5	112.50	7	157.50	22	495.00
Goat (20+2)	1.5	No.	0.90	25	33.75	20	27.00	20	27.00	65	87.75
Goat (40+2)	2.5	No.	0.90	20	45.00	10	22.50	20	45.00	50	112.50
Sheep (20+1)	1.5	No.	0.90	4	5.40	4	5.40	2	2.70	10	13.50
Sheep (40+2)	2.5	No.	0.90	5	11.25	5	11.25	5	11.25	15	33.75
Pig Breeding Farm (20+4)	8.00	No.	0.90	10	72.00	10	72.00	10	72.00	30	216.00
Piggery Unit (10+2)	5.00	No.	0.90	5	22.50	5	22.50	5	22.50	15	67.50
Pigger Commercial Rearing Units (3+1)	1.00	No.	0.90	5	4.50	5	4.50	5	4.50	15	13.50
				84	419.4	64	277.65	74	342.45	222	1039.50
Sub Total of Sheep/ Goat and Piggery Development					83.88		55.53		68.49		207.90
Working Capital @20%											
Others- Meat Shop	0.25	No.	0.90	2	0.45	2	0.45	2	0.45	6	1.35

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Avail able	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Total of Animal Husbandary-Sheep/ Goat and Piggery				86	503.73	66	333.63	76	411.39	228	1248.75
Fisheries											
Construction of new ponds (Fin Fish) (ha.)	7.00	Ha.	0.90	25	157.50	25	157.50	20	126.00	70	441.00
Renovation of old ponds	3.50	Ha.	0.90	20	63.00	15	47.25	15	47.25	50	157.50
Others- Establishment of Fish Seed Hatcheries	25.00	Ha.	0.90	2	45.00	1	22.50	2	45.00	5	112.50
Others-Integrated Ornamental Fishery unit (1000 sq.mt.)	25.00	No.	0.90	5	112.50	5	112.50	2	45.00	12	270.00
Others-Fish Market (Retail Outlet)	60.00	No.	0.90	1	54.00	1	54.00	0	0.00	2	108.00
Others-Establishment of small fish Feed Mill	25.00	No.	0.90	5	112.50	3	67.50	3	67.50	11	247.50
Total of Fisheries				58	544.50	50	461.25	42	330.75	150	1336.50
Working Capital - Fisheries @20%					108.90		92.25		66.15		267.30
Others-Bullock, Bullock carts, etc											
Work animal	0.40	No.	0.75	60	18.00	80	24.00	60	18.00	200	60.00
Animal driven cart	0.60	No.	0.75	60	27.00	60	27.00	30	13.50	150	67.50

ANNEXURE - 1											
ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Avail able	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Agri Others -Gold Card etc.	7.00	No.	0.75	4000	21000.00	3000	15750.00	3000	15750.00	10000	52500.00
Two Wheelers to Farmers	0.60	No.	0.75	300	135.00	220	99.00	250	112.50	770	346.50
Total of Others				4420	21180.00	3360	15900.00	3340	15894.00	11120	52974.00
Total Term Loan/Investment Credit				8897	41689.91	7250	33516.63	7017	32151.50	23164	107358.04
Total Farm Credit (A+B)				101997	153333.40	80350	119236.22	78217	115516.65	260564	388086.27
B. AGRICULTURE INFRASTRUCTURE											
Storage facilities											
Cold Storage/ Rural Godowns											
New cold Store (5000 ton)	500.00	No.	0.75	7	2625.00	5	1875.00	3	1125.00	15	5625.00
Rural Godowns (10000 MT)	300.00	No.	0.75	10	2250.00	7	1575.00	7	1575.00	24	5400.00
Rural Markets/Apni Mandis	33.00	No.	0.75	2	49.50	2	49.50	3	74.25	7	173.25
Others-Electronic Weighing Centre	17.00	No.	0.75	10	127.50	15	191.25	10	127.50	35	446.25

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Available	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Refrigerated Transported Vehicle (9 MT)	26.00	No.	0.75	15	292.50	10	195.00	10	195.00	35	682.50
Others-Grain Cleaning and Grading Units (4 TPH)	65.00	No.	0.75	5	243.75	5	243.75	5	243.75	15	731.25
Others-Modernisation of Cold storage (5000 MT)	250.00	No.	0.75	2	375.00	2	375.00	1	187.50	5	937.50
Others-Silos	275.00	No.	0.75	2	412.50	2	412.50	2	412.50	6	1237.50
Total of Storage Facilities				53	6375.75	48	4917.00	41	3940.50	142	15233.25
Land Development, Soil Conservation, Watershed Development											
Land Leveling/ Sand scrapping	0.15	Ha.	0.90	450	60.75	450	60.75	450	60.75	1350	182.25
Reclamation of salt affected soil	0.30	Ha	0.90	450	121.50	350	94.50	350	94.50	1150	310.50
Farm Ponds (30x30x3) brick lined with barbed wire fencing	6.08	No.	0.90	245	1339.54	245	1339.54	245	1339.54	735	4018.62
Purchase of Agri. land	18.00	Acre s	0.90	380	6156.00	340	5508.00	340	5508.00	1060	17172.00

ANNEXURE - 1											
ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Avail able	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Total of Land Development, Soil Conservation, Watershed Development				1525	7677.79	1385	7002.79	1385	7002.79	4295	21683.37
Others											
Seed Processing Units (20 tpd)	29.00	No.	0.75	5	108.75	5	108.75	5	108.75	15	326.25
Vermi-Composting (200 TPA)	13.50	No.	0.75	3	30.38	5	50.63	3	30.38	11	111.39
Tissue Culture lab (25 lakh plants p.a.)	250.00	No.	0.50	2	250.00	1	125.00	1	125.00	4	500.00
Bio-production/ Fertilizers (200 TPA)	160.00	No.	0.90	2	288.00	1	144.00	1	144.00	4	576.00
Others-Fruit & Vegetable Waste compost unit (100 TPD)	200.00	No.	0.75	2	300.00	2	300.00	1	150.00	5	750.00
Total of others				14	977.13	14	728.38	11	558.13	39	2263.64
Total of Agriculture infrastructure				1592	15031	1447	12648	1437	11501	4476	39180.26
C. ANCILLIARY ACTIVITIES											
Ancillary Activities-Agro & Food Processing											

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Available	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Rice Mill 2.5TPH with parboiling	336.00	No	0.75	4	1008.00	3	756.00	3	756.00	10	2520.00
Others - Working Capital	34.00		0.75	6	153.00	5	127.50	5	127.50	16	408.00
Others-Biscuit Manufacturing Unit(300 MTPD)	35.50	No	0.75	3	79.88	2	53.25	2	53.25	7	186.38
Others-Fruit & Veg Based	15.50	No	0.75	10	116.25	5	58.13	5	58.13	20	232.51
Sub Total Ancillary activity				23	1357.13	15	994.88	15	994.88	53	3346.89
ii) Others (ACABC, Loans to PACS etc.)											
Agri.Clinic/Agri-Business Centre	12.00	No.	0.75	30	270.00	15	135.00	15	135.00	60	540.00
Loans to PACS	18.00	No.	0.90	30	486.00	15	243.00	15	243.00	60	972.00
Loans to FPOs	15.00	No.	0.80	20	240.00	30	360.00	20	240.00	70	840.00
Others Sub Total				80	996.00	60	738.00	50	618.00	190	2352.00
				103	2353.13	75	1732.88	65	1612.88	243	5698.89
Total of Ancillary Activities											
Total Agriculture				1036	170717.2	8187	133617.2	79719	128630.95	265283	432965.42

ANNEXURE - 1											
ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Avail able	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
MICRO, SMALL AND MEDIUM ENTERPRISES (MSME)											
A. Term Loan											
(i) Manufacturing Enterprises											
Micro enterprises	100.00	No.	0.75	40	3000.00	40	3000.00	30	2250.00	110	8250.00
Small enterprises	1000.00	No.	0.75	13	9750.00	18	13500.00	15	11250.00	46	34500.00
Medium enterprises	5000.00	No.	0.75	1	3750.00	1	3750.00	1	3750.00	3	11250.00
Sub Total (Manufacturing Sector -TL)				54	16500.00	59	20250.00	46	17250.00	159	54000.00
ii) Service Sector Entreprises											
Micro enterprises	100.00	No.	0.85	25	2125.00	25	2125.00	30	2550.00	80	6800.00
Small enterprises	1000.00	No.	0.85	7	5950.00	12	10200.00	6	5100.00	25	21250.00
Medium enterprises	5000.00	No.	0.85	1	4250.00	1	4250.00	1	4250.00	3	12750.00
Sub Total (Service Sector Sector - TL)				33	12325.00	38	16575.00	37	11900.00	108	40800.00
B. Working Capital											
(i) Manufacturing Sector Enterprises											
Sub Total (Manufacturing Sector - WC) @10%					1650.00		2025.00		1725.00		5400.00

ANNEXURE - 1											
ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Avail able	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
(ii) Service Sector Enterprises - Working Capital											
Sub Total (Service Sector - WC) @10%					1233.00		1658.00		1190.00		4081.00
TOTAL MSME				87	31708.00	97	40508.00	83	32065.00	267	104281.00
Export Credit											
Pre-Shipment Credit	200.00	No.	0.75	1	150.00	1	150.00	1	150.00	3	450.00
Post-Shipment Credit	50.00	No.	0.75	3	112.50	5	187.50	5	187.50	13	487.50
				4	262.50	6	337.50	6	337.50	16	937.50
Total of Export credit											
Education											
Educational Loans	10.00	No.	0.95	500	4750.00	350	3325.00	350	3325.00	1200	11400.00
Total of Education				500	4750.00	350	3325.00	350	3325.00	1200	11400.00
Housing Loan											
Purchase/ construction of house	20.00	No.	0.90	550	9900.00	450	8100.00	375	6750.00	1375	24750.00
Repair to dwelling units	2.00	No.	0.75	370	555.00	370	555.00	350	525.00	1090	1635.00
				920	10455.00	820	8655.00	725	7275.00	2465	26385.00
Total Housing Loan											
Renewable Energy											

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Avail able	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Bio Gas (6 Cu m)	0.15	No.	0.50	450	33.75	350	26.25	375	28.13	1175	88.13
Solar Off-Grid System (upto 1kw)	0.50	No.	0.75	18	6.76	18	6.76	18	6.76	54	20.28
Solar Hot water system	5.00	No.	0.75	50	187.50	35	131.25	35	131.25	120	450.00
Others-Roof Top Solar Units (1kw)	1.00	No.	0.75	25	18.75	25	18.75	25	18.75	75	56.25
Others- Biomass Gassifier units 200 kw	100	No.	0.75	1	75.00	1	75.00	1	75.00	3	225.00
Total of Renewable energy				544	321.76	429	258.01	454	259.89	1427	839.66
OTHERS											
Loans to Matured SHGs	1.000	No.	1.00	60	60.00	30	30.00	60	60.00	150	150.00
Loans to New SHGs	0.500	No.	1.00	180	90.00	150	75.00	200	100.00	530	265.00
Loans to JLGs	2.00	No.	1.00	200	400.00	150	300.00	150	300.00	500	1000.00
PMJDY Loans	0.10	No.	1.00	1500	150.00	1500	150.00	1500	150.00	4500	450.00
Loans to distress farmers-debt swap/other individuals-misc.	1.000	No.	1.00	10500	10500.00	9500	9500.00	8000	8000.00	28000	28000.00

ANNEXURE - 1 ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23											
Activities	Unit Cost	Unit	Bank Fin. Avail able	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
Loans to Start ups other than Agr. or MSME	400.00 0	No.	0.85	25	8500.00	18	6120.00	20	6800.00	63	21420.0 0
Loans to State Sponsored Coop for SCs/STs	0.750	No.	1.00	5500	4125.00	4500	3375.00	5000	1200.00	15000	8700.00
Total of others-Others VII				17965	23825.0 0	1584 8	19550.0 0	14930	16610.0 0	48743	59985.0 0
Social Infrastructure											
Drinking water	50.00	No.	0.75	50	1875.00	30	1125.00	10	375.00	90	3375.00
Schools	100.00 0	No.	0.75	20	1500.00	18	1350.00	15	1125.00	53	3975.00
Hospitals/ Health care facilities	100.00 0	No.	0.75	15	1125.00	20	1500.00	15	1125.00	50	3750.00
Sanitation	0.50	No.	0.75	40	15.00	40	15.00	40	15.00	120	45.00
Pvt Clinics	5.00	No.	0.75	30	112.50	30	112.50	30	112.50	90	337.50
Total social infrastructure				155	4627.50	138	4102.50	110	2752.50	403	11482.50

ANNEXURE - 1 <i>ACTIVITY-WISE / BLOCK - WISE POTENTIAL - LINKED PHYSICAL & FINANCIAL PROJECTIONS FOR 2022-23</i>											
Activities	Unit Cost	Unit	Bank Fin. Avail able	Barnala		Mehal Kalan		Sehna		District Total	
				PHY	BL	PHY	BL	PHY	BL	PHY	BL
TOTAL PRIORITY SECTOR				123867	246666.96	99560	210353.28	96377	191255.84	319804	648276.08

Annexure - II
AN OVERVIEW OF FLOW OF GROUND LEVEL CREDIT FOR LAST 3 YEARS
STATE: PUNJAB **DISTRICT: BARNALA**

(₹ lakh)

Sr. No	Agency/Category	2018-19		2019-20		2020-21		2021-22
		Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar
1	Crop Loan							
	CBs	174108.00	169451.07	194995.52	168362.00	206335.52	189375.47	209835.52
	SCB	57200.00	42754.42	57200.00	42197.53	57808.44	68920.00	57808.44
	SCARDB	1248.00	47.85	1248.00	0.00	1248.00	0.00	1248.00
	RRB	25792.00	31234.29	25817.75	35922.74	27417.75	64628.00	27417.75
	Others	0.00	0.00	0.00	0.00			
	Sub-Total (A)	258348.00	243487.63	279261.27	246482.27	292809.71	322923.47	296309.71
2	Term Loan (MT+LT)							
	CBs	72111.00	22206.68	72266.48	23773.45	80426.48	13010.46	80426.48
	SCB	14186.00	0.00	24502.40	3038.78	24278.04	5212.50	24278.04
	SCARDB	13012.00	11.80	2695.68	0.00	3028.48	0.00	3028.48
	RRB	15288.00	4535.58	15357.29	2748.35	15957.29	2875.28	15957.29
	Others	0.00	0.00	0.00	0.00	0.00		
	Sub-Total (B)	114597.00	26754.06	114821.85	29560.58	123690.29	21098.24	123690.29
3	Total Agri Credit							
	CBs	246219.00	191657.75	267262.00	192135.45	286762.00	202385.93	290262.00
	SCB	71386.00	42754.42	81702.40	45236.31	82086.48	74132.50	82086.48
	SCARDB	14260.00	59.65	3943.68	0.00	4276.48	0.00	4276.48
	RRB	41080.00	35769.87	41175.04	38671.09	43375.04	67503.28	43375.04
	Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Sr. No.	Agency/Category	2018-19		2019-20		2020-21		2021-22
		Tar	Ach.	Tar	Ach.	Tar	Ach.	Tar
	Sub-Total (C)	372945.00	270241.69	394083.12	276042.85	416500.00	344021.71	420000.00
	Total Agri Credit [i.e. (A)+(B)] (D)							
4	Non-Farm Sector							
	CBs	32240.00	36680.85	33550.00	39480.54	34450.00	31709.88	42850.00
	SCB	333.00	0.00	0.00	0.00	371.52	0.00	371.52
	SCARDB	0.00	0.00	332.80	0.00	0.00	0.00	0.00
	RRB	676.00	795.48	678.48	174.46	778.48	77.05	778.48
	Others	0.00	0.00	0.00	0.00	0.00		
	Sub-Total (E)	33249.00	37476.33	34561.28	39655.00	35600.00	31786.93	44000.00
5	Other Priority Sector							
	CBs	63138.00	26329.55	64346.40	52063.12	66346.40	47060.64	80446.40
	SCB	1664.00	0.00	1664.00	2174.09	1705.12	974.10	1705.12
	SCARDB	3120.00	48.40	3120.00	2680.00	3120.00	0.00	3120.00
	RRB	676.00	964.58	678.48	153.78	728.48	503.98	728.48
	Others	0.00	0.00	0.00	0.00	0.00		
	Sub-Total (F)	68598.00	27342.53	69808.88	57070.99	71900.00	48538.72	86000.00
6	Grand Total							
	CBs	341598.00	254668.15	365158.40	283679.11	387558.40	281156.45	413558.40
	SCB	73383.00	42754.42	83366.40	47410.40	84163.12	75106.60	84163.12
	SCARDB	17380.00	108.05	7396.48	2680.00	7396.48	0.00	7396.48
	RRB	42432.00	37529.93	42532.00	38999.33	44882.00	68084.31	44882.00
	Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Grand Total(D+E+F)	474793.00	335060.55	498453.28	372768.84	524000.00	424347.36	550000.00

Annexure - III

**SUB SECTOR DETAILS OF GROUND LEVEL CREDIT DISBURSEMENT UNDER AGRICULTURE & ALLIED ACTIVITIES
STATE: PUNJAB DISTRICT: BARNALA**

(₹ lakh)

Sector	2018-19				2019-20				2020-21				2021-22 (Target)			
	CBs	Coo ps	RR Bs	Total	CBs	Coo ps	RR Bs	Total	CBs	Coo ps	RRB s	Total	CBs	Coo ps	RR Bs	Total
I. CropLoan	16945 1	4280 2	3123 4	2434 88	1683 61	4219 8	3592 3	2464 82	18937 5	6892 0	6462 8	3229 23	20983 6	5905 6	2741 8	29631 0
II. Term Loan																
MI	5	0	0	5	0	0	0	0	0	0	0	0	624	466	624	1714
LD	963	0	0	963	256	0	0	256	1900	200	0	2100	10223	3952	1714	15889
FM	1225	0	298	1523	608	0	0	608	75	0	0	75	12030	4618	2731	19379
P&H	0	0	0	0	0	0	0	0	0	0	0	0	998	92	520	1610
DD	147	12	71	230	70	0	17	87	4033	2232	1934	8199	8011	4285	2476	14772
PD	990	0	0.00	990	303	0	11	314	959	796	814	2569	2005	1872	1004	4881
SGP	67	0	0	67	282	0	17	299	499	33	0	532	774	25	0	799
Fish	127	0	0	127	0	0	0	0	351	151	0	502	437	208	0	645
F/WLD	136	0	0	136	0	0	0	0	145	0	0	145	208	0	0	208
SMY	0	0	0	0	0	0	0	0	5048	1800	128	6976	6521	1706	1248	9474
B.Gas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seri.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	18547	0	4166	22713	2225 5	3038	2703	2799 6	0	0	0	0	38594	1008 4	5640	54318
Subtotal - II	2220 7	12	453 6	2675 4	2377 4	303 8	274 8	2956 0	1301 0	5212	287 6	2109 8	8042 6	273 07	159 57	12369 0
Grand total (I +II)	1916 58	428 14	357 70	2702 42	1921 35	452 36	386 71	2760 42	2023 85	7413 2	675 04	3440 21	2902 62	863 63	433 75	4200 00

ANNEXURE – IV				
Unit Cost for farm sector activities – 2022-23				
S.No	Particulars	Specifications	Unit Cost for 2021-22	Unit Cost approved for 2022-23
I	Water Resources			
A	Tube Wells with Pumpsets			
1	61 meter (200') deep with standard material	with 5 HP EPS	3,20,000	3,20,000
2	92 meter (300') deep with standard material	with 10-15 HP EPS	4,50,000	4,50,000
3	120 meter (400') deep with standard material	with 20-30 HP	5,30,000	5,30,000
4	Pumpsets (Replacement)	5 HP	70,000	70,000
B	Drip Irrigation (Spacings)			
1	12 x 12	1 Ha	33,021	33,100
2	10 x 10	1 Ha	33,451	33,500
3	9 x 9	1 Ha	37,052	37,100
4	8 x 8	1 Ha	39,149	39,200
5	6 x 6	1 Ha	46,430	46,500
6	5 x 5	1 Ha	52,791	52,800
7	4 x 4	1 Ha	57,525	57,600
8	3 x 3	1 Ha	72,630	72,700
9	2.5 x 2.5	1 Ha	84,804	84,900
10	2 x 2	1 Ha	1,02,582	1,02,600
11	1.5 x 1.5	1 Ha	1,20,207	1,20,300
12	2.5 x 0.6	1 Ha	76,382	76,400
13	1.8 x 0.6	1 Ha	96,051	96,100
14	1.2 x 0.6	1 Ha	1,31,864	1,31,900
C	Sprinkler Irrigation			
1	Mini Sprinkler Irrigation	0.4 Ha (10 X 10)	44,936	45,000
		0.4 Ha (8 x 8)	54,414	54,500
		1 Ha (10 x 10)	94,532	94,600
		1 Ha (8 x 8)	1,19,339	1,19,400
2	Micro Sprinkler Irrigation	0.4 Ha (5 x 5)	44,106	44,200
		0.4 Ha (3 x 3)	70,260	70,300
		1 Ha (5 x 5)	94,713	94,800
		1 Ha (3 x 3)	1,70,059	1,70,100
D	Under Ground Pipe Line (UGPL)			
1	UGPL per Ha (PVC)	110 mm	25,044	25,100
		125 mm	NA	NA
		140 mm	NA	NA
		160 mm	48,120	48,200
		180 mm	61,488	61,500
		200 mm	76,764	76,800
		225 mm	NA	NA

ANNEXURE – IV				
<i>Unit Cost for farm sector activities – 2022-23</i>				
S.No	Particulars	Specifications	Unit Cost for 2021-22	Unit Cost approved for 2022-23
		250 mm	1,14,900	1,14,900
		280 mm	1,47,588	1,47,600
		315 mm	1,83,360	1,83,400
		355 mm	2,47,368	2,47,400
		400 mm	3,13,368	3,13,400
		450 mm	4,37,616	4,37,700
		500 mm	5,41,440	5,41,500
		560 mm	6,92,268	6,92,300
2	UGPL per Ha (HDPE)	110 mm.	36,296	36,300
		125 mm.	47,527	47,600
		140 mm.	59,508	59,600
		160 mm.	76,986	77,000
		180 mm.	95,713	96,000
		200 mm.	1,17,534	1,17,600
		250 mm.	1,71,857	1,71,900
		280 mm.	2,15,996	2,16,000
		315 mm.	2,65,714	2,65,800
		355 mm.	3,30,871	3,30,900
		400 mm.	4,23,044	4,23,100
		450 mm.	5,43,204	5,43,300
		500 mm.	6,69,280	6,69,300
		560 mm.	8,40,061	8,40,100
3	Reinforced Concrete (RCC) Pipes	200mm	69,580	69,600
		225mm	73,080	73,100
		250mm	79,100	79,100
		300mm	1,00,520	1,00,600
		350mm	1,18,300	1,18,300
		400mm	1,40,700	1,40,700
		450mm	1,66,320	1,66,400
		500mm	1,93,480	1,93,500
E	Solar Photovoltaic water pumping system	2 HP (AC)	170000 - 200000	170000 - 200000
		3 HP (AC)	240000 - 300000	240000 - 300000
		5 HP (AC)	325000 - 400000	325000 - 400000
		7.5 HP (AC)	450000 - 550000	450000 - 550000
		10 HP (AC)	600000 - 700000	600000 - 700000
II	Farm Mechanization			
1	Tractor (varies with rated hp as per CTR , model , make and specifications as indicated	30 to 50 HP	4,50,000- 7,30,000	4,50,000- 7,30,000
		51 to 60 HP	7,30,000 - 11,20,000 *	7,30,000 - 11,20,000*

ANNEXURE – IV				
Unit Cost for farm sector activities – 2022-23				
S.No	Particulars	Specifications	Unit Cost for 2021-22	Unit Cost approved for 2022-23
2	Trolley (varies with model, make of the manufacturer and tractor HP requirement for coupling)	Hydraulic tripping type for ease of loading and unloading	90,000 to 2,50,000	90,000 to 2,50,000
3	Power Tiller ((varies with rated hp as per CTR , model , make and specifications as indicated by the dealer/maufacturer in the invoice/quotation)	12.5-15 HP	1,75,000-2,25,000	1,75,000-2,25,000
4	Rotavator (Tractor Drawn)	5ft	90,000	90,000
		6 ft	1,00,000	1,00,000
		7ft	1,05,000	1,05,000
		8 ft	1,10,000	1,10,000
		9 ft	1,15,000	1,15,000
5	Seed Drill (tractor drawn)	9-15 tyne	40000 - 55000	40000 - 55000
6	Paddy Nursery Raising Machine		1,75,000	1,75,000
7	DSR Drill Cum Planter	Roto Seed Drill	60,000	60,000
8	Paddy Transplanter	2-wheeled walk behind type with floats	2,00,000 -3,00,000	2,00,000 - 3,00,000
		4-wheeled, riding type with cage wheels and floats	8,00,000-10,00,000	8,00,000-10,00,000
9	Power Operated Spray Pumps		5,000 - 10,000	6,200-20,000
10	Battery Powerd Sprayers	Battery Operated	3000-7000	3000-7000
11	Tractor operated Hydraulic Sprayers	400 ltr	60,000	60,000
		600 ltr	1,00,000	1,00,000
12	Raised bed Planter/ridge-planter/multi-crop planter	varies with model and make	60,000-85,000	70,000-1,50,000
13	Multi-crop thresher/maize thresher	tractor operated	1,70,000	1,70,000
14	Maize sheller	tractor operated	50,000	50,000
15	Power Weeder	Diesel Engine/Petrol Engine Operated Rotary Tiller cum Power	60,000-95,000	60,000-95,000

ANNEXURE – IV				
Unit Cost for farm sector activities – 2022-23				
S.No	Particulars	Specifications	Unit Cost for 2021-22	Unit Cost approved for 2022-23
		Weeder		
16	Combine Harvester	Self propelled with attachment of Super SMS (Straw Management System)	18,00,000-20,00,000	18,00,000-25,00,000
		Self propelled-multicrop with air-conditioned driver's control cabin	18,00,000-25,00,000	18,00,000-30,00,000
		Tractor mounted	16,00,000	16,00,000
17	Laser Land Leveller		3,00,000-3,50,000	3,00,000-3,50,000
18	Happy Seeder (Turbo)	9/10/11 row planter	1,50,000 - 1,65,000	1,50,000 - 1,65,000
19	Straw Reaper	Tractor Operated - Combo Model for paddy and wheat crop	2,50,000-3,50,000	2,50,000-3,50,000
20	Gyro Rake		2,90,000	3,00,000
21	Baler	Square	9,00,000-11,00,000	9,00,000-12,00,000
22	Baler	Round	3,75,000	4,00,000-18,00,000
23	Reversible Plough	2 Bottom MB Plough/3 Bottom M<B Plough	1,60,000 - 2,25,000	1,60,000 - 2,25,000
		4 Bottom MB plough	2,90,000	2,90,000
24	Paddy Straw Chopper - Shredder/Mulcher	5ft to 8 ft-mounted type	1,35,000-1,68,000	1,35,000-1,68,000
25	Super Straw Management System on Combine Harvesters (Super SMS)		1,12,000	1,12,000
26	Mulching machine		1,25,000	1,50,000
27	Chopper -cutter-cum-spreader		45,000	45,000

ANNEXURE – IV				
<i>Unit Cost for farm sector activities – 2022-23</i>				
S.No	Particulars	Specifications	Unit Cost for 2021-22	Unit Cost approved for 2022-23
28	Zero Tillage - Seed-cum-Fertilizer Drill	9 tyne/11 tyne/13 tyne/15 tyne	48,000 - 62,000	48,000 - 62,000
29	Cotton Ball Pluckers	Hand held and battery operated	4,000	7,000
30	Cotton Planter/Multiple planter		50,000 - 60,000	50,000 - 60,000
	<i>*Hi-tech Tractors with AC driver's control cabin + 4WD</i>			
III	Land Development			
1	Graded bunding	cum	75	75
2	Farm bunding–Medium to Light soil(4% slope)	cum	62.5	62.5
3	Farm bunding – heavy soil (4% slope)	cum	67	67
4	Farm ponds Stone/ brick lined with barbed wire fencing	cum	225	225
5	Farm ponds - kaccha tanks, lined with polythene sheets and barbed wire	cum	110	110
6	Farm ponds	30 x 30x 3 m		
7	Land levelling and shaping	Slope - 1%	7,500	7,500
		Slope – 1-2%	10,500	10,500
		Slope 2-3%	15,000	15,000
8	Vermicomposting	Unit size 16 ftx32 ft. (30 TPA)	60,000 - 1,00,000	60,000 - 1,00,000
IV	Plantation and Horticulture			
A	Fruits crops			
1	Mango (10 m x 10 m)	Ha	63,000	63,000
2	Mango (3m x 4m)	Ha	1,33,000	1,33,000
3	Kinnow (6 m x 6 m)	Ha	93,000	93,000
4	Guava (6 m x 6 m)	Ha	88,000	88,000
5	Peach (6.5 m x 6.5 m)	Ha	87,000	87,000
6	Pear (7.5 m x 7.5 m)	Ha	80,000	80,000
B	Floriculture			
1	Rose (protected cultivation - includes cost of polyhouse)	Area - 800 sqm	14,60,000	14,60,000
2	Gerbera (Protected cultivation including the cost of polyhouse)	Area - 800 sqm	16,06,000	16,06,000
3	Gladiolus (Open field Cultivation)	Area - 800 sqm	1,78,000	1,78,000
4	Marigold (open cultivation)	Area - 800 sqm	85,000	85,000
C	Bee Keeping			
1	Apis mellifera - Non migratory (Wooden box)	50 Colony unit	3,63,000	3,63,000

ANNEXURE – IV				
Unit Cost for farm sector activities – 2022-23				
S.No	Particulars	Specifications	Unit Cost for 2021-22	Unit Cost approved for 2022-23
2	Apis mellifera - Migratory (Wooden box)	100 Colony unit	9,61,000	9,61,000
3	Apis mellifera - Migratory (Wooden box)	250 Colony unit	24,59,000	24,59,000
D	Nursery			
1	Small Nursery	1 ha	15,00,000	15,00,000
2	Hi Tech Nursery (with fan & pad based polyhouse structure as per MIDH norms of cost)	1 unit	56,00,000 (Per acre)	56,00,000 (Per acre)
E	<u>Polyhouses (as per MIDH guidelines) Green House structure</u>			
E-1	Fan & Pad system			
1	upto 500 sqm	sqm	1,650	1,650
2	501-1008 sqm	sqm	1,465	1,500
3	1009-2080 sqm	sqm	1,420	1,500
4	> 2081	sqm	1,400	1,400
E-2	Naturally ventilated system			
E-2(i)	Tubular structure			
1	upto 500 sqm	sqm	1,060	1,100
2	501-1008 sqm	sqm	935	1000
3	1009-2080 sqm	sqm	890	900
4	> 2081	sqm	844	900
E-2(ii)	Wooden structure	sqm	540	550
E-2(iii)	Bamboo structure	sqm	450	450
E-3	<u>Shade Net House</u>			
1	Tubular structure	sqm	710	750
2	Wooden structure	sqm	492	500
3	Bamboo structure	sqm	360	400
4	Plastic Tunnels	sqm	60	60
5	Walk in tunnels	sqm	600	600
F	<u>Post Harvest Management</u>			
1	Pack house	9m x 6 m	4,00,000	4,00,000
2	Integrated pack house with facilities for conveyer belt, sorting, grading units, washing, drying and weighing.	9m x 18 m	50,00,000	50,00,000
3	Pre-cooling unit	6 MT	25,00,000	25,00,000
G	<u>Mushrooms</u>			
1	Button mushroom unit	250 trays	2,00,000	2,00,000
2	Button mushroom unit	20 TPA	19,16,000	19,16,000
3	Spawn making unit	50 TPA	32,00,000	32,00,000

ANNEXURE – IV				
Unit Cost for farm sector activities – 2022-23				
S.No	Particulars	Specifications	Unit Cost for 2021-22	Unit Cost approved for 2022-23
V	<u>Forestry/Waste Land Development</u>			
1	Poplar	per Ha	1,65,000	1,65,000
2	Eucalyptus(Clonal)	per Ha	3,70,000	3,70,000
	Bamboo (Bambusa balcooa)	per Ha	1,76,000	1,76,000
VI	<u>Animal Husbandry</u>			
1	Graded Buffalo (Murrah)	> 15 ltr/ day	70,000	70,000-95,000
2	CBC (HF)	> 20 ltr/ day	70,000	90,000-1,00,000
3	Indigenous Mixed breeds (Sahiwal, rathi, Tharparkar, Gir, Haryana, Red Sindhi))	12-15 ltr/ day	60,000	60,000-80,000
4	Indigenous Mixed breeds (Sahiwal, rathi, Tharparkar, Gir, Haryana, Red Sindhi))	> 15 ltr/ day	1,00,000	1,00,000
5	Rearing of heifer calves	20 animals	9,70,000	9,70,000
6	50 animal unit	50 animals	57,23,437	57,23,500
7	100 animal unit	100 animals	99,34,500	99,34,500
8	Cattle Shed (10 buffaloes)	40' x 60' (covered area 1400 sft)	4,00,000	4,00,000
9	Cattle Shed (20 cows)	60' x 70' (covered area 2520 sft)	6,00,000	6,00,000
10	Milking Machines	Single teet cup	55,000 - 60,000	55,000 - 60,000
		Double teet cup	70,000 - 75,000	70,000 - 75,000
		Line milking (6-8 animals)	8,00,000 - 10,00,000	8,00,000 - 10,00,000
11	Bulk Milk Coolers (DG Set - 7.5 KVA)	500 ltr	6,00,000	6,00,000
	Bulk Milk Coolers (DG Set - 20 KVA)	1000 ltr	8,00,000	8,00,000
	Bulk Milk Coolers (DG Set - 20 KVA)	2000 ltr	10,00,000	10,00,000
	Bulk Milk Coolers (DG Set - 25 KVA)	5000 ltr	20,00,000	20,00,000
12	Milko Tester		66,000	66,000
13	Miking Parlour (swing over/ hering bone)	for 12 animals	20,00,000	20,00,000
14	Automatic Milk Collection Centre		1,65,000	1,65,000
15	Refrigerated Tanker van(Road Tanker) - Double Jacket steel tanker	500 ltr	5,50,000	5,50,000

ANNEXURE – IV				
<i>Unit Cost for farm sector activities – 2022-23</i>				
S.No	Particulars	Specifications	Unit Cost for 2021-22	Unit Cost approved for 2022-23
	Refrigerated Tanker van(Road Tanker) - Double Jacket steel tanker	5000 ltr	11,50,000	11,50,000
	Refrigerated Tanker van(Road Tanker) - Double Jacket steel tanker	8000 ltr	14,00,000	14,00,000
	Refrigerated Tanker van(Road Tanker) - Double Jacket steel tanker	10000 ltr	16,00,000	16,00,000
	Refrigerated Tanker van(Road Tanker) - Double Jacket steel tanker	13000 ltr	22,00,000	22,00,000
16	Fodder Harvester	Single row	1,50,000	1,50,000
17	Self Propelled Forage Cutter/Harvester	2 wheel	2,20,000	2,20,000
		3 wheel	3,50,000	3,50,000
		4 wheel	4,25,000	4,25,000
18	Automatic Silage Bailer & Wrapper Machine		14,00,000	14,00,000
19	Feed & Fodder store	20' x 20'	75,000	75,000
20	Electric Chaff cutter (with hopper)		80,000	80,000
21	TMR (Total Mixed Ration) Wagon	05 cum	9,50,000	9,50,000
22	TMR (Total Mixed Ration) Wagon	08 cum	11,00,000	11,00,000
23	Mobile Milk Vending Machine (with BMC 500 ltr + genset + vehicle)		9,00,000	9,00,000
24	Purchase of dairy processing equipment for manufacture of indigenous milk product		13,20,000	13,20,000
25	Dairy Marketing outlet/ dairy parlour		3,00,000	3,00,000
26	Integrated dairy farming cum vermicomposting	10 dairy animal with cattle shed (40'x60'with a total covered area of 1400 sqft.) + vermicompost unit of 100 TPA	13,00,000	13,00,000
VII	Animal Husbandry-Poultry			
1	Commercial Layer	5000 birds	20,00,000	20,00,000
2	Commercial Broiler	1000 birds	2,24,000	2,24,000
3	Backyard Poultry	400 LIT	91,000	91,000
4	Backyard Poultry (Kadaknath)	400 LIT	1,28,000	1,28,000
5	Feed Mixing Unit (Mash feed)	one ton/hr	16,00,000	16,00,000
6	Transport Vehicle-open cage		8,00,000	8,00,000

ANNEXURE – IV				
<i>Unit Cost for farm sector activities – 2022-23</i>				
S.No	Particulars	Specifications	Unit Cost for 2021-22	Unit Cost approved for 2022-23
7	Transport Vehicle-Refrigerated		15,00,000	15,00,000
VIII	<u>Animal Husbandy-Sheep, Goat and Piggery Development</u>			
1	Goat Rearing/Breeding Unit	10+2	75,000	75,000
2	Goat Rearing/Breeding Unit	20+2	1,50,000	1,50,000
3	Goat Rearing/Breeding Unit	40+2	2,50,000	2,50,000
4	Pig Commercial Rearing Unit (as per NLM guidelines 2016)	3+1	1,00,000	1,00,000
5	Pig Breeding Unit	10+2	5,00,000	5,00,000
6	Piggery Breeding farm (as per NLM guidelines 2016)	20+4	8,00,000	8,00,000
7	Piggery fattening unit	50 animal	5,50,000	5,50,000
IX	<u>Fisheries</u>			
1	Construction of new ponds/ tanks for Fin Fish Culture	Ha	NA	7,00,000
2	Construction of new ponds/ tanks for Shrimp Culture	Ha	NA	8,00,000
3	Renovation of existing pond (fish/shrimp)	Ha	NA	3,50,000
4	Establishment of Fish Seed Hatchery for Indian Major Carps and other cultivable Fin Fish	2 Ha	NA	25,00,000
5	Inputs cost for Freshwater Fish Culture (Fin Fish Culture)	Ha	NA	4,00,000
6	Inputs cost for Freshwater Shrimp Culture (Litopenaeus vannamei)	Ha	NA	6,00,000
1	Backyard Hatchery for Ornamental Fish	minimum 300 sq ft	NA	3,00,000
2	Medium Scale Ornamental Hatchery	minimum 150 sqm	NA	8,00,000
3	Integrated Ornamental Fishery Unit (Breeding and Rearing of Fresh Water Fish)	minimum 500 sqm	NA	25,00,000
1	Establishment of large Re-circulatory Aquaculture Unit	8 Tanks of minimum capacity 40 ton/crop, each tank having size of 90 m ³	NA	50,00,000
2	Establishment of Medium Scale Re-circulatory Aquaculture Unit	6 tanks of minimum 30 m ³ /tank capacity 10 ton/ crop	NA	25,00,000

ANNEXURE – IV <i>Unit Cost for farm sector activities – 2022-23</i>				
S.No	Particulars	Specifications	Unit Cost for 2021-22	Unit Cost approved for 2022-23
3	Establishment of small Re-circulatory Aquaculture Unit	with 1 tank of 100 m ³ capacity	NA	7,50,000
4	Establishment of large Bio-floc Aquaculture Unit	50 tanks of 4m dia and 1.5 m high	NA	50,00,000
5	Establishment of Medium scale Bio-floc Aquaculture Unit	25 tanks of 4m dia and 1.5 m high	NA	25,00,000
6	Establishment of Small Scale Bio-floc Unit	07 tanks of 4m dia and 1.5 m high	NA	7,50,000
1	Establishment of Fish Feed Mill	Large formulated pellet feed plant of min capacity @ 6-10 TPH or more	NA	2,00,00,000
2	Establishment of Small Fish Feed Mill	02 tonns/day or more	NA	30,00,000
3	Establishment of Small Fish Feed Mill	1 no.	NA	25,00,000
4	Insulated Vehicles	1 no.	NA	20,00,000
5	Motorcycles with Icebox	1 no.	NA	75,000
6	Auto rickshaws with Icebox	1 no.	NA	3,00,000

ANNEXURE V							
SCALE OF FINANCE FOR MAJOR CROPS IN THE DISTRICT (2021-22)							
Sr.No.	Name of the Crop	Cash	Kind	Total	Scale of finance in ha. 2021-22 per ha	Scale of finance in ha 2022-23(10 % increase as per KCC guidelines)	rounded off to the nearest rupee
1	Wheat	14000	9000	23000	56833	62516.30	62516
2	Paddy	15000	9000	24000	59304	65234.40	65234
3	Potatao	31000	16000	47000	116137	127750.70	127751
4	Sugarcane	28000	12000	40000	98840	108724.00	108724
5	Oilseeds	11000	8000	19000	46949	51643.90	51644
6	Vegetables	31000	11000	42000	103782	114160.20	114160
7	Green Fodder	10500	7500	18000	44478	48925.80	48926
8	Floriculture	19000	11000	30000	74130	81543.00	81543
9	Maize	12000	10000	22000	54362	59798.20	59798
10	Cotton	14000	10000	24000	59304	65234.40	65234
11	Turmeric	27000	9000	36000	88956	97851.60	97852
12	Pulses	8000	6000	14000	34594	38053.40	38053
13	Horticulture	20000	10000	30000	74130	81543.00	81543
	The Scale of Finance were fixed in the SLTC meeting for the year 2021-22 vide its letter No RCS/loan 1/CA 2/217P2/87 dated 17.03.2021 and No RCS/loan 1 /CA 2/217P2/4645 dated 11.05.2021. However, for undertaking PLP projections pertaining to FY 2022-23, SOF is suitably enhanced in keeping with the revised KCC guidelines.						

**SCALE OF FINANCE FOR WORKING CAPITAL FOR
ANIMAL HUSBANDRY AND FISHERIES IN THE DISTRICT FOR 2021 – 22**

(Amount in ₹)

a. Animal Husbandry

Sr. No.	Major components / items of recurring expenses per animal annual basis	Cow	Buffalo / Cross breed Exotic Breed	Sheep /Goat	Pig	Layer (life cycle of 72 weeks)	Broiler (life cycle of 2 months)
1	Cost of feed	58035	72635	1678	12592	657	103
2	Labor cost	18000	18000	2000	2880	18	7
3	Water and electricity	7200	9000	120	300	3	1
4	Cost of veterinary aid	2400	3600	120	300	35	15
5	Misc. cost	2400	3600	120	240	7	5
6	Chick cost	NA	NA	NA	NA	NA	NA
	Grand Total	88035	106835	4063	16337	720	161
7	Tenure of scale of finance (months)	6	7	6	6	6	3
8	Scale of finance per animal / bird	44018	61467	2032	8169	360	161
9	Repayment period	1 year	1 year	1 year	1 year	1 year	03 months

b. Fisheries

Fish Culture: Scale of finance for the working capital amounting to ₹1.50 lakh per ha as per norms of the Blue Revolution Scheme of Govt. India has been fixed for KCC for fish culture to Punjab Fish farmers.

White Shrimp Cultures: Scale of finance for the working capital for white shrimp culture amounting to ₹3.00 lakh per ha as per norms of the Blue Revolution Scheme of Govt. Of India or as per State Department Project for ₹10.90 Lakh /ha for extension of KCC for Shrimp culture to Punjab Fish farmers.

ABBREVIATIONS

AI	Artificial Insemination
ATMA	Agricultural Technology Management Agency (ATMA),
BC	Business Correspondent Agent
CCB	Central Cooperative Bank
C-DAP	Comprehensive District Agriculture Plant
DCP	District Credit Plan
DEDS	Dairy Entrepreneurship Development Scheme
DIC	District Industries Centre
DMI	Directorate of Marketing & Inspection
FI	Financial Inclusion
FM	Farm Mechanization
GLC	Ground Level Credit
HYV	High Yielding Variety
KCC	Kisan Credit Card
KVIB	Khadi and Village Industries board
LBR	Lead Bank Report
LD	Land Development
MI	Minor Irrigation
MSME	Micro, Small and Medium Enterprises
NABARD	National Bank for Agriculture and Rural Development
NFSM	National Food Security Mission (NFSM)
NGO	Non-Governmental Organisation
NHM	National Horticulture Mission
NPS	Non-Priority Sector
OPS	Other Priority Sector
P&H	Plantation and Horticulture
PACS	Primary Agriculture Cooperative Society
PADB	Primary Cooperative Agriculture Development Bank
PAU	Punjab Agriculture University
PGB	Punjab Gramin Bank
PLP	Potential Linked Credit Plan
PMRY	Prime Ministry Rojgar Yojna
PNB	Punjab National Bank
REDP	Rural Entrepreneurship Development Programme
RIDF	Rural Infrastructure Development Fund
RKCC	Rupay Kisan Credit Card
RKVY	Rashtriya Krishi Vikas Yojana (RKVY),
SAMIS	Service Area Monitoring Information System
SAP	Service Area Plan
SBI	State Bank of India
SGSY	Swaranjayanti Gram Swarozgar Yojna
SHG	Self Help Group
UGPL	Under Ground Pipe Line
VA	Voluntary Agency

ABBREVIATIONS

AI	Artificial Insemination
ATMA	Agricultural Technology Management Agency (ATMA),
BC	Business Correspondent Agent
CCB	Central Cooperative Bank
C-DAP	Comprehensive District Agriculture Plant
DCP	District Credit Plan
DEDS	Dairy Entrepreneurship Development Scheme
DIC	District Industries Centre
DMI	Directorate of Marketing & Inspection
FI	Financial Inclusion
FM	Farm Mechanization
GLC	Ground Level Credit
HYV	High Yielding Variety
KCC	Kisan Credit Card
KVIB	Khadi and Village Industries board
LBR	Lead Bank Report
LD	Land Development
MI	Minor Irrigation
MSME	Micro, Small and Medium Enterprises
NABARD	National Bank for Agriculture and Rural Development
NFSM	National Food Security Mission (NFSM)
NGO	Non-Governmental Organisation
NHM	National Horticulture Mission
NPS	Non-Priority Sector
OPS	Other Priority Sector
P&H	Plantation and Horticulture
PACS	Primary Agriculture Cooperative Society
PADB	Primary Cooperative Agriculture Development Bank
PAU	Punjab Agriculture University
PGB	Punjab Gramin Bank
PLP	Potential Linked Credit Plan
PMRY	Prime Ministry Rojgar Yojna
PNB	Punjab National Bank
REDP	Rural Entrepreneurship Development Programme
RIDF	Rural Infrastructure Development Fund
RKCC	Rupay Kisan Credit Card
RKVY	Rashtriya Krishi Vikas Yojana (RKVY),
SAMIS	Service Area Monitoring Information System
SAP	Service Area Plan
SBI	State Bank of India
SGSY	Swaranjayanti Gram Swarozgar Yojna
SHG	Self Help Group
UGPL	Under Ground Pipe Line
VA	Voluntary Agency



NABSAMRUDDHI FINANCE LIMITED

A Subsidiary of NABARD

To provide credit facilities to Rural Services sector/Off Farm sector for promotion, expansion, commercialization of enterprises covering the entire gamut of activities touching rural livelihoods

- Microfinance
- Vehicle
- School Infrastructure
- Rural Housing
- Societies
- MSME



Registered Office
NABARD Regional Office
1-1-61, RTC 'X' Road, P.B. No.1863,
Hyderabad - 500 020, Telangana
Ph.: 040-23241155

Corporate Office
Ground Floor, D Wing, NABARD HO
C-24, G Block, Bandra-Kurla Complex
Mumbai - 400051, Maharashtra
Ph. : 022-26539486

email
nabsamruddhi@nabard.org

website
www.nabsamruddhi.org



NABKISAN FINANCE LTD.(NKFL)

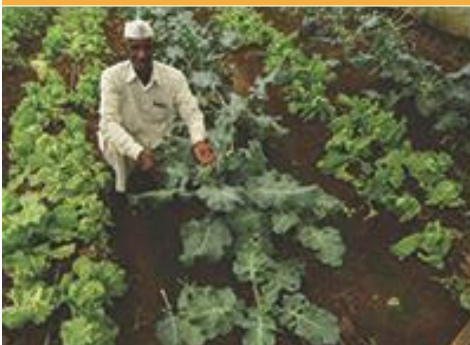
A Subsidiary of NABARD

- Largest lender in the FPO sector
- 500+ FPOs credit linked
- Collateral free loans at affordable rates
- Need based grant support
- Dedicated web portal for FPOs

Corporate Office
C/O NABARD, Head Office, Mumbai
Phone- 022- 26539620, 022-26539170
E-mail- corporate@nabkisan.org

Registered Office
C/O NABARD, Tamil Nadu RO, Chennai
Phone- 044-28270138, 044-28304658
E-mail- finance@nabkisan.org

Website
www.nabkisan.org
Web-Portal
krishimanch.nabkisan.org





NABARD Consultancy Services

A wholly owned subsidiary of NABARD

NABCONS, a wholly owned subsidiary of NABARD, is India's premier development consultancy organisation in the agri business sector. NABCONS caters to the research and consultancy needs of the agriculture, allied and rural sectors including natural resources management.

Registered Office

Ground Floor, D Wing, NABARD HO, C-24,
G Block, Bandra-Kurla Complex Mumbai - 400051,
Ph. : 022-26539419
md@nabcons.in www.nabcons.in

Corporate Office

NABARD Tower, 24, Rajendra Place ,
New Delhi - 110125,
Ph. : 011 2574103/07
headoffice@nabcons.in



NABVENTURES Limited

A Subsidiary of NABARD

NABVENTURES Fund I invests in early to mid stage start-ups (Pre-Series A and Series A) in agriculture, food and rural businesses (including rural fintech). The fund is managed by NABVENTURES Limited.

Registered Office

Ground Floor, D Wing, NABARD HO, C-24, G Block, Bandra-Kurla Complex
Mumbai - 400051, Ph. : 022-26539149 | nabventure@nabard.org



NABARD Financial Services

A Subsidiary of NABARD

- A Non-Banking Financial Company with NABARD owning 63% of the equity
- Government of Karnataka and other Public Sector Banks shareholders of the company.
- Company operates through its unique group based lending model sourcing Business & Development Correspondents to reach SHGs/ JLGs

Registered Office

#3072, 14th Cross, K R Road, Banashankari 2nd Stage, Bengaluru - 560 070, Karnataka
Email: ho@nabfins.org | Phone: 080 2697 0500 | www.nabfins.org

