



स्टेट फोकस पेपर 2023-24

STATE FOCUS PAPER 2023-24

सिक्किम
SIKKIM

राष्ट्रीय कृषि और ग्रामीण विकास बैंक
NATIONAL BANK FOR AGRICULTURE AND RURAL
DEVELOPMENT

सिक्किम क्षेत्रीय कार्यालय, गान्तोक



PREM SINGH TAMANG (GOLAY)
CHIEF MINISTER
SIKKIM

शुभकामना संदेश

मुझे यह जानकर अति प्रसन्नता हो रही है की नाबार्ड द्वारा सिक्किम राज्य के लिए वर्ष 2023-24 का State Focus paper तैयार किया गया है। राज्य के किसानों एवं ग्रामीण क्षेत्र के हित में नाबार्ड द्वारा की जा रहे प्रयासों के लिए मैं नाबार्ड को हार्दिक बधाई एवं धन्यवाद देना चाहता हूँ और आशा करता हूँ की नाबार्ड राज्य के समग्र विकास हेतु अपना अनवरत प्रयास जारी रखेगा। साथ ही, मैं यह भी अपेक्षा करता हूँ कि राज्य के सभी बैंक, नाबार्ड द्वारा State Focus paper में दर्शाए गए लक्ष्यों की पूर्ण प्राप्ति सुनिश्चित कर राज्य के विकास में अपना यथोचित योगदान देंगे और साथ ही यह दस्तावेज, नीति- निर्माताओं के लिए भी उपयोगी सिद्ध होगा।

वर्तमान में नाबार्ड द्वारा भारत सरकार और राज्य सरकार की नीतियों और प्राथमिकताओं के अनुरूप राज्य में वित्तीय समावेशन का गहरीकरण, डेयरी और मत्स्य कृषकों सहित सभी कृषकों को किसान क्रेडिट कार्ड से आच्छादन, प्राथमिक सहकारी समितियों का बहु-सेवा केंद्रों का उन्नयन व उनका कम्प्यूटरीकरण सहित राज्य के ग्रामीण सहकारी साख-संरचना के सुदृढीकरण, कृषक, अकृषक उत्पादक संगठनों का गठन एवं विकास, स्वयं सहायता समूहों का सुक्ष्म आर्थिक इकाइयों के रूप में विकास, इत्यादि में विशेष प्रयास किए जा रहें हैं, जो कि अत्यन्त ही सराहनीय है।

मैं पुनः नाबार्ड को State Focus Paper तैयार करने के लिए एवं अन्य विकासपरक कदमों में सफलता प्राप्ति की हार्दिक शुभकामनाएं देता हूँ।

15.02.2023

गान्तोक।

(प्रेम सिंह तामांग)

Foreword

NABARD has been preparing Potential Linked Credit Plans (PLP) on an annual basis for all districts, in a participative and consultative manner involving various stakeholders in the field of agriculture and rural sectors, under the Lead Bank Scheme. PLPs contain projections for credit potentials under various priority sector activities in respective districts, which can be exploited by Banks. These projections are aggregated at the State Level and presented in the State Focus Paper, which, inter alia, provides inputs for the policy makers, for optimum development of the priority sectors in the State.

Around 72% of the households in Sikkim are rural house-holds, dependent mostly on farm income and income from allied activities like dairy, piggery, etc. Other major sources of income for them are activities under tourism sector, retail trade, Govt. services, pharma units, private enterprises, etc. The SF/MF, accounting for more than 75% of the agricultural landholdings possess only 30% of the cultivable area and the average size of agricultural land holding in the State is only 0.62 Ha. While a lower productivity for some of the major agricultural commodities, is a concern, the State has also been demonstrating capabilities to leverage on its strength of organic farming, to make greater contribution under agriculture sector. Under these conditions, FPOs are an effective solution for achieving economies of scale and for consequent enhancement of income of farmers, through collectivization and an upward movement in the supply and value chain of respective commodities. The effects of climate change has also brought certain challenges to agriculture and allied sectors too, which require to be addressed through suitable adaptation and mitigation interventions by involvement of all concerned.

I am glad to present the State Focus Paper 2023-24 for the State of Sikkim, wherein the aggregate credit potential for 2023-24 has been assessed at ₹958.56 crore, comprising ₹370.66 crore (38.67%) for agriculture, ₹462.57 crore (48.26%) for MSME and ₹125.33 crore (13.07%) for other priority sectors, and hope that the same shall be realized in full, with the continued support and coordinated efforts of all the stakeholders.

I also take this opportunity to place on record my sincere thanks to the State Government, RBI, SLBC convener, Controlling Offices of Banks, District Administration of all the districts, Line Departments and the Lead District Manager for their cooperation in bringing out this document. I would also like to thank the staff members of NABARD, Sikkim RO, who have put in their valuable efforts and made significant contributions in bringing out of this document.

I believe this document will be of immense use to the State Government and Banks in formulating their plans for the year 2023-24. I welcome your valued feedback and suggestions for further improvements and refinements.

Gangtok
15 December 2022

Sanjay Kumar Gupta
General manager / Officer-in-Charge
NABARD, Sikkim Regional Office

State Focus Paper for the year 2023-24

Sikkim State

INDEX

Sr. No.	Contents	Page No.
1	Broad sector wise PLP Projections of Credit Potential for 2023-24 with pie diagram.	3
2	Executive Summary	5
3	Map of the State	18
4	Chapter I – State Profile	20
5	Chapter II – Banking /Financial Sector Profile	27
6	Chapter III – NABARD’s perception on the development perspective of the State.	30
7	Chapter IV – Potential Credit Outlay	36
8	Chapter V - Infrastructure Planning	59
9	Chapter VI – Details of policy initiatives of GoI, RBI, NABARD and the State Government.	70
10	Annexure I – District-wise, sub-sector wise PLP Projections for 2023-24 (including potential assessed for SHGs/ JLGs).	85
11	Annexure II – Agency wise broad sector wise flow of Ground Level Credit – Targets, achievements and percentage of achievement for last three years and target for 2023-24.	95
12	Annexure III – Critical Infrastructure support to be provided	97
13	Annexure IV – Critical interventions required in various sectors/ sub-sectors	98
14	List of Abbreviations	99

NABARD Interventions in Sikkim

Inauguration of Rural Haat and TDF Project at Chingthang GPU, Gyalshing



TDF Project at Dentam, Ghyalshing



NABARD Interventions in Sikkim

3 days Exhibition at MG Marg, Gangtok



Meeting of GM/OiC with Hon'ble CM, Govt. of Sikkim



Meeting of GM/OiC with Hon'ble Governor, Govt. of Sikkim



GM/ OIC's visit to OFPO Chuba, Namthang Block, Namchi district



Inauguration of Kiosk at Buriakhop MPCS, Soreng

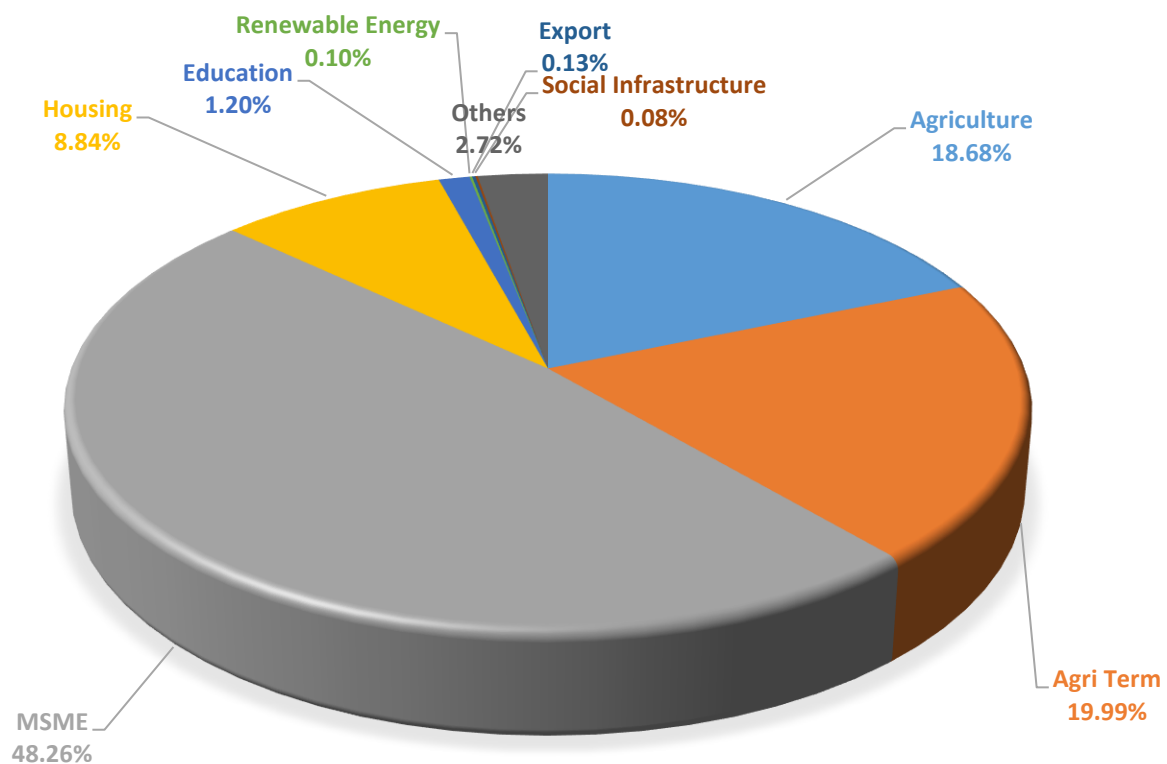


Broad Sector-wise PLP Projections of Credit Potential for 2023-24

State: Sikkim

(Rs. Lakh)

Sr No	Sector/Activity	PLP projections						
		Gangtok	Pakyong	Namchi	Mangan	Gyalshing	Soreng	Total
A	FARM CREDIT							
1	Crop Production	3539.28	3661.95	4200.69	1002.74	3676.86	1823.58	17905.10
2	Term loan for Agriculture and Allied Activities	5650.11	5351.86	2101.47	421.81	657.90	344.78	14527.93
	Sub Total	9189.39	9013.81	6302.16	1424.55	4334.76	2168.36	32433.03
3	Agriculture Infrastructure	1221.10	715.07	105.49	15.00	65.05	48.19	2169.90
4	Agriculture Ancillary activities	1344.30	771.00	40.63	20.25	114.78	172.39	2463.35
I	Credit Potential for Agriculture (1+2+3+4)	2565.40	1486.07	146.12	35.25	179.83	220.58	4633.25
II	Credit Potential for Micro, Small and Medium Enterprises (MSME)	25220.00	14445.00	4295.01	992.25	1065.00	240.00	46257.26
III	Potential for Export Credit	32.00	48.00	4.40	36.00	0.00	0.00	120.40
IV	Credit Potential for Education	560.00	460.00	32.00	58.50	19.36	23.23	1153.09
V	Credit Potential for Housing	5200.00	1424.00	924.16	515.25	291.60	122.40	8477.41
VI	Credit Potential for Renewal Energy	7.67	7.66	51.80	3.74	15.31	8.88	95.06
VII	Others (Loans to SHGs/ JLGs, PMJDY)	862.30	757.00	430.00	76.50	316.40	163.80	2606.00
VIII	Social Infrastructure involving bank credit	6.00	6.00	20.00	9.00	28.00	12.00	81.00
Total Priority Sector		43642.76	27647.54	12205.65	3151.04	6250.26	2959.25	95856.50



BROAD SECTOR WISE PROJECTIONS

EXECUTIVE SUMMARY

1. Introduction

Nestled in the Himalayan range, the State of Sikkim in addition to being characterised by its scenic mountainous terrain, has also emerged as one of the fastest growing states in the country. The credit potential and requisite infrastructure identified in the Potential Linked Credit Plans (PLPs) for all the six districts of the State for the year 2023-24 have been aggregated for preparation of the priority sector credit potential for the State as a whole. This estimation together with its analysis is presented in as “State Focus Paper 2023-24” which provides the road map to bankers in extending credit and act as a knowledge bank for Central and State Governments in formulating policies and to plan developmental initiatives. The basic objective of NABARD’s credit planning exercise is to assess the credit potential keeping in view the sector specific physical potential, infrastructure support, forward and backward linkages, local skills and natural resources and credit absorption capacity of the sector. The credit projection is also fine tuned by factoring in the priorities and the policies of the GoI, State Government and the RBI.

Out of 1,29,006 households in Sikkim, 93,288 are rural households dependent mostly on farm income. Small and marginal farmers account for 79% of the total cultivators but own only 39% of the cultivated area. The average land holding of small/marginal farmer in the state is 0.62 Ha. They have less bargaining power, inadequate access to credit, critical inputs and marketing facilities. The shrinking land asset, rising per unit cost of cultivation, decreasing net income, fragmented land holdings coupled with low productivity are the constraints being faced by them. In order to harness the collective bargaining power of small and marginal farmers, provide easy access to technology, credit and market promotion, farmers’ aggregates, collectivization of agricultural produce and formation of FPOs (Farmers’ Producers Organisations) would be the most effective solution to achieve sustainable economies of scale and enhance farm incomes.

The projections for bank credit and infrastructure funding were prepared and documented in the Potential Linked Credit Plans (PLPs) prepared for all the six districts, which shall form the basis of District Credit Plans to be prepared by LDMs. Accordingly, credit potential of ₹958.56 crore is estimated under Priority Sector for the financial year 2023-24 for the State of Sikkim.

The credit projections has been made taking into account, the revised Priority Sector Lending (PSL) norms issued by RBI, thrust given by GOI to increase the credit flow for agriculture sector, while also addressing issues viz regional imbalances, definite allocation for investment activities etc, initiatives/thrust given by State Government under the Organic Mission, etc.

2. State Profile

Sikkim is the second smallest State in India, areawise, covering an area of 7096 sqkm and smallest State in terms of population in the country. The population of the state is 6,10,577 as per 2011 census. Rural Population constitutes 74.85% and density of population in the State is 86 persons/sq.km. The number of BPL households is 21,618 covering a population of 1,01,618. Sikkim’s GSDP grew at a Compound Annual Growth Rate (CAGR) of 15.86% between 2015-16 and 2019-20. Literacy rate at 81.4% is higher than the all India average. Agriculture is the main driver of the rural economy of the state with an estimated 60% of the total population’s livelihood depending majorly on income from agricultural activities.

While a fragile ecology, low production and productivity remains a reality of the state, it is capitalizing more on its inherent strength of organic farming. The net sown area in the state is 70280 ha and gross cropped area is 83975 ha with a cropping intensity of 120%. The cultivable wastelands comprising of current / other fallows is 8794 ha. This offers scope for crop diversification and for bringing new area under cultivation. Interventions initiated by various agencies including APEDA, have resulted in the NE region witnessing an 85.34 percent growth in the export of agricultural products in the last six years as it increased from \$2.52 million in 2016-17 to \$17.2 million in 2021-22. Drug formulations, biologicals, medical and scientific instruments,

cereal preparations and miscellaneous processed items accounted for a majority share in the overall exports from the state. In FY 2020-21, total exports of drug formulation products from Sikkim stood at Rs. 34.39 crores (@ 49%).

3. Banking Profile

Sikkim has a network of 23 Commercial banks comprising of 12 public sector banks and 10 private sector banks and one State Co-operative Bank. As on 31 March 2022, total number of branches is 160 comprising 105 rural and, 55 urban and semi-urban branches. Besides, there is an exclusive bank namely State Bank of Sikkim with 53 branches, which is not governed under the BR Act, 1949. The population per bank branch is 2502.36. The total Deposits stood at Rs. 13472.13 crore as on 31 March 2022 registering a growth of 11.54 % over the previous year. Similarly, advances stood at ₹ 6719.21 crore (including credit from outside Sikkim). As on 31 March 2020, there are 220 ATMs operating at various locations in the state. In addition to above, 113 active CSPs, 88 live IPPB access points, 176 PACS with cash Kendras, 03 mobile vans are delivering financial services and 06 FLCs are creating awareness on Financial Inclusion Fund in the state. Another 6 new such centers have been supported by NABARD under Financial Inclusion Fund in the state through State Bank of India.

The C:D Ratio of all banks as on 31.03.2022 taking into account the credit extended by them in the state stood at 49.87%. The performance of banks under ACP for the last financial years is 253.51%. Details being provided in the table below -

3.2 Sectoral Trends in Credit Flow to Priority Sector

(Rs. Lakh)

Banks	As on 31 March 2020			As on 31 March 2021			As on 31 March 2022		
	Target	Achiev	% of achiev	Target	Achiev	% of achiev	Target	Achiev	% of achiev
Agriculture	30588.00	8942.17	29.2	29129.58	8187.44	28.1	30102.81	22533.34	74.85
MSME	16620.00	27710.06	166.7	17932.02	42120.02	234.9	19948.77	51504.6	258.18
Other Priority Sector	12400.00	12111.14	97.7	14997.61	8343.06	55.6	13438.89	11582.2	86.18
Total	59608.00	48763.37	81.8	62059.21	58686.27	94.56	63490.47	85620.14	134.86

(Source SLBC)

The performance of the banks under priority sector credit over the years is increasing and banks could achieve 134.86% of ACP target as on 31.03.2022. However, the performance of banks under agriculture and allied activities has been less than 30% of the target in the last two years. The achievement under ACP for agriculture during 2021-22 is at 74.85% whereas it is 258.18% and 86.18% under MSME and OPS respectively. However, availability of granular data in terms of the priority sector sub-activities still remains a challenge. This further restricts adequate analysis of the sector. The state also needs to work on effective planning for the identified credit deficient districts.

4. Rural Infrastructure – RIDF, NIDA etc.

Rural infrastructure primarily refers to the basic facilities, services and installations, both physical and social, needed for the rural community or society. It mainly includes rural roads, bridges, water supply, sanitation, irrigation structures for agriculture, rural energy, education, health and communication systems. Rural infrastructure in sectors like irrigation and connectivity is essential for increasing productivity of land, capital formation, and employment potential, reducing post harvest losses and improving living standards of the people.

To prioritise critical infrastructure and linkage support required for important sectors in each of the districts, critical infrastructure gaps under each district were identified and a list of has been prepared through dialogue and interaction with line departments. The same is furnished in Annexure III in detail. An aggregation of the requirement reveals that investment is required in the sectors viz., warehousing & cold storage, post harvest management & marketing, water supply, soil conservation, roads, irrigation, animal husbandry, power, social sector related infrastructure viz. public health institutions/ sanitation, rural tourism etc. These critical infrastructural gaps can be bridged by State Government with an option to avail funds under RIDF, as most activities are eligible for support.

In Sikkim NABARD has so far assisted 1277 Projects with RIDF loan of ₹ 862.72 Cr involving Rural Roads, Rural Water Supply, Rural Marketing, Schools, PHC, Rural Sanitation etc. An amount of ₹ 693.29 crore disbursed as on March 2022.

NABARD Infrastructure Development Assistance (NIDA): NABARD has sanctioned an amount of Rs 214.31 Crores (under NIIDA I and II) for development and strengthening of Road Infrastructure and released the entire amount of Rs.214.31 crores till date. The projects are implemented through SIDICO.

NABARD support is also available through Fisheries Infrastructure Development Fund (FIDF), Dairy Infrastructure Development Fund (DIDF), Micro Irrigation Fund (MIF) and Food Processing Fund(FPF). However, such projects in Sikkim are yet to be received under these funds.

5. Potential Linked Credit Plan Projections for 2023-24

The total priority sector credit potential estimated and presented in the State Focus Paper for the year 2023-24 is ₹ 958.56 crore. The credit potential for agriculture and allied sector is estimated at ₹ 370.66 crore, with lending for agri-investment activities constituting 20 per cent of total agricultural loans. The potential has been mapped keeping in view the existing ground level credit flow, policy initiatives and other interventions taken by the State Government under Sikkim Organic Mission, MOVCD, etc., implement in Banking and other infrastructure enhancement in credit absorption capacity through FLCs and CFLs of Government of India and NABARD. The district-wise details are presented in Annexure I.

The focus areas of the SFP 2023-24 are summarised as under

Crop Production, Maintenance and Marketing:

Agriculture is a major source of livelihood and economic and nutritional security of sizeable native population. Maize, rice, buckwheat and pulses are the main food crops grown in the state.

As per Agriculture Census 2015, Govt. of India, there are 71532 cultivators in the state out of which 79.77% fall under small and marginal category. The net sown area constitutes 9.90% of total geographical area with a cropping intensity of 120%.

As per the trends in gross cropped area, existing and likely shifts in cropping pattern, trends in off take of credit, policy support from GoI and State Govt. and special initiatives of NABARD, the potential for credit support assessed for Crop Production, Maintenance and Marketing for the year 2023-24 is ₹179.05 crore.

In order to increase lending for crop production, financing of crop loans as per scale of finance, banks need to issue of KCC cards to eligible borrowers/ farmers and try to achieve the saturation of farmers with KCC especially PMKISAN beneficiaries.

Investment Credit:

1. Precursor for capital formation in Agriculture: Investment credit continues to be top most priority for the policy makers and bankers, as means for stimulating capital formation in

agriculture. In this background, Government of India has fixed the sub-target of investment credit as a component of total agricultural credit at 36%. Banks and other stakeholders/line departments require to achieve this target and promote offtake of Investment Credit.

2. **An aggregate credit potential of ₹ 166.98 crore has been estimated under Agri. term lending/investment credit and agriculture infrastructure for the year 2023-24** and it is 45 per cent of the total agricultural credit potential and 17.42 per cent of the total priority sector credit projections.
3. The thrust areas under agri investment credit include horticulture (including sericulture), land development, dairy, poultry, sheep/goat/piggery, food and agro processing and credit to identified categories constituting SHGs/ JLGs, Cooperative Societies and PMJDY accounts.

Water Resources

Sikkim being a hilly state a more pragmatic approach is to go for micro irrigation and better methods of water application, like small water harvesting structures, roof water harvesting and water saving application.

The credit potential for the year 2023-24 for Water Resources has been pegged at ₹ 1.92 crore. NABARD is actively promoting community led spring based watershed development projects and infusing necessary training and capacity building to ensure the long term sustainability of the projects.

Some of the major issues/constraints in achieving the above projection and measures suggested to overcome them are banks to finance drip/sprinkler irrigation systems, water harvesting structures; setting up soil and water testing labs, promotion of surface irrigation, community and individual rain water harvesting structures.

Farm Mechanization

Agriculture in the State is largely carried out with traditional practices because of hilly terrain and small size of fragmented operational land holdings. State Government is promoting power tiller, harvester and other agri-implements for promoting farm mechanization in the state.

The potential estimated for 2023-24 under Farm Mechanization is pegged at ₹0.99 crore. In order to improve the quality and productivity under horticulture sector, it is necessary to introduce different tools & equipment, which are commercially available. Also, equipment for harvesting fodder crops, silage making etc. need to be introduced and popularised. In order to achieve the potential banks may finance small size power tillers and SHGs/JLGs/FPOs may be financed for purchase of power tillers.

Plantation and Horticulture

The agro-climatic and physiographic conditions prevailing in the State are conducive for growing a variety of horticulture crops and there is immense potential for their promotion including commercial floriculture. **Large cardamom, ginger and turmeric** are the principal spice crops while mandarin - orange, guava, banana, etc., are the principal fruits grown in the state. Sikkim is the largest producer of large cardamom in the country and flowers like Gladioli, Anthuriums, Lilliums, primulas, rhododendrons, orchids as well as many other floral species thrive here.

Cultivation of horticultural crops including vegetables with controlled micro irrigation, encouraging high density/ultra high density planting concepts, introduction of new crops, promotion of small green houses have excellent potential to enhance farmers' income and can act as one of the means of doubling of farmers' income.

Sikkim - Organic State

Since launching of the Sikkim Organic Mission in 2010, the programmes of organic farming were being implemented on a mission mode and the State has been declared as “First Organic State” on 18th January 2016 by the Honorable Prime Minister of India.

Government of Sikkim had initiated various measures like Promotion of FPOs, Organic Certification and marketing interventions like “Buyer-Seller” meets, marketing outlets, processing/value addition for organic produce.

Considering the thrust areas identified by the state government and market demand for various horticultural crops, an aggregate credit potential of ₹45.69 crore for 2023-24 crore has been estimated.

Some of the major issues/constraints in the sector and measures suggested to achieve the above potential are lack of adequate price protection, quality marketing, processing and value addition. Farmers face challenges such as, lack of timely availability of quality planting material, lack of good connectivity between production and marketing centres leading to the post-harvest loss and exploitation from middlemen/market intermediaries.

Forestry and Wasteland Development

Forest is one of the richest natural resources of Sikkim as it has unique bio-diversity. Out of the geographical area of 709600 ha. of the State, 82.32% of the area (584071 ha.) falls under forest land area which offer large scope for development of forestry. The state has 3325 ha. of wastelands (barren uncultivable and non-agricultural land) i.e. about 0.45% of the total geographical area of the State. Keeping in view the conducive climatic condition of the state for growth of bamboo, the same can be promoted under National Bamboo Mission in the state.

The potential for credit support assessed for Forestry and Wasteland Development for the year 2023-24 is ₹ 1.48 crore.

Awareness about the economics / bankability of agro-forestry/ farm forestry schemes among the farmers/ bankers is expected to help the activities upscale into commercial levels. Fodder and napier grass cultivation and forest based industries can be promoted.

Animal Husbandry

Animal Husbandry plays a pivotal role in the rural hill economy providing gainful employment to a large number of small and marginal farmers and enhancing their economic status. The State has a livestock population of 540233 in addition to 576353 poultry birds as per 2019 Livestock census. There was steady improvement in milk, meat and egg production during the last decade due to increase in availability of infrastructure in the state.

• Dairy Development

The dairy sector in the state has shown a whopping 71% rise to 2,30,000 litres per day production since 2019. Sikkim today occupies 1st position in NER and 12th in All India in terms of per capita per day availability of milk of 352 grams (against the top two states of Punjab at 1300 gms and Haryana at 900 gms). The Sikkim Milk Union (SMU) has a robust network of 600 plus Dairy Cooperative Societies/ Collection centres with approximately 13000 pouring milk farmers.

Govt. of Sikkim's (GoS) – Price Incentive Scheme of Rs. 8/- per litre to dairy farmers selling to SMU or any other FPO/ Cooperative society has been the critical force behind the increase in milk production in the state. Encouraged by the same, GoS has ramped up its support through subsidising insurance coverage of dairy animals.

This led to the conceptualisation of a comprehensive project by NABARD for the sector which would cater to credit requirements of dairy farmers,

In view of this and to bridge the gap between demand and supply of milk and milk products a credit potential of ₹ 56.51 crore is estimated for the year 2023-24.

AI coverage of breedable cattle, improvement in progeny of local cattle breed and promotion of cross-bred cows, Promotion of dairy as a main/subsidiary occupation and promotion of Dairy Cooperative Societies, non availability of land for cultivation of fodder and shortage of good quality fodder seeds and lack of permanent pastures and other grazing land are important issues.

Banks may increase credit flow by financing dairy animals and dairy infrastructure by Milk Unions/SHGs/JLGs/FPOs, induction of good quality, better productive cows, strengthening of infrastructure required for AI, encouraging farmers to grow fodder in their own lands, supplying high yielding seedling and planting materials to the cattle owners, training & capacity building of farmers.

Bankers may supply credit to all dairy farmers in the form of AH-KCC to achieve saturation.

1. Poultry Development

Poultry-rearing is the most dynamic and fast-growing agri-business activity in the State of Sikkim. Blooming tourism sector, domestic demand and rapid development in the retail and food service industries is expected to fuel the growth in demand in the state. As per the Livestock Census of 2019, there are 5.76 lakh poultry birds in the state.

The estimated egg production during 2019-20 was 39.32 lakh eggs in the state. Total meat production in the state during 2018-19 was at 3493 MT. In order to bridge the gap between demand and supply of eggs and poultry meat a credit potential of ₹ 14.48 crore is estimated for the year 2023-24.

Absence of hatcheries, lack of infrastructure and poultry cooperatives are the constraints and there is need to promote financing of individual units, central grower units by FPOs/SHGs/JLGs with support under National Livestock Mission(NLM). Financing good no. of units under the marketing linkage of poultry products like cage van, refrigerated van, cold storage, large processing units, dressing and marketing units, promotion poultry FPOs/Cooperatives etc. are needed.

Sheep/Goat/Piggery

There is a wide gap between demand and production of meat in the state and as per livestock census 2019, the population of sheep, goat and pigs in the state has reduced to 2076, 90506 and 27320 respectively as compared to the census in 2012 (2684, 110870 and 30317) which is a alarming feature. Considering the increasing demand for meat in the state, the sector need to be promoted by encouraging financing under the activity and accordingly a credit potential of ₹ 21.60 crore is estimated for the year 2023-24.

Creating awareness among the farmers GOI schemes, Strengthening and expansion of existing Pig breeding farms, promotion of sheep rearing on a large scale for wool/meat purpose and financing more no. of units under FPOs/SHGs/JLG mode for establishment of pig, goat and sheep breeding and rearing units are needed.

Fisheries Development

The total fish production in the state during 2017-18 was 380 tones and there is high demand for fish in the state which has a riverine system of length of 900 km, lakes and derelict water bodies to the extent of 0.03 lakh ha. A large part of the demand is being met from adjacent state of West Bengal and Bihar as also from Andhra Pradesh. Considering the increasing demand for fish in the state, the sector need to be promoted by encouraging financing under the activity and accordingly a credit potential of ₹ 1.38 crore is estimated for the year 2023-24.

In order to achieve the above credit potential target, it is necessary to create awareness, promotion of trout fish farming / any other feasible breed and strengthening of infrastructure including seed banks, issue of KCC to farmers are to be promoted.

Agriculture Infrastructure

Construction of Storage Facilities – warehouses, market yards including cold storage units / cold storage chains

It is a well-known fact that poor farmers do not have the economic strength to retain the produce till market prices are favourable. Moreover, farmers also need efficient marketing arrangement for realizing fair and remunerative prices. Absence of proper storage facilities force farmers for distress sales of their produce, resulting in heavy losses.

A network of Rural Godowns/ Market Yards will thus, enable small farmers to enhance their holding capacity in order to sell their produce at favorable prices and avoid distress sale. **Credit potential of ₹ 16.61 crore is estimated for the year 2023-24.** Development of low-cost, eco-friendly and low energy cold chambers for on farm storage of horticultural produce could be considered for state.

Land Development, Soil Conservation, Watershed Development

The average land holding size of small/marginal farmers in Sikkim is 0.62 ha (2015) which permits small scale land development activities leading to soil and moisture conservation activities. NABARD is also implementing 07 springshed based watershed projects which benefits 3000 ha area with grant support of ₹.1.60 crore to rejuvenate drying springs and implement soil and water conservation measures. **The credit potential of ₹ 4.14 crore is estimated for the year 2023-24 for land development activities.**

Others – Tissue culture, agri-biotech, seed production, vermicomposting, bio-pesticides/ fertilizers etc.

There is good scope for economically important plant species like orchids, medicinal plants, bamboo, large cardamom and other rare and endangered species. Also, organic seed production and setting up organic inputs like bio fertilisers and pesticide units on commercial scale has huge demand as state is declared as complete organic. Farmers/Entrepreneurs of the state can be encouraged to set up units with support from “The capital subsidy scheme for commercial production units of organic inputs” of GOI and banks extend loans under “Agriculture Infrastructure Fund” being implemented through NABARD. The credit potential of ₹0.95 crore is estimated for the year 2023-24 for these activities.

Ancillary Activities - Food and Agro Processing

Food and Agro processing sector serves as a vital link between the agriculture and industrial segments of the economy. Sikkim is endowed with varied agro-climatic conditions suitable for cultivation of large number of sub-tropical and temperate fruits and other crops like Sikkim mandarin, passion fruit guava, papaya, avocado, banana, off-season vegetables, root & tuber crops (potato, sweet potato, cassava, yam and colocasia), spices (large cardamom and ginger), floriculture (orchid), etc , There is scope for value addition to cardamom, ginger and citrus fruits and other cash crops through agro-based industrial units.

Thus, Sikkim needs a strong and dynamic food-processing sector, which will play a vital role in diversification and commercialization of agriculture, and ensure value addition to agriculture produce. **The credit potential estimated for food and agro processing sector is ₹20.85 crore for the year 2023-24.**

Ancillary Activities - Others

The Cooperative Societies/FPOs of farmers may be provided short term loans for disposing of their produce so that necessary arrangements could be made to transport it to the markets in the neighbouring places where it could fetch better price.

Agri-clinic / Agri-Business Centres (ACABC) can be set up by interested agricultural graduates-

Loans to MFIs for on-lending to agriculture activities by SHGs, JLGs, overdraft under PMJDY and Miscellaneous (loans to distressed persons to repay non institutional lenders (other than farmers) and loans to State sponsored organisations for SC/ST. **The credit potential of ₹3.78 crore is estimated for the year 2023-24 for these activities.**

Micro, Small and Medium Enterprises (MSME)

Micro, Small and Medium Enterprises (MSMEs) sector has emerged as a vibrant and dynamic sector for the economy and in Sikkim 64% of GSDP is contributed by industry. MSME sector is recognized as a catalyst in promoting growth and development. The MSME Services sector in Sikkim draws its strength from tourism activities as the state is a preferred destination of tourists and the influx of tourists has given a boost to all service activities relating to tourism viz. hotels/ resorts/ homestays, travel agencies, tourist transport sector, local retailers and small businessmen. There is very good potential for establishment of MSME units under agro processing, tourism, traditional handlooms and handicrafts etc. Sikkim state is finalizing MSME policy to incentivize budding entrepreneurs. The credit potential of ₹ 462.57 crore is estimated for the year 2023-24 for MSME sector.

Export Credit:

There is untapped potential for provision of Export Credit in Sikkim for wide range of activities under Agriculture, Non-Farm Sector and Tertiary Activities. There is huge demand for organic large cardamom, buckwheat, turmeric and ginger in the export market. **The credit potential of ₹2.70 crore is estimated for the year 2023-24 for these activities.**

Education

A great emphasis has been given for training in engineering and other professional areas such as computer software and information technology, accountancy, medicine, business management, rural development and tourism.. There is ever growing demand in the Education Sector and a **credit potential is estimated for the year 2023-24 is ₹11.53 crore under this sector.**

Housing

Support is available in the state for construction of houses under Chief Minister Awas Yojana, Pradhan Mantri Awas Yojana. Banks to finance construction of houses and there is huge demand for housing loans for individual/home stays. **The credit potential for housing sector estimated for the year 2023-24 is ₹84.77 crore.**

Social Infrastructure Involving Credit

Social infrastructure covering schools, health care facilities, and drinking water and sanitation facilities in tier II – VI centers under social infrastructure by banks through credit. **The credit potential under this sector estimated for the year 2023-24 is ₹0.81 crore.**

Renewable Sources of Energy and Waste Management

Promotion of renewable sources of energy like solar energy, hydro electric energy, bio gas etc with bank credit has very good scope in the state. **The credit potential under this sector estimated for the year 2023-24 is ₹0.95 crore.**

Microfinance- Promotion and Financing of SHGs, JLGs

State Rural Livelihood Mission (SRLM) promotes and nurtures women SHG programme in all the districts of the state. During 2021-22, 5244 SHGs were savings bank linked account of which 1068 SHGs have been credit linked with bank loan to the tune of ₹20.00 crores.

NABARD continues to extend grant support for training and capacity building of SHGs. The Livelihood and Enterprise Development Programme (LEDP) targets SHG clusters in contiguous villages involved in farm and off farm activities, supports intensive skill building, refresher training, backward-forward linkages, value chain management, end to end solutions, handholding and escort services over two credit cycles. Further, under the Micro Enterprise Development Programme (MEDP), SHGs/ SHG members are encouraged to start micro enterprises by providing the requisite training. NABARD has also promoted Joint Liability Groups (JLGs).

6. Financial Inclusion Plan - Financial Inclusion Fund

Financial Inclusion Fund (FIF), with a corpus of Rs.2,000 crore was created with NABARD in 01 April, 2015.

FIF aims at developmental and promotional interventions to secure greater financial inclusion and support suitable technology and innovations. The fund supports various financial inclusion activities of banks like conduct of financial literacy camps, opening Kiosk Outlets in unbanked villages of North Eastern States, Support to Financial Literacy Centres (FLCs), Support for deployment of mobile signal booster and VSAT in grey and dark areas, AUA/KUA authentication, Support for Mobile Vans, Dual Authentication at BC points for SHG transactions etc.

In Sikkim, NABARD has taken up various interventions under FIF like support for conduct of more than 2000 **Financial Literacy Awareness Programmes (FLAPs)** assistance is also being extended for remote bank branches for UPS deployment, procuring of POS/ mPOS machines, onboarding to different payment portals/ payment systems and setting up of KIOSKS etc under support towards creation of banking infrastructure and adoption of banking technology.

7. Central Sector Scheme on Formation and Promotion of 10,000 FPOs

Government of India has recently launched the Central Sector Scheme for Formation and Promotion of 10,000 FPOs in July 2020 to facilitate development of vibrant and sustainable income oriented farming and for overall socio-economic development and wellbeing of agrarian communities.

In Sikkim state total 76 clusters areas have been identified for FPO promotion and out of which in 28 clusters FPOs have been promoted and additional 28 are been planned under the Mission Organic Value Chain development (MOVCD) covering about 8500 farmers.

NABARD has supported promotion of 17 FPOs in the state of which 05 FPOs are under the Central Sector Scheme. Identified, FPOs have been successfully linked with marketing interventions involving retail outlet, exhibitions and buyer seller meets.

8. Support to Cooperatives/MPCS in Sikkim

Comprehensive Support Plan for Development of MPCS/Cooperatives: NABARD has approved a Comprehensive Support Plan for conversion of 40 MPCS as MSCs with an outlay of Rs. 113.21 lakhs and committed a grant assistance of Rs. 90.57 lakhs.

PACS as MSCs: In order to convert PACS/MPCS as Multi Service Centres, NABARD is extending Special Refinance Facility for conversion of PACS/MPCS as Multi Service centres. During the year, it is proposed to convert 23 MPCS in the State with refinance support of Rs.1.83 crore.

Computerisation of MPCS: NABARD is the nodal agency for implementation of the central sector scheme for PACS computerization. The Govt. of Sikkim along with NABARD envisages to saturate all 178 MPCSs under the scheme in the state.

NABARD Sikkim has formulated and launched a comprehensive project for strengthening dairy co-operatives in the state, wherein these agencies are supported to play the role of one stop solution for the Dairy farmers with an objective of deepening financial inclusion.

Long Term and Short Term Refinance to SISCO: NABARD has been extending concessional refinance support to SISCO under both short term and longterm windows and released an amount of Rs 1.75 crore and Rs.4 crore as Longterm and Short-term Refinance respectively to SISCO Bank during 2020-21.

9. Skill Development of Youth and Women

NABARD is involved in Skill development of youth, women and farmers for their capacity building and to convert them as entrepreneurs and create gainful employment opportunities. Accordingly, NABARD has supported training of 25 rural youth of South Sikkim on “Animation & Design” at TEMI, South Sikkim in collaboration with Tomorrow’s Foundation and Department of IT, Commerce & Industries, GoS.

Also, Skill and Entrepreneurship Development of Women SHG members have been taken up through partner agencies on incense sticks, noodles, fast food, candle making, tailoring, mushroom cultivation covering all four districts of the state.

10. Rural Marketing – Support for Establishment of Rural Haats and Mart

NABARD supported establishment of 08 Rural Marts in Gangtok, Ray Busty, Luing Perbing in East Sikkim, Namchi, Namthang and Soreng in South Sikkim, Mangan in North Sikkim and Dentam in West Sikkim with a grant assistance of Rs.26.38 lakhs and construction of 03 Rural Haat projects were supported with an outlay of Rs.35 lakhs in East, West and South Districts. These Projects have supported marketing of products/produce of SHGs, Farmers, and Artisans etc. The construction of the haat project in West Sikkim is under planning phase.

NABARD is promoting one **OFPO for “Angora Rabbit and Sheep Wool Products” at Namthing GPU, South Sikkim with a Grant Assistance of Rs. 1.25 crore** supporting 200 plus artisans. NABARD

11. Climate Change Initiatives National Adaptation Fund on Climate Change (NAFCC) project

Sikkim RO is associated with the project for “Addressing Climate Change Vulnerability of Water Sector at Gram Panchayat Level in drought prone areas of Sikkim” under NAFCC, which is under implementation in 74 GPUs of South and West Districts of Sikkim through RMDD. Total grant support of Rs. 24.66 cr has been sanctioned and entire amount released.

12. Tribal Development Projects under Tribal Development Fund: NABARD has successfully implemented 08 Tribal Development Projects in Sikkim assisting 2473 tribal families with an outlay of Rs.14.73 crores. Small Orchards of maximum one acre is developed for each tribal family as a source of sustainable livelihood under the project. Another three projects are under finalization phase.

13. Concessional Refinance Support: Special Refinance Scheme to Banks for promoting Micro Food Processing Enterprises has been launched by NABARD and rate of interest under this Special Refinance Scheme will be at 4% p.a. NABARD is also extending refinance at 4% p.a. for banks for projects under Water Sanitation and Hygiene(WASH) initiatives.

14. Agricultural Infrastructure Fund (AIF): GOI has launched Agricultural Infrastructure Fund wherein Credit Guarantee and Interest Subvention Facility will be extended to Agri/Horti Infrastructure projects with Outlay upto Rs.2.0 crore to be set up by PACS, FPOs, Startups etc. The Credit Guarantee Fund for FPOs is set up with NABARD.

Summing up

Economic growth is driven by the private sector financing through banks. Channeling the credit to the mandated sectors helps in ensuring a balanced and equitable growth. The priority sector credit potentials estimated in this paper, will definitely be a useful guide to the SLBC and the Banks in preparing their annual credit plans for the year 2023-24. State funding for the infrastructure gaps coupled with the partnership arrangement with private sector under PPP model for funding mega infrastructure projects, is the other trigger for economic development of the State. Creating a conducive environment through appropriate policy interventions and appropriate strategizing through a synergetic convergence of efforts of all stakeholders will also pave the way for speedier growth of the State.

Sikkim State Map



Source-www.sikkim-roadsandbridges.gov.in

State Profile

Sikkim

1. PHYSICAL & ADMINISTRATIVE FEATURES

Total Geographical Area (Sq.km)	7096
No. of Districts	4
No. of Blocks	32
No. of Villages (Inhabited)	989
No. of Panchayats	176

3. LAND UTILISATION [ha]

Total Area Reported	709600
Forest Land	584071
Area Not Available for Cultivation	15115
Permanent Pasture and Grazing Land	
Land under Miscellaneous Tree Crops	7827
Cultivable Wasteland	3325
Current Fallow	5469
Other Fallow	4987
Net Sown Area	70280
Total or Gross Cropped Area	83975
Area Cultivated More than Once	69142
Cropping Intensity [GCANSA]	120.00%

6. WORKERS PROFILE [in '000]

Cultivators	71
Of the above, Small/Marginal Farmers	56
Agricultural Labourers	25
Workers engaged in Household Industries	5
Workers engaged in Allied Agro-activities	
Other workers	160

8. HOUSEHOLDS [in '000]

Total Households	129
Rural Households	93
BPL Households	21

10. VILLAGE-LEVEL INFRASTRUCTURE [Nos]

Villages Electrified	425
Villages having Agriculture Power Supply	NA
Villages having Post Offices	211
Villages having Banking Facilities	
Villages having Primary Schools	332
Villages having Primary Health Centres	
Villages having Potable Water Supply	NA
Villages connected with Paved Approach Roads	

13. IRRIGATION COVERAGE [Ha]

Total Area Available for Irrigation (NIA + Fallow)	17030
Irrigation Potential Created	37266
Net Irrigated Area (Total area irrigated at least once)	7541
Area irrigated by Canals / Channels	20236
Area irrigated by Wells	
Area irrigated by Tanks	
Area irrigated by Other Sources	4120
Irrigation Potential Utilized (Gross Irrigated Area)	31897

15. AGRO-PROCESSING UNITS

Type of Processing Activity	No of units	Cap.[MT]
Food (Rice/Flour/Dal/Oil/Tea/Maize)	51	
Sugarcane (Gur/Khandsari/Sugar)	NA	
Fruit (Pulp/Juice/Fruit drink)	11	
Spices (Masala Powders/Pastes)	26	
Dry-fruit (Cashew/Almond/Raisins)	NA	
Cotton (Ginning/Spinning/Weaving)	NA	
Milk (Chilling/Cooling/Processing)	1	
Meat (Chicken/Mutton/Pork/Dryfish)	1	

17. ANIMAL POPULATION AS PER CENSUS 2019 [in '000]

Category of animal	Total	Male	Female
Cattle	148010		
Buffaloes	1144		
Sheep	2016		
Goat	90506		
Yak	5219		
Pig	27320		
Horses and Pony	115		
Poultry Birds	576353		
Rabbit	573		
Dog	23595		

2. SOIL & CLIMATE

Agro-climatic Zone	Tropical, Temperate, Alpine
Climate	Tropical to Temperate predominantly wet and moist
Soil Type	Loamy sand to silty clay loam with acidic in nature

4. RAINFALL & GROUND WATER

Rainfall [in mm]	Normal	Actual	2017-18	2018-19	2019-20
	2000-5000		2739.00	2656.80	2701.16
	Variation from Normal				
Availability of Ground Water [Ham]	Net annual recharge		Net annual draft		Balance

5. DISTRIBUTION OF LAND HOLDING

Classification of Holding	no of holdings		Area	
	Nos.	% to Total	Ha.	% to Total
<= 1 Ha	44294	61.92%	18073	19.89%
>1 to <=2 Ha	12767	17.85%	17756	19.54%
>2 Ha	14471	20.23%	55036	60.57%
Total	71532		90865	

7. DEMOGRAPHIC PROFILE [in '000]

Category	Total	Male	Female	Rural	Urban
Population	611	323	287	457	154
Scheduled Caste	28	14	14	20	8
Scheduled Tribe	206	105	101	167	39
Literate	445	251	194	322	123
BPL	102	54	48	NA	

9. HOUSEHOLD AMENITIES [Nos. in '000 Households]

Having brick/stone/concrete houses	48	Having electricity supply	68
Having source of drinking water	2	Having independent toilets	6
Having access to banking services	33	Having radio/tv sets	NA

11. INFRASTRUCTURE RELATING TO HEALTH & SANITATION [Nos]

Anganwadis	1308	Dispensaries	146
Primary Health Centres	24	Hospitals	4
Primary Health Sub-Centres	147	Hospital Beds	1555

12. INFRASTRUCTURE & SUPPORT SERVICES FOR AGRICULTURE

Fertiliser/Seed/Pesticide Outlets [Nos]		Agriculture Pumpsets [Nos]	
Total N/P/K Consumption [MT]		Pumpsets Energised [Nos]	
Certified Seeds Supplied [MT]		Agro Service Centres [Nos]	NA
Pesticides Consumed [MT]		Soil Testing Centres [Nos]	
Agriculture Tractors [Nos]		Plantation nurseries [Nos]	
Power Tillers [Nos]		Farmers' Clubs [Nos]	572
Threshers/Cutters [Nos]		Krishi Vigyan Kendras [Nos]	4

14. INFRASTRUCTURE FOR STORAGE, TRANSPORT & MARKETING

Rural/Urban Mandi/Haat [Nos]	181	Wholesale Market [Nos]	1
Length of Pucca Road [Km]	1100	Godown [Nos]	26
Length of Railway Line [Km]		Godown Capacity [MT]	NA
Public Transport Vehicle [Nos]	6928	Cold Storage [Nos]	2
Goods Transport Vehicle [Nos]	2855	Cold Store Capacity [MT]	2100

16. AREA, PRODUCTION & YIELD OF MAJOR CROPS

Crop	2018-19		2019-20		Avg. Yield [kg/ha]
	Area (000'ha)	Prod. (000'MT)	Area (000'ha)	Prod. (000'MT)	
Paddy	9.256	17.182	8.685	16.137	1857.19
wheat	0.163	0.176	0.165	0.178	1080.53
Maize	37.78	66.789	38.387	67.908	1768.48
Buck-Wheat	2.996	2.994	3.136	3.088	983.6
Finger Millet	2.114	2.181	2.282	2.366	1034.28
Barley	0.786	0.843	0.401	0.461	1111.75
Oil Seeds	6.067	5.61	6.062	5.61	924.65
Pulses	5.001	4.805	5.239	5.039	961.35

18. INFRASTRUCTURE FOR DEVELOPMENT OF ALLIED ACTIVITIES

Veterinary Hospitals/Dispensaries	127	Sheep farm [Nos]	1
Disease Diagnostic Centres [Nos]	18	Milk Collection Centres [Nos]	216
Artificial Insemination Centers [Nos]	154	Mother Dairy Farm [Nos]	1
Animal Breeding Farms [Nos]	15	Fish seed farms [Nos]	NA
Animal Husbandry Tng Centres [Nos]	4	Livestock Checkposts [Nos]	1
Dairy Cooperative Societies [Nos]	333	Poultry Layer Farms [Nos]	1
Improved Fodder Farms [Nos]	8	Slaughter houses [Nos]	1

19. MILK, FISH, EGG PRODUCTION & THEIR PER CAPITA AVAILABILITY

Fish	Production [Tonnes]	NA	Per cap avail. [gm/day]	NA
Egg	Production [Lakh Nos]	39.32	Per cap avail. [nos/p.a.]	NA
Milk	Production [Tonnes]	84213.00	Per cap avail. [gm/day]	NA
Meat	Production [MT]	3493.00	Per cap avail. [gm/day]	NA

Sources (if not mentioned against the respective item):

Sikkim Statistical Profile 2019-20 department of ESME, Livestock Census 2019, Department of AHLFVS, Agricultural Census 2015-16 GoS, Annual Reports FSADD and HCCDD, Official website of GoS

CHAPTER – I

STATE PROFILE

1.1 The State of Sikkim in addition to being characterised by its scenic mountainous terrain, the state has also emerged as one of the fastest growing states in the country. The State is located at the foothills of Eastern Himalayas between 27° 5' N to 20° 9' N latitudes and 87° 59' E to 88° 56' E longitudes. Sikkim, the 22nd state of India came into existence with effect from 16th May, 1975. Sikkim is the second smallest state in the country and extends to about 115 Kms from north to south and 65 Kms from east to west. The state is surrounded by vast stretches of Tibetan Plateau in the North and parts of its eastern boundaries. The kingdom of Bhutan in the lower - east, Darjeeling and Kalimpong districts of West Bengal in the south, and the kingdom of Nepal in the west. The state having alpine zones and snow bound land, carries elevations ranging from 300 to 8586 mtrs above mean sea level. Mt. Kanchendzonga, the world's third highest peak, is the state's highest point, situated on the border between Sikkim and Nepal. Ethnically Sikkim has mainly three groups of people viz. Lepchas, Nepalis, Bhutias. English, Nepali, Sikkimese and Lepcha are the official languages of the State.

1.2 State Administration

The total geographical area of the state is 7,096 sq.km, which is divided into six districts –Gangtok, Pakyong, Gyalshing, Soreng Mangan and Namchi. There are 33 Administrative blocks and 185 gram panchayat units (GPUs) administering 1040 gram panchayat wards (villages).

Source: panchayat.gov.in

1.3 Demographic Profile

Sikkim has a total population of 6,10,577 (as per 2011 census). There was high population growth averaging 12.36% between 2001 and 2011. The rural population constitutes 74.85% (4,56,999) and urban population constitutes 25.15% (1,53,578). The density of population is 86 persons per sq.km, one of the least densely populated in the country. The sex ratio is 890 female per 1000 male population.

Scheduled caste and scheduled tribe population is 4.63% (28,275) and 33.80%(2,06,360) respectively. Literacy rate at 81.4% - is higher than the all India average. Sikkim is a multi-ethnic state and the population can be broadly divided into tribal and non-tribal groups. East district is the most populated whereas North district is least populated.

Out of 1,29,006 households in Sikkim, 93,288 are rural households. Further the number of BPL households is 21,618 covering a population of 1,01,618. Sikkim's GSDP grew at a Compound Annual Growth Rate (CAGR) of 15.86% between 2015-16 and 2019-20. The state has huge potential to develop and harness the capacity of its skilled and educated labour force.

1.4 Agriculture

Agriculture practices in the state is based on the hill agriculture system mostly under rainfed condition. Due to low production and productivity in Sikkim which is lower than both the regional and national averages for all the major field crops and its fragile ecology, the state is capitalizing its inherent strength of organic farming. The Net Sown Area of the state is 70,280.73 ha and Gross Cropped Area is 83,975.328 ha with a cropping intensity of 120%. Agriculture is the main driver of the rural economy of the state with an estimated 60% of the total population's livelihood depending majorly on income from agricultural activities.

Distribution of Land Holding

Classification of Holding	Land Holding		Area	
	Nos.	% to total	In Hectares	% of total
<= 1 ha	44294	54.01	18073	19.88
>1 to <=2 ha	12767	22.60	17756	19.54

>2 to <=10 ha	14104	22.33	48722	55.64
>10 ha	367	1.06	6315	6.94
Total	71532	100	90865	100

Source: Handbook on Agriculture Sikkim 2018-19, Agriculture Dept., Govt. of Sikkim

From the above table, it could be observed that small and marginal farmers accounting for more than 79% of the total land holdings but possess only 39% of the area. The average land holding of small/marginal farmer is 0.62 Ha.

Area, Production and yield of Major crops

Crop	2017-18			2018-19			2019-20		
	Area (000'Ha.)	Prod. (000'MT)	Avg. Yield (Kg/Ha)	Area (000'Ha.)	Prod. (000'MT)	Avg. Yield (Kg/Ha)	Area (000'Ha.)	Prod. (000'MT)	Avg. Yield (Kg/Ha)
Rice	9.501	17.637	1856.24	9.256	17.182	1856.29	8.685	16.137	1858.083
Wheat	0.172	0.186	1079.26	0.163	0.176	1079.33	0.165	0.178	1081.731
Maize	38.458	67.969	1767.34	37.778	66.789	1767.93	38.387	67.908	1769.033
Buck Wheat	3.435	3.353	976.24	2.996	2.944	982.50	3.136	3.088	984.716
Millet	2.469	2.547	1031.65	2.114	2.181	1031.66	2.282	2.366	1036.893
Barley	0.420	0.451	1072.64	0.786	0.843	1072.69	0.401	0.461	1150.829
Pulses	5.346	5.101	954.21	10.002	9.611	962.61	5.239	5.039	961.82
Oilseeds	6.282	5.808	924.55	6.067	5.610	924.60	6.062	5.605	924.612

Source: Annual Reports 2017-18, 2018-19, 2019-20 Dept of Agriculture, Govt of Sikkim

As may be seen from the above table, the productivity in all major crops have shown an increasing trend but at a slow rate except for pulses which has shown a marginal decline.

Irrigation coverage

Irrigation Potential Created	28689 ha
Net Irrigated Area	11060 ha
Area Irrigated by Canals/ Channels	6940 ha
Area Irrigated by Wells	-
Area under Micro Irrigation	3400 ha
Area Irrigated by Tanks	NA
Area Irrigated by Water Harvesting Structures	720 ha
Area Irrigated by Other Sources (PMKSY)	2524 ha
Irrigation Potential Utilized (Gross Irrigated Area)	25055 ha

Soil and Climate

Agro Climatic Zone	Tropical	Temperate	Alpine
Height in Mtrs	MSL to 1700	1700 to 4300	4300 to 5000
Soil Type	Loamy sand to silty clay loam		

Land Utilization (Ha)

Total Area Reported	709600
Forest Land	584071.76
Area Not Available for Cultivation excluding fallow land	15115.63
Total Operated Area	90865.31
No. of operational holdings	71532
Land under Miscellaneous Tree Crops	7827

Cultivable Wasteland	3325
Current Fallow	5468.95
Other Fallow	4987
Net Sown Area (NSA)	70280.73
Total or Gross Cropped Area (GCA)	83975.33
Area Cultivated More than Once	13694.61
Cropping Intensity [GCA/NSA]	120%

Source : Dept. of Agriculture, Govt. of Sikkim

According to the land use pattern in the State, the net sown area (NSA) of the state constituted 9.90% of the total geographical area and 82.31% of the area is covered under forestland. The cultivable wasteland and current fallows are 8794 ha which offers good scope for crop diversification and promoting integrated farming systems approach.

Sikkim's rural economy is largely agrarian, based on the terraced farming and the cultivation of crops such as maize, millet, barley, oranges, tea and cardamom. Owing its hilly terrain and logistics challenges and other related infrastructure, Sikkim lacks large-scale industrial base.

1.5 Horticulture

Sikkim is blessed with abundant resources, manifested in rich bio-diversity, perennial water sources, diverse soil profile, extremely varied climate and wide ranging topographical variations. The extreme climatic diversity of the region gives rise to wide ranging agro-ecological situations ranging from sub-tropical in the lower valleys to alpine in higher elevations. Horticulture is one of the major economic activities of the people of Sikkim. Large Cardamom, ginger and turmeric are the principal crops while Mandarin orange, guava, banana are the principal fruits grown in the state. Sikkim is the largest producer of large cardamom, contributing over 80% of India's total production. Vegetables such as bean, garden pea, tomato, cole crops, radish, tuber crops; potato, are also extensively cultivated. There is immense potential for developing floriculture on commercial scale. The state is home to more than 500 species of exotic orchids. Sikkim is also a paradise of flowers like rose, lily, gladioli, anthurium, carnation, gerbera, alstroemeria and zantedeschia.

The following table details the area, production and average yield of major horticultural crops of Sikkim for the year 2019-20.

No.	Crops	Area (000' ha)	Production (000 tonnes)	Average Yield (Kgs/ha)
1	Fruits	19.48	49574.00	2544.45
2	Vegetables	17.96	92910.60	5171.70
3	Root & Tuber Crops	6.51	46048.00	7077.23
4	Spices	42.58	105518.30	2478.25
5	Flowers (2014-15)	0.241	254.715	-
	Total of Horticultural Crops except Flowers	86.53	294050.90	

(Source: Horticulture and Cash Crops Development Department, Govt. Of Sikkim)

The Government of Sikkim, under the Sikkim Organic Mission, is implementing the Central Sector Scheme entitled "Mission Organic Value Chain Development (MOVCD) for North Eastern Region" launched by the Ministry of Agriculture and Farmer Welfare, Government of India. The scheme aims at development of certified organic production in a value chain mode to link growers with consumers and to support the development of entire value chain starting from inputs, seeds, certification, to the creation of facilities for collection, aggregation, processing, marketing and brand building initiative. Various other missions like Horticulture Mission for North East and Himalayan States (HMNEH), National Bamboo Mission (NBM), National Mission on Medicinal Plants (NMMP) and National Mission on Micro Irrigation (NMMI) are in operation in the State.

1.6 Animal Husbandry

Predominantly a rural economy, animal husbandry sector is an extremely important activity to bring substantial improvement in the living standards as it absorbs risks for the farmers and acts as an additional source of income. Further, for the landless and marginal land owners at time animal husbandry is the only source of income. Overall, only 15% of total geographical area of the State is available for agricultural operation. With increasing population, per capita availability of land is constantly decreasing. Therefore, animal husbandry is essential for increasing income level of farmers.

Animal Population

Category of Animals	Total (2012)	Total (2019)	% of change
Cattle	140,690	146,908	4.42
Bovine	145,206	153,273	5.55
Buffalo	892	1,144	28.25
Yak	6,220	5,219	-16.10
Sheep	2,684	2,016	-24.89
Goat	110,870	90,506	-18.37
Pig	30,317	27,320	-9.89
Horses & Ponies	536	115	-78.54
Mules	4	2	-50.00
Backyard Poultry	437,645	576,353	31.70
Farm Poultry	63,127	12,371	-80.40

(Source: 20th Livestock Census 2019)

As is clear from the above data that the Animal Population is showing a mixed trend, wherein cattle/ bovine/ buffalo/ pig/ sheep and backyard poultry of the State has shown an increase. Thus, the main commercial animal husbandry population has shown a very positive growth.

1.7 Infrastructure

The state of Sikkim is blessed with tremendous hydroelectric power potential that has been worked out at 8000 MW Peak and a firm base of 3000 MW. Approximately seventy miles North East stretch of Sikkimes territory possesses a land gradient that lies roughly between 500 feet to 28,000 feet above mean sea level. Due to this amazing terrain Sikkim houses some of the most turbulent and swiftest rivulets in the world that is best suited for harnessing hydel power potential. There are 29 hydro-electric projects under private and public sector in the State which supports power generation. Long term plans are to produce electricity of over 6,500 MW by developing the hydropower potential of the upstream of the Teesta river basin.

Absence of rail and fully operational air network in the state has restricted the mode of communication only through roads. Sikkim has a network of 3668.78 km of roads including 512 kms National Highway, 732.61 kms of state highways, and 1424.17 kms of roads at district/ village/ other category. With the inauguration of the Pakyong Greenfield Airport in September 2018, Sikkim has been added in the domestic aviation map. Natural calamities including heavy rainfall and landslides affect the communication system on a regular basis especially during rainy season and the maintenance work continues round the year.

Education Department, a social sector unit may not contribute directly to the economic development of the State but has a pivotal role to play in the development of human resource and skills leading to generation of active and productive citizens who are able to contribute to the socio-economic progress and lead to the improvement in the level of living standard of the people. Considering the 86 amendment of Constitution of India that gives guarantee to education as

fundamental right, Government of Sikkim has emphasized in establishment and upgradation of educational institutions from primary level to technical discipline. Sikkim today boasts of one Central University, one Medical College, one Engineering College, one Pharmacy Institute, three Poly-technique Institutes and other colleges, computer institutes and schools.

1.8 Industry

The Gross State Domestic Product (GSDP) of Sikkim expanded at a CAGR of 15.86% between 2015-16 and 2019-20. The State has a huge potential for industry in areas where the State enjoys a comparative advantage. The major endowments of the State are its nature and natural resources, flora and fauna and the people. This enables the state to encourage MSME interventions focussing or supporting tourism and related activities. The State is comfortable in terms of availability of power as it has huge potential for hydel power. The prospects of cross border trade with neighbouring countries of Bhutan, Nepal and PRC poses both challenges and opportunities for the State. It is in this context that the importance of industry and trade lies in optimal use of its resources and making the most of the emerging opportunities to realize the State's potential of industry and trade which would ensure smooth transition of the State from being overwhelmingly dependent on the public sector to a vibrant economy based on private sector initiative, enterprise and entrepreneurship.

As of April 2021, Sikkim had a total installed power generation capacity of 677.83 MW, of which 169.65 MW was under the central sector, state utilities (412.11 MW) and private sector (96.07 MW). Of the total installed power generation capacity, 105.65 MW was contributed by thermal, 520.00 MW by hydro and 52.18 MW by renewable energy.

Total merchandise exports from Sikkim stood at US\$ 7.92 billion in FY23 (Until August 2022) and US\$ 18.91 billion in FY22. Drug formulations, biologicals, medical and scientific instruments, cereal preparations and miscellaneous processed items accounted for a majority share in the overall exports from the state. In FY22, total exports of drug formulation products from Sikkim stood at US\$ 11.27 million (~67%)...(Source: www.ibef.org)

Due to the initiatives taken by APEDA, the NE region witnessed an 85.34 percent growth in the export of agricultural products in the last six years as it increased from \$2.52 million in 2016-17 to \$17.2 million in 2021-22. The major destination of export has been Bangladesh, Bhutan, the Middle East, the UK and Europe.

The MSME Policy has been revamped in 2022 keeping in view the inherent requirements of the state. The MSMEs of Sikkim would be the cradle for the “Make in Sikkim” vision. This would be the nursery where small existing businesses have the potential to become world class players. Larger ventures will also have the advantage to establish themselves globally by attracting partners with technology and funds. The present MSME policy is framed to encourage this.

To assist young entrepreneurs by way of providing skill development training, all round incubation, funding access, subsidies, marketing assistance and in order to ensure that enterprises are firmly rooted and capable of sustained growth through sound business model development.

The objectives of the policy are as below:

- To promote the development of entrepreneurship within the state by increasing awareness, sensitization and exposure;
- To assist young entrepreneurs by providing skill development training, all round incubation, funding access, subsidies, marketing assistance in order to ensure that enterprises are firmly rooted and capable of sustainable growth through business model;
- To encourage MSME to upscale their businesses and promote from local to national and international enterprises. Attract investment in this sector from local entrepreneurs;

- To provide technological support to new and existing entrepreneurs to maximize their production;
- To promote employment among the local populace in businesses within the capability of MSME;
- To ensure that enterprises follow the green development pathways by adopting environment friendly measures;
- Benefits of specific incentives can be availed by Sikkim Subject/ Certificate of Identification/Residential Certificate holders and their descendents;

1.9 Handicraft

In order to bridge the gap in terms of income, education, region and particularly population living in cities/ towns and the remote villages, a development strategy has been planned and evolved taking into consideration the prevailing resources, the ground realities and the people's need and priorities. The long term perspective of the Directorate of Handicrafts and Handloom, Government of Sikkim is to develop Sikkim into a leading handicraft and handloom destination both in India and globally. *(Source: Website of Sikkim Govt. & Sikkim Statistical Journal 2015 -Govt. of Sikkim)*

1.10 Skill Training

Sikkim with a literacy rate of 81.4% has a well educated and young populace which can be skilled and developed to contribute towards the economy of the state. The Government of Sikkim has established ITIs/ Training institutions/ training facilities under all extension departments to impart training and capacity building initiatives towards the same. The State Government also encourages stakeholders in this area viz. CSR units/ development agencies/ international funding agencies to contribute towards skill building and support such endeavours.

Banking Profile

State - SIKKIM

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

Agency	No. of Banks/Soc.	No. of Branches			No. of non-formal agencies associated			Per Branch Outreach	
		Total	Rural	Urban	mFIs/mFOs	SHGs/JLGs	BCs/BFs	Villages	Households
Commercial Banks	22	146	93	53	0		112	10	977
Regional Rural Bank	0	0	0	0	0	0	0	0	0
State Coop. Bank	1	14	12	2	0		0	76	9215
Coop. Agr. & Rural Dev. Bank	0	0	0	0	0	0	0	0	0
MPCS	176	0	0	0	0	0	0	6	759
Others									
All Agencies	199	160	105	55			112	92	10951

2. DEPOSITS OUTSTANDING

Agency	No. of accounts					Amount of Deposit [Rs.Lakh]				
	31 Mar 19	31 Mar 20	31 Mar 21	Growth(%)	Share(%)	31 Mar 19	31 Mar 20	31 Mar 21	Growth(%)	Share(%)
Commercial Banks	NA					874963.59	706752.14	1096703.4	55.18	90.80
Regional Rural Bank						NA				
Cooperative Banks						173706.33	103317.46	111093.96	7.53	9.20
Others										
All Agencies						1048669.9	810069.6	1207797.36	49.10	100.00

3. LOANS & ADVANCES OUTSTANDING

Agency	No. of accounts					Amount of Loan [Rs.Lakh]				
	31 Mar 18	31 Mar 19	31 Mar 20	Growth(%)	Share(%)	31 Mar 19	31 Mar 20	31 Mar 21	Growth(%)	Share(%)
Commercial Banks	NA					765719.78	323224.68	820443.39	153.83	92.16
Regional Rural Bank										
Cooperative Banks						90914.17	69240.16	69817.56	0.83	7.84
Others										
All Agencies						856633.95	392464.84	890260.95	126.84	100.00

4. CD-RATIO

Agency	CD Ratio		
	31 Mar 19	31 Mar 20	31 Mar 21
Commercial Banks	87.5	45.7	74.81
Regional Rural Bank	NA		
Cooperative Banks	52.3	67	62.85
Others			
All Agencies	81.70	48.4	73.71

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

Agency	During 2020-21		Cumulative	
	Deposit	Credit	Deposit	Credit
Commercial Banks	2115		144108	
Regional Rural Bank	NA			
Cooperative Banks	925		26627	
Others				
All Agencies	3040		170735	

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	57540.96	98.05	7722.55	94.32						
Regional Rural Bank	NA									
Cooperative Banks	1145.31	1.95	464.89	5.68						
Others										
All Agencies	58686.27	100.00	8187.44	100.00						

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	64089	108537.28	169.35	55789.8	39176.25	70.22	54719.74	57540.96	105.15	114.90
Regional Rural Bank	NA									
Cooperative Banks	6191	2004.19	32.37	8016.7	787.56	9.82	7339.47	1145.31	15.6	19.26
Others										
All Agencies	70280.00	110541.47	157.29	63806.50	39963.81	62.63	62059.21	58686.27	94.56	104.82

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. '000]	Ach'ment [%]	Target [Rs.Lakh]	Ach'ment [Rs. Lakh]	Target [Rs.Lakh]	Target [Rs.Lakh]	Ach'ment [Rs. Lakh]	Ach'ment [%]	
Crop Loan	15080.00	1225.13	8.12	18014	3183.19	17.67	17741.7	3648.8	20.56	15.45
Term Loan (Agr)	9020.00	3995.85	44.30	12574	3758.98	29.89	11387.8	4538.08	39.84	38.01
Total Agri. Credit	24100.00	5220.98	21.66	30588	6942.17	22.70	29129.58	8187.44	28.10	24.15
Non-Farm Sector	16770.00	22140.15	132.02	20000	27710.1	138.55	17932.02	42120.02	234.88	168.48
Other Priority Sector	13660.00	11687.95	85.56	14120	6012.98	42.58	14997.61	8343.06	55.62	61.25
Total Priority Sector	54530.00	39049.08	71.61	64708	40665.2	62.84	62059.21	58686.27	94.56	76.33

CHAPTER – II

BANKING/ FINANCIAL SECTOR PROFILE

2.1 Banking Network

Sikkim has a network of 23 banks comprising of 12 public sector banks, 10 private sector banks and one State Co-operative Bank. As on 31 March 2021, total number of branches was 160 comprising 105 rural, 55 urban and semi-urban branches. Besides, there is an exclusive bank namely State Bank of Sikkim with 53 branches, which is not governed under BR Act, 1949. The population per bank branch is 3818.75.

Banking at a Glance in Sikkim State

Sr No	Agency	No	No. of branches
1	Public Sector Banks	12	104
2	Private Sector banks	10	42
3	StCB	01	14
	Total	23	160

Source: SLBC

2.2 Deposits

The position of Deposits raised by the banks for the last three years is as under:

(Rs. crores)

Sr	Banks	2019-20			2020-21			2021-22		
		Amt	Share %	Growth over previous year %	Amt	Share %	Growth over previous year %	Amt	Share %	Growth over previous year %
1	PSB	5189.22	40.58	-8.48	7207.59	59.67	38.9	8283.23	61.70	14.92
2	Pvt SB	1878.30	31.87	-39.01	3759.44	31.13	100.15	4120.37	30.69	9.60
3	SCB	1033.17	27.54	-40.52	1110.94	9.20	7.53	1021.72	7.61	-8.03
	Total	8100.69			12077.97			13425.32		

Source: SLBC

The quantum of deposit during 2021-22 has shown a y-o-y increase of 11.16% while, deposits in 2019-20 has shown a decreasing trend over the previous year 2018-19. The Public Sector Banks have shown the biggest recovery with a 14.92% increase with biggest market share of 61.70% followed by Private Sector Banks wherein deposits have increased by 9.60% with the market share of 30.69%. The St. Coop. Bank has shown a degrowth of 8.03% over the previous year and has lost the market share from 9.20% to 7.61%.

2.3 Advances

The position of Outstanding Advances of the banks (including credit from outside Sikkim) for the last three years is as under:

(Rs. crores)

Sr	Banks	2019-20			2020-21			2021-22		
		Amt	Share %	Growth over previous year %	Amt	Share %	Growth over previous year %	Amt	Share %	Growth over previous year %
1	PSB	2744.94	69.94	-60.02	7390.54	83.02	169.24	3833.62	57.51	-48.13
2	Pvt SB	487.31	12.42	-38.44	813.88	9.14	67.01	2127.42	31.91	161.39
3	SCB	692.40	17.64	-23.84	698.18	7.84	0.83	705.23	10.58	1.01
	Total	3924.65			8902.60			6666.27		

Source: SLBC

Overall advances have registered a y-o-y decline of 25.12% during 2021-22 over the previous year. The highest growth in share of advances has been made by the Private Sectors Banks at 161.39% covering an 31.91% of the total share. The quantum of advances by Public Sector Banks has shown

an decrease of 48.13% during 2021-22 as against the previous year. The share of advances by State Cooperative Bank during 2021-22 increased from 7.81% in 2020-21 to 10.58% in 2021-22 as their advances showed a marginal rise of 1.01% in 2020-21.

2.4 Credit Deposit Ratio

The C:D Ratio of banks as **on 31.03.2022 taking into** account the credit extended by them in the state stood at 43.8%. The CD Ratio after including the outside credit was 73.71%.

The CD Ratio with and without outside credit for the last four years are furnished below -

Year-wise Credit Deposit Ratio

Date	CD Ratio (without outside credit)	CD Ratio (with outside credit)
31.03.2017	42.60	92.70
31.03.2018	42.90	77.30
31.03.2019	42.20	81.70
31.03.2020	48.4	99.60
31.03.2021	43.8	73.71
31.03.2022		49.87

Source: SLBC

2.5 Performance of the Financial Institutions under Annual Credit Plan (ACP)

The performance of the State under Agriculture, Industry and Services/Tertiary Sector by all the financial institutions for the past three years 2019-20, 2020-21 and 2021-22 are indicated below:-

(Rs. crores)

Sector	As on 31 March 2020			As on 31 March 2021			As on 31 March 2022		
	Target	Achiev	% of Achiev	Target	Achiev	% of Achiev	Target	Achiev	% of Achiev
Agriculture	305.88	89.42	29.2	291.29	81.87	28.1	301.02	225.33	74.85
Industries	166.20	277.10	166.7	179.32	421.20	234.9	199.48	515.04	258.18
Tertiary	124.00	121.11	97.7	149.97	83.43	55.6	134.38	115.82	86.18
Total	596.08	487.63	81.80	620.58	586.8	94.5	634.88	856.19	134.86

Source: SLBC

2.6 Financial Inclusion Plan and other interventions in the Financial Sector

All the Six districts of the state are identified as Special Focus Districts (SFDs) and are hence eligible for enhanced budgetary support from Government of India's financial inclusion support under the Financial Inclusion Fund. The network of 160 branches in the state is further supported by 112 CSP/ BCs appointed by variopus banks. The state also has six Financial Literacy Centres (FLCs) maintained by SBI, SISCO Bank Ltd. and Central Bank of India which conducts FLAPs and provides required counselling for the people in the area.

NABARD has adopted a differentiated strategy since 2019-20 to provide focused FI interventions comprising 14 schemes on tap, in order to address regional and institutional inadequacies and bring about inclusive and equitable financial inclusion across the country/state. The 14 schemes on tap cover the following areas:

1. Financial Literacy Programmes
2. Banking Technology Adoption
3. Regulatory Infrastructure Support
4. Support for Connectivity and Power Infrastructure

5. State Level Technical Committees have been formulated to develop and monitor the post CBS Technology Adoption by the RCBs.
6. Higher engagement with partner banks especially Small Finance Banks (SFBs), Payment Banks (PBs) has been taken up.

The state has one RSETI being run by SBI, the Lead Bank. During 2021-22, 23 individuals were trained by SBI RSETI taking the cumulative number of trainees to 3326 and also, 72 trainees were confirmed to be settled under wage/ self employment taking the cumulative number to 2274 individuals.

Under the Stand Up India Scheme (SUI), 246 individuals have been disbursed bank credit to the tune of Rs. 35.38 crores. Under the Pradhan Mantri Mudra Yojna (MUDRA) 5481 accounts have been disbursed bank loan of Rs. 87.80 crores in the state.

The Sikkim State Cooperative Bank Ltd. (SISCO) migrated to Core Banking Solution (CBS) platform with support from NABARD and their system was enabled in 2012. Subsequently, NEFT & RTGS services were started in 2016, DBT services were started in 2016 and Public Finance Management System (PFMS) platform became operational in 2018. The SCB was awarded scheduled status by RBI during 2020-21 and the bank has undertaken various initiatives viz. mobile banking, green PIN system for its clients during the year.

NABARD supported Demo Mobile Van to SISCO Bank Ltd under FIF



NABARD has supported purchase of 03 Demo vans for SISCO Bank under FIF. The vans successfully conducted demonstrations number of banking technology days in remote unbanked area of the state.

CHAPTER - III

NABARD's perception on the development perspective of the State

3.1 Role of NABARD as a financial institution with development banking approach

Rural development is a vast sector that involves multifarious activities related to rural infrastructure, institutions of governance, and livelihood opportunities. The key subsectors are agriculture, horticulture, allied activities, MSME, Banking services, health services, water supply, sanitation, housing, roads, wage employment, self-employment, and decentralization.

NABARD touches almost every aspect of rural economy through its developmental and financial interventions. These include providing refinance support to Banks, assistance for building rural infrastructure, preparing district level / State level credit plans and guiding the banks in achieving these targets, supervising rural Cooperative Banks & Regional Rural Banks to help them develop sound banking practices & on-boarding them to the CBS platform and adopting various banking technologies. The other important interventions range from designing new development schemes to their implementation as well as other GoI sponsored schemes, from training handicraft artisans to providing them a marketing platform for selling these articles, from promoting financial inclusion / digitization of banking transactions to promotion of micro credit delivery models along with capacity building and infrastructure. Thus, NABARD balances its finance and development functions in sync with the financial and real sector challenges relating to agriculture and rural development.

In Sikkim, NABARD has provided financial support in last 40 years in the form of loans and grants. This investment together with the non-financial interventions in terms of facilitating credit planning, supervision and development of cooperative banks, formation and capacity building of ground level institutions like SHGs, Farmers Producer Organizations, Farmers Clubs, activities towards sustainable livelihoods, developing entrepreneurship, addressing the climate change issues etc. reflect the substantial extent of contribution made by NABARD in the progress of the state.

Although the development perspective is part of the State Focus Paper, which is an integration of the potential linked credit plans prepared for the districts, an attempt is made to look beyond the projections through numbers and to reach out to the priorities of the State for a sustained income generation for the rural population, particularly farmers. For this, NABARD has been continuously striving to evolve policies and enabling environment through discussions, studies, workshops, field observations and feedback. Thus, this is a shared development perspective with three dimensions, viz., Agri. & Rural Development, the bankers and the State with a view to providing ideas for further collaborations for implementation. The primary objective of this chapter is finding out ways and means for convergence among the aforesaid three stakeholders.

3.1 Capital Formation in Agriculture and Increase in production and productivity

The major endowments of the State of Sikkim are its nature and natural resources, flora and fauna, its people and the traditional practices. Keeping these inherent aspects in view, GoS has capitalized on 100% organic agriculture and a green Sikkim. This, however, necessitates development of critical infrastructure, which is efficient and actually put to use by those for whom it is meant. This should fetch much higher prices as compared to the non organic products. The onus largely remains on both State and Central Govts. to undertake investment activities under agriculture infrastructure and other long term agriculture related activities.

It is pertinent to mention that out of the total geographical area of 7096 sq. km., only 10.5% is available for cultivation in the State of Sikkim. The net cultivated area has remained around

70,000 ha for the last decade or so, while the net cropped area has decreased due to diversion to non-agricultural uses like development of infrastructure.

Capital formation in agriculture is of critical importance for the sustainability of agricultural growth. It has been observed that most of the capital formation activities under the sector by private sector which happens through bank credit is by tagging with subsidy based schemes of either GOI or State Govt.

The small and marginal holdings in the State can be profitable if utilised optimally for cultivation of high value cash crops. Diversification of agriculture to high value off-season vegetables and horticulture is the best solution and offers potential for investments in agriculture in Sikkim.

Food crops followed by cash crops still remain the main source of livelihood for majority of the farmers. Large cardamom, Oranges, cherry pepper and ginger are the main cash crops in the state along with vegetables. Any new infrastructure planned needs to be concentrated in these products to fetch premium process to farmers.

A joint venture between IFFCO and Govt. of Sikkim to provide agri-inputs and services for organic farming along with providing facility of processing and marketing the organic produce has been undertaken, which is likely to become operation by the end of 2022. Besides organics, the joint venture will explore business opportunities in organic seeds, bio-pesticides, bio-fertilisers, organic fertilisers, organic plant growth promoters, organic food processing, organic horticulture and any other opportunity that furthers the purpose of promoting organic farming in the state/country. This initiative is expected to bring in a host of activities which if appropriately implemented will lead to a planned capital formation in agriculture activities and thus result in increase in efficiencies in the entire value chain. Subsequently, upscaling can be planned and effected.

Govt. of Sikkim has constructed around 63 storage godowns of which 6 are under Dept. of Horticulture and the remaining 57 are under the Dept. of Food and Civil Supplies. The total capacity is 24811 MT. It is understood that this storage space is mostly used for the imports coming into the state. Being a hilly state with challenges of outreach, farmers need decentralized storage structures which are within reach. This also applies to input processing as well as post harvest storage.

Agri Infrastructure Fund (AIF) with a facility of Rs. 01 Lakh Crore Fund has been created for development of agriculture infrastructure projects at farm-gate and aggregation points (such as cooperative societies and Farmer Producer Organizations). Eligible beneficiaries include Primary Agricultural Co-operative Societies, Farmers Producer Organizations, Agriculture Entrepreneurs, Start-ups. Banks may consider financing various suitable projects under AIF in the State.

There is a need for policy incentives for setting up small private market yards facilitating electronic and sample based horticulture produce. This will attract bulk buyers, processors and exporters and will fetch a premium price to the farmers.

Public sector investment in irrigation, rural roads, power, telecommunications, marketing, infrastructure, research, and extension services results in high growth of the agricultural sector and reduction in poverty. The investment strategy in agriculture should be guided by the efficient and equitable use of resources with high payoffs. There is also a need to accelerate the supply response in agriculture and save on large wastages in the supply chains. Large investments in supply chains, research and development, logistics processing and organized retailing are required to achieve this. Private sector investments can be leveraged through open and more investor-friendly policies, on one hand and farmer producer organizations (FPOs) on the other hand. These two will reinforce each other for a big push in agriculture.

Government of India has created the Long Term Rural Credit Fund (LTRCF) with NABARD to enhance the refinancing operations to Rural Cooperative Banks and Regional Rural Banks to meet the long term investment credit needs in agriculture as also to channel flow of credit to credit deficient districts. Under this, NABARD extends refinance at concessional rate of interest against agricultural term loans extended by the Cooperative Banks and RRBs to farmers to improve investments in agriculture sector. In Sikkim, the assistance has been provided to SISCO Bank.

Besides these, three Special Refinance Schemes are also being implemented by NABARD: -

- i. Refinance Scheme for Transformation of Primary Agriculture Cooperative Society (PACS) as Multi-Service Center (MSC)
- ii. Refinance Scheme for Micro Food Processing Enterprises
- iii. Refinance Scheme for Water, Sanitation, Hygiene (WASH) related activities

In Sikkim, NABARD has supported the 23 MPCs under PACS as MSC Scheme with a total refinance support of Rs. 1.82 Crore. This concessional refinance will help these MPCs to get credit at 4% RoI and diversify the business and also create assets for benefit of the members.

3.2 Financing of SF/ MF, Oral Lessees/ Tenant farmers/ Share Croppers etc.

Small and marginal farmers accounting for more than 79% of the total land holdings but possess only 39% of the area. The average land holding of small/marginal farmer is 0.62 Ha.

Sikkim being declared an organic state, in order to conform to quality/ organic norms, all farmers in the state are supported by the Govt. of Sikkim in terms of supply of inputs, planting materials and subsequently marketing wherever required.

The banking sector has been sanctioning KCC loans to small and marginal farmers. Efforts are on for popularizing of financing of Oral Lessees/ Tenant farmers/ Share Croppers etc. through the JLG mode and sensitization workshops/ web programs are being regularly conducted by RBI and NABARD for bank branch heads and other stakeholders.

It is imperative that Animal Husbandry and other allied activities are critical for increasing the income of landless and small/marginal farmers. Therefore, as per the announcement of GoI, in addition to the ongoing Kisan Credit Card (KCC) Scheme for Crop Loan, KCC Scheme is also extended for Animal husbandry, dairy and fisheries activities in the with coordinated efforts of all stakeholders under the guidance of NABARD. The Milk cooperative societies in the State are being involved in the programme through Sikkim Milk Union and Govt. Department so that the awareness and benefits can be extended to a wider population and objective of saturation of KCC is achieved.

A sub-committee of SLBC has also been formed to be guided by NABARD in agriculture credit and hence will help in increasing financing to SM&F. NABARD is also taking steps for saturation of all PMKSY beneficiaries.

3.3 KCC/ Rupay KCC, Crop Insurance, Land records digitization and creation of charge

The position on issuance of Kisan Credit Cards (KCC) in the State as on 31.03.2022 is furnished below.

Name of Bank	KCC ISSUED DURING THE QTR		OUTSTANDING KCC as on 31.03.2022	
	No	Amt (Lakh)	No	Amt (Lakh)
PSU Banks	2607	5009.7	15692	12475.11
Pvt. Banks	655	1757.77	2887	3139.38
Cooperative Bank	636	370.67	4531	1476.74
GRAND TOTAL	3898	7138.14	23110	17091.23

The banks in the state issue KCC/ Rupay KCC cards to KCC loan account beneficiaries. However, it has been observed that the farmers are yet to understand the unique benefits that KCC offers and they mostly withdraw the entire amount to the extent of limits granted under KCC in one go.

The Digital India Land Records Modernization Programme (DILRMP) is under implementation in the state as launched by Government of India in August 2008, aimed to modernize management of land records, minimize scope of land/property disputes, enhance transparency in the land records maintenance system, and facilitate moving eventually towards guaranteed conclusive titles to immovable properties in the country. The major components of the programme are computerization of all land records including mutations, digitization of maps and integration of textual and spatial data, survey/re-survey and updation of all survey and settlement records including creation of original cadastral records wherever necessary, computerization of registration and its integration with the land records maintenance system, development of core Geospatial Information System (GIS) and capacity building.

The main objective of the DILRMP is to develop a modern, comprehensive and transparent land records management system in the country with the aim to implement the conclusive land-titling system with title guarantee. Nodal department under Government of Sikkim for the above work is the Land Revenue and Disaster Management Department.

Physical Progress in Sikkim: (Data Source - dilrmp.gov.in)

Sl. No.	Component	Completed (Equal to or above 95%)	Ongoing (Above 0% and below 95%)
(1)	(2)	(3)	(4)
1	Computerization of Land Records(CLR)	3 States/UTs : Gyalshing, Namchi, SORENG	3 States/UTs : Gangtok, Mangan, PAKYONG
2	Digitization of Cadastral Maps		
3	Integration of Cadastral Maps with RoRs		
4	Computerization of Property Registration (CPR)	4 States/UTs : Gangtok, Gyalshing, Mangan, Namchi	
5	Integration of Land Records and Property Registration	4 States/UTs : Gangtok, Gyalshing, Mangan, Namchi	

3.4 Climate Change – Adaptation and Mitigation

Climate change is one of the most important areas of concern for India. It is foreseen that in the medium-term (2010–2039), climate change will have significant negative impacts. It is predicted that yields will fall by 4.5–9 per cent, depending on the magnitude and distribution of warming effect. This loss in yield roughly translates to 1.5 per cent of the GDP per year. Global warming is likely to lead to a decline in milk production of 15 MMT by 2050. It may also affect fish breeding, migration and harvests. New and innovative measures to adapt to climate change include: ✓ changes in agricultural practices to improve the fertility of soil and enhance carbon sequestration;	NAFCC Project of NABARD - Dhara Vikash Work
	10,000 Litre Water Tank

<ul style="list-style-type: none"> ✓ changes in the management of agricultural water for more efficient use of water; ✓ agricultural diversification to enhance resilience in the face of climatic change; ✓ development of agricultural science and technology, agricultural advisory services, and information systems; and ✓ improving risk management and crop insurance. 	
---	--

<p>Innovative policies include:</p> <ul style="list-style-type: none"> ✓ changing investment allocation within and across sectors, investments ✓ increasing the focus on risk-sharing and risk-reducing ✓ improving spatial targeting of investments, ✓ withdrawing the detrimental policies that will exacerbate the impacts of climate change, and ✓ reducing greenhouse gas emissions from agriculture and increasing the value of sustainable farming practices through the valuation of carbon and other forms of agricultural ecosystem services, such as water purification and biodiversity. 	Fodder Plantation
---	-------------------

The pattern of flows in the Himalayan Rivers will change due to the change in the receding glacier pattern. The maximum temperature in Gangtok has been rising at the rate of 0.2° C per decade and the annual rainfall is increasing at the rate of nearly 50 mm per decade. Number of rainy days is declining. Climate change related studies based on the analysis of the data for Sikkim month-wise, season wise and annually from 1957 to 2005 indicates a trend towards warmer nights and cooler days, with increased rainfall except in winter.

The Government of Sikkim has formulated 'State Action Plan on Climate Change (2012-2030)', the action points of which are to be implemented suitably by all stakeholders. NABARD being a National Implementing Entity (NIE) for Climate Change Adaptation Fund of the UNFCC and the Green Climate Fund (GCF), National Adaptation Fund for Climate Change (NAFCC) of GoI, aims to leverage finance for addressing concerns related to climate change in the agricultural and rural livelihood sector in the state through suitable implementing agencies.

Priority sector identified and major interventions suggested

Due to rise in temperature, the livelihoods of rural people will be adversely affected. Efforts or interventions which minimizes the impact of climate change will be treated as adaptation measures. The adaptation strategies / interventions identified for the adaptation to climate changes in the State are:

- Diversification of agriculture to climate resilient crops.
- Development of vulnerable areas through springshed / watershed approach.
- Management of soil health and prevention of top soil erosion
- Ruminant animals emit methane which can be addressed by feeding practices (use of Chaff

cutter, proper rationing or balanced diet), cow dung management (use of Gobar Gas plant and linkage with vermi compost).

- Use of solar energy
- Water-smart technologies like drip / sprinkler irrigation
- Rainwater harvesting structure, cover-crop method, greenhouse, reuse wastewater
- Supplementing the income of small & marginal farmers through dairy, etc.
- Diversification of cropping pattern as per rising temperature

3.5 Farmers' Producers Organization/ Farmers' Collectives

Government of India launched the Central Sector Scheme for Formation and Promotion of 10,000 FPOs in July 2020. The scheme envisages promotion of 10,000 FPOs across the nation in three years and providing them handholding support upto 5 years. A Business Plan Linked development in both medium and long-term period to be the hallmark of strong business growth for FPO.

Govt. of Sikkim's Intervention –

- Sikkim has been a front runner in aggregation of farmers into FPOs. The state has mapped 76 clusters for FPO promotion and has already promoted 37 FPOs under the Mission Organic Value Chain development (MOVCD) covering about 8500 (10000) farmers in the first phase. The next set of 28 FPOs have now been taken up.
- These 37 FPOs (MOVCD) specialize in organic cultivation, aggregation and are in the process of undertaking primary level grading and processing.
- Gearing up for implementation of the CSS for formation and promotion of 10,000 FPOs the Dept. of Agriculture, GOS has undertaken a mapping exercise of potential cluster areas wherein the farmers can be aggregated into FPOs. There is a potential of formation of around 80 FPOs in the State and keeping in view the experience of FPOs in the past, it has been desired at all levels that a single FPO may have members from one or two GPUs only because of the geographical constraints. Since the clusters have been saturated, it is clear that FPOs are yet to be formed in few left out clusters.
- NABARD and Govt. of Sikkim are focusing more on the nurturing of these FPOs and helping them in all possible ways of business preparation, credit facility and value chain development. A total of 76 such cluster areas have been identified out of which in 28 clusters FPOs have been promoted and additional 28 are been planned.

Initiatives of NABARD

- So far NABARD has also promoted 18 FPOs as per the following details:
 1. FPOs under CSS FPO Scheme – 06
 2. FPOs under NABARD's other existing schemes: 12 (including 4 FPOs in dairy sector and 02 FPOs in Fisheries sector)
- The 06 Single Activity FPOs are the first set of FPOs in animal husbandry sector in the state.
- In addition, to the aggregation of inputs, the FPOs are involved in production and marketing of seasonal organic vegetables, interventions in dairy, basic processing of pulses, turmeric/ ginger/ cardamom.
- Some of these FPOs have been successfully linked with marketing interventions involving retail outlet, exhibitions and buyer seller meet.
- NABARD has provided Rural Mobile Vans, Rural Marts to MPCs/SHGs to support their business activities.

Critical issues & challenges in building sustainable FPOs

- i. Inadequate technical skills and lack of awareness about the business model of FPO and about regulatory compliances
- ii. Non-availability of experienced, trained and professionally qualified CEOs
- iii. Topographical challenges and lack of interest of members
- iv. Inadequate availability of affordable credit facility matching with life cycle needs of FPO
- v. Poor market connect between FPOs and consumers/ agri-industry, market players, large retailers, processors, etc. on account of inadequate agri-logistics in rural areas.

Way Forward

- i. Complete value chain may be developed for major commodities with FPOs as back-end enabler for production, aggregation, value addition and marketing of produce
- ii. There is a need to have FPO Guidance Centers / Cells in each district with technical support of the Agricultural Universities/ ICAR Institutions.
- iii. Digital linking of FPOs with buyers, sellers and transport agencies for real time and online marketing of farm produce for better price realization may be encouraged along with implementation of internal control system.
- iv. Guidance to FPOs on audit compliances.
- v. Interest subvention facility on working capital & term loan requirement for FPOs may be considered by State Government / Central Government.
- vi. FPOs may be allotted land and support may be given for creation of storage and other facilities for aggregation and value addition.
- vii. Banks may develop/ innovate loan products to meet the credit needs of FPOs and cover them under credit guarantee schemes.
- viii. SLBC may consider incorporating FPO financing as a separate sub-target and the progress may be monitored.

3.6 Micro, Small and Medium Enterprises (MSME)

The State has emerged as the most popular hill destination within the country with an annual inflow of 12 to 14 lakh tourists against its own population of 6.10 lakh (2011 Census). Activities related to tourism mostly travel/ stay / related services have taken off in a huge way involving funding at various levels viz. State and Central Governments in development of infrastructure related to connectivity, private investments in communication technology and retailing, banks and MFIs alike in micro, small and medium level business catering to tourism. The state has consistently overachieved the targets set in MSME sector in terms of GLC flow.

With the industrialization of State since 1996, Sikkim now has more than 100 large industries. For promotion of the tiny, small scale and medium scale industries together with large scale industries, the State Government enacted the “Sikkim Industrial Promotion and Incentive Act, 2000”. While industrial development focused on the large industries in the last two decades, the Micro, Small and Medium Enterprises (MSME) have lagged behind. The role of MSME in the economy of India is well known as it contributes 30% to the GDP of the country (Year 2022) and accounts for more than 45% of the total industrial production of the country. The MSME sector will be essential to achieving the ambitious goal of a US\$ 5 billion economy with a 25% contribution from the manufacturing sector.

There was an urgent need to formulate a State MSME policy to encourage local youth to actively take up entrepreneurship. Hence State Government has formulated a “SIKKIM MICRO, SMALL AND MEDIUM ENTERPRISES POLICY, 2022” to encourage more of the local youth to take up entrepreneurship and establish themselves. Moreover, in the hilly terrain State where space is a

limiting factor, MSMEs are more suitable as they require less space when compared to large industries.

The State is comfortable in terms of availability of power as it has huge potential for hydel power. The prospect of opening up of the border trade through Nathula poses both challenges and opportunities for the State. It is in this context that the importance of industry and trade lies in optimal use of its resources and making the most of the emerging opportunities to realize the State's potential of industry and trade which would ensure smooth transition of the State from being overwhelmingly dependent on the public sector to a vibrant economy based on private sector initiative, enterprise and entrepreneurship.

The Prime Ministers Employment Generation Programme (PMEGP) is under implementation in the state through Khadi and Village Industries Commission (KVIC), Sikkim Khadi & Village Industries Board (SKVIB) and District Industries Centers (DICs). Under the Scheme, subsidy in the range of 15-35% is provided for establishment of micro and small enterprises. Through this scheme and other interventions from the Ministry of Micro, Small and Medium Enterprises, GoI, the MSME sector is expected to grow at a higher rate in the years to come. The Pradhan Mantri Mudra Yojana (PMMY) is also under implementation in the state, which is also facilitating the growth of MSME sector.

The State Bank of India has promoted a RSETI which is situated in Gangtok, the institute is catering to the training needs of entrepreneurs. The state has 03 ITIs which are also imparting 'skill trainings' to unemployed youth. The Directorate of Handicrafts & Handloom, Government of Sikkim has established 32 different centers across the state which is imparting trainings to suitable candidates. Through these trainings and through loan support from banks, the youth in the state are setting up their own enterprises.

NABARD has contributed in skilling and capacity building of the rural unemployed since its inception. During last couple of years, dedicated capacity building and training initiatives have been undertaken for 265 beneficiaries covering SHG members and rural unemployed in different areas viz. animation, tailoring, incense stick making, sanitation, production of sanitary napkin. Additionally, NABARD's projects like Springshed based watershed Development Project, Wadi development projects (TDF), promotion of Farmers Promotion Organisation have inbuilt training components wherein all households covered under the project undergo training on the project components.

3.7 Micro Credit

Rural women in the state have largely benefitted from the SHG mode of credit linkage. Presently, the Sikkim State Rural Livelihood Mission is implementing the GOI umbrella program of National Rural Livelihood Mission and is the nodal agency overlooking of promotion and formation of SHGs in the state. Their efforts are upheld by other funding and welfare agencies by supporting training and capacity building programs for progressive SHGs. Presently, banks have credit linked a total of 1068 SHGs in 2021-22 with an amount of Rs. 2000.28 lakh.

Concerns

Despite of having 5244 savings linked SHGs in the state, only 1068 are credit linked as on 31.03.2022. (Source: SLBC, March 2021-22 data).

NABARD's initiative in revisiting the programme and bringing forth need based training /capacity building programmes for bankers and SHG members with the involvement of Banks and NGOs is expected to address this issue and give a boost to the sector.

Roadmap for the Future:

- All the deliverables under NRLM to be monitored closely by SLBC/DLCCs
- Bank branches may participate actively in SHG-BLP.
- Dormant SHGs to be identified and revived.
- The capacity building and training programmes for the stakeholders are required

- especially in the context of entrepreneurship development of SHGs through credit.
- Convergence with other Government programmes may be intensified by proper selection of SHGs and their activities.

Initiatives of NABARD:

3.7.1. Financial Inclusion: NABARD is providing support to Banks for conducting financial and digital literacy camps and well as Village Level Camps for increasing awareness and credit linkage of SHGs. Further, NABARD also organizes leadership building programmes for SHGs and workshops for Banks.

3.7.2. Joint Liability Group: NABARD piloted and developed an effective credit product for mid segment clients viz. Joint Liability Groups (JLG). The product relies on mutual guarantee of clients like small/ marginal farmers, tenant farmers, oral lessees, share croppers, micro entrepreneurs, who have no conventional collateral to offer. Banking system need to reorient their policies and products towards financing JLGs, especially of share croppers, oral lessees tenant farmers and landless farmers. Focus on promotion of JLGs on a cluster basis is needed so that these JLGs will have the scope for upscaling to entrepreneurs.

3.7.3. Micro Enterprise Development Programme (MEDP): To develop entrepreneurship abilities among SHG members, NABARD has sanctioned Micro Enterprise Development Programs (MEDPs) in the state as on 31.03.2022. NABARD provides grant assistance to implementing agencies (NGOs) for providing training to SHG members, enabling graduation of SHGs to next higher level of livelihood. These interventions are imperative for increasing income levels and also credit absorption capacities of rural poor organized into SHGs.

3.7.4 Livelihood and Entrepreneurship Development Programme (LEDP): LEDP is a holistic intervention mechanism to promote livelihoods through participatory approach based on local demand, skill training, proper handholding and marketing support. Since the inception of the programme, 5 LEDP projects have been sanctioned by NABARD in the state for providing training programmes to 510 participants and promoting sustainable livelihood among rural masses.

3.7.5. Village Level Programs (VLPs) on SHGs: As a part of NABARD efforts for rejuvenation of SHG Bank Linkage program in a mission mode, in addition to training of Branch Managers and conduct of block level programs in DDM districts, Village Level Programs (VLPs) on SHG Bank linkage programs are being organised intensively since the year 2015-16. During the year 2022-23, 50 VLPs have been sanctioned to be conducted by various bank branches in Sikkim. SLBC has also been requested to issue suitable instructions to Banks to organise VLPs as per the guidelines.

3.7.6. Interest Subvention Scheme: NABARD is implementing the Interest Subvention Scheme for Women SHGs under DAY-NRLM for RRBs and Cooperative Banks.

3.8 Rural Infrastructure and linkage support

Because of its hilly terrain developing and maintaining adequate linkage infrastructure is a huge challenge for the state government. Today, the state boasts of a road network of 3668.78 kms and 240 bridges and 11863 culverts. Pakyong Airport is a Greenfield airport under Regional Connectivity Scheme (RCS) at Pakyong town near Gangtok, the state capital of Sikkim, India. Spread over 201 acres, the airport is located at Pakyong town about 31 km south of Gangtok. At 4646 ft, Pakyong Airport is one of the five highest airports in India.

Cumulative projects sanctioned under RIDF in the State as on 15.12.2022

(Rs. Crore)

Sr No	Activity Name	No of proj	Sanctioned Amount	Disbursed Amount
	Flood Protection Measures		17.03	17.02

Agri & Allied Sector	Minor/Micro Irrigation		25.68	26.93
	Weirs/Bunds	1	1.1	0.93
	Mandi	1	1.25	0.9
	Market Yard	1	12.83	12.82
Rural Connectivity	Rural Bridges	25	3.34	2.32
	Rural Roads	198	778.67	525.33
Social Sector	Rural Education Institutions – Primary Schools	128	52.01	47.41
	Toilet Blocks in Schools Specially for Girls	43	1.76	1.76
	Rural Drinking Water Supply	43	77.26	77.18
	Total		970.93	712.60

NABARD Infrastructure Development Assistance Programme (NIDA) designed by NABARD to support State Governments and other State owned Organisations over and above the borrowing power limit. NIDA aims to fund Rural Infrastructure projects by providing assistance to State Governments outside of RIDF on flexible terms through direct financing, based upon the appraisal of the specific project. NABARD has sanctioned an amount of Rs. 214.31 Crores (under NIDA I and II) for development and strengthening of Road Infrastructure and released an amount of Rs.214.31 crores till date. The projects are implemented through SIDICO.

3.9 Financial Inclusion

Financial Inclusion is the process of ensuring access to appropriate financial products and services needed by all sections of the society in general and vulnerable groups such as weaker sections and low income groups in particular at an affordable cost, in a fair and transparent manner by mainstream institutional players.

In order to accelerate financial inclusion to promote economic wellbeing, prosperity and sustainable development, an approach paper named “National Strategy for Financial Inclusion 2019-2024” has been prepared by RBI. Under this paper, RBI has issued guidelines for financial literacy through Financial Literacy Centres (FLCs) to be set up at block level and rural branches of banks to spread financial literacy.

The important milestones as per this framework are as under: -

- Increasing outreach of banking outlets of Scheduled Commercial Banks /Payments Banks/Small Finance Banks, to provide banking access to every village within a 5 KM radius/hamlet of 500 households in hilly areas.
- Strengthen eco-system for various modes of digital financial services in all the Tier-II to Tier VI centres to create the necessary infrastructure to move towards a less cash society **by March 2022.**
- Leverage on the developments in fin-tech space to encourage financial service providers to adopt innovative approaches for strengthening outreach through virtual modes including State mobile apps so that every adult has access to a financial service provider through a mobile device **by March 2024.**

Financial literacy and education are bedrocks of a vibrant financial system; it is important to make sustained efforts in this direction. As per the NSFI for 2019-2024, the reach of Centers for Financial Literacy (CFL) will be expended to every block in the country **by March 2024.**

In Sikkim, Banks have deployed 108 Business Correspondent Agents in sub service areas to provide Banking services to the far-flung areas where Brick and Mortar Branches are not financially viable. Further, NABARD has also supported through 120 Cash Kendras in remote areas.



3.10 Strengthening of Cooperative Credit Institution

Cooperatives are still considered the most appropriate institutions for purveying credit to farmers owing to their outreach and proximity. However, the cooperative credit structure in the State suffers from low coverage and various bottlenecks, rendering its members devoid of any effective credit support from them for their developmental needs. Most of the 178 PACS of State have been working as either stores or fair price shops on stand-alone basis with not much of on-lending to their members either from their own resources or by borrowing from the higher financing agency, barring a few which are providing crop loans to their members. All the farmer members of PACS need to be covered under ST SAO so as to extend crop loan at concessional interest rate of @ 7% and be covered under GOI scheme of interest subvention. The lack of issue of KCCs by PACS to their members needs to be addressed through extensive awareness campaigns.

PACS, being the link between farmers and the bank, need to be strengthened. The business development cell of PACS is being strengthened by NABARD so that they can evolve has to be strengthened through establishment of multi service centres. They should also prepare business development plans. PACS may be encouraged to increase term loan and take up diversified business activities like trading of various farm equipment, custom hiring of farm equipment's and cattle feed, etc.

NABARD has supported this cause through its NABARD has approved a Comprehensive Support Plan for conversion of 40 MPCS as MSCs with an outlay of Rs. 113.21 lakhs and committed a grant assistance of Rs. 90.57 lakhs. Further, a BDPIC project has been sanctioned with an outlay of Rs. 82.50 lakhs and committed a grant assistance of Rs. 66.00 lakhs.

3.11. Transformation of Primary Agriculture Co-operative Society (PACS) as Multi Service Center (MSC) – Special Refinance Facility

With a view to rejuvenating Primary Agriculture Co-operative Societies (PACS), the grass root level co-operative institutions meeting the credit requirement of the farmer members, NABARD has undertaken many initiatives. An important such initiative is “PACS as MSC” scheme under

which PACS are supported through a mix of concessional refinance @3% and grant support through StCB/DCCBs for undertaking infrastructure and business development activities, to be able to cater to their members' multifarious requirements. The scheme envisages enabling PACS to be able to meet credit plus requirements of the members as "One Stop Shop".

Further, with the Agriculture Infrastructure Fund (AIF) scheme under Atmanirbhar Bharat initiative of GoI, for establishing decentralized farm-gate Post Harvest Management infrastructure, wherein PACS have been included as one of the eligible institutions for interest subvention, PACS can now play a major role in physical and financial supply chain of commodities by working as spokes to the Gramin Agriculture Markets (GrAMs).

Eligible Activities

- Agro-storage Centres, Setting up of Cold Storage, Agro-service Centers, Agro-Processing Centres, Agri-Information Centre, Agri-transportation & Marketing facilities, Consumer Store & Other Miscellaneous activities
- Any Other Post-harvest management infrastructure meeting the value chain requirement of commodities in the catchment area.

Nature of Support from NABARD

- Technology support
- Managerial support
- Capacity building of members and PACS
- Brand promotion and market promotion.

In Sikkim, NABARD has supported the 23 MPCs under PACS as MSC Scheme with a total refinance support of Rs. 1.82 Crore.

3.9 Doubling of Farmers' Income

Suggestions for doubling farmers' income in Sikkim:

The probable initiatives for doubling of farmers' income in the State are given below:

- a) Diversification / expansion of area from traditional crops to commercial crops
- b) The farmers shall be motivated to produce organic vegetables and enroll themselves in tracenet / internal control system for getting premium prices for certified organic products
- c) Checking soil erosion
- d) Increase in productivity and quality of all major crops through high yielding
- e) Development of climate resistant varieties
- f) Promotion of high value horticulture crop
- g) Adoption of precision farming practices (Poly Houses and Micro Irrigation).
- h) Post-harvest management, promotion of more CA storage and efficient market
- i) Connectivity and linkages to national Agri-market portal.
- j) A strong research extension interface directed towards problems oriented research programmes. Research projects to be identified and funded in problem areas.
- k) Extension reforms through public-private partnership.
- l) Agro processing and value addition.
- m) Promotion of supplementary income generation activities- Dairy, Bee keeping, Off farm sector activities: and
- n) Provision of crop insurance to all farmers.

3.12.1 Recent Initiatives taken by the State Govt. in realizing this goal

GoS is shifting the development focus to rural areas and is strengthening all the rural institutions including that of Panchayati Raj and extension services. Further, GoS is also identifying the products which can be a game changer in the rural areas and are accordingly providing incentives to the farmers.

(a) Mukhya Mantri Pashudhan Yojana - Incentives for Dairy Farmers: GoS is giving a remunerative price incentive of Rs. 8/- per litre of milk with particular fat and solid non-fat (SNF)

standard and a minimum procurement price of Rs. **40/-** per liter to all the dairy farmers under the newly initiated Milk Production Incentive Scheme (MPIS) under Mukhya Mantri Pashudhan Yojana. As a result, the milk supply has gone up to 56000 litres per day from 25000 to 30000 litres per day. Over 15000 dairy farmers have benefitted so far from this subsidy of over Rs. **26.00** crore in the last two fiscal years and will soon be in a position to export our milk and milk products to other states. GoS is also planning to design and set up supplies of milk through bulk vending machines similar to Mother Dairy in Delhi.

Similarly, incentives are extended to piggery farmers under the Pig Production Incentive Scheme (PPIS). Pig rearing farmers are given Rs. **5000/-** per pig weighing above 50 kgs. Almost 2000 farmers have benefitted from Rs. **3.00** crore incentives so far.

(b) Mukhya Mantri Matsya Utpadan Yojana (MMMUY): The scheme was launched in October 2021 where the government provides 60 percent subsidy for fish farmers under which over 1000 farmers have benefitted from the Rs. **1.00** crore subsidy extended so far.

(c) Mukhya Mantri Krishi Aatmanirbhar Yojana (MMKAY): The scheme was launched in 2020 and GoS is extending cash incentives to all the agricultural commodities in the state. Under the scheme, over 4200 farmers have benefitted so far with more than Rs. **2.00** crore funding.

Likewise, GoS is also planning to make 3 'A's, (Aduwa, Alaichi and Amlisho) as the three commercial crops that would make the farming more attractive through interventions in production, processing and marketing.

(Source: Budget Speech: 2022-23)

(d) The Skilled Youth Startup Scheme formulated with an objective to promote equitable entrepreneurial opportunities among the educated unemployed mass in Sikkim. It is an umbrella program sponsored by the Government of Sikkim to support entrepreneurs availing bank credit to establish their commercial units. The scheme provides back ended bank loan subsidy assistance @ 50% for BPL and 35% for others on financially viable bankable projects. The activity/ unit could be undertaken in Agriculture and allied sector/ Manufacturing/ Services/ Business / Cooperative activities. Overall, 19 sub-sectors have been identified under the above broad specifications with admissible project costs ranging from Rs. 3.00 to Rs. 20.00 lakh. It is also envisaged that every investment of Rs. 5.00 lakh will generate wage employment for 01 person.

(e) Development through credit: The State government has implemented 'development through credit,' a farmer-centric credit loan scheme to boost the State's agriculture and allied sectors in the form of organisation of credit / loan Mela. The programme is aimed to strengthen the economic condition of the farmers as well as the State since 70 percent of the Sikkimese populace is connected to agriculture and farming sector. This will boost the agricultural sector in order to achieve a relative growth in the GDP of the State and will also encourage the educated unemployed youths of the State to opt for agricultural and allied activities in order to become self-reliant.

3.12.2 Constraints in Increasing Farmers' Income in Sikkim

- a) Problem of erosion due to serious topographical and climatic factors.
- b) the adoption rate of improved technologies and inputs by the farmers is less
- c) 79% of farmers are small/marginal
- d) Squeezing of agricultural lands because of diversion to non-agricultural purposes
- e) Inadequate infrastructure like marketing grading and packing facilities
- f) Low risk bearing capacity and poor purchasing power of the farmers.
- g) Low productivity of crops
- h) Erratic behaviour of rainfall
- i) volume available per farmer is small and markets (mandis) are located at far off places. In addition, during glut season, low prices prevail due to poor communication infrastructure and lack of storage facilities.

3.12.3 NABARD initiatives in doubling of farmer's income

- Rigorous efforts in increasing Agri Credit / KCC Saturation
- Formation and nurturing of FPOs
- Assistance under FSPF, WDF and TDF for allied activities
- Collaboration with KVKs and other institutes
- Effort to work on soil conservation in springshed area
- Supporting road projects under RIDF financing

3.13 Development initiatives of NABARD

3.13.1 : Watershed Development Programme –: NABARD started implementing participatory watershed projects since 1990's. The approach followed in the programme was "catch the rain where it falls" through participatory approach. Though, overall objective of implementation of watershed projects aimed at increasing agriculture productivity and production, the focus and concentration at present is oriented more towards implementation of soil and water conservation, water resource development, afforestation, dryland horticulture, etc. Further, with climate change over time, the farming community is facing uncertainties in rainfall (temporal and spatial distribution) impacting severely, agriculture production and livelihood of farmers.

The average land holding size of small/marginal farmers in Sikkim is 0.62 ha (2015) which permits small scale land development activities leading to soil and moisture conservation activities. NABARD is also implementing 07 springshed based watershed projects with grant support of ₹.1.60 crore to rejuvenate drying springs and implement soil and water conservation measures.

Objectives

- Revival of dying springs for irrigation and drinking water purposes.
- Enrichment of soil and water fertility.
- Afforestation for restoration of ecological balance
- Creation of alternate livelihood opportunities
- Promotion of sustainable farming practices
- Gender development

Activities:

- Area based treatment: Staggered trenches, strengthening of bench terraces, farm ponds, etc.
- Drainage line treatment: Gabion structures, check dams, loose boulder structures, etc.
- Afforestation
- Alternative livelihood opportunities: Dairy, fishery, bee keeping etc
- Gender empowerment:
- Training and capacity building

Ongoing projects:

- We are currently implementing 7 projects under Springshed development programme.
- Total treatable area: 2027 Ha
- Households benefited: 3839

NABARD is expected to sanction additional 02 springsheds in the State.

Way Forward:

- State Govt may provide Technical assistance to our partner agencies in rock profiling and identification of springs.
- Expediting the process of issuance of NOC by Forest Department and RMDD.
- Exchanging the learnings from successful experience of implementing “ Dhara Vikas”.
- Joint Monitoring of the projects.
- Convergence with state government schemes for livelihood generation.

3.13.2: Tribal Development Programme (TDF):**Objectives:**

1. To create replicable model of integrated development of tribal families on participatory basis, through adoption of sustainable income generating activities.
2. To strengthen tribal institutions enabling them to partner in policy formulation, program execution and improvement in socio economic status / Build and strengthen producer's organization

Activities:

1. Sustainable and participatory livelihood programmes such as orchard based farming system, mixed wadis.
 2. Sustainable and viable livelihood generating activities like agri allied activities, bee keeping, sericulture, Off farm activities.
 3. Micro enterprises for landless people
 4. Women empowerment through components such as drudgery reduction measures, on-farm and off-farm income generating activities and formation of self-help groups
 5. Training and capacity building
- **Completed and Ongoing projects:**
 - **NABARD has** successfully implemented four TDF projects of grant assistance of Rs 7.96 crores covering 1633 families.
 - There are four ongoing projects of grant assistance Rs 5.34 crore covering 840 families
 - Partnering research institutions like KVK North, KVK South and KVK West.
 - Involvement of line department in process of crop selection, project formulation, project sanctioning etc.

Way forward:

1. Government may contribute 50% of the total project cost, subject to terms and conditions decided at the time of sanction.
2. Technical support in crop selection.
3. Support in procurement of quality saplings
4. Support in marketing of the produce of the tribal families.
5. Convergence with various state government schemes
6. More visibility to the projects.



3.13.3: Projects under Farm Sector Promotion Fund

NABARD has created this fund to promote innovation through channel partners and also to build the capacity of farmers. Moreover, projects having components of artificial intelligence, machine learning and internet of things are now being promoted under the fund so as to connect the farmers with technological tools and enable them to take benefits from the same.

Objectives

- Promotion of innovations in Agriculture and Allied sectors
- Enhancing productivity in Agriculture and Allied sectors
- Promotion of climate resilient agriculture in distressed area
- Promotion of Agricultural value chain
- Training and capacity building measures

Completed and Ongoing projects:

- NABARD has completed 2 projects on Angora rabbit farming and quail farming.
- Presently, there are 5 ongoing projects are in the area of vertical farming, duckery, farming of large cardamom through value chain approach.

Way forward:

- More proposals from eligible institutions
- Cross learning between NABARD and State Government

3.14 Off Farm Development Initiatives - 2021-22 and 2022-23:

In Sikkim, the focus in off farm sector development, has been on improving marketing avenues for rural farm and off farm products. As step towards the same, Grant support of ₹9.75 lakh has been provided for setting up 02 rural marts including 01 mobile marketing vans to MPCSS for retail marketing.

Grant support of ₹15.00 Lakh has been extended for construction of Rural Haat at Chingthang GPU, Hee- Martam Block, Gyalshing to Krishi Vigyan Kendra, Gyalshing.

Also, ₹6.95 lakh has been provided for sponsoring stalls at IITF and Oon Festival at New Delhi and other exhibitions in India.

NABARD has also supported for registration of GI products namely Sikkim Orchid, Lepcha Flute and Tungbuk.

Off Farm Producer Organisation:

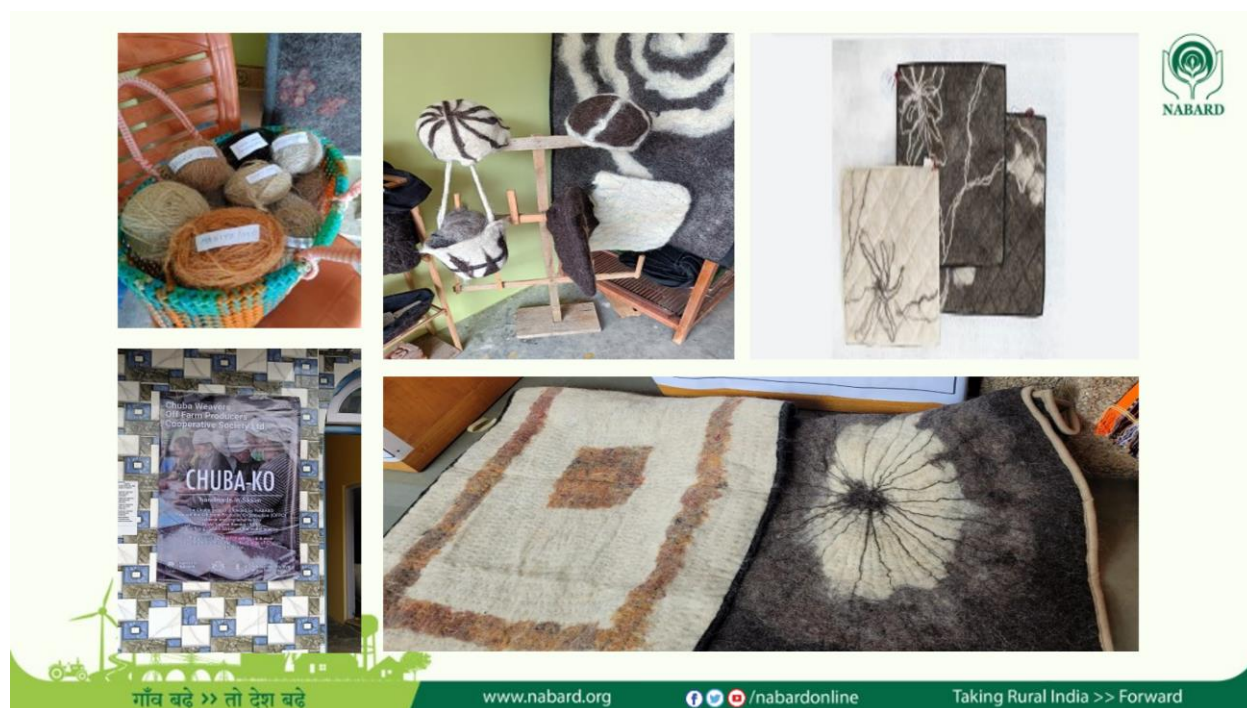
NABARD has also sanctioned one OFPO for “Angora Rabbit and Sheep Wool Products” with a Grant Assistance of Rs. 1.25 crore. The OFPO is “ **Chuba Weavers Off Farm Producers Cooperative Society Ltd.**” located at Upper Chuba village, Namthang Block under Namchi district.

Achievements so far:

The OFPO products were launched in Gangtok in August 2022 in a 03 day exhibition organized by NBARD on the eve of National Handloom day under the brand name “CHUBA-KO” designed for the OFPO meaning – from Chuba.

The OFPO has been able to gain good grounds in terms of recognition towards the effort made for preservation and enrichment of traditional indigenous craft. Notable of these are as under:

- Winner of Global Eco Artisan 2022 award by San Francisco based Agaati Foundation.
- Display of OFPO carpet at the New York Fashion Institute of Technology Museum.
- OFPO Carpet identified for gifting to dignitaries in the G20 Summit scheduled in India September 2023.



Proposed GI Products in Sikkim



Sikkim
Orchid



Lepcha
Flute



Tungbuk



गाँव बढ़े >> तो देश बढ़े

www.nabard.org

[f](#) [t](#) [v](#) /nabardonline

Taking Rural India >> Forward



CHAPTER – IV

POTENTIAL CREDIT OUTLAY

4.1 Introduction

This chapter provides sub-sector wise projections for 2023-24 followed by identification of constraints and bottlenecks which may hamper harnessing of potential to the maximum. Further, some solutions in the form of suggestion and action points are also attempted for use of all stakeholders in the development of the state. The credit projections for 2023-24 have been made district-wise in the Potential Linked Credit Plans (PLPs) prepared for the districts. These PLPs are aggregated at the State level and presented in Annexure I. A broad sector-wise projection is given in Page no.1

4.2 SFP Projections for the State in 2022-23 and 2023-24

Potential for priority sector credit for the State as a whole for 2023-24 has been estimated at Rs. 95856.47 lakh. The potential has been mapped keeping in view priority areas, GLC targets as given by DFS, GoI, policy initiatives of Central & State Governments, various subsidy linked schemes, thrust areas, infrastructure availability and ground level credit flow in the state. ~~The broad sector wise consolidated projections of 2023-24 vis-à-vis 2022-23 are given below:~~

Details of the credit projections made in the State Focus Paper for financing priority sector activities (SFP Projections 2023-24 vis-à-vis 2022-23)

(Rs. Lakh)

Sr. No	Sectors	Projections 2022-23	Projections 2023-24	% Growth	% share in total Priority Sector
1	Short term credit for Production & Marketing– Crop loans	20599.32	17905.103	-13.08	18.68
2	Investment Credit for Agriculture & Allied Activities*	12541.85	19161.18	52.78	19.99
3	Total Agriculture and Allied Activities(1+2)	33141.17	37066.25	11.84	38.67
4	MSME Sector	41270.33	46257.26	12.08	48.26
5	Other Priority Sector (OPS)#	12153.18	12532.96	3.12	13.07
	Total Priority Sector	86564.68	95856.47	10.73	

Note:*Includes - Term loan for Agriculture and Allied Activities + Agriculture Infrastructure Agriculture + Ancillary activities as per new PSL guidelines. #Includes Export credit, Education, Housing, Renewable source of energy and Social infrastructure as per new PSL guidelines

Credit Potential for Agriculture

Sectoral issues, constraints and action points for various stakeholders

4.3 Farm Credit

Agriculture plays an important role in the overall growth of the Sikkim economy despite its minor share in the State Domestic product. In spite of unfavourable climatic conditions, the State has made great strides in agricultural production.

Agriculture is a major source of livelihood and economic security of sizeable native population. Maize, Rice, Buckwheat and pulses are the main food crops grown in the state. Due to low production and productivity in Sikkim which is lower than both the regional and national averages for all the field crops and its fragile ecology, the state is capitalizing its inherent strength of organic farming. As the state is focusing on organic farming, there is an urgent need to shield the infected crops like cardamom and Sikkim mandarin in particular which are the back bone of farmers

economy in the State. Marketing and storage facilities are also crucial components of post-harvest management.

From 71532 farmers in the state, out of which 79% fall under small and marginal category. The details of land holding pattern is furnished in Chapter I. It could be observed there from that the average land holding of small/marginal farmer is only 0.62 Ha.

Land Utilisation & Land Holding

According to the land use pattern in the State, the net sown area (NSA) of the state constituted 9.97% of the total geographical area and 82.31% of the area is covered under forest land. The cropping intensity is 189%. The total area, production and average yield of major crops are furnished in Chapter I.

Scale of Finance

Sikkim being the second smallest state with similar variation in altitude, the Scale of Finance is worked out by the State Level Technical Committee (SLTC) for the entire state in place of District Level Technical Committees (DLTC) for each district. ~~However, the banks have been given leverage of calculating the amount of credit based on location, crop and season, etc.~~

4.4.1 Crop Production, Maintenance and Marketing

Keeping in view the hilly terrain and rugged topography, infrastructural gaps, small size of fragmented operational land holdings etc. of the state, credit potential of Rs. 17905.103 lakh has been estimated for crop production for 2023-24 as indicated below.

(Rs. lakh)

Sr. No	Activity	State Total	
		Physical estimate in Hectare	Financial Estimate
1	Paddy	2510.00	1154.60
2	Ginger	1966.00	3892.68
3	Maize	7590.00	3339.60
4	Oilseed mustard	1661.00	531.52
5	Pulses	1033.00	298.09
6	Finger Millet	584.00	227.76
7	Turmeric	699.00	754.92
8	Buckwheat	1060.00	328.60
9	Vegetables	2152.00	2388.72
10	Potato	406.00	856.66
Total Crop loan		19661.00	17905.10

District-wise & activity-wise PLP projections (financial) for 2023-24 are given in Annexure I

Some of the other major issues/constraints in achieving the above projection and measures suggested to overcome them are indicated below:

Issues

- Lower credit outflow to crop loan/ KCC by banks
- Only few MPCs engaged in credit dispensation
- Inadequate banking network in rural areas

Action Suggested

- Financing of crop loans as per Scale of Finance.
- Issue of KCC cards to eligible borrowers/ farmers.
- Production of bio-fertilizers, plant protection and organic manures / inputs to ensure their

availability

- Establishment of organic seed production units
- Introduction of Quality testing/soil testing laboratories
- Engagement of all MPCs in credit lending and multi services
- Review of Individual Maximum Borrowing Power (IMBP) by MPCs for enhancement of credit so as to reduce the issues of underfinancing of farmers.
- Increase in the outreach of Banking network through BF/BC/USB mode
- Increase in the area under high yielding variety crops
- Encourage farmers for alternate cropping system and mixed cropping system for maintaining soil health.

Implementing Agencies

- All Commercial Bank Branches including SISCO Bank Ltd.
- Food Security & Agriculture Development Department
- ICAR and KVKs

4.4.2 Water Resources

Irrigation.....the major constraint

Sikkim being a hilly state with varying degree of slopes, constructing big irrigation canals running across the length and breadth of the state is also not feasible and entails a very high capital cost and maintenance cost. As a result of this, scope of expanding irrigation potential is limited. The ground water is available in highly dynamic state and not available for useful purposes in sloping topography. Availability of stream water during the summer allows for cultivation of paddy, through temporary channels. Otherwise, almost all the crops are grown on rainfed condition. Hence, a more pragmatic approach is to go for micro irrigation and better methods of water application, like small water harvesting structures, roof water harvesting and water saving application.

Due to hilly terrain and rugged topography, the possibility of Micro Irrigation schemes needs to be encouraged. The following potential is estimated for the year 2023-24.

(Rs. lakh)

Activity	Physical Projection (Nos)	Financial Projection
Drip Irrigation Sets	41.00	58.02
Sprinkler Sets	38.00	43.94
Others (Tank Irrigation/ harvesting structures)	45.00	90.23
Total	124.00	192.18

Some of the major issues/constraints in achieving the above projection and measures suggested to overcome them are indicated below:

Issues

In spite of good rainfall, agriculture in the State suffers due to dry spells during summer and winter. There is huge surface runoff which needs to be addressed through various water conservation methods.

Action Suggested

- Banks to finance drip/sprinkler irrigation systems
- Popularising System of Rice Intensification (SRI)
- Soil and Water testing labs may be set up
- Promotion of surface irrigation, Community and individual rain water harvesting structures.
- Co-ordination between bankers and line department

Implementing Agencies

Irrigation Department, Food Security and Agriculture Development Department and all Bank

branches.

4.4.3 Farm Mechanization

‘Farm Mechanisation’ sector consists of mainly tractors, power tillers, combined harvesters and other agricultural machinery/ equipments and implements used for crop production and post harvest activities. Agriculture in the State is largely carried out with traditional practices because of hilly terrain and small size of fragmented operational land holdings. Small size and scattered holding of the farmers restricts the scope of major mechanization of farm activities. As a result of this, farm machinery generally remains underutilized. State Government is promoting power tiller, harvester and other agri-implements under farm mechanisation.

It would be appropriate to introduce a mix of power-operated and animal operated improved tools and equipment that would enhance the output, maintain quality of work and reduce drudgery levels. Animal-operated helical blade puddlers, drum type pre-germinated paddy seeders, manually operated 6-row transplanters, manual/ motorized threshers may be introduced on large scale. These will be useful to enhance the quality and output of work.

Mechanization in Horticultural Crops:

The State is a major producer of horticultural crops. However, the level of mechanization in this sector is very less. In order to improve the quality and productivity, it is necessary to introduce different tools & equipments which are commercially available. For orchards, pit makers, pruning tools, air assisted sprayers for tall trees are required. Rotavators, precision seeders / planters, efficient sprayers, weeders and diggers / harvestors are required to be used in farm activities.

Mechanization in Feed and Fodder:

- Equipment for harvesting fodder crops, silage making, compressed feed block, etc. need to be introduced and popularised. This technology will be useful in reducing the transport costs of shifting fodder and feed from surplus areas to deficit areas.
- Equipment for harvesting, densification and transport of crop residues will also be required

The following potential is estimated for the year 2023-24:

(Rs. Lakh)		
Activity	Physical Projection (No)	Financial Projection
Power Tiller	50.00	60.45
Power Spray	42.00	12.59
Other implements (includes Maize Sheller, Thresher, Chaff Cutter (Manual)	137.00	26.80
Total	229.00	99.84

Some of the measures suggested to achieve the potential are indicated below:

Action Suggested

- Emphasis on gender friendly implements needs to be promoted for efficiency, economy, time saving and reducing the drudgery in farming
- Small size power tillers to be financed/propagated
- SHGs/JLGs may be financed for power tillers

Implementing Agencies –

- All Bank branches
- Food Security and Agriculture Development Department
- KVKs, ICAR, CAEPHT

4.4.4 Plantation and Horticulture including Sericulture

Sikkim is famous for its horticultural produce crops like spices, fruits and vegetables. Large cardamom, ginger and turmeric are the principal spice crops while mandarin - orange, guava, banana, etc., are the principal fruits grown in the State. The agro-climatic and physiographic conditions prevailing in the State are conducive for growing a variety of horticulture crops. Sikkim is the largest producer of large cardamom in the country. Sikkim is also a paradise of flowers. Gladioli, Anthuriums, Lilliums, primulas, rhododendrons, orchids as well as many other floral species thrive here. There is an immense potential for developing floriculture on a commercial basis.

4.4.5 Sikkim - Organic State

The Govt. of Sikkim had taken a resolution to convert the entire state into an organic state by 2015 in the State Assembly in 2003. Since launching of the Sikkim Organic Mission in 2010, the programmes of organic farming were being implemented on a mission mode and the State has been declared as “First Organic State” on 18th January 2016 by the Honorable Prime Minister of India.

Towards achieving these goals Government of Sikkim had initiated the following measures:

- Organic certification introduced with the help of Service Providers
- Some of the technologies standardised for different crops through research by ICAR, Sikkim are – Organic management for rejuvenating the declining orchard, Organic mushroom, ginger and Kiwi fruit cultivation and System of Rice Intensification.
- Three Krishi Vigyan Kendras in the State under the administrative control of Government of Sikkim and one under ICAR have demonstrated various technologies on organic farming.
- Some of the technologies demonstrated so far are – Use of pheromone traps for control of flies in Sikkim Mandarin and Vegetables, homemade bio-pesticides for control of disease in rice, use of biodynamics for nutrients, pests and disease management in different crops, enrichment of compost with bio-fertilizers and bio-pesticides, etc.

In order to provide marketing interventions for organic produce a series of “Buyer-Seller” meets were organized, marketing outlets in Lal Bazaar, Gangtok and Rangpo Bazaar and identified junctions along state and district roads have been provided for sale of Organic Produce. The State Government under the aegis of “MOVCD-NER has also initiated measures for processing and marketing of organic produce. Details are indicated in para 3.3 of Chapter III of this document.

The following credit potential is estimated for the year 2023-24:

(Rs. Lakh)

Activity	Unit Size	Physical Projection	Financial Projection
Mandarin	ha	115.00	139.73
Large Cardamom	ha	517.00	1372.64
Floriculture - Cymbidium	500 plants	245.00	529.20
Floriculture - Gladiolus	500 plants	350.00	758.74
Floriculture - Anthurium	500 plants	311.00	675.18
Floriculture - Tuberose	500 plants	375.00	203.78
Modified Bhatti for drying large cardamom (ICRI) (400 kg capacity)	Ha	42.00	35.16
Oyster Mushroom	Ha	307.00	221.04
Bee Keeping (Unit Size: 100 bee boxes)	ha	117.00	88.49
Guava	no	62.00	31.80
Banana	ha	32.00	40.32
Kiwi	no.	74.00	472.86
Total		2547	4568.94

Some of the major issues/constraints in the sector and measures suggested to achieve the above potential are indicated below:

Issues.

- Farmers not getting adequate price for their produce.
- Lack of timely availability of quality planting material.
- Lack of good connectivity between production and marketing centres leading to the post-harvest loss as the horticulture produce are highly perishable.
- Loss due to natural calamities.
- Exploitation from middlemen/market intermediaries.

Action Suggested

- Awareness programmes may be conducted for farmers on continuous basis for replanting the old and diseased plantations in order to increase productivity and production of large cardamom
- Flower growers to be supported for post-harvest practices
- Cluster approach for fruit/flower growers
- Post-harvest centers by the government for sorting, grading, packaging, etc.
- Cultivation of horticultural fruits like oranges, pears, guava, apples, etc., may be promoted under the subsidy programmes of National Horticulture Board
- Farmers to be encouraged to adopt scientific farming
- Promotion of exotic vegetables, floriculture and aromatic and medical plantation through protected cultivation
- SIMFED may play a major role in providing marketing support.
- AIF and AMI Scheme under ISAM may be popularized by the line department.

Implementing Agencies

Horticulture & Cash Crop Department, Sikkim Organic Farming Development Agency (SOFDA), Spices Board of India, NHB, SIMFED & All bank branches.

4.4.6 Forestry and Wasteland Development

Forest is one of the richest natural resources of Sikkim. The state has a unique bio-diversity. The composition ranges from tropical Dry deciduous forests with Sal and its associates in the valleys of Teesta and Rangit to the Alpine Shrub and grasslands in high altitudes. Out of the geographical area of 709600 ha. of the State, 82.32% of the area (584139 ha.) falls under forest land area which offer large scope for development of forestry.

Keeping in view the conducive climatic condition of the state for growth of bamboo and its immense potential to generate economy besides providing ecological and livelihood security to the people, National Bamboo Mission has been implemented by the state.

The State has 3325 ha. of wastelands (barren uncultivable and non-agricultural land) i.e. about 0.47% of the total geographical area of the State.

The following potential is estimated for the year 2023-24

(Rs. lakh)

Activity	Physical Projection (acre)	Financial Projection
Farm Forestry	12.00	11.88
Wasteland Development	17.00	16.83
Tree/Grass Plantation	19.00	18.81
Bamboo Cultivation	101.00	99.99
Total Forestry & Wasteland Development	149.00	147.51

Some of the major issues/constraints in the sector and measures suggested to achieve the potential are indicated below:

Action Suggested

- There is a good potential for raising Bamboo, Acacia hybrids plantations in the State, However, restrictive harvesting rules detract farmers/ entrepreneurs for taking up such plantations.
- There is general lack of awareness about the economics / bankability of agro-forestry/ farm forestry schemes among the farmers/ bankers.
- Fodder and Napier Grass cultivation may be promoted
- Bamboo, Eucalyptus, etc. may be popularized
- Forest based industries may be promoted

Implementing Agencies

- Department of Forests
- All bank branches

4.4.7 Animal Husbandry

After crop production, Animal Husbandry is playing a pivotal role in the rural economy providing gainful employment to a large number of small and marginal farmers and enhancing their economic status. Besides providing supplemental income, dependability even during drought is one aspect that makes the Livestock activity more lucrative and progressive.

Suitable climate, availability of inputs, infrastructural facilities for health services, marketing facilities for milk, meat & eggs and above all the entrepreneurship of the farmers are the key factors for development of Livestock and Poultry sector in the State. With the increase in the livestock population, the production and availability of nutritious food to the people and supplemental income to the farmers will increase.

The overall area available for agriculture operations is limited and with the increasing population, land availability has been consistently declining. Supplementary sources of income need to be developed in order to provide not only the much needed support to the rural families but also to make available protein rich food items such as milk, egg and meat. Adequate number of livestock like cattle, buffaloes, pigs, sheep, goat and yak are reared in Sikkim. Yaks are reared in north eastern ranges bordering Tibet, Bhutan and western region bordering Nepal. The State has a livestock population of 290781 in addition to 437645 backyard poultry as per 2012 Livestock census. Details of Livestock Census 2012 is furnished under para 1.6 of Chapter-1. There was steady improvement in milk, meat and egg production during the last decade. Dairy farming is one of the major subsidiary activities supplementing the income of rural households in the state. For the thousands of small farmers each of whom own 1-2 animals, dairy is more than a business as it offers broader social and economic dimensions.

Physical Infrastructure

The major items of available infrastructure in the State for Animal Husbandry development are as follows –

Animal Husbandry sector – Facilities available		
1	Veterinary Hospitals/Dispensaries/Subcentres	137 no.s
2	Livestock Checkposts	5 no.s
3	Disease Investigation Laboratories	10 no.s
4	Mother Dairy Farm	1 no.
5	Poultry Layer farm	9 no.s
6	Pig Breeding Farm	6 no.s
7	Yak Breeding Farm	1 no.
8	Angora Rabbit Breeding Farm	1 no.
9	Goat Breeding Farm,	5 no.s
10	Sheep Farm	1 no.

4.4.8 Dairy Development

Annual milk production in the state during 2018-19 was 68169.59 MT and 84213 MT in 2019-20. Per day production of milk is estimated at 186,766 litres as per the integrated sample survey

conducted by the Dept of Animal Husbandry, Livestock, Fisheries and Veterinary Sciences, Govt. of Sikkim. Of this, about 30% is being procured by the Milk Unions. Sikkim Milk Union which is the apex body of milk co-operatives with Dairy Societies at ground level in the State. Taking into account the inherent stability of integrated farming system, the state conducive and traditional affiliation towards dairy activities, and to bridge the gap between demand and supply, of milk and milk products, the following credit potential is estimated for the year 2023-24.

(Rs. Lakh)

Activity	Physical Projection	Financial Projection
Dairy (2 Cross-bred cows)	737.00	978.76
Dairy (10 Cross-bred cows)	104.00	702.00
Calf rearing unit (5 calves units)	451.00	304.43
Working Capital for Dairy (1 CB cow)	7077.00	3665.95
Total	8369.00	5651.13

Issues

- AI coverage of breed-able animals
- Improvement in progeny of local cattle breed and promotion of cross-bred cows.
- Promotion of Dairy as a main/subsidiary occupation and promotion of Dairy Cooperative Societies.
- Cattles are generally brought from West Bengal and Bihar

Shortage of feed and fodder

- There is a rise in demand for feed and fodder, especially due to increasing animal population as well as crossbred population
- The State is a fodder deficit State.
- Reasons for shortfall of fodder production are- non availability of land for cultivation of fodder and acute shortage of good quality fodder seeds in the State
- There is no permanent pastures and other grazing land.

Actions Suggested

Fodder production:

To boost up fodder production in the State, the following developmental programmes may be taken up

- Encouraging farmers to grow fodder in their own lands
- Development of Livestock fodder sector through Schemes and Programmes
- Development of pasture lands involving local bodies, NGOs, SHGs
- Supplying high yielding seedling and planting materials to the cattle owners
- Organising regular training programmes on fodder production for farmers/cattle owners/rural youths in all districts
- Introduction of technologies in Fodder development including fodder development under Social Forestry Scheme, preservation of fodders, Social pasture, land development, etc.

Milk Production

The major activities that need to be taken up for increasing required milk production in the state can be grouped as follows:-

- Massive induction of good quality, better productive cows and special focus on calf rearing through introduction of different schemes.
- Establishment and strengthening of infrastructure required to maintain the A.I.
- Introduction of newer up-to-date technologies for production of mainly female calves and development of genetically potent productive milch cows.

- Establishment of Dairy Processing Units and Mass Automatic Milk Collection Units at Gram Panchayat level through Sikkim Milk Union.

Actions Suggested

- Increasing the credit flow to dairy sector through various central sector scheme like PMEGP, NLM, DIDF, etc.
- Financing more no. of units for establishment of milk collection centre, milk processing unit, refrigerated vans, bulk milk cooling units etc.
- Financing more no. of units under SHG/JLG mode so that small dairies can be established in a particular area and milk production can be increased substantially.
- Banks can take help of established Farmer's Clubs, good working NGOs to reach to the distant areas for financing more no. of units under dairy sectors.
- The genetic improvement of important livestock breeds may be undertaken by cross-breeding and selective breeding of low producing non-descript stock. Farmers may be educated about scientific breeding, insurance and animal health.
- Farmers may be encouraged to take up dairy as a main/subsidiary occupation. Efforts may be taken to promote setting up of modern dairy farms, rearing of heifer calves.
- Setting up of fodder bank/concentrated feed plants may also be encouraged.
- The existing dairy societies may also be strengthened and may explore business models.
- Supply of high yielding fodder seeds to dairy farmers at subsidised rates.
- Regular training programmes for farmers on Scientific Dairy farming and fodder cultivation.

Implementing Agencies

- Dept. Of Animal Husbandry and Veterinary Services,
- All Bank branches
- Cooperation Department
- Sikkim Milk Union

4.4.9 Animal Husbandry -Poultry Development

Poultry-rearing is the most dynamic and fast-growing agri-business activity in the State of Sikkim. Blooming tourism sector, domestic demand and rapid development in the retail and food service industries is expected to fuel the growth in demand in the state. In addition, the Indian consumers' preference is increasing for clean, safe, hygienic nutritious and properly packed, labelled and presentable food products including eggs. As per the Livestock Census of 2012, there are 4.38 lakh Backyard Poultry and 0.63 lakh Farm Poultry (Layer and Broilers) in the State.

The estimated egg production during 2018-19 was 93.26 lakh eggs in the state which came down to 39.32 lakh eggs during 2019-20. The per capita availability of eggs per annum in the State is 15.26, which is very low compared to 180 eggs per person per annum as recommended by ICMR which results in huge imports of eggs from neighbouring states. Marketing of Eggs is through private channels and it is based on the declared rates of NECC. Broiler marketing is through contract route and the integrators take care of marketing. Total meat production in the state during 2018-19 was at 3273 MT against 3493 MT during 2019-20.

Taking into account the above factors, potential is estimated for the year 2023-24 as under:

(Rs. lakh)

Activity	Physical Projection (No.)	Financial Projection
Broilers 200 birds (50x4)	1472.00	993.61
Layers (100 birds)	698.00	376.92
Working Capital for Broiler (100 birds)	72.00	25.08
Working Capital for Layers (100 birds)	27.00	52.23
Total Animal Husbandry-Poultry	2269.00	1447.84

Some of the major issues/constraints and measures suggested are indicated below:

Issues

- Absence of good hatcheries for Day Old Chicks (DOC)
- Lack of other infrastructure like feed, marketing, veterinary services etc
- Non operation of Poultry Cooperative societies.

Actions Suggested

The following measures would be required to be taken by State Government for the development of the sector:

- Establishment of Central Grower Units (CGUs) for supply of Day Old Chicks. The units can avail benefit from centrally sponsored scheme viz. Poultry Venture Capital Fund (PVCF)-EDEG under National Livestock Mission etc.
- Establishment of State Poultry breeding farms for commercial layers and broilers in the potential areas.
- Capacity Building of farmers through extension, publicity, training, exposure visits, etc.
- Strengthening the state animal husbandry infrastructure to make available the required Veterinary services to support the grounding of new schemes in poultry sector.
- Special emphasis on availability of organic poultry feed at a farmer friendly rate so that good no. of commercial layer and broiler units can be set up in the state.
- Creation of awareness on “Bio Security Measures” among poultry farmers which will help the state in combating "Avian Influenza” in the state.
- Increasing the credit flow to Poultry sector through various central sector scheme like KCC AH for working capital needs and NLM/SYSS for capital needs.
- Revival of Poultry Estate at Mangalbarey
- Financing good no. of units under the marketing linkage of poultry products like cage van, refrigerated van, cold storage, large processing units, dressing and marketing units.
- Financing more no. of units under SHG/JLG mode so that more no. of poultry farms can be established in a particular area and egg and meat production can be increased substantially.

4.4.10 Sheep/Goat/Piggery

Sheep Goat and Piggery provide gainful employment and income to the weaker section specially the rural poor. However, there is a wide gap between demand and production of meat as the majority of the people in this State are non-vegetarian. The common infrastructure available in the State for livestock development has been described in the chapter on animal husbandry. As per livestock census 2012, the population of sheep, goat and pigs in the state has reduced to 2684, 110870 and 30317 respectively as compared to the census in 2007 when it was 44879, 110120 and 38930.

The following potential is estimated for the year 2023-24

(Rs. lakh)

Activity	Physical Projection (Unit)	Financial Projection
Goat rearing (1+ 4) with local shed	562.00	303.48
Piggery (Breeding 1+4)	2101.00	1131.30
Working capital for Goat rearing (1 +10)	51.00	29.91
Working capital for Piggery (1 + 4)	572.00	391.50
Sheep (4+1)	483.00	304.29
Total Animal Husbandry-Sheep/ Goat/Pig	3769.00	2160.48

Issues

- Non-availability of good quality goat breed.
- Lack of Grazing land
- Despite of good sustainability of Ghungroo breed of pigs, Yorkshire breed is more popular as the same is demand driven
- Capacity Building of farmers through training and exposure visits

- Non-availability of feed and hygienic slaughter facility

Actions Suggested

- Improving fodder and fodder seeds availability
- Supply of improved males of sheep, goat and pig particularly to SHGs
- Creating awareness among the farmers about the support through centrally sponsored Government schemes and taking up these farming as another source of income as dairy and poultry.
- Strengthening and expansion of existing Pig Breeding Farms for adequate supply of piglets to new and prospective entrepreneurs.
- National Livelihood Mission (NLM) Scheme subsidy may be utilized for establishment of Poultry/ Piggy units
- State government may establish more breeding farms for supply of goat and sheep and piglets to the beneficiaries for further rearing. These rearing units can be supported under centrally sponsored schemes: Sub-component under National Livestock Mission i.e. Integrated Development of Small Ruminants and Rabbits (IDSRR) -EDEG and Pig Development-EDEG through credit by the farmers.
- The training support and capacity building programme through state functionaries and KVK.
- Set up one slaughter house in each district. At present there is only one slaughter house in the State.
- Introduce regular meat inspection procedure to ensure hygienic and wholesome quality of meat
- Supply of good quality piglets for fattening purposes may be ensured
- Possibility of sheep rearing on a large scale for wool/meat purposes may be explored and farmers may be trained for the purpose.
- Increasing the credit flow to Poultry sector through various central sector scheme like KCC AH for working capital needs and NLM/SYSS for capital needs.
- Financing more no. of units under SHGs/JLG mode for establishment of goat and sheep breeding units and rearing units, Pig rearing and breeding units for increasing the meat production.

4.4.11 Fisheries Development

Present Status & Opportunities

The total fish production in the state during 2017-18 was 380 tones. Although, the demand is very high the production of fish within the State is characterized by hilly terrain and limited availability of surface water resources. In most of the cases a small pond/ raceway is constructed by the side of water resources and water is channelized into the structure. The Government of Sikkim has implemented various programme to support Cold Water Fisheries in the state. The varieties being carp, high altitude cold water variety of trout and conservation of riverine fisheries. Sikkim has a riverine system to the length of 900 km, lakes and derelict water bodies to the extent of 0.03 lakh ha. A large part of the demand is being met from adjacent state of West Bengal and Bihar as also from Andhra Pradesh.

The following potential is estimated for the year 2023-24

(Rs. lakh)

Activity	Physical Projection (No.)	Financial Projection
Trout Fishery (Raceway)100 sq.mt	54.00	106.26
Miscellaneous Equipments	26.00	5.17
Working capital for Fishery (Carp Hatchery)	41.00	26.85
Total Fisheries	121.00	138.28

Some of the major issues/constraints and measures suggested are indicated below:

Issues/Action Suggested

- Awareness programme to be conducted and identify adequate number of farmers for sponsoring the same to the banks for credit
- Promotion of Trout fish farming and strengthening of infrastructures
- Fishermen may be issued credit cards on the lines of KCC by the banks
- Seed banks may be set up in districts to ensure steady supply fingerlings.

Implementing Agencies

- Department of Fisheries/FFDA

4.4.12 Other Activities

In hilly areas bullocks are still being used for ploughing and horse/mules/yaks for transportation. In view of the bad terrain and fragmented holdings, proper mechanised farming is not possible. Bullocks are widely used in the district both for cultivation and other agricultural operations. Yaks are reared by the poorest of the poor as multi-utility animal in difficult hilly snowbound terrain to earn their livelihood besides providing meat, milk means of transport in the border areas and also for tourism purposes in a small scale.

The following potential is estimated for the year 2023-24

(Rs. in lakh)

Activity	Physical Projection (No.)	Financial Projection
Bullocks (Pair)	124.00	66.96
Pony (Pair)	38.00	11.30
Mule	58.00	18.78
Working capital for bullocks	37.00	5.25
Working capital for pony	28.00	2.04
IFS (low cost model for small farmers)	5.00	12.47
Yak	10.00	4.95
Total Other Activities	300.00	121.74

Issues

Nowadays, the use of ploughing animals and pack animals are gradually getting reduced. However, in difficult terrains and hilly areas of the state, the use of mule and pony are still prevalent. The use of yak exists in hilly terrains of North and East Sikkim as more of custom than practical use as also for supply of meat specially during heavy winter when the villages remain cut off from the main stream. However, the credit flow in this sector is quite low because of lack of awareness among the local population as also from the side of the bank as the locations are quite far away from the vicinity of banking services.

Action Suggested

- Department of Animal Husbandry to create awareness
- Providing veterinary services in the hilly terrain of North and East Sikkim
- Banking channels may be flexible in financing of pack animals

Implementing Agencies

- Department of Animal Husbandry, Livestock, Fisheries & Veterinary Services
- Commercial Banks

4.5 Agriculture Infrastructure

4.5.1 Construction of Storage Facilities – warehouses, market yards including cold storage units/ cold storage chains

With a view to reduce distress sale by farmers, storage and other infrastructure for agricultural marketing need to be developed in the State. Provision of facilities for grading, sorting, packing, standardization and value addition are very critical and play a vital role in facilitating the farmers obtain a fair price for their produce. Cardamom, Sikkim mandarin, Ginger and Vegetables are the major crops of the State.

It is a well-known fact that poor farmers do not have the economic strength to retain the produce till market prices are favourable. Moreover, farmers also need efficient marketing arrangement for realizing fair and remunerative prices. Post-harvest management of agricultural and horticultural produce has been one of the biggest challenges of all times. It is estimated that in our country, around 10% of food grains produced is lost every year for want of better storage facilities. Absence of proper storage facilities force farmers for distress sales of their produce, resulting in heavy losses. Hence there is an urgent need for construction of scientific storages/ cold storage facilities for horticultural produce & food grains.

A network of Rural Godowns/ Market Yards will, thus, enable small farmers to enhance their holding capacity in order to sell their produce at favorable prices and avoid distress sale.

The following potential is estimated for the year 2023-24.

(Rs. lakh)		
Activity	Physical Projection (MT)	Financial Projection
Rural Godown	346.00	1660.80

Opportunities

- The gap in the available storage infrastructure vis-à-vis the requirement, offers an opportunity for private sector investment in creating post-harvest infrastructure for agricultural produce.
- Farmers, keeping their produce in Godowns, can be given pledge loan on hypothecation of their produce.

Suggested Action Points:

- Agricultural markets are regulated in India through the APMC Act, 2003. As per the act every APMC is authorized to collect market fees from buyers/traders in the prescribed manner on the sale of notified agricultural produce. In this context, the Government of Sikkim has amended the APMC Act 2003 and the Rules have been framed. The scheme needs to be popularised amongst the stakeholders.
- Private sector investment should be encouraged in order to create agricultural marketing infrastructure.
- Agriculture Infrastructure Fund Scheme (AIF) should be popularised. Banks to finance projects under subsidy schemes of GoI.
- Agri Marketing Infrastructure Scheme of Govt. of India / NABARD may be promoted and subsidy utilised to encourage eligible entrepreneurs/ beneficiaries.
- Public Private Partnership (PPP) in the sector will improve the situation to great extent.
- Setting up of Godowns and Market Yards by Producers Organisation in operationally convenient locations.
- Creation of more post-harvest facilities near the major production centres.
- Development of cold chains for preserving perishable horticultural commodities from their point of origin to point of consumption.
- Development of low-cost, eco-friendly and low energy cold chambers for on farm storage of horticultural produce.

Implementing Agencies

- Banks, individuals, Farmers Producers Organisations (FPOs).

4.5.2 Land Development, Soil Conservation, Watershed Development

For agricultural production, soil is an important resource which acts as the base. Seed and other inputs such as manure and fertilizers also play an important role in crop production. In Sikkim, one of the major problems of agriculture is the small holding size, which often sets limitation to adoption of improved and intensive production technologies because of the low input resources and risk bearing capacity of the farmers. There has been reduction in average size of holding from 1.48 ha in 2010-11 to 1.27 ha in 2015-16 as per the agri census. Sikkim has been divided into three agro climatic zones based on (i) altitude, (ii) rainfall pattern -both quantum and distribution (iii) soil type including texture, depth and physio-chemical properties (iv) Elevation and topography (v) major crops and vegetation.

The following potential is estimated for the year 2023-24

(Rs. lakh)

Activity	Physical Projection (Ha)	Financial Projection
Bunding & Terracing (Soil erosion control measures)	70.00	53.78
Rain-water Harvesting Structures	80.00	360.00
Total Land Development	150.00	413.78

Some of the measures suggested for achieving the above projection are indicated below:

Action Suggested

- The involvement of institutional credit in Watershed programmes of National Watershed Development Project in rainfed areas.
- Farmers' Knowledge Centers to sensitize farmers on land development issues
- Land leveling specially near river beds to reduce soil erosion.
- Individual farmers may be encouraged for availing credit facility for activities such as bench terracing, land reclamation, contour trenching, soil conservation and water management

Implementing Agencies

- All Bank branches, Food Security and Agriculture Development Department.

4.6 Others – Tissue culture, agri-biotech, seed production, vermicomposting, bio-pesticides/ fertilizers etc.

Tissue culture

State Tissue Culture Centre was established in the year 1994, as then under the State Forest Department, Government of Sikkim, which was later transferred to the Department of Science & Technology and Climate Change, along with the existing manpower in 1997.

The objectives of centre are:

1. Development and standardization of protocol of rare and endangered plant species of Sikkim Himalayas.
2. Crop of improvement of economic importance through genetic manipulation and breeding.
3. Development of suitable agro-technology of important crops of Sikkim.

The laboratory since inception is actively working on the protocol development and standardization of protocol of economically important plant species of Sikkim. The species includes the orchids, medicinal plants, bamboo, large cardamom and other rare and endangered species. The laboratory, for the first time in the state, has successfully isolated and cultured cymbidium hybrid "*Cymbidium sparkle green*" through meristem in 1995 as no private and government laboratory was able to do it till then.

The centre has imparted training on orchid tissue culture and orchid cultivation to the rural women of Sikkim and provided with orchid saplings on successful completion.

The main activities that the centre is engaged in are:

- Micro propagation of rare and endangered species of orchids through meristem culture.
- Micro propagation of ginger (*Zingiber Officinale*) for multiplication and bulb-let development.
- Nuclear culture of Sikkim Mandarin and mass multiplication.

• **Seed production**

State Govt has set up two Seed Production Units in the state, one at Jorethang, South Sikkim and another at Majhitar, East Sikkim. The Unit at Jorethang serves to West and South districts while Majhitar Unit caters to North and East districts. The Govt purchases the organic seeds, after in-field verification of the seeds by the field inspectors of the Agriculture Department. The seeds are cleaned and stored in the Units and is then distributed free of cost to the farmers in the next sowing season.

• **Bio-pesticides / fertilizer**

Sikkim has been declared as a fully Organic State, as such chemical fertilizer are completely banned and thus there is a huge demand for bio-fertilizers and bio-plant protection. To cater to this demand, the bio-fertiliser and bio-plant protection agents need to be produced in large quantity. This is possible only through commercial production. Govt of India, under National Project on Organic Farming Scheme, provides subsidy @25% of the capital cost of the project subject to maximum of Rs.40 lakhs, for setting up of Commercial Production units for bio-fertiliser and bio-pesticides/ plant protection agents. Concerned Departments of the State Government may provide trainings to farmers and agri-entrepreneurs on bio-fertilizer and bio-pesticide. Banks may provide term loan to farmers, individuals and agri-entrepreneurs for setting up of such Commercial Units.

• **Vermi-composting**

At present, cow dung is the main source of fertilizer in the State but in order to meet the demand of bio-fertilizer, this is not enough. Hence, the other source for the bio-fertilizer would be vermin-composting. Farmers, agri-entrepreneurs and individuals may be encouraged to take up the activity with bank credit as subsidy is provided for under DEDS Scheme. Concerned State Government Departments may provide quality worms and trainings to farmers and agri-entrepreneurs in vermi-composting.

Banks may provide credit to farmers, agri-entrepreneurs and individuals for setting up of such Commercial Units.

Activity	Physical Projection (Ha)	Financial Projection
Vermi Compost Unit (12x4x2 ft.)	507.00	95.32
Total Land Development	507.00	95.32

NABARD sanctions Springshed based Watershed Projects

Trench digging at Pakyong Springshed project under implementation with Eco –Tourism and Conservation Society of Sikkim (ECOSS)

Launching of two Springshed Projects at Central Pendum GPU, East Sikkim. Partner agency – The Mountain Institute of India (TMI)

4.6.2 Ancillary Activities

4.6.2(i) Food And Agro Processing

Food and Agro processing sector serves as a vital link between the agriculture and industrial segments of the economy. During the last five years, the sector has been growing faster than the agriculture sector, at an average annual growth rate of around 8.4 per cent. Availability of raw materials, changing lifestyles and appropriate fiscal policies has given a considerable push to the growth of this sector. Adequate focus on processing industries could effectively address our concerns on food inflation to a greater extent. Further, food processing leads to significant employment generation and also can act as an enabling factor for crop diversification.

Sikkim is endowed with varied agro-climatic condition suitable for cultivation of large number of sub-tropical and temperate fruits but due to land scarcity and economic viability only fruits like Sikkim Mandarin and Passion fruit are commercially cultivated. Other fruits and cash crops grown are guava, papaya, avocado, banana, off-season vegetables, root & tuber crops (potato, sweet potato, cassava, yam and colocasia), spices (large cardamom and ginger), floriculture (orchid), etc.

The State produces about 80% of India's large cardamom which enjoys a high value export market in Pakistan, Singapore, Middle East and South Asian countries and America. However, production of large cardamom has been low during the recent years due to disease/pest attacks. The ginger produced in Sikkim forms 11 % of the National Production and has also export prospects. As such, there is scope for value addition to cardamom, ginger and citrus fruits and other cash crops through agro-based industrial units. Post-harvest technology and management play a crucial role in value addition to agriculture. Investment in Agro & Food Processing sector have not been commensurate with the large potential available in the country as a result of which linkages between production, post-harvest management, processing and marketing including export largely remain weak.

Thus, Sikkim needs a strong and dynamic food processing sector which will play a vital role in diversification and commercialization of Agriculture, and ensure value addition to Agriculture produce. Govt. of India has instituted the Food Processing Fund in NABARD 2014-15, with a corpus of Rs. 2000 crore. Credit Support under the fund enables public and private players for setting up of food processing units/ food parks in Designated Food Parks (DFPs) notified by the Ministry of Food Processing Industries (MoFPI), Govt. of India. While an enabling policy environment will create a conducive atmosphere for healthy growth of food processing industry in the State, institutional credit deployment will act as a catalyst for bringing in greater investment into this sector.

Projections for 2023-24 are as below:

(Rs. Lakh)

Activity	Physical Projection (Ha)	Financial Projection
Food & Agro Processing (Micro units)	1034.00	2013.90
Miscellaneous Processing Units	25.00	71.44
Total Food and Agro Processing	1059.00	2085.34

4.6.2(ii) Ancillary Activities - Others

Loans to Cooperative Societies of farmers and to FPOs marketing of their produce.

- Due to the non-availability of storage facility, nearby regulated market, proper connectivity, the farmers are compelled to sell off their produce as soon as they harvest with minimal profit. If these farmers are collectively brought under Cooperative Society, then they will have better bargaining opportunity.
- The Cooperative Societies of farmers may be provided short term loans for disposing of their produce so that necessary arrangements could be made to transport it to the markets in the neighbouring places where it could fetch better price.
- The loan could be provided for a short period, say 45 to 60 days, repayable in one lump sum including interest. This would benefit both the farmers and the Banks.

Agri-clinic / Agri-Business Centres (ACABC)

The Agri-Clinic / Agri-Business Centres (ACABC) was launched in 2010 by Department of Agriculture and Cooperation, Ministry of Agriculture, Govt. of India to support agricultural development and create gainful self-employment opportunities to unemployed agricultural graduates, agricultural diploma holders, intermediate in agriculture and biological science graduates with PG in agri-related courses.

These establishments are required to supplement efforts of public extension by necessarily providing extension and other services to the farmers on payment basis or free of cost as per business model of Agripreneur, local needs and affordability of target group of farmers. The rise in demand in the dairy, poultry and piggery sectors in the recent times has increased the scope for such ventures.

Trainings are provided by MANAGE through Nodal Training Institutes. In Sikkim, training is imparted through SAMETI. The trainees then can establish Agri-Clinic or Agri-Business Centre with Bank Loan. Subsidy is available under the Scheme. (For details visit www.nabard.org)

Till date 09 candidates from Sikkim have received trainings on various agri-ventures from MANAGE out of which one trainee has set up unit at Ravangla, South Sikkim.

Loans to MFIs for on-lending to agriculture

Though Kisan Credit Card plays vital role through Banks in serving to the needs of the farmers but the outreach of the Banks is limited due to the difficult terrain. The MFIs which addresses clientele at the grass root level, can be involved by the banks to provide credit support to the rural populace in the remotest and difficult terrain rural areas. In most of the cases, the farmers are known to MFI personnels, hence it will be much easier for them to segregate the defaulters and provide loans to the genuine populace. The recovery hence would not be a problem. Thus, Banks may consider providing loans to MFIs for on-lending to agriculture as the loan would be much secured since recovery would not be much of a problem.

Activities under this sector also comprise loans to SHGs, JLGs, overdraft under PMJDY and Miscellaneous (loans to distressed persons to repay non institutional lenders (other than farmers) and loans to State sponsored organisations for SC/ST. Lending to the tertiary sector also assume significance from the point of view of linkage support provided by it to Agriculture (Primary Sector) & Rural Non-Farm Sectors (Secondary Sector) and for the overall development of the economy. It is considered vital for sustaining the developmental activity in the primary and secondary sector

Projections for other ancillary activities for Fy 2023-24 are as below: (Rs. Lakh)

Activity	Physical Projection (Ha)	Financial Projection
ACABC	2.00	30.00
Working Capital to FPO	34.00	348.00
Self Help Groups (SHGs)	1060.00	917.50
PM Jan Dhan Yojna (PMJDY)	1615.00	1210.50
Joint Liability groups (JLGs)	480.00	478.00
Total Ancillary Activities – others	3191.00	2984.00

Issues

- The scenario SHG and JLG financing is gradually improving. However, the JLG financing in the state is slow.
- SHG loans are progressing at a low rate which may be discouraging for the SHG members.

Suggested Action Points

- Banks have a role to play in the promotion and development of this sector in the district.
- Sensitisation of Bankers is required for dealing with these project proposals.

Implementing Agencies

- Banks, NGOs promoting SHGs, JLGs, SRLM, RMDD

4.7 Micro, Small and Medium Enterprises (MSME)

Introduction and Importance :

India's Micro, Small and Medium Enterprises (MSMEs) sector has emerged as a vibrant and dynamic sector for the economy. It is recognized as a catalyst in promoting growth and development. MSMEs are playing a pivotal role in creating a huge amount of employment at lower cost of capital in comparison to large industries, helping in establishment of industries in economically backward regions and minimizing regional inequalities. This sector contributes 45 percent of the manufactured output and 40 per cent of its exports. MSMEs provide employment to about 80 million persons through 36 million enterprises. There are about 6000 products ranging from traditional to high tech items manufactured by MSME units.

Recognising the emerging role of RUDSETIs (Rural Development Employment Training Institute) in imparting entrepreneurship training the Lead Bank of Sikkim, State Bank of India has set up a Rural Self Employment Training Institute (RSETI), for which the Government of Sikkim has allotted a plot of land and Central Government has already approved the financial assistance for construction of building and infrastructure.

The MSME Services sector in Sikkim draws its strength from tourism activities as the state is a preferred destination of tourists and the influx of tourists has given a boost to all service activities relating to tourism viz. hotels/ resorts/ homestays, travel agencies, tourist transport sector, local retailers and small businessmen.

With a view to give a fillip to this sector in Sikkim, the following factors need to be considered

- Establishment of Industrial Estates, technology parks, Floriculture Park, light engineering, etc.
- Availability of land and uninterrupted power supply are to be addressed
- Ensuring supply of raw materials to Handloom, Handicraft Sectors Promoting agencies to ensure that adequate raw materials are supplied to artisans to promote traditional handloom and handicrafts. Artisan SHGs may be promoted and strengthened to ensure supply and procurement of goods in an organized manner.
- Entrepreneurs should avail the benefit of subsidy under the GoI sponsored Credit Linked Capital Subsidy Scheme for upgradation of technology for SSI units
- Assured and organized market linkages needs to be provided to artisans besides giving adequate exposure through fairs exhibitions, etc.
- Inadequate institutional credit for investment and working capital, adequate and timely credit to be provided.

The following potential is estimated for the year 2023-24

(Rs. lakh)

Activity	Financial Projection
MSME – Term Loan : Micro Manufacturing Units - SSI unit; Hand / Power loom ;Tiny / Village/ Cottage/ Rural Industries/ Service Sector	37157.01
MSME – Working Capital : Micro Manufacturing Units - SSI unit; Hand / Power loom; Tiny / Village/ Cottage/ Rural Industries/ Service Sector	9100.25
Total	46257.26

Infrastructure gaps and constraints and suggested action points

- Micro entrepreneurs may be financed through JLGs/Handloom Weavers Group (HWGs).
- The progress in issuing Swarozgar Credit Cards, Artisan Credit Cards, Handloom Weaver Cards and Laghu Udyami Credit Cards is slow and banks have to give wider publicity to the scheme.
- Industrial areas/Estates may be earmarked by the State government to promote MSME
- Skill based training to rural youth may be imparted by agencies like RSETI, etc.

Implementing agencies

- Department of Commerce & Industries
- Districts Industries Centre
- Khadi & Village Board
- Khadi & Village Commission
- Department of Micro, Small & Medium Enterprise
- Commercial Banks
- RSETI

4.8 Export Credit

Introduction

Exports form the most important source of foreign exchange for developing countries. All developing countries including, India strives to increase their exports as a means of addressing balance of payments. Growth in Agri- exports not only brings in additional foreign exchange for the country but benefits a large number of people involved in the production, processing and export of such products. There is untapped potential for provision of Export Credit in Sikkim for wide range of activities under Agriculture, Non-Farm Sector and Tertiary Activities. There is huge demand for organic large cardamom, buckwheat, turmeric and ginger in the export market and Sikkim, being already declared an Organic State, there will be rise in demand for export credit for these two spices.

The following credit potential is estimated for the year 2023-24.

(Rs. lakh)

Activity	Physical Projection	Financial Projection
Export Credit (Upto Rs 20 lakh)	12.00	120.40

4.9 Education

- With the objective of making Sikkim a fully literate state and the Sikkimese people fully – literate citizens, the State Government has been investing a considerable annual budget in the education sector. Education is free upto the College level. There is provision for free distribution of school uniforms, books, exercise books, school bags, raincoats etc.
- In order to encourage girl children, the Purna Yojana provides scholarship of cash award of Rs.3,000 annually for girl children excelling in their studies at the district levels. The State Government has introduced the Small Family Scheme with the provision of bank deposit.
- Under the Chief Minister's Free Scholarship, the State Government bears the entire cost of expenditure for any Sikkimese who is able to secure admission in any of the twenty best Universities of the world.
- A great emphasis has been given for training in engineering and other professional areas such as computer software and information technology, accountancy, medicine, business management, rural development and tourism. The demand for specialized management personnel has increased with the growing complexity and size of industrial establishments and other tertiary sector activities like tourism and trade. There is ever growing demand in the Education Sector.
 - The following potential is estimated for the year 2023-24

(Rs. lakh)

Activity	Physical Projection	Financial Projection
Education Loan	290.00	1153.09

Issues

A large number of students are going out of state for higher or specialized educations viz., engineering, medical, management, hospitality etc. The Education Loan will help parents of the

deserving/meritorious students who are willing to pursue higher education in well known institutions to cope with the ever rising fee structure for higher education.

Suggested Action points

- Banks may tie up with various educational/technical institutions for provision of loans to new students enrolled.
- All banks may give wide publicity regarding availability of loans for taking up various technical courses.

Implementing Agencies

- Banks
- Education Department, Govt. of Sikkim

4.10 Housing

Support is available in the state for construction of houses under Chief Minister Awas Yojana, Reconstruction of Earthquake Damaged Rural Houses (REDRH), Pradhan Mantri Awas Yojana. Banks to finance construction of houses.

Pradhan Mantri Awas Yojana (PMAY)-G

A new scheme by the name Pradhan Mantri Awas Yojana – Gramin (PMAY-G) has been launched on 20th November 2016 aiming development of affordable homes for poor families including BPL populace in rural areas by the year 2022. Under the scheme, the beneficiaries in eastern and hilly areas would be provided with financial assistance of Rs.1,30,000/- for construction of house. Further, an additional amount of Rs.12,000/- would be provided to build toilet under Swach Bharat Mission. The beneficiaries will also be provided with daily wages of up to 90-95 days (Rs.18,000/-). Interested beneficiaries can also avail a loan of upto Rs.70,000/- from any nationalized bank for the construction of home. The beneficiaries for the scheme would be selected on the basis of SECC-2011 data. Banks may extend the necessary credit to interested people under the scheme.

Government of India's initiative to include middle class in urban areas under PMAY by extending interest subvention of 4% for loans upto Rs.9 lakhs and 3% for loans upto Rs.12 lakhs shall also boost credit outflow under Housing Sector. Interest subvention is also provided on loans upto Rs.2.00 lakh availed for renovation/extension of extending houses in rural areas.

The following potential is estimated for the year 2023-24

(Rs. lakh)

Activity	Physical Projection	Financial Projection
Housing Loan	1024.00	8232.00
Housing Loan - PMAY-G	124.00	245.41
Total	1148.00	8477.41

Issues

Tourism is one of the key sectors for the employment and income of the people. The demand for homestays for tourists in rural areas is rising and adequate financing is required in this field.

Suggested Action Points

Housing loan products needs to be focused in the rural areas and semi-urban areas for construction of homestays, lodges and hotels.

4.11 Infrastructure

4.11.1 Public Investment

Infrastructure provides the framework under which an economy performs and the state of roads,

the quality of telecommunications and the stable supply with power, to name just a few examples, more often than not makes the difference between a successful and a struggling economy. As the onus chiefly lies on public investment, therefore it is imperative that adequate infrastructure is created, completed on time and maintained for economic activities sustain.

4.11.2 Social Infrastructure Involving Credit

Social infrastructure covering schools, health care facilities, drinking water and sanitation facilities in tier II – VI centers have now been brought under the ambit of Priority Sectors Lending norms. This has opened up huge opportunity for promoting social infrastructure by banks through credit.

The following credit potential is estimated for the year 2023-24

(Rs. lakh)

Activity	Physical Projection	Financial Projection
Pay and Use Toilet	31.00	81.00

Issues

The absence of proper toilets without running water facilities in the tourist destinations causes sanitation problems not only for the tourists but also to the environment of the rural areas.

Suggest Action Points

Awareness generation amongst the public and entrepreneurs is necessary. Public-private partnership is likely to be a win-win situation for lenders and borrowers atleast in the initial stage.

Implementing Agencies

- Entrepreneurs and rural populace.
- Banks

4.11.3 Renewable Sources of Energy and Waste Management

Energy is the basic input for all economic activities. The per capita consumption which was about 150 units in the sixties now stands at about 325 units. The demand for electrical energy is growing rapidly at 9% annually. At the present rate of consumption, the limited reserves of fossil fuels would not last very long. Development of renewable sources of energy is a national priority as 40% of the population is not having access to energy. In this direction, GoI has set a contribution target for renewable energy at minimum 10% of total power generation capacity by year 2022.

Solar Energy: The National Solar Mission is a major initiative of the Government of India and State Governments to promote ecologically sustainable growth while addressing India's energy security challenge. It will also constitute a major contribution by India to the global effort to meet the challenges of climate change. Solar energy has the potential to provide energy without recurring cost. It has utility especially in lighting of houses, community lighting, etc.

The Sikkim Renewable Energy Development Agency (SREDA)

- This Agency was constituted by the State Government in 1999 mandated with the task of promoting and popularizing renewable energy and also to act as the State Nodal Agency for all renewable energy programmes and projects in the State.
- A pilot project of SREDA began with the implementation of 10 kw micro hydel project in Karek village, south Sikkim. A total of 92 houses were electrified in Karek village.
- SREDA has also recently tied up with the Swiss Agency for Development and Cooperation for implementing Village Electrification for Sustainable Use of Renewable Energy VeSURE project.
- In Banjhakri Falls Energy Park, 7 kw micro hydel plant was installed to supplement the electricity need of the park. A 20 kw plant in Ghor village in North Sikkim was commissioned in May 2012 and one in Hee-Bermiok village in West Sikkim (25 kw) is under testing and

commissioning stage.

Special Area Demonstration Programme (SADP)

- Under Special Area Demonstration Programme (SADP), SREDA had been sanctioned installation of a 20 kwp Solar Power Plant at State Assembly Premises, Gangtok East Sikkim.
- The project was completed and handed over to State Legislative Assembly, Gangtok on 26th of July 2012.
- Under the Jawaharlal National Solar Mission 2011-12 for Off Grids Solar Applications the Ministry of New and Renewable Energy, Govt of India has sanctioned SREDA installation of six (6) nos. of Solar Power Plants with an aggregate capacity of 530 kwp at various government institutions in and around Sikkim. All of the six (6) projects have been completed.
- For 2012-13 SREDA had been sanctioned two solar power plants with an aggregate capacity of 115 kwp to be installed at Mintokgang and Samman Bhawan, East Sikkim.

Solar Water Heater

- Under the Special Area Demonstration Programme of Ministry of New & Renewable Energy, SREDA has installed solar water heaters in many government building and religious institutions.
- Under State subsidy programme, solar water heating systems are being sold to hotels & private individuals on subsidized rate.

For the financial year 2012-13 SREDA has been sanctioned a total of 22000 lpd solar water heaters. 10000 lpd solar water heaters for domestic use and 12000 lpd solar water heaters for institutions.

National Biogas and Manure Management Programme (NBMMP)

- Under the National Biogas and Manure Management Programme (NBMMP) Family size biogas plants of 1 to 6 cubic meters are constructed.
- The Central Financial Assistance (CFA) from the NBMMP programme is Rs. 15,000/- to Rs. 17,000/- .
- Beneficiaries for this programme are selected through the recommendations of the Panchayats and after verification of criterion as envisaged in the NBMMP Programme guidelines.
- The programme has found wide acceptability amongst rural farmers as an affordable means of cooking and lighting alternative source of energy.

The following credit potential is estimated for the year 2023-24

(Rs. lakh)

Activity	Physical Projection (No.)	Financial Projection
Bio Gas plant	227.00	54.72
Solar Equipments - Flat plate collector system	208.00	40.34
Total Renewable Sources of Energy	435.00	95.06

Issues/Action Suggested

- Promoting use of Solar energy based units have a few constraints in the form of high capital cost and lack of awareness of technology.
- Biogas - The constraints are non-availability of good trained masons, poor installation / quality of plant construction, negligence on periodic repair and maintenance, poor post installation services, poor resources, inadequate backyard space for installation, social stigma attached to use/ handling night soil, lack of ownership/ poor group dynamics for community bio-gas plants, etc.

Implementing Agencies

- Commercial Banks and State Cooperative Banks
- Sikkim Renewable Energy Development Agency (SREDA)



CHAPTER- V

Infrastructure Planning

5.1 Importance of Rural Infrastructure

Infrastructure is the growth driver of the economy and our country needs massive investments in rural infrastructure in sectors like agriculture including irrigation, rural connectivity, renewable energy, health care, etc., to provide good quality services to the rural population and in bringing significant positive changes in their lives. The Government of India is committed for the welfare of the farmers and others in the rural areas. The development of rural infrastructure has, therefore, far reaching implication for ushering in prosperity and better quality of life.

Infrastructure development is critical for boosting productivity of economic factors. Rural infrastructure in the form of road network, irrigation facilities, flood protection, storage, energy, transport, communications, marketing centres, educational institutes, sanitation, health centres, etc. contributes both directly and indirectly to enhancement of rural farm and nonfarm productivity. This, in turn, accelerates economic growth and quality of life of rural masses.

5.1 State Perspective on Infrastructure Development

In the State, the sectors which demand infrastructural development on a priority basis include roads, bridges, education, health, agriculture research, extension services, drinking water, cold chain, renewable source of energy, etc.

The State Government has well appreciated the importance of infrastructure in these sectors in enhancing the production and productivity as well as per capita income in agriculture sector and has therefore laid emphasis on this sector in the State Budget 2022-23. Some of the major projects are two Passenger Ropeway systems (PM-DevINE), alternative highway to Sikkim running on the Sikkimese side from Teesta-Rangeet confluence onwards and Chiwabhnajang road corridor to Nepal through Uttaray side of West Sikkim. These makes for smooth entry into Nepal. The Chiwabhanjang corridor could in fact be considered as the first Sikkim-Nepal Economic, Trade and Tourism Corridor (SNETTC). Govt. is also trying for the declaration of 3 State Roads as National Highways.

Infrastructure needs in agriculture sector as identified in the State Budget are rural connectivity (roads and bridges), horticulture, floriculture, value chain, nursery management, breeding and feed management etc.

5.2 Rural Infrastructure Development Fund (RIDF)

Rural infrastructure comprises all activities and facilities which help to sustain the growth in production and income generation. While there are various avenues for financing rural infrastructure in the form of various schemes of state and central governments, RIDF (Rural Infrastructure Development Fund) is one of the major sources of funding for State Governments for completing / implementing various infrastructure projects in States. The fund was started in 1995-96 with an initial corpus of Rs. 2,000 crores (Tranche I), which has grown to Rs. 40,000 crore in 2022-23 (Tranche XXVIII). Apart from Government Departments, State owned Corporations are also eligible to borrow directly from NABARD under RIDF, on the basis of State Government guarantee.

The funding of vast multitude of rural infrastructure projects under RIDF over past 25 years has emerged as an important mechanism for both the concerned state governments and NABARD for creating rural infrastructure. The robust mechanism of normative allocation based on socio-economic parameters, techno-economic appraisal, concurrent monitoring, outcome based regular reviews at the highest level, correlation of financial progress with physical achievements and periodic ex-post evaluation have ensured sustained benefits to the rural population and the rural economy through optimal utilisation of scarce resources. The significant achievements over the years have made NABARD the premier partner of the state governments in building rural infrastructure, across the length and breadth of the country.

5.3 Eligible activities under RIDF

The eligible activities are classified under following three broad categories.

(i) Agriculture and Allied Sectors : Irrigation projects, soil conservation, flood protection, watershed, reclamation of water logged areas; animal husbandry, plantation and horticulture, seed, agriculture and horticulture farms, forest development, fishing harbour/ jetties, riverine fisheries; market yards, godowns, marketing infrastructure; cold storage; grading/ certifying mechanisms; testing laboratories; Hydel projects (up to 25 MW); village knowledge centres; infrastructure for Information Technology in rural areas; desalination plants in coastal areas; and setting up of KVIC industrial eStates/ centres, Infrastructure works related with alternate sources of energy, viz. solar, wind etc & energy conservation, 5/10 MW Solar Photovoltaic Power Plant and Farm Mechanization. The loans are provided at 95 per cent of project cost for all the States.

(ii) Social Sector: Drinking water; public health institutions; construction of toilet blocks in existing schools, especially for girls and “Pay & Use” toilets in rural areas, infrastructure for rural education, construction of ‘anganwadi’ centres and solid waste management and infrastructure works related with sanitation in rural areas. The loans are provided at 90% of the project cost in North Eastern and hilly States and 85% of the project cost for other States

(iii) Rural Connectivity: Rural roads, rural bridges, Ropeway and Road Over Bridge (ROB) on Railways crossings. The loans are provided at 90% for NEW and hilly states and 80 per cent of project cost for other states.

5.4 Infrastructure support under Rural Infrastructure Development Fund (RIDF)

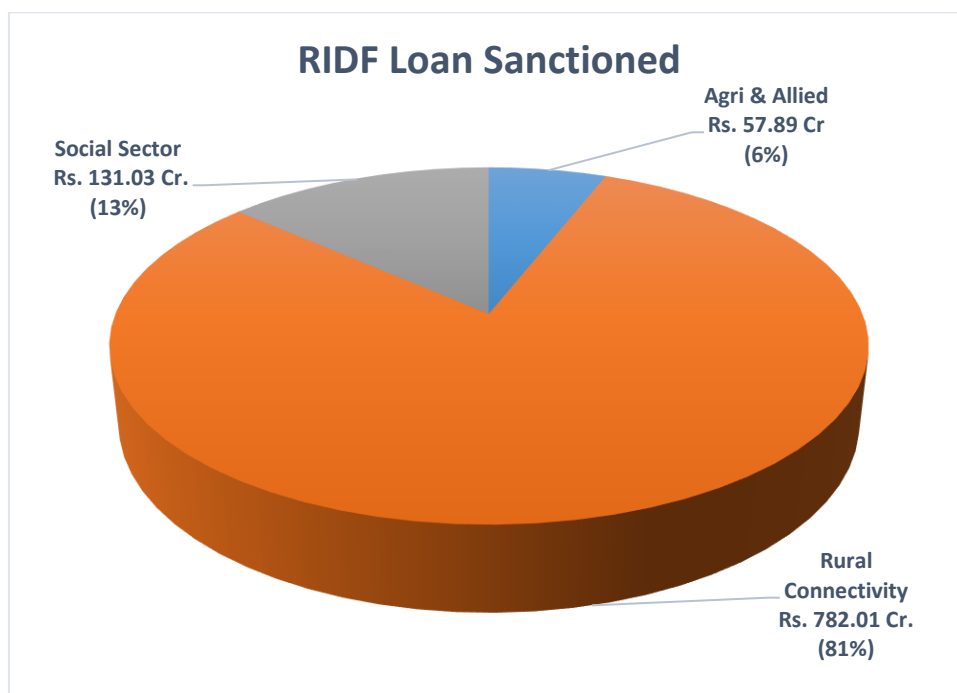
In Sikkim, under RIDF, apart from the traditional rural road & irrigation projects, NABARD has also sanctioned many diversified projects like flood control, construction of school rooms /hostel buildings, rural drinking water supply projects, rural markets, pay & use toilets, etc. Total number of projects sanctioned to GoS cumulatively under the fund is 1279 (excluding projects withdrawn, closed due to various reasons), amounting to ₹.970.93 crore, against which the total disbursement stood at ₹.712.60 crore as on 15 December 2022.

The broad sector wise details of projects sanctioned and amount disbursed as on 15 December 2022 are given in the table below:

(Rs. Crore)

Sr No	Activity Name	No of projects	Sanctioned Amount	Disbursed Amount
Agri & Allied Sector	Flood Protection Measures		17.03	17.02
	Minor/Micro Irrigation		39.08	26.93
	Weirs/Bunds	1	1.1	0.93
	Mandi	1	1.25	0.9

	Market Yard	1	12.83	12.82
Rural Connectivity	Rural Bridges	25	3.34	2.32
	Rural Roads	198	778.67	525.33
Social Sector	Rural Education Institutions – Primary Schools	128	52.01	47.41
	Toilet Blocks in Schools Specially for Girls	43	1.76	1.76
	Rural Drinking Water Supply	43	77.26	77.18
	Total		970.93	712.60



5.5 Critical Infrastructure Support Required

NABARD through its Potential Linked Credit Plans has made an attempt to identify the district-wise critical infrastructure requirement. An aggregation of the requirement reveals that an investment of Rs.661.28 crore is required in various sectors. A list of critical infrastructure projects – as assessed by NABARD is enclosed as Annexures IIIA, IIIB and IIIC. This critical infrastructure, when completed, is expected to lead to increased credit outflow for various sectors and lead to overall development of rural areas.

5.6 Potential areas/sectors for financing under RIDF in the State

- Rural connectivity (Roads and Bridges)/ Ropeways
- Marketing infrastructure/Mandis
- Small/mid-sized Warehousing/Storage facilities
- Animal husbandry/Modern abattoir
- Soil conservation
- Rural drinking water supply
- Small hydro power generation
- Drainage system
- Seed/Horticulture farms

- Public health institutions
- Solid waste management and infrastructure works related with sanitation in rural areas.

5.7 Acceleration of credit flow /associated benefits on completion of RIDF projects

5.8.1 Roads

- Roads in mountain terrain have a high cost per beneficiary due to a relatively lower number of population served, high construction costs due to the difficult terrain, and low volume of use per day. However, they offer significant social benefits in terms of access to health and education services by providing market linkages and improving access to government programs
- Areas linked by rural roads now have easy access to the markets, dairies, etc. This leads to enhanced agricultural as well as non-agricultural activities in the region. Banks may explore the possibility of lending for establishing SSIs, RNFS units in the areas where connectivity and road infrastructure has improved.
- Construction of new roads under RIDF had provided all weather connectivity to market places, towns and urban centres and facilitated transportation of perishable commodities like milk, vegetables, fruits, etc.
- Access to education and medical facilities had improved.
- Business and service sectors in rural villages have greatly benefited on account of better connectivity. Operation of jeeps/cars for transporting people and goods has become feasible in the connected villages. It was observed that small business and service centres like grocery shops and car hire had flourished in the post development period, while the quality of life had improved in the villages which were connected by roads.

Social Sector

On completion of social sector projects, following benefits have accrued to the society at large.

- Construction of drinking water supply schemes has led to the availability of safe and potable drinking water in the villages, thereby reducing the health costs on water related diseases. This also reduced the drudgery for women folk to fetch drinking water from far off places.
- Completion of Rural Markets is catering to the immediate needs of rural population to market their produce.
- Sikkim has achieved 100% sanitation. Provision of toilets in rural areas also helps in promoting tourism.

5.9 New avenues for funding of infrastructure projects

5.9.1 NABARD Infrastructure Development Assistance (NIDA)

i. Policy

NABARD Infrastructure Development Assistance (NIDA) has been specially designed as a dedicated and customized window to provide loan support to the State Government for creation of rural infrastructure. The offering under NIDA is given as:

On-budget: In cases where the State Government's borrowing limits have not been exceeded, but its RIDF allocation is not sufficient to meet the infrastructure needs of the State, or the requirements are beyond eligible activities specified under RIDF, NIDA can be an effective window for the State Government to channelize funds for infrastructure creation.

Off-budget: Often State Governments may have exceeded their borrowing limit under Article 293 (3) of the Constitution, or else they would like to borrow money for purposes other than infrastructure development. In such cases, State Governments may resort to off-budget borrowing by State-owned entities who can channelize funds for infrastructure creation. The State Government may want to encourage profit making State agencies having assured income stream to approach NABARD for funding infrastructure projects, thus reducing dependence on budgetary resources.

ii. Progress under NIDA – All India

During 2021–22, term loan of Rs.8215 crore was sanctioned under NIDA through 13 credit proposals. These included 01 Irrigation, 08 education, 3 Road and 01 Transmission projects.

iii. Impact of NIDA projects

Under NIDA, irrigation, connectivity, and rural electrification including power transmission and distribution are the major activities. Support for supplying drinking water projects is another major area financed under NIDA. The projects supported under NIDA have varied impact.

iv. NIDA - Progress in Sikkim

NABARD has sanctioned an amount of Rs.214.31 Crore (under NIDA I and II) for development and strengthening of Road Infrastructure and released an amount of Rs.214.31 crore till date. The projects are implemented through SIDICO.

5.10 Rural Infrastructure Assistance to State Governments (RIAS)

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

6. PROMOTING FOOD PROCESSING INDUSTRY

6.1 Food Processing Fund (FPF): Envisaged Plan and Impact

NABARD sanctioned a term loan of Rs 701.2 crore for 12 Mega Food Parks (MFPs), 10 Agro Processing Clusters (APCs) and 10 Individual Food Processing Units with a cumulative disbursement of Rs 409.4 crore. During the year 2020-21 sanction and disbursement under FPF stood at Rs.116.5 crore and Rs 53.2 crore, respectively.

6.2 Milestones Achieved

Under Food Processing Fund (FPF), term loan has been extended to all types of eligible activities viz. Mega Food Parks, Agro Processing Clusters and Individual Units; and to different borrowing entities, viz. State Govt., State Govt. owned entities, Special Purpose Vehicles (SPVs), Federations, Companies, Partnership Firms and Limited Liability Partnerships. Fifteen (15) States have been covered including North-Eastern States (Assam and Manipur), difficult areas i.e . Himalayan States (Himachal Pradesh and Uttarkhand) and State Notified Integrated Tribal Development Project (ITDP) areas.

7. PRADHAN MANTRI AWAS YOJANA - GRAMIN (PMAY-G)

Pradhan Mantri Awas Yojana - Garmin (PMAY-G) aims at providing a pucca house with basic amenities to all households and those households living in kutcha and dilapidated houses, by 2022. Under Phase I (2016-17 to 2018-19) of the scheme, one crore houses were to be constructed.

Under Phase I, as on 31 March 2019, an amount of Rs. 21,975 crore was sanctioned and Rs.18,008 crore was released by NABARD to National Rural Infrastructure Development Authority (NRIDA), the nodal agency identified by MoRD for borrowing funds from NABARD for part funding of Central share under PMAY-G.

Following further approval of the Union Cabinet for continuation of PMAY-G beyond March 2019, with additional target for construction of 1.95 crore houses under Phase II (2019-20 to 2021-22). The cumulative sanction and release under PMAY-G as on 31 March 2021 stood at Rs. 61,795 crore and Rs. 48,819 crore respectively.

As against the target of 2.95 crore houses to be built in rural areas under PMAY-G [1 crore during Phase-I (2016-17 to 2018-19) and Rs 1,95 crore during Phase –II construction of more than 1.3 crore houses has been completed.(as on 27.02.2021).

8. DAIRY PROCESSING AND INFRASTRUCTURE DEVELOPMENT FUND (DIDF)

With the objective of modernisation and infrastructure augmentation for milk processing and value addition and to ensure optimum price realisation by the primary producers, Government of India has created Dairy Processing and Infrastructure Development Fund (DIDF) in NABARD in the year 2017-18, with a total corpus of Rs.8,004 crore to be utilised over a period of five years.

As on 31 March 2021, 43 projects in 11 states have been sanctioned to the National Dairy Development Board and the National Cooperative Development Corporation with the loan amount of Rs 3644.5 crore for an investment of Rs 5256.5 crore in the dairy processing center. The cumulative amount disbursed is Rs 1,230.7 crore. The sanctioned projects are expected to create milk processing capacity of Rs 162.7 lakh litre per day(LLPD), modernisation of existing plants of 10.6 LLPD, value addition capacity of 2,794.8 metric tonne per day(MTPD) and milk drying capacity of 300 MTPD in the implementing states.

9. OTHER INFRASTRUCTURE FUNDS

9.1 Promotion of Market Infrastructure in Gramin Agricultural Markets

Pursuant to the announcement in Union Budget 2018-19, a dedicated Agri Market Infrastructure Fund (AMIF) with a corpus of Rs.2,000 crore has been established with NABARD. The scheme provides financial assistance for upgradation of 10,000 Grameen Haats to Grameen Agricultural Markets (GrAMs), creation of electronic display mechanism and linking of GrAMs with APMCs and upgradation of 585 e-NAM enabled APMCs. Thus, it will help in providing better farmer-consumer interface in providing the forward market linkages and modernize the marketing, processing, storage and ancillary infrastructure/logistics, including better assaying facilities, in 585 e-NAM enabled APMCs.

9.2 Fisheries and Aquaculture Infrastructure Development Fund (FIDF)

In line with its announcement in the Union Budget 2018–19, Government of India created the Fisheries and Aquaculture Infrastructure Development Fund (FIDF) with a total corpus of Rs.

7,522 crore to be implemented over a period of five years (2018–19 to 2022 - 23). NABARD is acting as a Nodal Loaning Agency and will fund the public infrastructure components to the tune of Rs. 2,508 crore through State governments for various investment activities like developing fishing harbours, fish landing centres, modernized State fish seed farms, modern fish markets, disease diagnostic laboratories, aquatic quarantine facilities and training infrastructure.

The fund was operationalised in December 2019 with signing of the first tripartite MoA amongst the State Government of Tamil Nadu, the Government of India and NABARD. During the year 2019-20, three fishing harbour proposals were sanctioned to the Government of Tamil Nadu with total financial outlay of Rs. 420 crore and loan component of Rs. 348 crore. The fishing harbours will generate additional employment to 12,115 sea going fishermen and 6,000 persons in shore-based establishments, distribution and marketing.

9.3 Swachh Bharat Mission-Gramin (SBM-G)

SBM-G was launched by Govt. of India with effect from 2nd October 2014 with the goal to achieve universal sanitation coverage in rural areas by 2nd October 2019. The nodal Ministry for SBM-G is the Ministry of Jal Shakti.

Under SBM-G, NABARD extends loans to National Centre for Drinking Water, Sanitation and Quality (NCDWS&Q) towards part funding of Central share towards construction of 3 crore household toilets. As on 31 March 2021, total sanction and disbursement under SBM-G stood at Rs. 15,000 crore and Rs 12,298.2 crore respectively. The loan assistance from NABARD has facilitated construction of 3.3 crore household toilets.

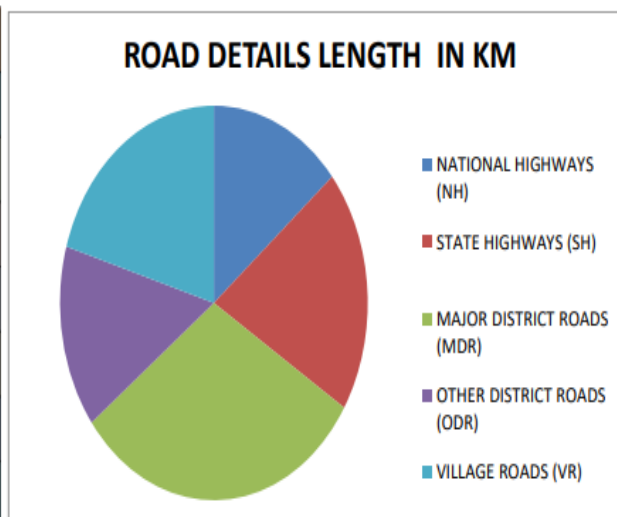
9.4 Micro Irrigation Fund (MIF)

As per the announcement in the Union Budget, the Micro Irrigation Fund with a corpus of Rs. 5,000 crore has been operationalized in NABARD from 2019-20. Ministry of Agriculture and Farmers Welfare (MoA & FW), Government of India is the Nodal Ministry for implementation of the fund. The objective of the fund is to facilitate State governments in mobilizing additional resources for expanding coverage under micro irrigation and incentivizing its adoption beyond provisions of PMKSY-PDMC.

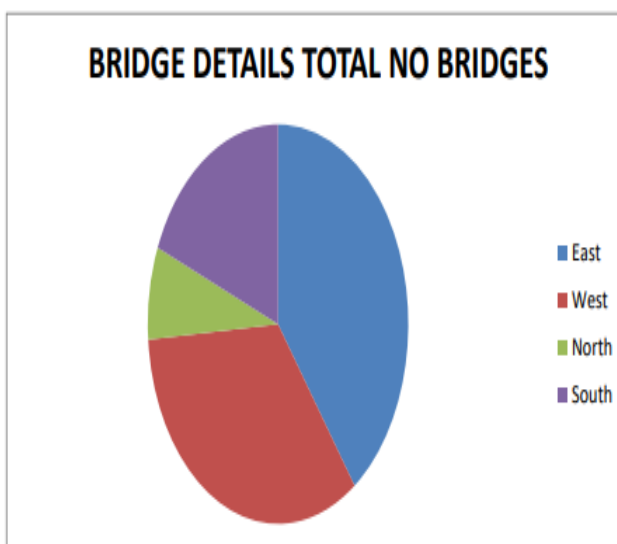
NABARD shall lend to the State Govts under the fund at 3% below the corresponding cost of fund mobilized from market with Govt of India providing interest subvention of 3% to meet the balance cost. During 2020-21, Rs 1,128.6 crore was sanctioned to 4 States viz. Andhra Pradesh, Gujarat, Tamil Nadu and Haryana. This fund ensures water use efficiency and water conservation while increasing irrigation coverage. As on 31 March 2021, cumulative sanction under MIF stood at Rs 3,970 crore and release at Rs 1,827 crore. This will help these States to expand micro irrigation to an area of 12.8 lakh hectare.

Status of Roads in Sikkim:

ROAD DETAILS	
ROAD CLASSIFICATION	LENGTH IN KM
NATIONAL HIGHWAYS (NH)	512.00
STATE HIGHWAYS (SH)	732.61
MAJOR DISTRICT ROADS (MDR)	1,126.31
OTHER DISTRICT ROADS (ODR)	549.68
VILLAGE ROADS (VR)	748.18
TOTAL	3,668.78



BRIDGE DETAILS	
DISTRICTS	TOTAL NO BRIDGES
East	96
West	81
North	18
South	45
TOTAL	240.00



(Source: Roads and Bridges Deptt. GoS)

10. Critical infrastructural gaps and interventions required with the state Government for inclusion in the budget are listed in Annexure III and IV.

Critical interventions required to be addressed by the State Government

Flow of Funds: Timely release of funds to the implementing offices at the grass root level is to be ensured by the implementing departments and also monitoring by the nodal department, i.e., Finance Department to ensure smooth progress in physical work of projects sanctioned under various funds.

Monitoring: The implementing departments may monitor the progress on a regular basis to ensure that the projects are implemented as per the phasing and benefits are reaching to the beneficiaries for which the projects are being implemented.

Infrastructure Index : Preparation of an exclusive Rural Infrastructure Policy / Plan / Index with a regional planning approach and further breaking down to district and block level. State Government may consider construction of a quinquennial infrastructure index. The sectoral weightage pattern may be revised every five years based on the prevailing condition of the sector

at the time of revision. This would enable identification of critical infrastructure gaps and investment in prioritised sectors.

Comprehensive investment plan for Agri-Infrastructure: Creation of a separate policy/strategy for Agriculture Infrastructure. Prioritization of sectors and financing such infrastructure by leveraging low cost and market linked cost effective funds of NABARD so that the assets are created and benefits thereof realised over a period of time.

Benefit of Potential Created: State Government may leverage on the infrastructure created to introduce additional physical and infrastructure and service infrastructure. Latest technologies / Robust technologies like IOT to be adopted to reduce operational and maintenance costs.

-----8-----

CHAPTER – VI

Details of Policy Initiatives of Government of India, Reserve Bank of India, NABARD and Govt. of Sikkim

6.1 Policy Initiatives - Government of India

6.1.1 Union Budget of India- 2022-23

Agriculture and Food Processing

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

MSME

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

Skill Development

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

Inclusive Welfare Focus

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

Productivity enhancement and Investment

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

Sunrise opportunities and climate action

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

Financing Public Investment

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

6.1.2 Strengthening of Cooperative Sector

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

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

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

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

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

Source: NCUI 2018

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

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

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

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

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

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

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

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

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

6.1.3 Enhancing Credit Flow: Credit Guarantee Schemes

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

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

6.2 Policy Initiatives – Reserve Bank of India

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

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

- ii. Master circular on SHG- Bank Linkage Programme consolidating the relevant guidelines/ instructions issued by Reserve Bank of India up to March 31, 2022, was issued vide circular FIDD.CO.FID.BC.No.1/12.01.033/2022-23 dated 01 April 2022. As per the circular, utmost priority should be given by banks in lending to SHGs and the same should also form an integral part of the bank's corporate credit plan.
- iii. **Kisan Credit Card Scheme - Eligibility criteria for farmers engaged in fisheries/ aquaculture**
 RBI has issued modified instructions to all Commercial Banks including Small Finance Banks and excluding Regional Rural Banks, with regard to the eligibility criteria for inland fisheries and aquaculture. As per the modified instructions, the beneficiaries must own or lease any fisheries related assets such as ponds, tanks, open water bodies, raceways, hatcheries, rearing units, boats, nets and such other fishing gear as the case may be and possess necessary authorisation/certification as may be applicable in respective states for fish farming and fishing related activities and for any other state specific fisheries and allied activities. The detailed instructions were issued by RBI vide circular FIDD.CO.FSD.BC.No.6/05.05.010/2022-23 dated 18 May 2022.
- iv. **Lending by Commercial Banks to NBFCs and Small Finance Banks (SFBs) to NBFC-MFIs, for the purpose of on-lending to priority sector**
 To ensure continuation of the synergies that have been developed between banks and NBFCs in delivering credit to the specified priority sector, RBI issued instructions to all Scheduled Commercial Banks including Small Finance Banks that Bank credit to NBFCs (including HFCs) for on-lending will be allowed up to an overall limit of 5 percent of an individual bank's total priority sector lending in case of commercial banks. In case of SFBs, credit to NBFC-MFIs and other MFIs (Societies, Trusts, etc.) which are members of RBI recognized 'Self-Regulatory Organisation' of the sector, will be allowed up to an overall limit of 10 percent of an individual bank's total priority sector lending. These limits shall be computed by averaging across four quarters of the financial year, to determine adherence to the prescribed cap.
 SFBs are allowed to lend to registered NBFC-MFIs and other MFIs which have a 'gross loan portfolio' (GLP) of up to Rs.500 crore as on March 31 of the previous financial year, for the purpose of on-lending to priority sector. In case the GLP of the NBFC-MFIs/other MFIs exceeds the stipulated limit at a later date, all priority sector loans created prior to exceeding the GLP limit will continue to be classified by the SFBs as PSL till repayment/maturity, whichever is earlier. The detailed instructions were issued by RBI vide circular FIDD.CO.Plan.BC.No.5/04.09.01/2022-23 dated 13 May 2022.
- v. **Modified Interest Subvention Scheme for Short Term Loans for Agriculture and Allied Activities availed through Kisan Credit Card (KCC) during the financial year 2022-23**
 Modified instructions on Interest Subvention Scheme for Short Term Loans for Agriculture and Allied Activities availed through Kisan Credit Card (KCC) during the financial year 2022-23 were issued by RBI to all Public Sector Banks, Private Sector banks and Small Finance Banks to extend the benefit of Interest Subvention vide circular FIDD.CO.FSD.BC.No.13/05.02.001/2022-23 dated 23 November 2022. As per the scheme, banks to submit their additional claim pertaining to the disbursement made during the year 2022-23 which is (i) not included in the claim as on 31 March 2023; and (ii) repaid promptly during 2023-24, latest by 30 June 2024.

6.3 Policy Initiatives – NABARD

6.3.1 Long-Term Refinance

To ensure increased and uninterrupted credit flow to farmers, as also to give a boost to capital formation in agriculture sector, NABARD provides refinance to the cooperative banks and RRBs out of Long Term Rural Credit Fund, at a reasonable rate of interest. An amount of Rs.1,25,000.00 crore was allocated for the year 2022-23.

6.3.2 Short-Term Refinance

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

6.3.3 Other Initiatives

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

(ii) Special Liquidity Facility-2

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

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

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

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

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

6.3.4 Government Sponsored Programmes with Bank Credit

- Department of Food and Public Distribution (DFPD), Government of India has notified the "Scheme for extending financial assistance to project proponents for enhancement of their ethanol distillation capacity or to set up distilleries for producing 1st Generation (1G) ethanol from feed stocks such as cereals (rice, wheat, barley, corn & sorghum), sugarcane, sugar beet, etc." NABARD has been appointed as the Nodal Bank for interacting with DFPD and managing interest subvention under the Scheme.

The operational guidelines have been issued to Cooperative Banks, RRBs, NCDC, PSBs, Commercial Banks, etc. for implementation of the scheme.

- Administrative approval conveying continuation of the following subsidy schemes for 2022-23 (till 30 September 2022) has been received from the GoI :
 - Agri Clinics and Agri Business Centres (ACABC)
 - Agri Marketing Infrastructure (AMI) sub scheme of Integrated Scheme for Agricultural Marketing (ISAM)

6.3.5 Rural Infrastructure Development Fund (RIDF)

- The corpus under Rural Infrastructure Development Fund (RIDF) was Rs. 40,000 crores during FY 2022-23.
- During 2021-22, the total sanctions were to the tune of Rs. 46,072.70 crore and disbursements were to the extent of Rs. 33,883.18 crore to various State/UTs.
- Based on the requests received from State Governments, two new activities viz. Road Over Bridges on railway crossings and Ropeway were added in the list of eligible activities under RIDF.

Other Important Funds

i) Long Term Irrigation Fund (LTIF)

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

ii) Micro irrigation Fund (MIF)

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

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

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

6.3.6 Micro Credit Intervention

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

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

Registry for capturing the KYC details of members of SHGs for reporting to CICs.

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

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

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

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

6.3.7 Financial Inclusion

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

6.3.8 Farm Sector Development – Important Initiatives

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

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

II. FPO Promotion

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

III. IOT and ICT Interventions

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

IV. Climate Action

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

6.3.9 Off Farm Sector Initiatives

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

6.3.10 Agriculture Credit Target during 2022-23

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

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

6.4 Policy Initiatives – State Government

Some of the schemes / policies brought out by the State Govt. to impart thrust to agriculture and other priority sectors :

1. Mukhya Mantri Krishi AtmaNirbhar Yojna (MMKAY): This program provides financial incentive to farmers on the basis of quantum of produce in respect of 19 identified agri- horti items marketed through/ sold to FPOs/ cooperative societies/ SHGs registered under NRLM/ SRLM/ Government departments and agencies. The incentive amounts range from Rs. 7/- (cauliflower/ radish/carrot) to Rs. 100/- (for large cardamom) per kg with an upper limit of Rs. 30,000/- per individual crop and Rs. 1,00,000/- per individual farmer producer in aggregate. Additionally an incentive of 2% is provided as handling charge to the approved agency (except Govt. Departments) for marketing/ aggregating of farmer's produce.

2. Pig Production Incentive Scheme (PPIS): In order to attain self-sustenance in pork protein, GoS has introduced the PPIS wherein pig farmers are incentivized with a benefit of Rs. 50,000/- per animal with an upper cap of 3 animals per farmer subject to attaining a weight of 50 kg each. Additionally, an annual incentive of Rupees One Lakh each to pig farmers who rear more than twenty pigs has been formulated to encourage commercial pig farming.

3.1. Dairy farmers' Incentive Scheme: The scheme was launched by the Govt. of Sikkim with the slogan 'HamroKranti-DoodhKranti'. Dairy is a major allied activity in Sikkim and to support and incentivize the efforts of dairy farmers, following schemes are being implemented.

- All dairy farmers of Sikkim producing and supplying milk through Co-Op Societies shall receive Rs. 8 per litre as Government Incentive
- To foster a healthy competition, GoS has initiated 'Milkman of the Year' award.
- Pashu Dhan Mela has been started which will benefit livestock farmers of the State opting to purchase high yield and better quality breed animals for enhanced production performance.
- Skilled Youth Start Up schemes with assistance of Rs. 5 lakh for Dairy farming.
- Development through credit scheme
- compensation for milk damage caused by road blockage
- promotion of 'One Family Two Cows' policy

3.2. Fisheries: So far most of the efforts of the Govt. were in promotion of Brown Trout for tourism and angling purposes. Now focus has been slowly shifted to promotion of Rainbow trout for food purpose. This will give direct income to farmers in the high altitude areas. Most of it will be consumed in the high end hostels in Gangtok and will be exported to other cities of the country.

Under the Mukhya Mantri Matsya Utpadan Yojana (MMMUY) subsidy scheme of state government, the beneficiaries are provided 60% subsidy. The Trout / Carp fish farmers can get 60% subsidy of Rs.24,000/- (maximum) on purchase of fish seed for stocking costing Rs.40,000/- while the fishermen can get 60% subsidy of Rs.15,000/- (maximum) on purchase of fishing equipments (Rods, line/cast net, fish transportation box & weighing machine) costing Rs.25,000/-.

4. Policy on Organic Farming: Sikkim is the first state in India to officially announce adoption of organic farming in the year 2003 and the only state of India to convert entire state into organic. Sikkim Organic Mission is the flagship program of Sikkim State and under which 76,169 hectares of the cultivated area is certified as fully organic covering 66,227 farmers. Use of chemical fertilizers and insecticides has been banned. To enforce this, the State Government has framed the Organic Input and Livestock Feed Regulatory Act, 2014.

5. As on 31 March 2018, 66,227 farmers have been registered under the organic certification program covered under 191 groups. Soil Health Cards have been distributed to farmers after soil testing based on the Central Government's guidelines on 10-Hectare grid basis.

6. 28 Farmers' Producer Organizations (FPOs) have been promoted under MOVCD in phase I and nurtured through Sikkim Organic Mission, Govt. of Sikkim. Presently the State has projected a total potential of 80 FPOs under all schemes including the 28 FPOs already promoted. The second phase with a target of another 28 FPOs is currently under implementation.

7. MSME Policy

Government of Sikkim has revamped the state's MSME Policy and Rules in 2022 and has come up with present set of framework to boost its visions of "Make in Sikkim" and "One Family One Entrepreneur".

The new policy aims to provide facilitation, services, incentives and subsidies to promote local entrepreneurs to increase production and services and enable them to export their commodities and services outside the state and country. Broadly by providing an enabling and supporting ecosystem; and subsidy framework for very small businesses.

Policy Incentives comprise –

- a. 100% exemption from stamp duty. Transfer duty paid on purchase of land or for lease of land/shed/buildings for MSME activities undertaken by COI holder/ Sikkim Subject Certificate holder/ Residential Certificate holder shall be reimbursed (subject to a maximum of Rs. 2 lakhs).
- b. New MSME units belonging to manufacturing, servicing and job work shall get reimbursement of 50% SGST for a period of 3 years from the date of commencement of commercial production/services (subject to a maximum of Rs. 2 lakhs).
- c. Interest Subsidy of 25% for the first five years shall be provided to MSME for their credit loan availed for enterprise development, subject to the payment of EMI without default by the MSME for the previous year. This interest subsidy shall not exceed a maximum of Rs 2 lakhs per year.
- d. The MSME shall be provided with 50% of their transportation cost for participation in national/international trade fairs. e. Exposure training for entrepreneurs in established industrial firms outside the state will be arranged from different schemes for their first-hand information and knowledge.

A State MSME Advisory Committee has been envisaged under the new policy comprising of officials and experts from different State Departments, Central Ministries/Offices, State/Central Universities and representatives of associations who have the mandate to work in the MSME sector or are related to its development. The Sikkim State MSME Advisory Committee, an autonomous body will be headed by the Secretary, Department of Commerce and Industries with members from the line departments of the Government of Sikkim, the MSME Development Institute of the Government of India, National Small Industries Corporation, Entrepreneurs associations, Lead Bank and National Bank for Agriculture and Rural Development (NABARD).

8. Food Processing Infrastructure: Government of Sikkim has entered into a joint venture with IFFCO under the banner Sikkim IFFCO Organics Ltd. to provide agri-inputs and services for organic farming along with providing facility of processing and marketing of the organic produce.

Additionally, the venture will explore business opportunities in organic seeds, bio-pesticides, bio-fertilizers, organic fertilizers, organic plant growth promoters, organic food processing, organic horticulture and any other opportunity that furthers the purpose of promoting organic farming in the state. SIFCO will market the produce to various markets in the county and across the world, for which it has already signed two Memorandum of Understanding (MoU).

9. Marketing and Branding of Sikkim made - In order to create special and unique attributes that distinguishes the organic produce to obtain price premium, a brand identity has also been created for Sikkim organic products. Sikkim Organic Mission is assisting the FPOs in developing packaging and labelling, literature, brand promotion materials etc. as a part of branding and market initiative. To support the products made in Sikkim, the producing unit will add 'A product of Sikkim Himalayas', in its packaging besides the tag of "Made in India".

10. The state government has launched Sikkim AGRISNET, an internet-based agriculture information center, to promote scientific agricultural methods and convert research into practice in the agricultural sector.

11. **RKVY – RAFTAAR** is being implemented in the State with the revised Central and State funding pattern of 90:10 covering various activities ranging from organic fodder & feed

development, setting up of primary processing & packaging units, storage & marketing structures, mobile veterinary units.

12. Pradhan Mantri Fasal Bima Yojna (PMFBY) – The Government of Sikkim has been implementing the scheme to provide insurance coverage and financial support to the farmers in the event of failure of the notified crop because of natural calamities, pest and diseases by contributing its share of 50 % in addition to Central Government funding.

13. MGNREGA is one of the major programs under implementation. Out of 92,000 rural household in Sikkim, 84,931 households have been provided Job cards while 65,454 (71%) household have been provided employment at an average of 66 person days per annum. Since its inception, MGNREGA has generated 326.31 lakh person days of employment, with an average of 40.7 lakh person days of employment per year.

In Sikkim, the lifestyle of the rural poor has been enhanced tremendously through this livelihood scheme. During the last 10 years, a total investment of 663.63 crore, with an average of 66.36 crore per year have been made under MGNREGA, out of which 391.62 crore (59% of total), with an average of 39.16 crore per year have been directly paid as wage to the job cards holders bank accounts.

Out of the total 92,000 rural households in the State, 23,090 (27%) household belonging to poorest category were covered under the livelihood intervention, directly benefiting on an average 131 households per Gram Panchayat Unit. During the FY 2015-16 a total of 20.85 lakhs women person days of employment was generated and the women participation increased from 26% in 2006 to 48%.

14. The State Government has adopted a Kutcha House Free policy and provide sustainable houses for longer period for the economically weaker section in the state. Presently the Sikkim Garib Awas Yojna is under implementation with an objective of facilitating sustainable housing facility to deserving households such that their own income can be utilized for other requirements of the family. Strict guidelines for selection of beneficiaries have been laid comprising of owning and size of land, identity as Sikkim Subject, non-availing of any other housing schemes executed by the government earlier and annual household income. Rural Management and Development Department is the nodal department implementing the scheme in the state.

15. Skill Development Mission - The Skill Development Initiative was launched in 2007 and apart from the Directorate of Capacity Building, the State Institute of Capacity Building at Karfectar. All the 32 Livelihood schools will work under State Institute of Capacity Building, Karfectar, South Sikkim. The Institute and all Livelihood School will be Governed by a Examining cum affiliating Board i.e. STATE BOARD OF LIVELIHOOD SCHOOL, SIKKIM (SBLSS) which has been notified by Government of Sikkim. The institute and Livelihood Schools have become centers for youth to learn about their strengths and needs, to prepare for successful lives as adults, make choices about their futures and take up related training after which they may be able to build their careers. In a way this Institute will cater to the needs of youth development which would include strategies related to academic development, delivering quality and standard based training, work skills and core value.

Advancing North East is a digital initiative (www.advancingnortheast.in) ideated by the North Eastern Council (NEC), Ministry of Development of North Eastern Region, Government of India to create a State of the Resource Centre which will act as One Stop Solution Portal primarily focusing on career and livelihood of the youths of the North Eastern Region.

16. Development through credit: The State government has implemented ‘development through credit,’ a farmer-centric credit loan scheme to boost the State’s agriculture and allied sectors in the form of organisation of credit / loan Mela. The programme is aimed to strengthen the economic condition of the farmers as well as the State since 70 percent of the Sikkimese populace is connected to agriculture and farming sector. This will boost the agricultural sector in order to achieve a relative growth in the GDP of the State and will also encourage the educated unemployed youths of the State to opt for agricultural and allied activities in order to become self-reliant.

17. Status of Cooperatives in the State

The cooperative movement in Sikkim started to take shape with the enactment of the Sikkim Cooperative Societies Act 1955. Later, with the enactment of the Sikkim Cooperative Societies Act 1978 and consequently the Sikkim Cooperative Societies Rules of 1981, the cooperative movement got further boost. The Sikkim Cooperative Mission 2015 since aimed at diversifying the activities undertaken by cooperatives in the state and emphasized on establishing of Multi-Purpose Cooperative Society (MPCS) at every gram panchayat level. Focus is also on developing cooperatives on animal husbandry, construction, handloom, handicraft, organic farming, tourism and other sectors.

Structure and Outreach:

i. SISCO Bank : SISCO Bank got registered in 1996 and came into operation from 1999 under RBI license. Based on the recommendations of NABARD, SISCO Bank was granted scheduled status by RBI in February 2022.

STCCS in Sikkim consists of two tiers - Sikkim State Cooperative Bank Ltd. (SISCO) at the State level and Multi-Purpose Cooperative Societies Ltd (MPCS) at the primary Level. A total of 178 PACS (MPCS) are affiliated to the StCB (SISCO Bank).

The Bank caters to the rural credit requirements with a special focus on PACS. Through various support measures from NABARD under CDF like CSP-NER, BDPIC, SISCO bank is working to empower cooperatives further. Further, SISCO Bank has been at the forefront of adopting various kinds of banking technologies, the latest being launch of mobile banking app in June 2022.

ii. SIMFED: Sikkim State Co-operative Supply and Marketing Federation Ltd (SIMFED) was established in the year 1983 as an apex marketing federation of the State for undertaking bulk marketing of agricultural & horticulture produces including important cash crops and distribution of farm-input through cooperatives.

The federation is also supplying uniform, textbook, furniture and office equipments to the Government Departments through its branch outlets at Namchi, Jorethang, Mangan, Gangtok. It undertakes wholesale supply of consumer goods through primary multipurpose cooperatives societies, consumer cooperative societies for Siliguri market prices. SIMFED has also started organic fruits and vegetables stall “Sikkim’s Organic” at Kanchenjunga Shopping Complex, Gangtok. The society has also started marketing seasonal cut-flowers viz; Cymbidium orchids, Oriental and Asiatic Liliun, Gentadesia, Gerbera, Roses to Delhi and Kolkata. There are 191 primary cooperative societies including Zilla Panchayat of East, South and West district as member of the Federation.

iii. Sikkim Cooperative Milk Producers’ Union Ltd (SCMU) is an Apex body of the Primary Milk producers’ Cooperative Societies formed on Anand Model under the aegis of National Dairy Development Board (NDDB). Its operation is extended to East, West and South districts of Sikkim. The main objectives of the Union is to procure raw milk from the Primary Milk Producers’ Cooperative societies by giving remunerative prices to the producers who were mostly organized in far flung remote areas of the State. The milk collected is hygienically processed in Dairy plants of SCMU and supplied to markets at Gangtok and Jorethang. Collection, transportation, processing and marketing of good quality hygienic milk and assist the producer farmers to market their products is the primary objective of the Union. As on date, there are altogether 387 primary milk producers’ cooperative societies comprising of both registered as well as unorganized groups as members of the Sikkim Milk Union Ltd.

Milk Producer Cooperative Societies are also very active in the state and have been instrumental as collection centres for Sikkim Milk Union.

iv. The Denzong Agriculture Cooperative Society (DACS) Ltd. was registered in 1965 during Chogyal’s regime with a view to support producer farmers by creating market outlets to enable them to sell their marketable surplus. It is one of the oldest cooperatives of Sikkim.

Initially, the society was formed by the private individuals wherein the majority of the shares were held by the then erstwhile royal family. However, after Sikkim becoming 22nd State of Indian Union, the State Government acquired all the shares of private individuals and reinvested to 35 multipurpose cooperative societies in 1992 to give more democratic character to the Society.

The basic objective of the society is to procure all marketable farm surpluses through its member societies by giving remunerative prices to the producer farmers. The society, since its inception has entered into negotiated Annual Contract with Army to supply all perishable consumer goods requirement like meat, fish, fowls, eggs and vegetables to the Army. It is supplied through its supply points located mostly in snow bound border areas scattered throughout the State with utmost satisfaction of Army personnel stationed in Sikkim. There are 77 cooperative societies including 19 Poultry Growers' Cooperative Societies as members of Denzong Agriculture Cooperative Society Ltd.

2. Sector-wise/ Activity-wise distribution of Cooperatives

Sr. No	Type	Number of Societies
A. Details of Non-Credit Cooperative Societies		
1	AH Sector (Milk/Fishery/ Poultry etc.)	(378-M/62-F) 440
2	Consumer Stores	62
3	Housing Societies	---
4	Weavers	10
5	Marketing	120
6	Labour Societies	17
7	Industrial Societies	---
8	Agro Processing and Sugar	---
9	All others	3055
	Total	3642
B. Details of Credit Cooperative Societies		
10	Primary Agriculture Credit Societies	178
C. Details of Multi State Cooperative Societies		
11	No. of MSCS	---
<i>Source: Cooperation Department</i>		

3. Recent Developments/ Initiatives, if any, taken by State Government in strengthening of outreach and activities of Cooperatives

PACS Computerisation: Govt. of Sikkim has participated in centrally sponsored scheme of Computerisation of all PACS in the state. Efforts are on to bring in all 178 PACS under computerization and digital mode by Dept. of Cooperation and St. CB – SISCO Bank Ltd.

The Sikkim Milk Producers Union Ltd. (SMU) is one of the most successful of such cooperatives in the State with more than 500 registered societies and collecting around 60 thousand litres of milk per day through its affiliated societies. During 2022 under NABARD Sikkim's initiative, SMU under the direction of Dept. of AH & VS, Govt. of Sikkim and SLBC has jointly launched a saturation drive for dairy farmers' credit needs through KCC-AH.

PMVDY: Pradhan Mantri Vandhan Yojana is a scheme of Ministry of Tribal affairs, GoI and is implemented in 27 state of India by TRIFED Ltd. In Sikkim, the Department of Science & Technology is State Nodal Agency and Cooperation Department is Implementing Agency. Sikkim has identified 80 clusters for implementation of the Yojana. The scheme aims at promotion of tribal enterprise through sustainable harvesting, value addition, branding and marketing of minor forest produce. Training to rural SHG and cooperative members in the identified cluster is main activity under the project.

6.5 State Government Sponsored Programmes with Bank Credit

The Skilled Youth Startup Scheme formulated with an objective to promote equitable entrepreneurial opportunities among the educated unemployed mass in Sikkim. It is an umbrella

program sponsored by the Government of Sikkim to support entrepreneurs availing bank credit to establish their commercial units. The scheme provides back ended bank loan subsidy assistance @ 50% for BPL and 35% for others on financially viable bankable projects. The activity/ unit could in undertaken in Agriculture and allied sector/ Manufacturing/ Services/ Business / Cooperative activities. Overall, 19 sub-sectors have been identified under the above broad specifications with admissible project costs ranging from Rs. 3.00 to Rs. 20.00 lakh. It is also envisaged that every investment of Rs. 5.00 lakh will generate wage employment for 01 person. The nodal agency for implementation of the scheme is the Department of Commerce and Industries, Government of Sikkim.

----------

ANNEXURE - I
District wise/Sector wise PLP projections for 2023-24

(Rs. Lakh)

Sr No	ACTIVITY	Unit Size	Unit Cost	Gangtok & Pakyong		Soreng & Geyzing		Mangan		Namchi		State Total	
				Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate
Agriculture													
A. Farm Credit													
A (I) Crop Production, Maintenance, Marketing													
i	Paddy	Ha	0.57	1640.00	754.40	315.00	144.90	250	115	305.00	140.30	2510.00	1154.60
ii	Ginger	Ha	2.45	880.00	1742.40	555.00	1098.90	11	21.78	520.00	1029.60	1966.00	3892.68
iii	Maize	Ha	0.55	3110.00	1368.40	1195.00	525.80	975	429	2310.00	1016.40	7590.00	3339.60
iv	Oilseed (mustard)	Ha	0.39	1011.00	323.52	310.00	99.20	140	44.8	200.00	64.00	1661.00	531.52
v	Vegetables	Ha	0.38	678.00	752.58	935.00	1037.85	14.00	15.54	525.00	582.75	2152.00	2388.72
vi	Pulses	Ha	0.49	288.00	80.64	355.00	99.40	85.00	32.65	305.00	85.40	1033.00	298.09
vii	Potato	Ha	1.25	0.00	0.00	350.00	738.50	11.00	23.21	45.00	94.95	406.00	856.66
viii	Turmeric	Ha	0.38	247.00	266.76	340.00	367.20	7.00	7.56	105.00	113.40	699.00	754.92
ix	Buckwheat	Ha	1.07	420.00	130.20	385.00	119.35	50.00	15.50	205.00	63.55	1060.00	328.60
x	Finger Millet	Ha	2.54	309.00	120.51	0.00	0.00	170.00	66.30	105.00	40.95	584.00	227.76
Total Crop loan				8583.00	7201.23	4740.00	5500.43	1713.00	1002.74	4625.00	4200.69	19661.00	17905.10
A (II) Farm Credit-Term Loan													
Water Resources													
i	Drip	No	1.59	18.00	25.74	9.00	12.88	4.00	5.09	10.00	14.31	41.00	58.02
ii	Sprinkler	No	1.30	12.00	14.04	9.00	10.53	4.00	4.16	13.00	15.21	38.00	43.94
iii	Others (Tank Irrigation)	No	2.25	20.00	40.50	8.00	16.20	4.00	7.20	13.00	26.33	45.00	90.23

Sr No	ACTIVITY	Unit Size	Unit Cost	Gangtok & Pakyong		Soreng & Geyzing		Mangan		Namchi		State Total	
				Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate
Total Water Resources				50.00	80.28	26.00	39.61	12.00	16.45	36.00	55.85	124.00	192.18
Farm Mechanization													
i	Power Tiller	No	1.50	30.00	36.00	9.00	10.80	3.00	4.05	8.00	9.60	50.00	60.45
ii	Power Spray	No	0.22	26.00	8.32	0.00	0.00	7.00	1.39	9.00	2.88	42.00	12.59
iii	Other Equipments	No.	0.40	102	13.93	18	5.76	17.00	7.11	0.00	0.00	137.00	26.80
Total Farm Mechanization				158.00	58.25	27.00	16.56	27.00	12.55	17.00	12.48	229.00	99.84
Plantation / Horticulture / Sericulture													
i	Mandarin	Ha	2.95	66.00	80.19	12.00	14.58	7.00	8.51	30.00	36.45	115.00	139.73
ii	Large Cardamom	Ha	1.35	476.00	1263.78	14.00	37.17	7.00	18.59	20.00	53.10	517.00	1372.64
iii	Floriculture - Cymbidium	Ha	0.57	234.00	505.44	0.00	0.00	0.00	0.00	11.00	23.76	245.00	529.20
iv	Floriculture - Gladiolus	Ha	1.40	332.00	723.10	3.00	5.94	0.00	0.00	15.00	29.70	350.00	758.74
v	Floriculture - Anthurium	500 plants	2.39	300.00	653.40	0.00	0.00	0.00	0.00	11.00	21.78	311.00	675.18
vi	Floriculture - Tuberose	500 plants	2.42	336.00	184.47	19.00	9.41	0.00	0.00	20.00	9.90	375.00	203.78
vii	Modified Bhatti for drying large cardamom (ICRI) (400 kg capacity)	500 plants	2.42	0.00	0.00	18.00	15.07	0.00	0.00	24.00	20.09	42.00	35.16
viii	Oyster Mushroom	Ha	0.91	246.00	177.12	18.00	12.96	0.00	0.00	43.00	30.96	307.00	221.04

Sr No	ACTIVITY	Unit Size	Unit Cost	Gangtok & Pakyong		Soreng & Geyzing		Mangan		Namchi		State Total	
				Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate
ix	Bee Keeping (Unit Size: 100 bee boxes)	No	0.80	66.00	49.93	18.00	13.61	3.00	2.27	30.00	22.68	117.00	88.49
x	Guava	No	0.57	62.00	31.80	0.00	0.00	0.00	0.00	0.00	0.00	62.00	31.80
xi	Banana	No	1.40	32.00	40.32	0.00	0.00	0.00	0.00	0.00	0.00	32.00	40.32
xii	Kiwi	No	7.1	74	472.86	0.00	0.00	0.00	0.00	0.00	0.00	74.00	472.86
Total Plantation & Horticulture				2224.00	4182.41	102.00	108.74	17.00	29.37	204.00	248.42	2547.00	4568.94
Forestry & Wasteland Development													
i	Farm Forestry	Ha	1.10	0.00	0.00	6.00	5.94	0.00	0.00	6.00	5.94	12.00	11.88
ii	Waste Land Development	Ha	1.10	0.00	0.00	12.00	11.88	0.00	0.00	5.00	4.95	17.00	16.83
iii	Tree/Grass Plantation	Ha	1.10	0.00	0.00	12.00	11.88	0.00	0.00	7.00	6.93	19.00	18.81
iv	Bamboo cultivation	Ha	1.10	69.00	68.31	16.00	15.84	4.00	3.96	12.00	11.88	101.00	99.99
Total Forestry & Wasteland Development				69.00	68.31	46.00	45.54	4.00	3.96	30.00	29.70	149.00	147.51
Animal Husbandry - Dairy Development													
i	Dairy (2-CB Cows)	No	1.45	610.00	796.06	30.00	39.15	17.00	22.19	80.00	121.36	737.00	978.76
ii	Dairy (10-CB Cows)	No	7.50	104.00	702.00	0.00	0.00	0.00	0.00	0.00	0.00	104.00	702.00
iii	Calf Rearing Unit (5 calves)	No	7.50	446.00	301.05	0.00	0.00	0.00	0.00	5.00	3.38	451.00	304.43

Sr No	ACTIVITY	Unit Size	Unit Cost	Gangtok & Pakyong		Soreng & Geyzing		Mangan		Namchi		State Total	
				Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate
iv	Working Capital for Dairy (1 CB cow)	No	0.75	2882.00	1400.65	1140.00	615.60	460.00	248.40	2595.00	1401.30	7077.00	3665.95
Total Animal Husbandry - Dairy Development				4042.00	3199.76	1170.00	654.75	477.00	270.59	2680.00	1526.03	8369.00	5651.13
Animal Husbandry - Poultry													
i	Broilers(200 Birds)	No	0.75	1384.00	934.20	15.00	10.13	13.00	8.78	60.00	40.50	1472.00	993.61
ii	Layers (100 Birds)	No	0.60	684.00	369.36	3.00	1.62	6.00	3.24	5.00	2.70	698.00	376.92
iii	Working Capital for Broiler (100 birds)		0.30	20.00	5.40	18.00	5.40	17.00	9.18	17.00	5.10	72.00	25.08
iv	Working Capital for Layers (100 birds)		2.09	20.00	37.60	2.00	4.18	3.00	6.27	2.00	4.18	27.00	52.23
Total Animal Husbandry - Poultry				2108.00	1346.56	38.00	21.33	39.00	27.47	84.00	52.48	2269.00	1447.84
Animal Husbandry - Sheep/Goat/Piggery													
i	Goat rearing (1+ 4) with local shed	No	0.70	508.00	274.32	15.00	8.10	14.00	7.56	25.00	13.50	562.00	303.48

Sr No	ACTIVITY	Unit Size	Unit Cost	Gangtok & Pakyong		Soreng & Geyzing		Mangan		Namchi		State Total	
				Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate
ii	Piggery (Breeding 1+4)	No	0.60	1800.00	972.00	48.00	25.92	18.00	6.48	235.00	126.90	2101.00	1131.30
iii	Working capital for Goat rearing (1+10)	No	0.49	20.00	11.00	10.00	6.10	13.00	7.93	8.00	4.88	51.00	29.91
iv	Working capital for Piggery (1 + 4)	No	0.60	500.00	337.50	48.00	36.00	13.00	9.75	11.00	8.25	572.00	391.50
v	Sheep (4+1)	No.	0.70	470	296.1	0	0	13.00	8.19	0	0	483	304.29
Total Animal Husbandry - Sheep/Goat/Piggery				3298.00	1890.92	121.00	76.12	71.00	39.91	279.00	153.53	3769.00	2160.48
Fisheries													
i	Fishery Trout (raceway) 100 sq.mtr.	No	2.20	40.00	79.20	8.00	15.84	3.00	5.28	3.00	5.94	54.00	106.26
ii	Misc (Fishing Net, Equipments)	No.	0.22	26.00	5.17	0.00	0.00	0.00	0.00	0.00	0.00	26.00	5.17
iii	Working capital for Fishery (Carp Hatchery)	No	0.28	26.00	12.87	9.00	4.86	3.00	7.50	3.00	1.62	41.00	26.85

Sr No	ACTIVITY	Unit Size	Unit Cost	Gangtok & Pakyong		Soreng & Geyzing		Mangan		Namchi		State Total	
				Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate
Total Fisheries				92.00	97.24	17.00	20.70	6.00	12.78	6.00	7.56	121.00	138.28
Other Activities													
i	Bullocks (Pair)	No	0.60	86.00	46.44	15.00	8.10	7.00	3.78	16.00	8.64	124.00	66.96
ii	Pony (Pair)	No	0.33	30.00	8.92	6.00	1.78	0.00	0.00	2.00	0.59	38.00	11.30
iii	Mule			58.00	18.78							58.00	18.78
iv	Working capital for bullocks	No	0.55	20.00	2.70	10.00	1.50	0.00	0.00	7.00	1.05	37.00	5.25
v	Working capital for pony	No	0.36	20.00	1.40	6.00	0.48	0.00	0.00	2.00	0.16	28.00	2.04
vi	IFS (low cost model for small farmers)					3	7.48	0	0	2	4.99	5.00	12.47
			2.77	0	0								
vii	Yak	No	0.55	0	0	0	0	10.00	4.95	0	0	10.00	4.95
Total Other Activities				214.00	78.24	40.00	19.34	17.00	8.73	29.00	15.43	300.00	121.75
Total Farm Credit-Term Loan				12255.00	11001.97	1587.00	1002.69	670.00	421.81	3365.00	2101.48	17877.00	14527.94
Total Farm Credit A = A(I) + A(II)				20838.00	18203.20	6327.00	6503.12	2383.00	1424.55	7990.00	6302.17	37538.00	32433.04
B. Agriculture Infrastructure													
Storage Facilities													
i	Rural Godown (100MT)	Per MT	6.40	339.00	1627.20	2	9.60	2.00	9.60	3.00	14.40	346.00	1660.80
Total Storage Facilities				339.00	1627.20	2.00	9.60	2.00	9.60	3.00	14.40	346.00	1660.80

Sr No	ACTIVITY	Unit Size	Unit Cost	Gangtok & Pakyong		Soreng & Geyzing		Mangan		Namchi		State Total	
				Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate
Land Development, Soil Conservation, Watershed Development													
Bunding & Terracing (Soil erosion control measures)		Ha	0.85	46.00	35.19	9.00	6.89	5.00	4.05	10.00	7.65	70.00	53.78
Rain-water Harvesting Structures		No	5.00	56.00	252.00	9.00	40.50	0.00	0.00	15.00	67.50	80.00	360.00
Total Land Development				102.00	287.19	18.00	47.39	5.00	4.05	25.00	75.15	150.00	413.78
Others													
Vermi Compost Unit (12x4x2 ft.)		No	0.25	116.00	21.78	300.00	56.25	6.00	1.35	85.00	15.94	507.00	95.32
Total Others				116.00	21.78	300.00	56.25	6.00	1.35	85.00	15.94	507.00	95.32
Total Agriculture Infrastructure				557.00	1936.17	320.00	113.24	13.00	15.00	113.00	105.49	1003.00	2169.90
C. (a) Ancillary Activities													
i	Food & Agro Processing (Micro units)	No	2.20	1014.00	1977.30	9.00	14.85	6.00	13.50	5.00	8.25	1034.00	2013.90
ii	Miscellaneous Processing Units	No	7.50	0.00	0.00	18.00	52.31	1.00	6.75	6.00	12.38	25.00	71.44
Total Ancillary Activities				1014.00	1977.30	27.00	67.16	7.00	20.25	11.00	20.63	1059.00	2085.34
C. (b) Ancillary Activities – Others													
iii	ACABC			2.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	30.00
iv	Working Capital to FPO	No	20.00	10.00	108.00	20.00	220.00	0.00	0.00	4.00	20.00	34.00	348.00
Total Ancillary Activities – Others				12.00	138.00	20.00	220.00	0.00	0.00	4.00	20.00	36.00	378.00
Total Ancillary Activities - C(a)+C(b)				1026.00	2115.30	47.00	287.16	7.00	20.25	15.00	40.63	1095.00	2463.34

Sr No	ACTIVITY	Unit Size	Unit Cost	Gangtok & Pakyong		Soreng & Geyzing		Mangan		Namchi		State Total	
				Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate
Total Agriculture (A+B+C)				22421.00	22254.67	6694.00	6903.52	2403.00	1459.80	8118.00	6448.28	39636.00	37066.27
D. Micro, Small and Medium Enterprises (MSME)													
Manufacturing Sector – Term Loan													
i	Micro Units	No	Upto 5.00 lakh	742.00	11872.00	31.00	496.00	10.00	45.00	14.00	224.00	797.00	12637.00
ii	Small Units	No	16.50	57.00	10260.00	1.00	180.00	0.00	0.00	5.00	900.01	63.00	11340.01
iii	Medium Units	No	500.00	10.00	9600.00	0.00	0.00	0.00	0.00	1.00	960.00	11.00	10560.00
Total Manufacturing Sector TL				809.00	31732.00	32.00	676.00	10.00	45.00	20.00	2084.01	871.00	34537.01
Service Sector - Term Loan													
i	Micro Units	No	upto 2.9	0.00	0.00	31.00	248.00	120.00	900.00	14.00	112.00	165.00	1260.00
ii	Small Units	No	0.00	0.00	0.00	1.00	120.00	0.00	0.00	3.00	360.00	4.00	480.00
iii	Medium Units	No	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	880.00	1.00	880.00
Total Service Sector				0.00	0.00	32.00	368.00	120.00	900.00	18.00	1352.00	170.00	2620.00
Working Capital													
i	Manufacturing Sector	No	0.00	0.00	2350.00	32.00	169.00	10.00	9.00	0.00	521.00	42.00	3049.00
ii	Service Sector	No	0.00	0.00	5583.00	32.00	92.00	105.00	38.25	0.00	338.00	137.00	6051.25
Total Working Capital				0.00	7933.00	64.00	261.00	115.00	47.25	0.00	859.00	179.00	9100.25
Total- Micro, Small and Medium Enterprises (MSME)				809.00	39665.00	128.00	1305.00	245.00	992.25	38.00	4295.01	1220.00	46257.26
E. Export Credit													

Sr No	ACTIVITY	Unit Size	Unit Cost	Gangtok & Pakyong		Soreng & Geyzing		Mangan		Namchi		State Total	
				Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate
	Export Credit (Upto Rs 20 lakh)	No	Upto 20 lakh	5.00	80.00	0.00	0.00	6.00	36.00	1.00	4.40	12.00	120.40
Total Export Credit				5.00	80.00	0.00	0.00	6.00	36.00	1.00	4.40	12.00	120.40
F. Education													
	Education Loan	No	upto 5 lakh	255.00	1020.00	11.00	42.59	16.00	58.50	8.00	32.00	290.00	1153.09
Total Education				255.00	1020.00	11.00	42.59	16.00	58.50	8.00	32.00	290.00	1153.09
G. Housing													
	Housing Loan	No	upto 10 Lakh	828.00	6624.00	46.00	368.00	40.00	360.00	110.00	880.00	1024.00	8232.00
	Housing Loan - PMAY-G	No	2.3	0.00	0.00	25.00	46.00	75.00	155.25	24.00	44.16	124.00	245.41
Total Housing				828.00	6624.00	71.00	414.00	115.00	515.25	134.00	924.16	1148.00	8477.41
H. Renewable Energy													
	Bio Gas plant	No	0.30	36.00	8.64	68.00	16.32	8.00	2.16	115.00	27.60	227.00	54.72
	Solar Equipments - Flat plate collector system	No	0.25	38.00	6.69	41	7.87	8.00	1.58	121.00	24.20	208.00	40.34
Total Renewable Energy				74.00	15.33	109.00	24.19	16.00	3.74	236.00	51.80	435.00	95.06
Others Miscellaneous													0.00
	SHG	No.	1.10	243.00	24.30	407.00	447.70	50.00	49.50	360.00	396.00	1060.00	917.50
	PMJDY	No.	0.10	1050.00	1155.00	265.00	26.50	100.00	9.00	200.00	20.00	1615.00	1210.50
	JLG	No.	1.00	440.00	440.00	6.00	6.00	20.00	18.00	14.00	14.00	480.00	478.00
Total Others Miscellaneous				1733.00	1619.30	678.00	480.20	170.00	76.50	574.00	430.00	3155.00	2606.00
J. Social Infrastructure													

Sr No	ACTIVITY	Unit Size	Unit Cost	Gangtok & Pakyong		Soreng & Geyzing		Mangan		Namchi		State Total	
				Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate	Physical Estimate	Financial Estimate
	Social Infrastructure Involving Bank Credit (Pay and Use toilet)	No	1.00 to 2.50 Lakh	6.00	12.00	10.00	40.00	10.00	9.00	5.00	20.00	31.00	81.00
Total Social Infrastructure				6.00	12.00	10.00	40.00	10.00	9.00	5.00	20.00	31.00	81.00
TOTAL PRIORITY SECTOR				26131.00	71290.30	7701.00	9209.50	2981.00	3151.04	9114.00	12205.65	45927.00	95856.49

ANNEXURE - II

Agencywise, Broad sector-wise flow of ground level credit in Sikkim

(Rs. Lakh)

Sl. No.	Agency/ Category	2018-19				2019-20		2020-21			2021-22	
		Target	Ach.	% of Ach.	Target	Ach.	% of Ach.	Target	Ach.	% of Ach.	Target	
A	Crop Loan											
	Commercial Banks	13076	1158.1	8.86	14482	2875.8	19.86	14390	3377	23.46	15801.75	
	State Co-op.Bank	2004.5	67.04	3.34	3532	307.44	8.7	3351.7	271.81	8.1097	3432.00	
	Sub-Total (A)	15080	1225	8.12	18014	3183	17.67	17742	3648.8	20.56	19233.75	
B	Term Loan (MT+LT)											
	Commercial Banks	7748.5	3629.2	46.84	10673	3446	32.29	9671.2	4345	44.92	9403.59	
	State Co-op.Bank	1271.5	366.69	28.84	1901.2	312.97	16.46	1716.6	193.08	11.248	1465.47	
	Sub-Total (B)	9020	3996	44.3	12574	3759	29.89	11388	4538.08	39.84	10869.1	
C	Total Agri Credit											
	Commercial Banks	20824	4787.3	22.99	25155	6321.8	25.13	24272	7722	31.81	25205.34	
	State Co-op.Bank	3276	433.73	13.24	5433.2	620.41	11.42	4857	464.89	9.5706	4897.47	

	Total Agri Credit [C = (A)+(B)]	24100	5221	21.66	30588	6942	22.7	29130	8187	28.10	30102.81	
D	Non-Farm Sector											
	Commercial Banks	15800	22034	139.46	17550	27641	157.5	16610	41868	252.06	18522.77	
	State Co-op.Bank	970	106.1	10.94	2450	69	2.82	1322	251.97	19.06	1426	
	Sub-Total (D)	16770	22140	132	20000	27710	138.55	17932	42120	234.88	19948.77	
E	Other Priority Sector											
	Commercial Banks	12785	10612	83.01	12815	5914	46.15	13838	7914.6	57.196	13123.89	
	State Co-op.Bank	875	1075.7	122.94	1305	99	7.59	1160	428.45	36.935	315.00	
	Sub-Total (E)	13660	11688	85.56	14120	6013	42.58	14998	8343	55.629	13438.89	
F	Total Priority Sector											
	Commercial Banks	49409	37434	75.76	55520	39877	71.82	54720	56445	103.15	56852.00	
	State Co-op.Bank	5121	1616	31.55	9188	788.4	8.58	7339	1145.3	15.605	6638.47	
	Total Priority Sector [F=(C+D+E)]	54530	39049	71.61	64708	40665	62.84	62059	58686	94.56	63490.47	

ANNEXURE – III

Critical Infrastructure Support to be provided

Sl. No.	Project Name and Location	Benefits that could be created	Fund requirement
1	Warehousing, Mangan	Creation of storage capacity of 500mt would benefit the organized farmers Farmer's Clubs, Self Help Groups, Joint Liability Groups	Rs.20 lakh
2	Cold Storage, Mangan	Creation of storage capacity of 500mt would benefit the organized farmers under Farmer's Club, Self Help Groups, Joint Liability Groups	Rs.50 lakh
3	Development of Tourist Centre: Home Stay 10 Home stay each at Lachung, Lachen & Chungthang	Tourism promotion and generation of additional income to the inhabitants of the area	Rs.450 lakh (@Rs.45 lakh/home stay)
4	Pay & Use Toilet Lachung, Yumthang, Lachen, Gurudongmar, Mangan, Chumthang	Maintenance of hygienic environment in the rural area and tourism promotion	Rs.15 lakh
5	Fishing-Cold Water Highland Fishery: 1. Trout Fish Hatchery Farm, Lachung 2. Fish Feed Plant, Chungthang	Promotion of high value fish farming. Attractive additional cuisines to tourists and additional income generation to local inhabitants.	Rs.75 lakh Rs.50 lakh
6	Water Harvesting structure community, Lower Dzongu	Creation of irrigation capacity of 500 acres to benefit the farmers club, joint liability groups and self-help groups during scanty rainfall.	Rs.37 lakh
7	District level Central Feed Godown	Creation of 100 mt buffer feed stock to benefit the dairy farmers of the district	Rs.5 lakh
8	Construction of Veterinary Dispensary along with staff quarter, Chandey	Veterinary services would be available at the door steps of dairy farmers	Rs.5 lakh
9	Construction of Veterinary Dispensary along with staff quarter, Lindem, Upper Dzongu	Veterinary services would be available at the door steps of dairy farmers	Rs.5 lakh
10	Market Yard, Jorethang	Aggregation of produce. Markets near to the farms	Rs. 50.00 lakh
11	Water Harvesting structure , Perbing, Kitam and Lingmoo	Irrigation facilities to farmers	Rs. 70.00 lakh
12	Rural Drinking Water, Assangthang, Salghari	Irrigation and drinking water	Rs. 70.00 lakh
13	Construction of new road from Kecheperi to Kecheperi Gompa, Yuksam, Tashiding	Facilitate rural connectivity and tourism	Rs. 600.00 lakh
14	Construction of road from HeePatal to Pecherek (Chiyandara), Gyalshing Bermoik	Facilitate rural connectivity	Rs. 360.00 lakh
15	Construction of road from Darap bazar to Lagey ICDS via Sidibunglpsing, Yangthang	Facilitate rural connectivity	Rs. 480.00 lakh
16	Construction of Rural Marketing Centre at Begha	Rural Marketing Infrastructure	Rs. 170.00 lakh
17	Construction of new road from Dzongu, Lachem to Mangan and from Kabi to Kungchok	Facilitate rural connectivity	Rs. 2330.00 lakh

ANNEXURE - IV

Critical Interventions required in various sectors /sub-sectors

Sl. No	Sectors/Issues	Intervention required	Agency/Department
A	Agriculture		
1	Productivity – The agricultural productivity in Sikkim is lower than both the regional and national averages for all the major field crops	Strategy to increase productivity and thereby increase the share of marketable surplus to ensure sustainable inclusive growth. The economy of Sikkim is linked with agriculture which serves as a source of livelihood and economic security of sizeable population.	Concerned Central and State Government Departments
2	Lack of post-harvest infrastructural facilities	Creation of post-harvest infrastructural facilities like marketing yard, godown, cold storage, agro-processing units and other value addition infrastructure needs to be initiated	Concerned Central and State Government Departments
3	Marketing Organic Produce	Promotion of Farmers Producer Organisations for collective bargaining and better price recovery.	NABARD in association with State Government
4	Promotion of agri-allied activities	There is a need to initiate a coordinated effort to promote dairy, poultry, piggery which has great potential in the State. Possible arrangements for tripartite agreements /MOUs on aggregation and marketing could be arrived at which will provide a secure environment for banks to fund the activity.	Concerned Central and State Government Departments, NABARD & Banks
5	Low Credit off-take under agriculture	There are 244 branches of 33 Banks in the State. But the coverage of farming community under KCC is not very encouraging. Need for creation of financial awareness	NABARD & All bank branches
6	Agricultural insurance	Although Crop Insurance Scheme of AICIL is in implementation, coverage of farmers is not encouraging. Popularising the scheme including Pradhan Mantri Fasal Bima Yojana will go a long way in increasing the coverage.	ALL Banks and Agriculture Dept GoS
B	Non-Farm Sector/Services		
1	Rural Tourism	There is a wide scope of Tourism- adventure tourism, eco and wild life tourism, religious and pilgrimage tourism for all seasons in the State and is emerging sector in employment generation. Greater thrust in promotion and development of 'Model Organic Cum Ecotourism Villages', development of new tourist destinations, capacity building of individuals assisted under tourism, incentives for development of Home stays, etc may be given.	Concerned State Government Departments
2	Small Business and Services	There has been a tremendous progress in this sector which resulted in increased self-employment and credit flow. However, there is still wide scope especially to develop ethnic handloom and handicraft activities and marketing of the produce within and outside the State.	Concerned State Government Departments

ABBREVIATIONS

Abbreviation	Full Form	Abbreviation	Full Form
ACABC	Agri Clinic and Agri-Business Centre	MSME	Micro, Small & Medium Enterprises
AC	Alternating Current	MSP	Minimum Support Price
AFB	Adaptation Fund Board	MT	Metric Ton
AH & VS	Animal Husbandry and Veterinary Services	NAIS	National Agriculture Insurance Scheme
AI	Artificial Insemination	NBFC	Non-Banking Financial Company
AIBP	Accelerated Irrigation Benefits Programme	NABARD	National Bank for Agriculture and Rural Development
AMI	Agricultural Marketing Infrastructure	NAFCC	National Adaptation Fund on Climate Change
APL	Above Poverty Line	NAPCC	National Action Plan on Climate Change
ASCI	Agriculture Skill Council of India	NCUI	National Cooperative Union of India
ATM	Automated Teller Machine	NDDDB	National Dairy Development Board
BADP	Border Area Development Programme	NER	North Eastern Region
BL	Bank Loan	NOFRI	National Organic Farming Research Institute
BPL	Below Poverty Line	NGO	Non-Governmental Organisation
CBS	Core Banking Solution	NHB	National Horticulture Board
CCB	Central Cooperative Bank	NIDA	NABARD Infrastructure Development Assistance
CISS	Capital Investment Subsidy Scheme	NIA	Net Irrigated Area
DAHD & F	Department of Animal Husbandry, Dairying & Fisheries	NIE	National Implementing Entity
DC	Direct Current	NLM	National Livelihood Mission
DCCB	District Central Cooperative Bank	NPCI	National Payments Corporation of India
DEDS	Dairy Entrepreneurship Development Scheme	NPK	Nitrogen, Phosphorous, Potassium
DIC	District Industries Centre	NRLM	National Rural Livelihood Mission
DPR	Detailed Project Report	NSA	Net Sown Area
EDEG	Entrepreneurship Development and Employment Generation	NSDC	National Skill Development Corporation
FIF	Financial Inclusion Fund	NSSO	National Sample Survey Organisation
FPO	Farmer Producer Organisation	OPS	Other Priority Sector
GCF	Green Climate Fund	PACS	Primary Agricultural Cooperative Society
GLC	Ground Level Credit	PoS	Point of Sale
GCI	Galvanized Corrugated Iron	PDC	PACS Development Cell
GHG	Green House Gases	PHY	Physical
GoI	Government of India	PLP	Potential Linked Credit Plan
HO	Head Office	PMAY - G	Pradhan Mantri Awas Yojana - Gramin
IBPC	Inter Bank Participation Certificate	PMFBY	Pradhan Mantri Fasal Bima Yojana (PMFBY)
ICAR	Indian Council for Agricultural Research	PMJDY	Pradhan Mantri Jan Dhan Yojana
ICDS	Integrated Child Development Scheme	PMKVY	Pradhan Mantri Kaushal Vikas Yojana
ICM	Institute of Cooperative Management	PSLC	Priority Sector Lending Certificate
IPM	Integrated Pest Management	RBI	Reserve Bank of India
ISAM	Integrated Scheme for Agricultural Marketing	REDD	Reducing Emissions from Deforestation and Forest Degradation
IPCC	Intergovernmental Panel on Climate Change	RIDF	Rural Infrastructure Development Fund
ITI	Industrial Training Institute	RRB	Regional Rural Bank
JLG	Joint Liability Group	RSETI	Rural Self Employment Training Institute
KCC	Kisan Credit Card	RUDSETI	Rural Development and Self Employment Training Institute
KVIB	Khadi and Village Industries Board	SECC	Socio-Economic Caste Census
KVIC	Khadi and Village Industries Commission	SC	Scheduled Caste
KVK	Krishi Vigyan Kendra	SHG	Self Help Group
LPD	Liters Per Day	SIDICO	Sikkim Industrial Development & Investment Corporation
LTRCF	Long Term Rural Credit Fund	SIMFED	Sikkim State Cooperative Supply and Marketing Federation Ltd.
MANAGE	National Institute of Agricultural Extension Management	SISCO Bank	Sikkim State Cooperative Bank Ltd.
MoEF & CC	Ministry of Environment, Forest and Climate Change	SMS	Short Message Service
MFI	Micro Finance Institution	SRDA	Sikkim Rural Development Agency
MI	Minor Irrigation	SRLM	State Rural Livelihood Mission
MNIAS	Modified National Agricultural Insurance Scheme	ST	Scheduled Tribe
MNRE	Ministry of New & Renewable Energy	StCB	State Apex Co-operative Bank
MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act	TFO	Total Financial Outlay
MOVCD	Mission Organic Value Chain Development	UD & HD	Urban Development and Housing Department
MPCS	Multi-Purpose Cooperative Society	VAs	Voluntary Agencies
MSEs	Micro and Small Enterprises		