



NATIONAL BANK FOR
AGRICULTURE AND RURAL
DEVELOPMENT

फोकस पेपर Focus Paper 2025-26



केन्द्र शासित प्रदेश लद्दाख
UNION TERRITORY OF LADAKH

जम्मू और कश्मीर क्षेत्रीय कार्यालय, जम्मू
Jammu & Kashmir Regional Office, Jammu



दृष्टि

ग्रामीण समृद्धि के लिए राष्ट्रीय विकास बैंक

ध्येय

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

Vision

Development Bank of the Nation for Fostering Rural Prosperity

Mission

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

Focus Paper

Year: 2025-26

UT: Ladakh



National Bank for Agriculture and Rural Development
Jammu and Kashmir Regional Office, Jammu

Establishment of State Cooperative Bank and promotion of MPACS: All existing and new cooperative societies should be Multi-Purpose Agricultural Cooperative Societies (MPACS) offering multitude of services and facilitate the marketing of goods. This would include procurement of local products and marketing of same to defense personnel, the local population and sale outside the UT. The federation of MPACS will act as the State Cooperative Bank (StCB) for the UT, and suitable steps to be taken for promotion of StCB in the Union Territory (UT).

Solar Energy Promotion: In February 2024, the Ministry of New and Renewable Energy, Government of India, launched the PM-Surya Ghar Muft Bijli Yojana- 2024, aiming to provide free electricity to households across India. This scheme offers financial assistance in the form of a subsidy of up to 40% of the cost of solar panels for the installation of rooftop solar panels. Eligible applicants must be Indian citizens owning houses with suitable roofs for solar panel installation, valid electricity connections, and no previous subsidies for solar panels. Ladakh, characterized by its cold desert terrain with high energy consumption and a fragile ecosystem, finds hydel projects unsuitable. Hence, there's a significant push to promote solar power. Ladakh possesses a substantial potential to generate 35 GW from solar energy. It's crucial to enhance awareness about the scheme to encourage more households to benefit from it.

Homestay Initiative:

Ladakh, sharing a lengthy border with China and boasting diverse topography, including high- altitude cold deserts, Buddhist monasteries, glaciers, and more, witnesses a surge in tourist influx annually. However, accommodations remain scarce, with most hotels clustered within a 20-kilometer radius of Leh, and few options near Kargil town. In response, Ladakh has put in place a policy to promote homestays, aiming to alleviate the strain on limited resources concentrated in urban areas while diversifying tourist experiences across different locations. Various agencies are actively involved in promoting homestays to attract tourists and reduce the density in urban areas. Promotion of clusters of homestays with common kitchens, vehicle service centers, communication facilities and banking outlets can be the way forward.



Village Development: The Vibrant Villages Programme (VVP), launched by the Government of India in February 2023 with a financial outlay of ₹4800 crore from FY 2022- 23 to 2025-26, focuses on comprehensive development in select villages across 46 blocks in 19 districts abutting the northern border. This program aims to improve the quality of life for residents and reverse outmigration by intervening in various sectors such as agriculture, horticulture, tourism, skill development, and infrastructure. To maximize the benefits of the scheme, mapping of economic activities in border villages is crucial, allowing for strategic interventions to strengthen agriculture,

horticulture, tourism, and skill development. Initiatives like promoting Farmer Producer Organisations, high-density plantation, and installation of solar grids are vital for sustainable development.

Strengthening Marketing Systems: To support local agri-produce and products, Ladakh plans to develop a robust marketing infrastructure, including village-level and higher-level markets. These facilities will facilitate the efficient collection, sorting, grading, processing, and sale of agricultural goods within and outside the UT. By enhancing market access for farmers and artisans, Ladakh aims to boost rural incomes and promote economic sustainability. Existing/ new cooperatives should be upscaled with the facilities for promotion of marketing of vegetables/handicrafts etc.



Skill Development:

Ladakh recognizes the importance of preserving traditional art forms and providing employment opportunities for rural youth. Skill development training in crafts like Thangka Painting, Tibetan wood carving, and carpet weaving not only preserves cultural heritage but also creates avenues for income generation. By supporting artisans and craftsmen, Ladakh seeks to revitalize traditional industries and promote sustainable livelihoods.



Research and Development: Ladakh aims to enhance the value of native produce like apricot and sea buckthorn through research and development initiatives. By developing processed products with extended shelf life, the region can access wider markets and increase income for producers. This focus on innovation and value addition contributes to the economic prosperity of rural communities and strengthens the agricultural sector.

Religious & Adventure Tourism: With Buddhism being predominant in Ladakh, the region boasts numerous Buddhist monasteries and gompas that attract national and international visitors.

Efforts to develop religious tourism coincide with major Buddhist festivals like Hemis and Losar, enhancing the cultural experience for tourists. By promoting religious tourism, Ladakh showcases its rich spiritual heritage while creating opportunities for economic growth, adventure tourism and cultural exchange. The topography of Ladakh, dotted with Himalayan mountain peaks, fast flowing rivers & high passes make it an ideal destination for adventure tourism. Trying out various adventure activities like River Rafting in Upshi, Ladakh Mountain Biking festival at the Disko Valley Bike Park and religious trek to Phugtal Monastery provides a unique kind of thrill & experience to the visitors. Therefore, it is important to develop certain skill sets among the youth and local populace for these activities in order to cater to the tourists.

Other issues

- Storage for agriculture and horticulture produce including vegetables to be created at MPACS and vegetable societies.
- Support for training & capacity building for product design, improvement and marketing of handloom products of Ladakh.
- Promotion of seabuckthorn and Yak milk products etc.
- Development of Network of BCs across the UT and utilizing the services of homestay owners for such facilities.

Foreword

I am happy to present the UT Focus Paper(UTFP) 2025-26 for the UT of Ladakh. The UT Focus Paper is an aggregation of the potentials and projections envisaged in the PLPs of both the districts of the UT. It provides an outline for the development of the sectors under the Priority Sector and highlights the focus areas for optimum exploitation of the available potential. It also flags the important policy initiatives/relevant issues enabling the development process. The UT Focus Paper has estimated the total credit potential under the Priority Sector at ₹1211.88 crore for the FY 2025-26.

Implementation of the UT Potential Linked Credit Plan embodied in the UT Focus Paper requires the availability of necessary infrastructure specific to the concerned sectors. Accordingly, an attempt has been made in the paper to assess the critical infrastructure required for harnessing the assessed potential. The credit planning process has become all the more important in view of climate change and its impact on agriculture and allied activities and need for adopting climate resilient practices.

UT Focus Paper projects a credit potential of the UT for Priority Sector activities as defined by the Reserve Bank of India. Building on our efforts to digitalize the Potential Linked Credit Plans, NABARD has this year utilized technology to develop a digital UTFP for more efficient credit projections. This advanced document features a standardized structure, comprehensive coverage, and data indices. We believe that the Digital UTFP will act as a guiding factor for financial institutions, empowering them to channelize credit effectively, enhancing ground-level credit flow and fostering agriculture term lending.

Further, the 2025 UN International Year of Cooperative was launched in New Delhi by UN at the behest of Government of India indicates the Government's vision to promote this sector under the theme "Cooperative Build a Better World". NABARD is already strengthening the sector by helping PACS in improving technical knowhow and capacity building of their staff under computerization of PACS.

I take this opportunity to place on record, my sincere thanks to the UT Administration of Ladakh, Reserve Bank of India, Ladakh UTLBC, Banks, Line Departments, LDMs, DDM, farmers and other valued stakeholders for providing the necessary inputs and co- operation in the preparation of the Focus Paper and PLPs at the UT and district level, respectively. I hope that the various stakeholders would find the document useful as a guidance tool. I also look forward to valuable suggestions and feedback for making this document more effective in the future.



(Bhallamudi Sridhar)
Chief General Manager

Union Territory Focus Paper (UTFP) document prepared and finalised by:
NABARD, Jammu and Kashmir Regional Office, Jammu

'The document has been prepared on the basis of information collected from publicly available sources and discussions with various stakeholders. While preparing the projections, every effort has been taken to estimate credit potential realistically. NABARD shall not be responsible for any material or other losses occurring to any individual/organization owing to use of data or contents of this document.'

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Executive Summary

1 Introduction

This UT Focus Paper broadly outlines NABARD's perception on the development of the Union Territory with a special focus on potential credit outlays, infrastructure support & other initiatives in agriculture and allied sectors. The document has been prepared by consolidating the potentials identified in the Potential Linked Credit Plans (PLPs) of Leh and Kargil districts so as to prioritize allocation of funds especially bank credit, in accordance with the potentials available for exploitation. The UT Focus Paper for the year 2025-26 estimates an exploitable credit potential of ₹1211.88 crore under priority sector, with an increase of 24.59% over the previous year's credit projection.

2 UT Profile – Physical Characteristics

Ladakh lies in the rain shadow region of the Himalayas where dry monsoon winds reach Kargil after its moisture has been used in the plains and the Himalayas. Ladakh combines the conditions of both arctic and desert climates. Therefore, Ladakh is often called as “Cold Desert”. Leh contains the Indus, Shyok and Nubra river valleys while Kargil district contains the Suru, Dras and Zaskar river valleys. The Indus River is the backbone of Ladakh. Most of the major historical and current towns — Shey, Leh, Basgo and Tingmosgang, are close to the Indus River. Scant precipitation makes Ladakh a high-altitude desert with extremely scarce vegetation over most of its area. Natural vegetation mainly occurs along watercourses and in high altitude areas that receive more snow and have cooler summer temperatures. The climate in Kargil district is milder than that of Leh district. The average annual temperatures are 8.6°C in Kargil and 5.2 °C in Leh. The average annual rainfall is 318 mm in Kargil and 103 mm in Leh.

3 Economic Activities of the UT:

Ladakh is a unique land-based economy characterized by its delicate ecological balance, limited mineral resources, and challenging climatic conditions, alongside restricted connectivity. The region faces certain obstacles, including seasonal road blockages in winter, the absence of a railway network, and occasional fluctuations in power supply. However, Ladakh is endowed with significant potential for solar and wind energy, with estimates suggesting the capability to harness 35 GW from solar and 4 GW from wind resources.

The agro-climatic conditions in Ladakh present promising opportunities for horticulture and livestock management. Irrigation is facilitated through an intricate system of channels that divert water from the ice and snow of the mountains. The primary crops grown in this region include barley and wheat, with naked barley

(Ladakhi: nas, Urdu: grim) historically serving as a staple food. It is noteworthy that cultivation seasons vary considerably with altitude, and Korzok, located near Tso Moriri Lake at an elevation of 4,600 meters (15,100 feet), is recognized as hosting some of the highest agricultural fields in the world.

There is ample opportunity for the establishment of demand-driven small-scale industrial units across both organized and unorganized sectors, particularly in areas such as handloom, handicrafts, and metal-based production. Such developments have the potential to create meaningful employment opportunities for those trained in various skills and crafts. In recent years, tourism has emerged as a vital sector for the region, contributing significantly to its economic landscape.

4 Banking Sector in the UT

As on 31 December 2024, 17 Commercial Banks (09 Public Sector Banks and 08 Private Sector Banks), 01 RRB, 01 StCB and 01 State Finance Corporation are functioning in the Ladakh with network of 107 branches. SBI is the lead bank and also the UTLBC convenor. Against the Credit disbursement target of ₹808.93 crore under the Annual Credit Plan (priority sector) for Ladakh for year 2023-24, an amount of ₹970.95 crore was disbursed during the year for various sectors, recording an achievement of 120.03%. The CD ratio of Ladakh stood at 46.49% as on 31.12.2024.

5 Sectoral trends in Credit flow to Agriculture and Priority Sectors

5.1 Factors facilitating GLC

- **Government Schemes and Policy Support:** Initiatives like the Kisan Credit Card (KCC), Pradhan Mantri Mudra Yojana (PMMY), and the National Rural Livelihood Mission (NRLM) have significantly increased credit accessibility in agriculture and rural enterprises. These schemes offer lower interest rates, easier documentation and targeted support for farmers, MSMEs, and other priority sectors, making GLC more attractive and accessible.
- **Promotion of Financial Inclusion:** Financial inclusion has made significant strides in Ladakh. Initiatives such as Jan Dhan Yojana and Centre for Financial Literacy (CFL) have helped raise awareness and provided wider access to banking services, particularly in rural areas. As a result, more farmers, women, and micro-enterprises have been able to access credit, which has led to an increase in GLC flow.
- **Improvement in Banking Infrastructure:** The expansion of banking networks, particularly in rural and remote areas, has enhanced the accessibility of GLC. Regional rural banks and cooperative banks have played a key role in providing credit to agriculture and rural enterprises. Additionally, the rise of digital banking and mobile financial services has improved access to credit in previously underserved areas.

- **Incentives and Interest Subventions:** Government-supported interest subvention schemes have helped reduce the cost of borrowing for farmers and small businesses. These initiatives have incentivized financial institutions to extend loans to agriculture, making it easier for farmers and rural entrepreneurs to access GLC at lower rates.
- **Support for Rural Entrepreneurship:** The promotion of rural entrepreneurship through schemes like PMEGP (Prime Minister's Employment Generation Programme) has provided access to affordable credit for small businesses. This has contributed to the development of micro-enterprises in rural areas, which has, in turn, boosted the demand for and flow of GLC in the region.
- **Banking and Government Partnerships:** Strong collaborations between the government and financial institutions have streamlined the credit delivery process. Regional and sector-specific credit plans have been designed to ensure GLC reaches agriculture, MSMEs, and other priority sectors effectively, making the credit system more responsive to local needs.

5.2 Factors inhibiting GLC

- **Geographical and Climatic Challenges:** The difficult terrain and harsh climate together with limited working season has limited the scope for extending GLC, in regions.
- **Lack of Collateral and Land Titles:** Many farmers lack formal land titles or proper documentation, preventing them from using land as collateral for loans. This lack of clear land records restricts access to institutional credit, significantly reducing the flow of GLC to agriculture.
- **Limited Financial Literacy:** Many farmers and rural entrepreneurs are unaware of available credit products and loan processes. This gap in financial literacy leads to low demand for credit and deters financial institutions from extending GLC, hindering access to loans in agriculture and allied sectors.
- **Fragmented Agricultural Value Chains:** The agricultural sector in Ladakh faces fragmented supply chains, poor market access, and low price realization, leading to income instability for farmers. This instability makes it difficult for borrowers to repay loans, discouraging lenders from providing GLC to the sector.
- **Inadequate Risk Mitigation Instruments:** Lack of crop insurance facilities often discourages lenders from extending GLC to agriculture, as they are unable to offset the risks faced by farmers.

6 Credit Potential Assessment for Financial Year 2025-26

➤ Farm Credit

The credit potential for the year 2025-26 under farm credit has been assessed at ₹391.43 crore as furnished in Annexure I.

➤ Crop Production, Maintenance & Marketing

Out of the total credit potential of farm credit sector of ₹391.43 crore, the credit potential for crop production, maintenance and marketing is ₹277.19 crore for the year 2025-26.

➤ Water Resources

The credit potential for the year 2025-26 under water resources has been assessed at ₹2.38 crore as furnished in Annexure I.

➤ Farm Mechanization

The credit potential for the year 2025-26 under farm mechanization has been assessed at ₹8.40 crore as furnished in Annexure I.

➤ Plantation & Horticulture, and Sericulture

The credit potential for the year 2025-26 under plantation & horticulture, and sericulture has been assessed at ₹7.65 crore as furnished in Annexure I.

➤ Forestry and Waste land development

The credit potential for the year 2025-26 under forestry and waste land development has been assessed at ₹0.93 crore as furnished in Annexure

➤ Animal Husbandry

The credit potential for the year 2025-26 under animal husbandry has been assessed at ₹90.53 crore as furnished in Annexure I.

➤ Fisheries

The credit potential for the year 2025-26 under fisheries has been assessed at ₹2.96 crore as furnished in Annexure I.

➤ Farm Credit – Others

The credit potential for the year 2025-26 under farm credit-others has been assessed at ₹1.39 crore and given in Annexure I.

➤ Agriculture Infrastructure

The credit potential for the year 2025-26 under agriculture infrastructure has been assessed at ₹3.49 crore as furnished in Annexure I.

➤ Agri. Ancillary Activities – Others

The credit potential for the year 2025-26 under agri. ancillary activities- others has been assessed at ₹7.41 crore as furnished in Annexure I.

- **Micro Small and Medium Enterprises (MSME)**
The credit potential for the year 2025-26 under MSME has been assessed at ₹750.83 crore as furnished in Annexure I.
- **Export Credit**
The credit potential for the year 2025-26 under export credit has been assessed at ₹0.45 crore as furnished in Annexure I.
- **Education**
The credit potential for the year 2025-26 under education has been assessed at ₹2.16 crore as furnished in Annexure I.
- **Housing**
The credit potential for the year 2025-26 under housing has been assessed at ₹43.03 crore as furnished in Annexure I.
- **Social Infrastructure**
The credit potential for the year 2025-26 under social infrastructure has been assessed at ₹3.00 crore as furnished in Annexure I.
- **Renewable Energy**
The credit potential for the year 2025-26 under renewable energy has been assessed at ₹8.12 crore as furnished in Annexure I.
- **Others**
The credit potential for the year 2025-26 under 'others' category of priority sectors has been assessed at ₹1.95 crore as furnished in Annexure I.

7 Status of Cooperatives in the UT

The Cooperative movement in Ladakh has played an important role in providing various services to its members as well as other residents as it provides not only various consumer items of daily use on fair prices but also marketing of local agri- horticultural (vegetables, fruits, sea buckthorns, apricots etc.) and livestock produce (milk, pashmina, wool etc.)

The Cooperatives are registered mainly under two Cooperative Acts viz. J&K Cooperative Societies Act, 1989 and J& K Self Reliant Act, 1999. Those registered under the Act of 1989 are called Cooperative societies whereas those under the Act of 1999 are called Cooperatives only. The Cooperative societies registered under Act of 1989 are directly monitored, inspected and audited by the Cooperative Department. They are also being provided financial support by the department and other Govt. agencies through various schemes. On the contrary, the Cooperatives under Act of 1999 are self-reliant and no financial aid is admissible to them from the Cooperative Department and they merely need to submit their annual returns to the office of the Registrar of Cooperatives, UT of Ladakh. Currently barring milk, poultry and hatchery (which are registered under Act of

1989), all other cooperatives are registered under the Self-Reliant Act of 1999 only. It is to be noted that the Jammu and Kashmir Cooperative Societies Act, 1989 and Jammu and Kashmir Self-reliant Cooperative Act, 1999 have not been repealed post reorganization of the Jammu and Kashmir State into 02 Union Territories viz. UT of Jammu and Kashmir and UT of Ladakh, respectively and are operational as adaptation of state laws vide S.O3775 (E) issued by Ministry Of Home Affairs, Government of India on 23rd October, 2020.

The cooperative sector in Ladakh comprises a total of 270 cooperatives, covering 111 Non-Credit Cooperative Societies (like Milk/Fishery/Poultry/ Housing/ Labour/ Consumer/ Weavers/ Marketing/ Industrial societies, etc.) and 159 rural credit co-operatives (PACS). Further, in line with the directions of Ministry of Cooperation, Government of India, formation of more number Multi –purpose Primary Agri Credit Societies is under progress in UT.

8 Potential for Geographical Indication in the UT

With the initiative of NABARD Jammu & Kashmir Regional Office, Ladakh Wood Crving has become the first handicraft product from the Union Territory of Ladakh to be granted a Geographical Indication (GI) tag by the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry. Besides, Ladakh Wood Craving, Ladakhi Pashmina, Ladakh Seabuckthorn and Raktsey Karpo (an apricot variety) of the district also have got GI.

Further in Phase-II, NABARD has sanctioned a project for GI Registration of an additional 9 products from the UTs of J&K and Ladakh as per details given below:

- i) Likir Pottery, Ladakh
- ii) Chilling Metal Work, Ladakh
- iii) Thangka Painting, Ladakh
- iv) Thikma, Ladakh
- v) Pabu, Ladakh
- vi) Loom Weaving Woolen products, Ladakh

Currently, applications for the GI tags for these products are pending with the GI Registry at Chennai.

9 Aspirational District & Aspirational Block Programme

In Ladakh, the Government of India has initiated the Aspirational Blocks Programme (ABP) to accelerate development in underperforming regions. Notably, Karsha Block in Kargil district and Rupsho-Puga Block in Leh district have been selected under this program. These initiatives, anchored by NITI Aayog, aim to enhance various development parameters, including health, education, agriculture, and infrastructure, thereby improving the overall quality of life in these blocks.

10 NABARD initiatives in the UT:

- **Dissemination of farm technologies:** NABARD has been implementing number of projects under its Farms Sector Promotion Fund for dissemination of advanced / innovative/ improved agriculture technologies for development of the agriculture sector in the UT of Ladakh. Some of the project include project of demonstration and adoption of Solar Apricot Dryers and Apricot Harvesting Nets by Tribal Farmers in Lower Sham Valley of Ladakh, project on promotion of crop diversification, project on dissemination of vermicomposting technology, project on promotion of Yak rearing and processing of Yak milk and wool for generating, project in promotion of Integrated Organic Farming System (IOFS), project on introduction of Oyster Mushroom as an important commercial crop in tribal areas of Kargil etc.
- **Tribal Development:** An integrated tribal development project is being implemented by Ladakh Framers and Producers Cooperative Limited (LFPCCL) at Ranbir Thiksay. The project is being implemented in a large tract of wasteland that was allocated to the families of Rambirpura village. It is a unique project where plantation is collectively undertaken on 311-acre land which is considered as a single Wadi belonging to the community. The water resources for the project is being funded through a separate NABARD project under Rural Infrastructure Promotion Fund (RIPF) by lifting of water from the river Indus, storing it in tanks and then supplying through drip irrigation.
- **Natural Resource Management:** NABARD has been supporting several developmental interventions towards promoting climate resilient agriculture for sustainable livelihood promotion. It has implemented a Springshed based Watershed development project on at Sakti village to increase availability of water for farming. NABARD is implementing springshed based watershed project in Leh district of Ladakh. The project area is spread across 285 ha. Similarly, project on artificial glaciers is being implemented in Tsaga AND Mudh villages of Changthang. To ensure advancement and improvement in this local technology, NABARD has also started a project of Automation of Ice Reservoirs in Igoo and Ayee villages of Ladakh in October 2024.
- **Non-Farm sector:**
 - In order to improve quality and sizing of products, marketing of products, establishing institutional and retail channels, NABARD has been organizing capacity building programmes for women artisans in association with TATA Trust for handicraft products in Leh District with a broader objective of transforming an SHG to an enterprise.
 - My District My Project is a project which aims to improve the quality of life and incomes from improved wool craft based interventions for 200 families in six villages of Leh district. It will empower women artisans through skill development with a grant assistance of ₹11.40 lakh. It is envisaged to establish a training center for knitting and weaving in Nyoma block headquarter which will ensure continuity of skill development efforts.

- “My Pad My Right” project is a unique initiative of NABARD to spread mass awareness among women about menstrual hygiene and make easy availability of sanitary pads to protect them from gynecological disorders. Under this project, a sanitary pad-making machine is provided to the members to SHGs. Further training and handholding support is provided for proper operation of the machine. The project has been sanctioned in both Leh and Kargil districts.
 - Under the concept of Rural Marts, NABARD not only provides market access but also helps in promoting entrepreneurship amongst producer communities, SHGs etc. The scheme provides support towards operational expenditure for setting up of Rural Marts at potential locations. In this direction in order to ensure the retail marketing outlet for producers /artisans/weavers to sell their locally made products. NABARD has sanctioned 02 rural marts one each in Leh city and Nyoma block of Ladakh for providing marketing channels to SHG and FPO products.
 - In order to strengthen and broad-basing Pashmina and Wool Value Chain in Leh NABARD has sanctioned a grant assistance of ₹ 107.50 lakh to an existing cooperative “Looms of Ladakh Women Cooperative Society” to scale up its operation and form a complete value chain of Pashmina and wool based products in Leh, Ladakh. The project envisages to directly impact the lives of the Pashmina weavers of Ladakh and increase their income and quality of lives significantly. A Work Studio and Training Centre covering an area of 40,000 sq ft has been constructed in Chushul, Leh.
 - With the initiative of NABARD Jammu & Kashmir Regional Office, Ladakh Wood Crving has become the first handicraft product from the Union Territory of Ladakh to be granted a Geographical Indication (GI) tag by the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry. Further, under a NABARD project, GI applications have already been filed for six more handloom / handicraft products of Ladakh.
- **Financial Inclusion:** NABARD has always been at the forefront in furthering the cause of Financial Inclusion in the Country. In the UT of Ladakh NABARD has sanctioned 8 Centers for Financial Literacy (CFL) under its Financial Inclusion Fund. In addition, NABARD has been supporting Jammu & Kashmir Grameen Bank, Jammu & Kashmir State Cooperative Bank and Commercial Banks for different activities like conduct of financial literacy camps, support for mobile banking vans, installation of micro ATMs, VSATs, POS machines etc. to ensure access to banking services in remote areas of UT Ladakh.

11. Major Constraints

- **Fragmented Land holdings:** The average land holding size is 0.65 ha. The small and marginal holdings constitute 94.06% of the total no. of holdings in the UT.

- Lack of insurance cover for major crops and allied activities. The insurance companies are reluctant to offer comprehensive and affordable products for agriculture and allied sector activities.
- Major constraint for sheep/animal husbandry sector is lack of fodder in winters.
- Lack of scientific storage/ infrastructure for value addition and market facilities for horticultural crops.

12 Thrust areas

- Connecting all un-connected villages and providing alternative roads in stretches that are likely to be disrupted due to natural disasters / accidents etc.
- Facilitating the provision of Primary and Secondary health services, closer to the communities.
- Provision of backward and forward linkages for communities engaged in various livelihood activities.
- Sustainable tourism by facilitating tourist movement to known and uncharted tourist destinations.
- Skill development of youth for gainful engagement / accessing and excelling in various employment opportunities.

13 Suggested Action points

Agriculture and allied sector:

- To promote a self-sustaining system, it's important to implement suitable strategies for crop diversification and agricultural intensification, which will in turn rejuvenate the land-based economy
- The implementation of technical strategies such as using high-yielding varieties, quality seeds, appropriate agricultural techniques, integrating traditional crops with newer ones, and adopting moderate farm mechanization to address labor shortages in farming can help reduce Leh's reliance on imported food grains for consumption.
- Collectivization of farmers in the form of FPOs and ensuring more active involvement of existing cooperatives like PACS in agriculture-related activities right from the purchase of inputs to marketing of produce will provide economies of scale to the farmers.
- Area expansion under horticulture crops may be explored through the use of micro - irrigation techniques.

- Development of storage, processing and marketing infrastructure to reduce wastage of horticulture produce.
- The lack of high-quality fodder is a major issue. Enhancing the development of fodder resources in this area can help to improve the situation.

Micro, Small and Medium Enterprises (MSMEs)

- DIC may conduct a survey for identification of potential blocks/ areas and barriers for development of the sector. Mapping of location specific activities for cluster development at the block level may be taken up.
- Organizing handicraft-based activities into clusters, providing design support, cluster brands, access to finance and establishing market linkages.
- Reskilling of artisans engaged in traditional arts and crafts, handlooms etc. to ensure product standardization and market acceptability of products.
- Efforts may be made for the mobilization of artisans into Self Help Groups, Joint Liability Groups, Cooperatives and Producer groups.
- Market assessment, product assessment study, exposure visits for artisans.

14 Way Forward

➤ Agriculture Value Chain Finance

This financial approach holds the key to unlocking the region's vast agricultural and handicrafts artisanal potential. Amidst diverse terrains and formidable challenges, local farmers seek capital infusion to modernize the infrastructure required for agri inputs, technology, logistics and processing. Value chain finance offers a lifeline, facilitating investments in technology, irrigation, and advanced seeds. Furthermore, it invigorates the horticulture and handicraft sectors, nurturing production, processing, and global market access. In a region where economic growth is pivotal for stability, value chain finance becomes a catalyst for progress, prosperity, and the sustainable development of the UT of Ladakh.

➤ Community Based Business Entities

The strategic focus lies in fostering the growth of Farmer Producer Organizations (FPOs), Primary Agricultural Cooperative Societies (PACS), and analogous community-based entities to serve as primary collectors and processors of agricultural and horticultural produce. Furthermore, our aim is to assist them in forging partnerships for advanced processing and marketing endeavors, encompassing activities such as grading, sorting,

certification, Geographical Indication (GI) tagging, and establishing robust traceability systems. This comprehensive approach not only enhances the economic prospects of local farmers but also bolsters the agricultural and horticultural sectors, fostering growth and promoting global market access.

➤ **Coping with Climate Change: Comprehensive Land and Resource Planning**

In the face of the pressing challenges posed by climate change, adopting a comprehensive approach to land use and resource planning is paramount. This strategy is essential for mitigating the impacts of a changing climate effectively. By carefully evaluating how we utilize land and allocate resources, we can optimize agricultural practices, conserve water resources, and protect vital ecosystems. It also supports sustainable forestry, responsible urban development, and resilient infrastructure. Furthermore, it enables us to implement adaptive measures that shield communities from extreme weather events and rising temperatures.

➤ **Revitalizing Rural Communities: Empowering Youth through Skills and Entrepreneurship**

Promoting skill development and fostering job opportunities and entrepreneurship among the youth is crucial for rural development. Empowering young individuals with practical skills not only enhances their employability but also contributes to the overall progress of rural areas. As skilled youth find gainful employment or embark on entrepreneurial ventures, they become engines of local economic growth. This not only uplifts their own livelihoods but also creates a ripple effect, generating employment opportunities for others in rural communities.

➤ **Digital Transformation in Rural Development: Bridging the Gap to Empower Communities**

The digital transformation of life takes on a unique significance in the context of rural development. It represents the bridge that connects remote and underserved communities to the broader world of opportunities. Access to digital technologies enables rural areas to leapfrog traditional development hurdles, offering access to education, healthcare, and market information. It empowers local entrepreneurs and farmers, fostering economic growth. However, it's essential to ensure equitable access and digital literacy to avoid leaving anyone behind. The digital transformation, when harnessed thoughtfully in rural development, has the potential to drive positive and sustainable change, closing the gap between rural and urban areas.

➤ **Strengthening of Cooperative Sector**

All existing and new cooperative societies should be Multi-Purpose

Agricultural Cooperative Societies (MPACS) offering multitude of services and facilitate the marketing of goods. This would include procurement of local products and marketing of same to defense personnel, the local population and sale outside the UT. The federation of MPACS will act as the State Cooperative Bank (StCB) for the UT, and suitable steps to be taken for promotion of StCB in the Union Territory (UT).

Part A

UT Map

Union Territory - Ladakh



Broad Sector-wise assessment of Credit Potential for 2025-26

(₹ lakh)

Sr. No.	Particulars	Amount
A	Farm Credit	39143.08
1	Crop Production, Maintenance and Marketing, and Working Capital Loans for Allied Activities	34966.14
2	Term Loan for agriculture and allied activities	4176.94
B	Agriculture Infrastructure	349.20
C	Ancillary activities	740.97
I	Credit Potential for Agriculture (A+B+C)	40233.25
II	Micro, Small and Medium Enterprises	75083.20
III	Export Credit	45.00
IV	Education	215.60
V	Housing	4303.20
VI	Social Infrastructure	300.00
VII	Renewable energy	812.16
VIII	Others	195.30
	Total Priority Sector	121187.71

Summary of Sector/ Sub-sector wise assessment of Credit Potential 2025-26

(₹ lakh)

Sr. No.	Particulars	Amount
I	Credit Potential for Agriculture	
A	Farm Credit	
1	Crop Production, Maintenance and Marketing	27719.50
2	Water Resources	237.60
3	Farm Mechanization	839.72
4	Plantation & Horticulture with Sericulture	765.07
5	Forestry & Waste Land Development	92.80
6	Animal Husbandry - Dairy	7195.82
7	Animal Husbandry - Poultry	438.86
8	Animal Husbandry - Sheep, Goat, Piggery	1418.21
9	Fisheries	296.00
10	Farm Credit- Others	139.50
	Sub total	39143.08
B	Agriculture Infrastructure	
1	Construction of storage	280.80
2	Land development, Soil conservation, Wasteland development	10.80
2	Agriculture Infrastructure - Others	57.60
	Sub total	349.20
C	Ancillary activities	
1	Food & Agro. Processing	664.47
2	Ancillary activities - Others	76.50
	Sub Total	740.97
II	Micro, Small and Medium Enterprises	
	Total MSME	75083.20
III	Export Credit	45.00
IV	Education	215.60
V	Housing	4303.20
VI	Social Infrastructure	300.00
VII	Renewable energy	812.16
VIII	Others	195.30
	Total Priority Sector	121187.71

Union Territory Profile

Key Agricultural and Demographic Indicators

UT	Ladakh
SLBC Convener	State Bank of India

Physical & Administrative Features

Particulars	Nos
Total Geographical Area (sq.km)	59146
No. of Districts	2
No. of Sub-Divisions	11
No. of Blocks	31
No. of revenue villages	244
No. of Gram Panchayats	193

Additional Information

Particulars	Nos
No. of districts classified as Aspirational District	0
No. of districts classified as Low PSL Credit Category	0
No. of districts having an international border	2
No. of districts classified as LWE affected	0
No. of districts Climate Vulnerability to Agriculture	
Very High	0
High	1
Medium	1
Low	0
Very Low	0
No. of districts with % of Tribal Population above the national average of 8.9%	2

Soil and Climate

Particulars	Nos
Climate	Cold Arid
Soil Type	Sandy Loam Clay Loam

Agro Climatic Zones in the State

Districts Covered	Agro Climatic Zones
Leh Ladakh	AZ5 - Cold Arid
Kargil	AZ5 - Cold Arid

Land Utilisation [Ha]

Particulars	Nos
Total Area Reported	86186
Forest Land	4937
Area Not Available for Cultivation	35096
Barren and Unculturable land	NA
Permanent Pasture and Grazing Land	NA
Land under Miscellaneous Tree Crops	4030
Culturable Waste	8548
Current Fallow	1871
Other Fallow	1109
Net Sown Area	21959
Total or Gross Cropped Area	24056
Area Cultivated More than Once	2097
Cropping Intensity [GCA/NSA] (%)	109.55

Rainfall & Ground Water Scenario

Particulars	Nos
Normal (mm)	50.90
Actual (mm)	
Year – 2023	94.90
Year – 2022	84.11
Year – 2021	
Availability of Ground Water (Ham)	6000
Net annual recharge (MCM)	70
Net annual draft (MCM)	20
Stages of GW development (%)	30.93
Total No. of Blocks	31
Safe	17
Critical	0
Semi Critical	1
Over Exploited	0
Saline	0
Not Assessed	13

Distribution of Land Holding [in '000] (2015-16)

Classification of Holding	Holding		Area	
	Nos	% to Total	ha.	% to Total
<= 1 ha	31.01	80.73	9.73	38.76
>1 to <=2 ha	5.12	13.33	7.2	28.69
>2 to <=4 ha	1.96	5.10	5.24	20.88
>4 to <=10 ha	0.3	0.78	1.68	6.69
>10 ha	0.02	0.05	1.25	4.98
Total	38.41	100	25.10	100.00

Workers Profile [In '000]

Particulars	Nos
Cultivators	38.41
Of the above, Small/ Marginal Farmers	36.13
Agricultural Labourers	4.81
Workers engaged in Household Industries	2.24
Workers engaged in Allied agro activities	NA
Other workers	90.17

Demographic Profile [In '000]

Category	Total	Male	Female	Rural	Urban
Population	274.29	156.76	117.53	212.28	62.01
Scheduled Caste	0.51	0.46	0.05	0.12	0.39
Scheduled Tribe	218.19	110.2	108	184.63	33.56

Households [In '000]

Particulars	Nos
Total Households	40247
Rural Households (Occupied residential households)	31052
BPL Households	NA

Household Amenities [Nos. in '000 Households]

Particulars	Nos
Having brick/stone/concrete houses	40247
Having source of drinking water	39165
Having electricity supply	NA
Having independent toilets	40247

Village-Level Infrastructure [Nos.]

Particulars	Nos
Villages Electrified	238
Villages having Agriculture Power Supply	-
Villages having Post Offices	108
Villages having Banking Facilities	193
Villages having Primary Schools	234
Villages having Primary Health Centres	70
Villages having Potable Water Supply	238
Villages connected with Paved Approach Roads	NA

Infrastructure Relating to Health & Sanitation [Nos.]

Particulars	Nos
Anganwadis	1141
Primary Health Centres	70
Primary Health Sub-Centres	252
Dispensaries	15
Hospitals	2
Hospital Beds	811

Infrastructure & Support Services for Agriculture [Nos.]

Particulars	Nos
Fertiliser/Seed/Pesticide Outlets	2
Agro Service Centres	4
Soil Testing Centres	2
Krishi Vigyan Kendras	4

Irrigation Coverage ['000 Ha]

Particulars	Nos
Area Available for Irrigation (NSA + Fallow)	22.5
Irrigation Potential Created	-
Net Irrigated Area (Total area irrigated at least once)	22.5
Area irrigated by Canals/ Channels	22.5
Area irrigated by Wells	0
Area irrigated by Tanks	0
Area irrigated by Other Sources	0
Irrigation Potential Utilized (Gross Irrigated Area)	22.5

Infrastructure for Storage, Transport & Marketing

Particulars	Nos
Pucca Road [km]	1927
Railway Line [km]	0

Animal Population as per Census [Nos.]

Category of animal	Total	Male	Female
Cattle - Cross bred	84201	NA	NA
Buffaloes	0	NA	NA
Sheep	198501	NA	NA
Goat	240106	NA	NA
Pig	298	NA	NA
Horse/ Pony/ Mule/ Donkey/ Camel	11111	NA	NA

Processing Units

Type of Processing Activity	No. of units	Capacity [MT]
Food (Rice/Flour/Dal/Oil/Tea/Coffee)	107	NA
Sugarcane (Gur/Khandsari/Sugar)	0	NA
Spices (Masala Powders/Pastes)	0	0
Dry-fruit (Cashew/Almond/Raisins)	0	0
Cotton (Ginning/Spinning/Weaving)	0	0
Milk (Chilling/Cooling/Processing)	1	5

Infrastructure for Development of Allied Activities [Nos.]

Particulars	Nos
Veterinary Hospitals	4
Dispensaries	20
Dairy Cooperative Societies	79
Fishermen Societies	1
Animal Markets	0
Fish Markets	0
Livestock Aid Centers	87

Milk, Fish, Egg Production & Per Capita Availability

Particulars	Production (Annum)		Per cap avail.	
	Quantity	Unit	Availability	Unit
Fish	NA	TMT	NA	gm/day
Egg	NA	Lakh Nos.	NA	nos/p. a.
Milk	98.89	MT	0.98	gm/day
Meat	NA	TMT	0	gm/day
Wool	159.03	MT	580	gm

Source(s)

Physical & Administrative Features	Statistical Handbook Ladakh 2022-23
Additional Information	Statistical Handbook Ladakh 2022-23
Soil & Climate	Statistical Handbook Ladakh 2022-23 and additional sources
Land Utilisation [Ha]	
Ground Water Scenario	Dynamic Ground Water Resources of India 2024
Distribution of Land Holding [In '000]	Statistical Handbook Ladakh 2022-23
Workers Profile [In '000]	Statistical Handbook Ladakh 2022-23
Demographic Profile [In '000]	Census data
Households [In '000]	Census data
Household Amenities [Nos. in '000 Households]	Statistical Handbook Ladakh 2022-23 and local sources
Village-Level Infrastructure [Nos.]	Statistical Handbook Ladakh 2022-23 and local sources
Infrastructure Relating To Health & Sanitation [Nos.]	Statistical Handbook Ladakh 2022-23 and local sources
Infrastructure & Support Services For Agriculture[Nos.]	Statistical Handbook Ladakh 2022-23 and local sources
Irrigation Coverage ['000Ha]	Statistical Handbook Ladakh 2022-23
Infrastructure For Storage, Transport & Marketing	Local sources
Processing Units	Statistical Handbook Ladakh 2022-23 and

	local sources
Animal Population as per Census [Nos.]	20th Livestock Census
Infrastructure for Development of Allied Activities [Nos.]	Statistical Handbook Ladakh 2022-23 and local sources
Milk, Fish, Egg Production & Per Capita Availability - Year-2	Statistical Handbook Ladakh 2022-23 and local sources

Key Insights into Agriculture and Socio-Economic Indicators

Socio–Economic and Demographic Profile and Investment in Agriculture

Sr.No.	Particulars	Details
1	Coastline (km)	0
2	Geographical Area Rank/Position	17
3	Population Rank among India States	35
4	No. of ATMs per lakh of population	61.68
5	No. of Bank Branches per lakh of population	38.32
6	Population Density	4.60

Major Social Indicators of the UT

Social Indicators		
1	Sex Ratio	987
2	Birth Rate	12.28
3	Death Rate	3.76
4	Infant Mortality Rate	16
5	Life Expectancy - Male	
6	Life Expectancy - Female	
7	Maternal Mortality Rate (MMR)	48

Investment in Agriculture

(₹ crore)

Sr.No.	Particulars	Amount
1	Total UT Budget	4920.34
2	Revenue Expenditure (Agri. & Allied Sectors and irrigation)	9.68
3	Capital Expenditure (Agri. & Allied Sectors and irrigation)	3.28
4	Share (%) of Capital Expenditure in Total Agriculture Budget	25.31
5	Share (%) of Revenue Expenditure on Total UT Budget for Agriculture	74.69

Crop Production, Maintenance and Marketing

KCC Coverage

Particulars	31/03/2022	31/03/2023	31/03/2024
KCC coverage (No.)	24289	26220	20202
GLC through KCC (Crore)	313.27	347.70	198.44

KCC - Disbursement and Outstanding

Sr.No.	Total amount disbursed in KCC (Fresh) during 31/03/2024		Balance O/S as on 31/03/2024	
	A/c (in lakh)	Amt. (₹ crore)	A/c (in lakh)	Amt. (₹ crore)
1	0.2	198.44	0.24	226.79

Average per account KCC loan

Sr.No.	Agency	Per account Credit (₹)		
		31/03/2022	31/03/2023	31/03/2024
1	Commercial Banks	128804.00	132360.00	96887.00
2	RRBs	144771.00	154865.00	165769.00
3	Cooperative Banks	126429.00	123820.00	149000.00

PM Kisan

Particulars	31/03/2022	31/03/2023	31/03/2024
PM Kisan Coverage (No.)	-	-	19413

Soil testing facilities

Particulars	31/03/2022	31/03/2023	31/03/2024
Soil Testing Laboratories (No.)	0	0	2
Soil Health Cards Issued (No.)	-	0	442

Crop Insurance

Particulars	31/03/2022	31/03/2023	31/03/2024
Crop Insurance Coverage (No.)	0	0	0
Crop Loss compensation, if any (Crore)	0.00	0.00	0.00

Details of the coverage under PMFBY for Kharif & Rabi in the UT

Sr.No.	Particulars	31/03/2022		31/03/2023		31/03/2024	
		Kharif	Rabi	Kharif	Rabi	Kharif	Rabi
1	Farmers Covered (in lakh)	0.00	0.00	0.00	0.00	0.00	0.00
2	Applications -Loanee (in lakh)	0.00	0.00	0.00	0.00	0.00	0.00
3	Applications - Non Loanee (in lakh)	0.00	0.00	0.00	0.00	0.00	0.00
4	Sum insured (₹ crore)	0.00	0.00	0.00	0.00	0.00	0.00
5	Area insured (lakh Ha)	0.00	0.00	0.00	0.00	0.00	0.00

Number and area of operational holdings

Sr.No.	Particulars	2010-11	2015-16
1	No. of operational land holding (in lakh)	0.41	0.38
2	Area of operational holding ('ooo ha)	27.2	25.1

*Including land holdings of UT of Ladakh

FPOs in the UT Key Statistics

(₹ lakh)

Sr.No.	Particulars	No./Amt.
1	Total No. of FPOs sanctioned	2
2	Total No. of FPOs Registered	2
3	Aggregate Grant Sanctioned	22.50
4	Aggregate Grant Released	21.52
5	No. of Shareholding Members	801
6	Women Members	439
7	Equity Mobilized	
8	No. of FPOs credit-linked	0.00
9	No. of FPOs market linked	2.00

Source(s)

Table Name	Source(s) and reference year of data
KCC Coverage	UTLBC Data
PM Kisan	Local sources
Soil testing facilities	Local sources and SHC Portal
Crop Insurance	Local sources & pmfby.gov.in/adminStatistics/dashboard
FPOs in the UT Key Statistics	NABARD

Water Resources

Irrigated Area & Potential

Particulars	31/03/2022	31/03/2023	31/03/2024
Net Irrigated Area ('000 ha)	22.00	22.00	22.00
Gross Irrigated Area ('000 ha)	22.00	22.00	22.00

District wise rainfall status

Sr. No.	Status	Districts
1	Large deficient	Leh Ladakh
2	Large deficient	Kargil

Source(s)

Table Name	Source(s) and reference year of data
Irrigated Area & Potential	Statistical Handbook 2022-23 and 2021-22
District wise rainfall status	Rainfall Statistics 2022-23

Key Insights into Plantation & Horticulture including Sericulture

Export status of important Horticulture crops [MTs]

Sr. No.	Crop	31/03/2022	31/03/2023	31/03/2024
1	Area under sericulture (ha)	0	0	0
2	Production - kg	0	0	0

Sericulture

Sr. No.	Crop	31/03/2022	31/03/2023	31/03/2024
1	Apricot	30	0	0
2	Apple	0	0	2

Status of Sericulture in the State

Sr No.	Particulars	Unit	Details
1	Mulberry Plantations	Acres	0
2	Sericulture farmers	Nos.	0
3	Mulberry cocoon Production	MTs	0
4	Raw silk production	MTs	0
5	Productivity	Kgs/100 dfls	0
6	Tasar cocoon production	In Lakh Nos	0
7	Automatic reeling machines established	No of ends/units	0
8	GVA realised	Rs in crores	0

Weaver's Cluster

Sr. No.	Crop	31/03/2022	31/03/2023	31/03/2024
1	Popular variety (ies)	Pasmina, Merino	Pasmina, Merino	Pasmina, Merino
2	Weavers' population (No.)	NA	NA	NA
3	Reeling Units (No.)	NA	NA	NA

Production and Productivity of Horticultural crops

Sr. No.	Crop	31/03/2022		31/03/2023		31/03/2024	
		Area ('000 ha)	Prod. ('000 MT)/Lakh nuts	Area ('000 ha)	Prod. ('000 MT)/Lakh nuts	Area ('000 ha)	Prod. ('000 MT)/Lakh nuts
1	Apricot	2.55	16.13	2.58	16.16	NA	NA
2	Apple	0.87	5.17	0.83	5.55	NA	NA
3	Others	0.12	0.16	0.12	0.16	NA	NA

Key Insights into Allied Sector, Agri Infra and Land Development AH & Fisheries - Production Status in the UT

S. N	Particulars	Unit	31/03/2022	31/03/2023		31/03/2024		Per capita Availability	
			Details	Details	Growth (%)	Details	Growth (%)	Availability	Unit
1	Milk	TMT	86.87	86.87	-	86.87	-	600.00	gram/day
2	Total Meat	Lakh MT	0.01	NA	-	NA	NA	NA	kg/p. a.
3	Poultry Meat	Lakh MT	NA	NA	NA	NA	NA	NA	kg/p. a.
4	Egg	Crore Nos	NA	NA	NA	NA	NA	NA	Nos./p. a.
5	Fish Production	Lakh MT	NA	NA	NA	NA	NA	NA	kg/p. a.

Sources

Table Name	Source(s) and reference year of data
Table 1: Sericulture	NA
Table 2: Weavers Clusters	Local sources
Table 3: Production and Productivity of Horticultural crops (Maximum 25 crops)	Statistical Handbook Ladakh 2022-23

Infrastructure available in the Animal Husbandry Sector

Sr.No.	Institution	Unit	Details
1	Veterinary Hospitals	No.	4
2	Veterinary Dispensary	No.	6
3	Livestock Aid Centre (LAC)	No.	87
4	Frozen Semen A.I. Centres	No.	NA
5	Livestock Breeding Farms	No.	1313
6	Poultry Breeding Farms + Duck Breeding Farms	No.	1313
7	Fodder Farms + Seed Production Farms	No.	1313
8	Sheep breeding farm	No.	102
9	Goat Breeding Farms	No.	NA
10	Pig Breeding Farms	No.	0
11	Chilling & processing facility State Federation		
a	No.	No.	1
b	Capacity	LLPD	0.05

Animal Husbandry – Dairy

GLC

Particular	31/03/2022	31/03/2023	31/03/2024
KCC for working capital (₹ Crore)*	23.19	21.24	NA
KCC for working capital (No.)*	1334	1560	NA

Source(s)

Table Name	Source(s) and reference year of data
Table 1: GLC	UTLBC

Animal Husbandry – Sheep, Goat, Piggery etc.

Popular Breed(s)

Particular	31/03/2024
Popular sheep breed(s)	Merino
Popular goat breed(s)	Pashmina / Changthangi Goats

Source(s)

Table Name	Source(s) and reference year of data
Table 1: GLC	NA
Table 2: Popular Breed(s)	Local Sources

Agriculture Infrastructure

Ground Level Credit

Particular	31/03/2022	31/03/2023	31/03/2024
GLC flow (₹ Crore)	0.88	0.03	0.01

Agri Storage Infrastructure

Particular	31/03/2022	31/03/2023	31/03/2024
Cold Storages (No.)	2	2	2
Cold Storages (Capacity - '000 MT)	1.3	1.3	1.3
Storage Godowns (No.)	26	26	26
Storage Godowns (Capacity - '000 MT)	42.45	42.45	42.45
Rural/Urban Mandi/Haat/ Rythu Bazaar (No.)	3	3	3

Sources

Table Name	Source(s) and reference year of data
Table 1: GLC	UTLBC
Table 2: Agri Storage Infrastructure	Local Sources

Land Development, Soil Conservation & Watershed Development
NABARD's interventions

Particular	31/03/2022	31/03/2023	31/03/2024
Watershed Projects (No.)	1	1	1
Watershed Projects - Area treated ('000 ha)	0.285	0.285	0.285
Wadi Projects (No.)	1	1	1
Wadi Projects - Area of plantation ('000 ha)	0.126	0.126	0.126

Source(s)

Table Name	Source(s) and reference year of data
Table 1: NABARD's interventions	NABARD

Key Insights into MSME, Cooperatives, Infrastructure and others

Agri Ancillary Activities - Food & Agro Processing & Others GLC

Particulars	31/03/2022	31/03/2023	31/03/2024
GLC flow (₹ Crore)	0.95	3.36	4.80
MUDRA Loans (₹ Crore)	92.01	119.43	110.58

Other Ancillary Services

Particulars	31/03/2022	31/03/2023	31/03/2024
PACS as MSC (No.)	Data not Available	Data not Available	Data not Available
ACABCs (No.)	0	0	0

Source(s)

Table Name	Source(s) and reference year of data
Table 1: GLC	UTLBC
Table 2: Other Ancilliary Services	Dashboard of ACABC

MSME**GLC**

Particulars	31/03/2022	31/03/2023	31/03/2024
No. of units financed / No. of A/cs	3659	3362	7625
Loans under Stand Up India Scheme (₹ Crore)	1.97	28.21	52.05

Skill Development Trainings

Particulars	31/03/2022	31/03/2023	31/03/2024
PMEGP/ DDU-GKY Schemes (No. of trainees)	258	182	154
EDP for artisans/ entrepreneurs by UT/ NABARD (No.)	NA	NA	5

Performance of RSETIs in the UT**(Nos.)**

Sr.No.	Financial Year Ended	Training Programmes Conducted	Candidates Trained	Candidates Settled	Candidates covered under Bank Finance
1	Year 2022	22	535	173	173
2	Year 2023	22	624	155	266
3	Year 2024	20	585	213	213

Category-wise performance under PMMY during 31/03/2024

Sr.No.	Catagory	No. of A/Cs	Amount Disbursed
1	Shishu (loan up to ₹ 50,000)	506	1.02
2	Kishore (loan from ₹ 50,001 to ₹ 5.00 lakh)	2047	49.77
3	Taurn (loan from ₹ 5.00 lakh to ₹ 10 lakh)	815	59.79
	Total	3368	110.58

Source(s)

Table Name	Source(s) and reference year of data
Table 1: GLC	UTLBC
Table 2: Skill Development Trainings	Statistical Handbook 2022-23, UTLBC Data, EDPs (NABARD programmes only)

Export/ Education/Housing GLC

Particular	31/03/2022	31/03/2023	31/03/2024
GLC flow under Export Credit (₹ Crore)	0.00	0.00	0.00
GLC under Education (₹ Crore)	0.43	0.37	0.50
GLC under Housing (₹ Crore)	31.34	28.41	23.52

Export performance - [Year]

(₹ crore)

Sr.No.	Category of Products	31/03/2023	31/03/2024	Growth %
1	Engineering / Chemicals & Allied products	0.00	0.00	0.00
2	Minerals	0.00	0.00	0.00
3	Agriculture & Forest produce	0.00	0.00	0.00
4	Marine products	0.00	0.00	0.00
5	Handloom products	0.00	0.00	0.00
6	Handicrafts	0.00	0.00	0.00
7	Textiles	0.00	0.00	0.00
8	Pharmaceuticals	0.00	0.00	0.00
9	Others	0.00	0.00	0.00
10	Softwares / Electronics	0.00	0.00	0.00
	Total	0.00	0.00	0.00

Source(s)

Table Name	Source(s) and reference year of data
Table 1: GLC	UTLBC
Table 2: Export performance	Niryat Portal

Social Infrastructure Investments

GLC

Particulars	31/03/2022	31/03/2023	31/03/2024
GLC flow under Social Infrastructure Projects (₹ Crore)	1.20	0.00	0.50

Source(s)

Table Name	Source(s) and reference year of data
Table 1: GLC	UTLBC

Renewable Energy

GLC

Particulars	31/03/2022	31/03/2023	31/03/2024
Assistance under Renewable Energy Initiatives (₹ Crore)	0.13	0.05	0.09

Source(s)

Table Name	Source(s) and reference year of data
Table 1: GLC	UTLBC

Informal Credit Delivery

GLC

Particulars	31/03/2022	31/03/2023	31/03/2024
SHG Bank Linkage (₹ Crore)	1.11	0.49	2.16
JLG Bank Linkage (₹ Crore)	Data not Available	Data not Available	Data not Available

Status of SHGs

Particulars	31/03/2022	31/03/2023	31/03/2024
No. of SHGs formed	8	13	13
No. of SHGs credit linked (including repeat finance)	NA	1386	1956
Bank loan disbursed (₹ Crore)	NA	52	54
Average loan per SHG (₹ lakh)	NA	1.38	2.18
Percentage of women SHGs %	NA	0.026	0.04

NABARD Intervention for Capacity building Programme in FY**(No.)**

Sr. No.	Particulars	No. of Progs during 31/03/2023	Prog during 31/03/2024	No. of persons trained
1	SHG/JLG Sensitisation programme for bankers	1	1	NA
2	Village level programmes	4	4	NA
3	Micro Enterprise Development Programme	0	2	NA
4	Grass Root Level Training Programme			NA
5	Livelihood and Enterprise Development Programme	0	0	NA

Source(s)

Table Name	Source(s) and reference year of data
Table 1: GLC	UTLBC
Table 2: Promotional Interventions	NABARD
Table 3: Status of SHGs	UTLBC Data and LRLM Sources (cumulative data)

Potential for formation of Cooperatives [No]

Sr. No.	Name of Sector	Name of Potential District/s	Approximate Potential (No. of Cooperatives)
1	PACS	Leh Ladakh	15
2	PACS	Kargil	34

Status and Prospects of Cooperatives Details of non-credit cooperative societies

Particular	31/03/2022	31/03/2023	31/03/2024
AH Sector - Milk/ Fisheries/ Poultry (No.)	79	79	79
Consumer Stores (No.)	14	14	14
Housing Societies (No.)	1	1	1
Weavers (No.)	NA	NA	NA
Marketing Societies (No.)	10	10	10
Labour Societies (No.)	2	2	2
Industrial Societies (No.)	NA	NA	NA
Sugar Societies (No.)	NA	NA	NA
Agro Processing Societies (No.)	NA	NA	NA
Others (No.)	5	5	5
Total (No)	111	111	111

Details of credit cooperative societies

Particular	31/03/2022	31/03/2023	31/03/2024
Primary Agriculture Credit Societies (No.)	159	159	159
Multi state cooperative societies (No.)	NA	NA	NA

Source(s)

Table Name	Source(s) and reference year of data
Table 1: Details of non-credit cooperative societies	Cooperative Department UT Ladakh
Table 2: Details of credit cooperative societies	Cooperative Department UT Ladakh
Table 3: Status/ progress under various schemes of MoC in the district	Cooperative Department UT Ladakh
Table 4: Potential for formation of Cooperatives	National Cooperative Database, JWC minutes etc.

Renewable Energy - Sector-wise cumulative achievements

Sr.No.	Sector	Installed capacity (GW)
1	Solar Power	0.00163
2	Wind Power	NA
3	Bio Energy	NA
4	Small Hydro	0.098
5	Total	0.0996

Renewable Energy Potential

Particular	31/03/2024					
	Solar Power (MW)	Wind Power (MW)	Small Hydro (MW)	Biomass (MW)	Waste to Energy (MW)	Total (MW)
Potential	35000	4000	NA	NA	NA	35000
Developed	1.63	NA	98.93	NA	NA	1.63
Planned	13000	NA	NA	NA	NA	13000
Gap	21998	4000	98.3	-	-	

Status/ progress under various schemes of MoC in the UT

Sr.No .	MoC Scheme/ Initiative	31/03/2024
		No. of PACS/ No. of Units
1	Adoption of Model Bye-laws by the societies in the district	159
2	Potential for formation of new MPACS	49
3	PACS Computerisation	10
4	ARDBs Computerisation	0
5	New MPACS/ Primary Dairy Societies/ Fisheries Societies established	0
6	World's largest grain storage plan for cooperatives	
7	PACS sanctioned with warehousing facility & other related infrastructure	0
8	Capacity of the grain storage godowns sanctioned	0
9	PACS as Common Service Centres (CSCs)	NA
10	PACS as Kisan Samridhi Kendras (KSKs)	0
11	PACS as Jan Aushadi Kendras (JAK)	0
12	Petrol/ Diesel distributorship/ dealership	0
13	LPG distributorship	0
14	PACS as Pani Samitis	0
15	PM Kusum Scheme	0
16	Societies engaged as Bank Mitras of DCCB	0
17	Societies/ Bank Mitras provided with micro-ATMs	0
18	Societies which have taken membership in the Multi State Cooperative Societies	
19	Membership in Multi State Cooperative Society on Seeds	15
20	Membership in Multi State Cooperative Society on Organic farming & products	15
21	Membership in Multi State Cooperative Society on Agri- exports	6

Banking Profile

1. Network & Outreach

Agency	No. of Banks/ Societies	No. of Banks/ Societies				No. of non-formal agencies associated			Per Branch Outreach	
		Total	Rural	Semi-urban	Urban	mFIs/ mF Os	SHGs/JL G s	BCs/BFs	Village s	Househ olds
Commercial Banks	15	92	58	-	34	-	-	16	NA	NA
Regional Rural Bank	1	4	2	-	2	-	-	0	NA	NA
State Coperative Bank	1	7	2	-	5	-	-	0	NA	NA
District Central Coop. Bank	0	0	0	-	0	-	-	0	NA	NA
Coop. Agr. & Rural Dev. Bank	0	0	0	-	0	-	-	0	NA	NA
Primary Agr. Coop. Society	159	159	159	-	0	-	-	0	NA	NA
Others	1	2	0	-	2	-	-	0	NA	NA
All Agencies	177	264	221	-	43	-	1980	16	NA	NA

2. Deposits Outstanding

Agency	No. of accounts (in lakh)					Amount of Deposit [₹Crore]				
	31/03/2022	31/03/2023	31/03/2024	Growth (%)	Share (%)	31/03/2022	31/03/2023	31/03/2024	Growth (%)	Share (%)
Commercial Banks	0.74	0.84	-	-	-	7411.20	8220.76	8781.43	6.82	95.52
Regional Rural Bank	0.01	0.01	-	-	-	19.27	23.09	31.63	36.99	0.34
Cooperative Banks	0.03	0.03	-	-	-	327.96	349.40	380.02	8.76	4.13
Others	0.00	0.00	-	-	-	0.00	0.00	0.00	-	-
All Agencies	0.79	0.89	-	-	-	7758.43	8593.25	9193.08	6.98	100.00

3. Loans & Advances Outstanding

Agency	No. of accounts (in lakh)					Amount of Loan [₹ Crore]				
	31/03/2022	31/03/2023	31/03/2024	Growth (%)	Share (%)	31/03/2022	31/03/2023	31/03/2024	Growth (%)	Share (%)
Commercial Banks	0.38	0.46	0.47	2.2	95.9	2762.83	3464.32	4003.61	15.57	96.08
Regional Rural Bank	0.01	0.01	0.01	0.0	2.0	23.11	26.25	37.52	42.93	0.90
Cooperative Banks	0.01	0.01	0.01	0.0	2.0	105.77	111.74	111.05	-0.62	2.67
Others	0.00	0.00	0.00	-	-	14.07	16.32	14.56	-10.78	0.35
All Agencies	0.40	0.48	0.49	2.1	100.0	2905.78	3618.63	4166.74	15.15	100.00

4. CD Ratio

Agency	CD Ratio %		
	No. of accounts		
	31/03/2022	31/03/2023	31/03/2024
Commercial Banks	37.28	42.14	45.59
Regional Rural Bank	119.93	113.69	118.62
Cooperative Banks	32.25	31.98	29.22
Others	-	-	-
All Agencies	37.45	42.11	45.32

5. Ratio Performance under Financial Inclusion (No. of A/cs in lakh)

Agency	Cumulative up to			
	31/03/2024			
	PMJDY	PMSBY	PMJJBY	APY
Commercial Banks	0.19	0.19	5.69	0.06
Regional Rural Bank	0.02	0.02	1.47	0.00
Cooperative Banks	0.04	0.04	0.004	0.00
Others	0.00	0.00	-	0.00
All Agencies	0.24	0.24	7.16	0.07

6. Performance on National Goals

Agency	31/03/2024									
	Priority Sector Loans		Loans to Agri Sector		Loans to Weaker Sections		Loans under DRI Scheme		Loans to Women	
	Amount [₹Crore]	% of Total Loans	Amount [₹Crore]	% of Total Loans	Amount [₹Crore]	% of Total Loans	Amount [₹Crore]	% of Total Loans	Amount [₹Crore]	% of Total Loans
Commercial Banks	914.81	40.95	200.96	8.99	814.09	36.44	NA	NA	NA	NA
Regional Rural Bank	23.90	82.53	7.42	25.62	23.15	79.94	NA	NA	NA	NA
Cooperative Banks	32.24	80.24	3.34	8.31	0.04	0.10	NA	NA	NA	NA
Others	0.00	0.00	0.00	0.00	0.00	0.00	NA	NA	NA	NA
All Agencies	970.95	42.15	211.72	9.19	837.28	36.35	NA	NA	NA	NA

7. Agency-wise Performance under Annual Credit Plans

Agency	31/03/2022			31/03/2023			31/03/2024			Avg. Ach [%] in last 3 years
	Target [₹crore]	Ach'ment [₹crore]	Ach'ment [%]	Target [₹crore]	Ach'ment [₹crore]	Ach'ment [%]	Target [₹crore]	Ach'ment [₹crore]	Ach'ment [%]	
Commercial Banks	600.87	586.32	97.58	605.92	670.11	110.59	732.48	914.81	124.89	111.96
Regional Rural Bank	30.61	29.67	96.93	15.47	14.11	91.21	19.64	23.90	121.69	102.98
Cooperative Banks	50.10	12.14	24.23	52.13	44.72	85.79	63.33	32.24	50.91	53.82
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
All Agencies	681.58	628.13	92.16	673.52	728.94	108.23	815.45	970.95	119.07	107.25

8. Sector-wise Performance under Annual Credit Plans

Broad Sector	31/03/2022			31/03/2023			31/03/2024			Avg. Ach [%] in last 3 years
	Target [₹crore]	Ach'ment [₹crore]	Ach'ment [%]	Target [₹crore]	Ach'ment [₹crore]	Ach'ment [%]	Target [₹crore]	Ach'ment [₹crore]	Ach'ment [%]	
Crop Loan	181.12	313.27	172.96	188.49	347.71	184.47	191.78	198.44	103.47	153.09
Term Loan (Agri.)	137.47	5.30	3.86	61.59	9.29	15.08	117.29	13.28	11.32	8.81
Total Agri. Credit	318.59	318.57	99.99	250.08	357.00	142.75	309.07	211.72	68.50	101.09
MSME	282.13	271.90	96.37	367.20	333.28	90.76	444.56	721.41	162.28	121.27
Other Priority Sectors*	80.86	37.67	46.59	56.24	38.66	68.74	61.81	37.82	61.19	57.39
Total Priority Sector	681.58	628.14	92.16	673.52	728.94	108.23	815.44	970.95	119.07	107.26

9. NPA Position (Outstanding)

Broad Sector	31/03/2022			31/03/2023			31/03/2024			Avg. Ach [%] in last 3 years
	Total o/s [₹crore]	NPA amt. [₹crore]	NPA %	Total o/s [₹crore]	NPA amt. [₹crore]	NPA %	Total o/s [₹crore]	NPA amt. [₹crore]	NPA %	
Commercial Banks	2762.84	23.45	0.85	3464.28	45.64	1.32	4003.57	29.56	0.74	0.96
Regional Rural Bank	23.11	0.28	1.21	26.25	0.20	0.76	37.53	0.26	0.69	0.85
Cooperative Banks	105.77	6.32	5.98	111.74	6.71	6.01	111.05	14.76	13.29	8.46
Others	14.07	3.29	23.38	16.32	0.00	0.00	14.57	5.44	37.34	19.42
All Agencies	2905.79	33.34	1.15	3618.58	52.55	1.45	4166.71	50.01	1.20	1.27

*OPS includes Export Credit, Education, Housing, Social Infrastructure, Renewable Energy

Source(s)	
1	UTLBC Data 2021-22
2	UTLBC Data 2022-23
3	UTLBC Data 2023-24

Part B

Chapter 1

Major Socio-Economic Indicators of the UT

1.1 Geographic Indicators

- Ladakh is situated in the rain shadow of the majestic Himalayas, where the dry monsoon winds reach the town of Kargil after the moisture has been depleted in the lush valleys of the plains and the towering mountain ranges. This unique geographical setting results in a fascinating blend of arctic and desert climate characteristics, leading to Ladakh's designation as the "Cold Desert."
- The region is rich in river valleys, with Leh housing the prominent Indus, Shyok, and Nubra rivers, while the Kargil district is home to the Suru, Dras, and Zaskar river valleys. The Indus River, in particular, serves as the lifeline of Ladakh, shaping the landscape and culture of the area. Historical and contemporary towns such as Shey, Leh, Basgo, and Tingmosgang have flourished in close proximity to this vital water source, relying on its banks for sustenance and trade.

1.2 Physical features

- Ladakh, the largest Union Territory (UT) of India, spans an area of 59,146 square kilometers, making it the least densely populated region in the country. It is bordered by Tibet to the east, Himachal Pradesh to the south, Jammu & Kashmir to the west, and Gilgit-Baltistan (Pakistan-occupied) to the northwest. As per the 2011 Census, Ladakh has a population of around 274,289, with Leh and Kargil as its only two districts. The region has a low population density of about 4.6 people per square kilometer, reflecting its harsh terrain and extreme climatic conditions. The major ethnic groups include Ladakhis, Balti, Changpa, and Shia Muslims, with Buddhism and Islam being the predominant religions.
- The region falls under the cold desert agro-climatic zone, characterized by extreme aridity, high-altitude terrain, and a short growing season. It can be divided into three sub-zones: the cold desert zone, where barley, wheat, and vegetables are grown with glacial melt irrigation; the high-altitude pastoral zone, dominated by nomadic livestock rearing (yaks, sheep, and pashmina goats); and the river valley cultivation zone, where fertile soils support limited fruit orchards (apricots, apples) and traditional crops. Despite challenges like water scarcity and harsh winters, innovative techniques like greenhouse farming and artificial glaciers support agriculture in the region.

1.3 UT Demographics

- According to the 2011 Census, the Union Territory of Ladakh has a total population of approximately 274,289 individuals. It is divided into two main districts: Leh and Kargil. The region is characterized by its remarkably low population density, measuring around 4.6 people per square kilometer, which highlights the vast, open landscapes typical of this high-altitude area.
- In terms of demographics, Ladakh has a sex ratio of 978 females per 1,000 males, reflecting the broader social dynamics in the region. Notably, a significant portion of the population resides in rural areas, where traditional lifestyles and community structures play a central role in daily life. This demographic distribution underscores the cultural richness and unique challenges faced by the inhabitants of this remote and picturesque part of India.

1.4 UT's Economy – Key Parameters

- In the Union Budget for the financial year 2025-26, the Union Territory (UT) of Ladakh has received a substantial allocation totaling ₹4,692.15 crore. This financial

commitment is divided into two primary categories: ₹2,450 crore designated for revenue expenditure, which includes funding for essential services such as healthcare, education, and public welfare; and ₹2,242.15 crore allocated for capital expenditure, aimed at infrastructure development projects. This investment is geared towards enhancing the overall socio-economic landscape of Ladakh, fostering growth, and improving the quality of life for its residents.

1.5 Sectoral composition of UT's economy

- The economy of UT Ladakh is primarily driven by agriculture, tourism, and trade, with a growing emphasis on promoting sustainable development. Agriculture, particularly the cultivation of barley, wheat, and fruits like apricots, plays a crucial role in the livelihoods of rural communities, although it is limited due to the region's harsh climate and terrain. Irrigation is facilitated through an intricate system of channels that divert water from the ice and snow of the mountains.
- Tourism, in recent times, has become the most significant economic contributor, attracting visitors for its unique landscapes, Buddhist culture, and adventure activities, which has spurred growth in hospitality and related services. During the year 2022-23, the UT attracted more than 7 lakh tourists which is more than 2.5 times the population of Ladakh. A total of 399 Hotels and 842 guest houses were operating in Ladakh during the year 2022-23.
- There is ample opportunity for the establishment of demand-driven small-scale industrial units across both organized and unorganized sectors, particularly in areas such as handloom, handicrafts, and metal-based production. Such developments have the potential to create meaningful employment opportunities for those trained in various skills and crafts. In recent years, tourism has emerged as a vital sector for the region, contributing significantly to its economic landscape.

1.6 Land Use Pattern

- The gross cropped area is around 24000 Ha and the net sown area is around 22000 Ha including both Leh and Kargil districts. Around 94% of the land holdings belong to small and marginal farmers and the average land holding size is around 0.65 Ha. This high-altitude region benefits from a sophisticated network of irrigation channels that skillfully redirect meltwater from the towering ice-capped mountains, ensuring that even the most arid areas have access to water for cultivation. The landscape is predominantly characterized by the cultivation of barley and wheat. Horticulture crops like apricot and apple are the most important commercial crops grown in different parts of the UT. Around 94% of the land holding belong to small and marginal farmers the average land holding size is around 0.65 Ha.

1.7 Industry Sector

- There exists a rich potential for the creation of demand-driven small-scale industrial enterprises within both organized and unorganized sectors, especially in fields like handloom textiles, intricate handicrafts, and metal-based manufacturing. These

sectors not only reflect the region's cultural heritage but also hold the promise of generating significant employment opportunities for individuals who have honed specialized skills and craftsmanship.

- Pashmina is a highly significant and promising industry in Ladakh, renowned for producing some of the finest cashmere in the world. The region's unique climatic conditions and the artisanal skills of the local people contribute to the exceptional quality of Pashmina wool, derived from the undercoat of Himalayan goats. This luxurious fiber is not only a symbol of elegance but also supports the livelihoods of many families in Ladakh, creating opportunities for sustainable economic development while preserving traditional crafting techniques. As demand for authentic Pashmina products continues to grow globally, this industry holds

immense potential for enhancing the economic landscape of Ladakh and showcasing its rich cultural heritage.

1.8 Services Sector

- The service sector in the Union Territory of Ladakh is a vital cornerstone of its economic landscape, prominently driven by tourism, public administration, trade, education, and healthcare. Among these, tourism stands out as the most significant contributor, stimulating a diverse array of businesses including hotels, transportation services, and local handicrafts. This influx of visitors not only enhances the region's cultural richness but also provides numerous employment opportunities for the local population.
- Government jobs, particularly in administration and defense, hold immense importance for Ladakh, given its strategic geographical position bordering several countries. These roles contribute to economic stability and help maintain security in the region, providing livelihoods to many families.
- Trade plays a crucial role in sustaining the local economy, with particular emphasis on unique products such as pashmina shawls and high-quality wool items. These traditional crafts not only support small-scale businesses but also bring the exquisite artistry of Ladakh to a broader market, fostering appreciation for the region's cultural heritage.
- Looking ahead, the future of the service sector in Ladakh is likely to be shaped by substantial infrastructure development, which will improve connectivity across the region. Furthermore, initiatives promoting sustainable tourism aim to preserve the natural beauty and cultural integrity of Ladakh while inviting responsible travelers. Digital services are also on the rise, providing new opportunities for local entrepreneurs and enhancing access to resources. Eco-tourism is emerging as a promising avenue for growth, blending environmental conservation with economic benefit and ensuring that Ladakh remains a thriving destination for generations to come.

1.9 Infrastructure – Existing potential gap capital outlay areas of concern Power Rural electrification Road density Rail routes Coastal resources – wherever applicable

- The provision for road transport, drinking water, sanitation, education, and health defines the quality of life of an individual. After formation of the UT, administration is laying huge emphasis on development of infrastructure in the district. As per the Jal Jeevan Mission Dashboard, under the Jal Jeevan Mission piped drinking water has already reached to 96.54 percent of the households in UT (Feb 2025). Development roads has picked up in the recent years. Despite of the difficult terrain, the public works department and the Border Road Organization (Project Himank and Vijayak) have also

constructed a huge chunk of road networks in the district. The UT has good no. of educational and medical institutions as well.

- The public works department has constructed and maintained substantial road networks in the districts. The Border Road Organization (Project Himank and Vijayak) has also constructed and maintained a huge chunk of road networks connecting the border areas in the district.
- The generation and distribution of power continue to be one of the most problematic areas of development in the district. The major source of power in the district is Nimo-Basgo Hydel Power Project as well as diesel generators in far-flung areas for which generation capacity are 45 MW and 13.53 MW respectively. Solar power also plays an important role in about 5 villages approximately. All 238 villages of the UT are electrified as per statistical handbook 2022-23.
- The private sector involvement in higher education, primary education and healthcare facilities is mostly limited to urban areas. Far higher levels of private sector management and investment is required in social infrastructure in rural areas, especially in health sector.

1.10 Social sector – Educational Health Sanitation Welfare Programmes Life expectancy IMR

- **Education:** The Union Territory of Ladakh has a literacy rate of 75.70%. The UT administration operates a robust educational infrastructure with 7 Colleges, 124 Higher Secondary, 376 Middle Schools and 403 Primary schools as per the Statistical Handbook Ladakh 2022-23. In addition, there are 111 private run schools in Ladakh. Additionally, the establishment of the University of Ladakh and the approval of Sindhu Central University in 2021 aim to provide higher education opportunities within the region. However, there is a need for professional education institutions like medical and engineering colleges.
- **Health:** The UT has an Infant Mortality Rate of 16.63 and a Maternal Mortality Rate of 48.45. The Health & Medical Education Department of Ladakh is committed to delivering state-of-the-art and affordable healthcare. With support from the Ministry of Health and Family Welfare, efforts are underway to improve healthcare infrastructure and address human resource gaps. Plans include the establishment of a new medical college to strengthen medical education in the UT. The UT has a total of 339 medical institutions including 2 hospitals (excluding military hospitals), 8 sub-district hospitals, primary health centers, dispensaries etc.
- **Sanitation:** In UT Ladakh, sanitation programs have been a key focus to address the unique challenges posed by its remote, high-altitude geography and limited infrastructure. The region has seen the implementation of various initiatives under the Swachh Bharat Mission (SBM), with efforts to improve solid waste management, promote household toilets, and enhance waste segregation. The Ladakh administration has also prioritized awareness campaigns, sanitation training, and the construction of public toilets, particularly in tourist areas, to maintain hygiene and support sustainable tourism. Additionally, the region's focus on ecological preservation aligns with promoting proper waste disposal methods and reducing environmental impact. These efforts aim to improve public health and overall living conditions for residents and visitors alike.

1.11 Regional disparity – Backward-Aspirational Districts UT specific schemes

- The Vibrant Village Programme (VVP) is a significant initiative by the Government of India aimed at addressing the development challenges in remote border areas, including Ladakh. Launched in 2022, the program focuses on improving infrastructure, connectivity, and the socio-economic conditions of villages along the India-China border. In Ladakh, the VVP targets the transformation of villages in strategically important regions, with a focus on providing better road connectivity, 24x7 electricity, clean drinking water, healthcare, education, and livelihood opportunities.
- The program also encourages the development of tourism and sustainable agricultural practices, while enhancing the overall quality of life for residents. Additionally, the Vibrant Village Programme aims to prevent migration from these border areas by making them more livable and economically viable, ensuring that local communities remain in place and contribute to national security and development. By providing essential services and improving the infrastructure, the program seeks to boost the socio-economic fabric of Ladakh's border villages.

1.12 Status of Cooperatives in the UT – Status categories and number under each category

- The Cooperative movement in Ladakh has played an important role in providing various services to its members as well as other residents as it provides not only various consumer items of daily use on fair prices but also marketing of local agri- horticultural (vegetables, fruits, sea buckthorns, apricots etc.) and livestock produce (milk, pashmina, wool etc.)
- The Cooperatives are registered mainly under two Cooperative Acts viz. J&K Cooperative Societies Act, 1989 and J& K Self Reliant Act, 1999. Those registered under the Act of 1989 are called Cooperative societies whereas those under the Act of 1999 are called Cooperatives only. The Cooperative societies registered under Act of 1989 are directly monitored, inspected and audited by the Cooperative Department. They are also being provided financial support by the department and other Govt. agencies through various schemes. On the contrary, the Cooperatives under Act of 1999 are self-reliant and no financial aid is admissible to them from the Cooperative Department and they merely need to submit their annual returns to the office of the Registrar of Cooperatives, UT of Ladakh. Currently barring milk, poultry and hatchery (which are registered under Act of 1989), all other cooperatives are registered under the Self-Reliant Act of 1999 only. It is to be noted that the Jammu and Kashmir Cooperative Societies Act, 1989 and Jammu and Kashmir Self-reliant Cooperative Act, 1999 have not been repealed post reorganization of the Jammu and Kashmir State into 02 Union Territories viz. UT of Jammu and Kashmir and UT of Ladakh, respectively and are operational as adaptation of state laws vide S.O3775 (E) issued by Ministry Of Home Affairs, Government of India on 23rd October, 2020.
- The cooperative sector in Ladakh comprises a total of 270 cooperatives, covering 111 Non-Credit Cooperative Societies (like Milk/Fishery/Poultry/ Housing/ Labour/ Consumer/ Weavers/ Marketing/ Industrial societies, etc.) and 159 rural credit co-operatives (PACS). Further, in line with the directions of Ministry of Cooperation, Government of India, formation of more number Multi –purpose Primary Agri Credit Societies is under progress in the UT of Ladakh.

Chapter 2

Banking Sector Profile

2.1 Outreach of Banking Sector

As of 31 December 2024, the Union Territory (UT) has a robust banking network with 17 commercial banks, including 09 public sector banks and 08 private sector banks. Additionally, there are 1 Regional Rural Bank, 1 State Cooperative Bank and 1 State Financial Corporation. India Post Payment Bank is also expanding the payment infrastructure. There are a total of 107 bank branches in the UT. To improve outreach in rural areas, some banks have implemented the Banking Correspondents model, resulting in a network of 16 BCs.

2.2 CD Ratio

The combined credit-deposit (CD) ratio for all banks was 45.32 % on 31 March 31 2024, up from 42.11 % on 31 March 2023, representing an increase of 3.21%.

As of 31 December 2024, the total aggregate deposits of commercial banks (CBs), regional rural banks (RRBs), and cooperative banks amounted to ₹9682.89 crore and the advances stood at ₹4520.49 crore. The CD ratio as of 31 December 2024, was recorded at 46.69%.

2.3 Banking Sector Developments – Key parameters

As of 31 December 2024, the total aggregate deposits of commercial banks (CBs), regional rural banks (RRBs), and cooperative banks amounted to ₹9682.89 crore and the advances stood at ₹4520.49 crore. The CD ratio as of 31 December 2024, was recorded at 46.69%. Additionally, priority sector advances make up 34.57 % of the total advances. 16 BCs are operating in the UT. The number of ATMs in the UT stood at 169.

2.4 Priority Sector Advances

During the FY 2023-24, priority sector lending reached ₹970.95 crore, achieving 119.07 % of the ₹815.45 crore target. For FY 2024-25, the target is ₹925.06 crore. As of 31 December 2024, banks have recorded ₹907.24 crore in credit flow. The agriculture sector received ₹282.22 crore, while the MSME sector reached ₹605.45 crore. Housing credit is on track, but other sectors like exports, education, and renewable energy need significant improvement.

2.5 Ground Level Credit (GLC) Flow

The achievements in priority sector lending amounted to Rs. 970.95 crore, compared to the target of ₹815.45 crore during the financial year 2023-24. This resulted in an overall achievement rate of 119.07 %. The target set for FY 2024-25 is ₹925.06 crore. As of 31 December 2024, banks have achieved a credit flow of ₹907.24 crore towards this target, reflecting a 98 % achievement rate.

2.6 Health of Financial Institutions

As of 31 December 2024, the Union Territory (UT) has a robust banking network with 17 commercial banks, including 09 public sector banks and 08 private sector banks. The public sector banks and private banks have a combined CD ratio 67.34% and 38.58% respectively as on 31 December 2024. 4 branches JKGB have combined CD ratio of 123.48% and 7 branches of JKSTCB have combined CD ratio of 33.79%.

- **Commercial Banks**

In the Union Territory of Ladakh, 17 commercial banks operate, comprising 09 Public Sector Banks and 08 Private Sector Banks, with a total of 107 branches throughout the region. Jammu & Kashmir Bank (J&K Bank) holds a dominant market position with a significant share of deposits and advances followed by State Bank of India.

- **Regional Rural Banks**

The UT is served by one Regional Rural Bank i.e. Jammu and Kashmir Grameen Bank. The Bank operates with 4 branches in the UT of Ladakh. As on 31 December 2024, the banks has CD ratio of 123.48 % in the UT of Ladakh.

- **Rural Cooperative Banks**

The UT is served by Jammu & Kashmir State Cooperative Bank with its 7 branches. The banks has deposits of ₹347.39 crore and advances ₹117.39 crore in the UT OF Ladakh with CD ratio of 33.79%

2.7 Credit Offtake scenario

In the agriculture sector, during the financial year 2023-24, the Priority Sector Lending target was set at Rs.309.07 crore. The achievement for this sector reached Rs.211.72 crore, which is 68.50 % of the target. For the fiscal year 2024-25, the Priority Sector Lending target for agriculture has been established at Rs. 341.76 crore. As of 31 December 2024, the achievement in this sector stood at Rs. 282.22 crore.

2.8 Kisan Credit Card – Status and gap in the UT

During the financial year 2023-24, Rs.198.44 crore was disbursed in the UT of Ladakh under crop Loans. During the financial year 2024 -25, till 31 December 2024, 25531 KCC accounts were sanctioned (including renewals). Total disbursement during the year (till 31 March 2024) stood at Rs.249.19 crore. Out of the total KCCs sanctioned, 18816 are KCC crop, 6683 are KCC Animal Husbandry and 32 accounts are pertaining to KCC Fisheries.

2.9 Financial Inclusion – Status and areas of concern

NABARD has always been at the forefront in furthering the cause of Financial Inclusion in the Country. In the UT of Ladakh NABARD has sanctioned 8 Centers

for Financial Literacy (CFL) under its Financial Inclusion Fund. In addition, NABARD has been supporting Jammu & Kashmir Grameen Bank, Jammu & Kashmir State Cooperative Bank and Commercial Banks for different activities like conduct of financial literacy camps, support for mobile banking vans, installation of micro ATMs, VSATs, POS machines etc. to ensure access to banking services in remote areas of UT Ladakh. Significant efforts are being made to ensure 100% coverage in social security schemes of Govt. of India. especially in the vibrant villages.

2.10 GoI Schemes – Status and Areas of concern

Significant efforts are being made to ensure effective implementation of all GOI schemes in the UT. However, it has been observed that Pradhan Mantri Fasal Bima Yojna (PMFBY) is not under implementation in the UT due to non-availability of willing nodal insurance agency.

2.10.1 PMJDY

GoI launched a massive nation-wide comprehensive financial inclusion programme called “Pradhan Mantri Jan Dhan Yojana”, intended to bring the marginalized section of the society into the formal banking fold. The plan envisaged universal access to banking facilities with at least one Basic Savings Bank Deposit Account for every adult, financial literacy, access to credit, insurance and pension facility. Thus, the door step delivery of four minimum products linked to the income streams of the customers, viz., a pure saving account, a saving cum overdraft account, a remittance product to facilitate EBT/Other remittance and providing RuPay KCC or RuPay Debit Card is ensured. In addition, the beneficiaries get RuPay Debit Card having inbuilt accident insurance coverage of Rs. 2 lakh.

As per the latest data available, more than 24000 accounts have been opened under the scheme in the UT of Ladakh.

2.10.2 Universal Social Security Scheme

- **Pradhan Mantri Jeevan Jyoti Beema Yojana (PMJJBY):** PMJJBY or Pradhan Mantri Jeevan Jyoti Bima Yojana is a life insurance scheme launched by GoI, which offers insurance cover, on the death of the insured. In Ladakh, 28,257 beneficiaries have been enrolled under the scheme as on 31 December 2024.
- **Pradhan Mantri Suraksha Bima Yojana (PMSBY):** The Scheme is available to persons in the age group 18 to 70 years with a bank account who give their consent to join / enable auto-debit on or before 31st May of the coverage period, ie 1st June to 31st May on an annual renewal basis. Aadhar would be the primary KYC for the bank account. The risk coverage under the scheme is Rs. 2 lakh for accidental death and full disability and Rs. 1 lakh for partial disability. The premium of Rs. 20 per annum is deducted from the account holder's bank account through 'auto-debit' facility, in one installment. The scheme is being offered by the public sector General Insurance Companies or any other General Insurance Company who are willing to offer the product on similar terms with necessary approvals and tie up with banks for this purpose. The scheme is operational in the UT and a cumulative no. of 59,091 beneficiaries have been enrolled under the

scheme as on 31 December 2024.

- **Atal Pension Yojana (APY):** Atal Pension Yojana (APY) is a pension scheme launched by the GoI for providing social security to the citizens, with a focus on citizens in the unorganized sector. Under the scheme, guaranteed monthly minimum pension of Rs.1000/- or Rs. 2000/- or Rs. 3000/- or Rs. 4000 or Rs. 5000/- will be given at the age of 60 years, depending on the contributions by the subscribers. A total no. of 7195 accounts were opened in the UT under the scheme till 31.10.2024.

2.10.3 PMMY

A total of 3368 account loans were sanctioned under the scheme during the financial year 2023-24 with total loan amount of Rs.110.58 crore. During the financial year 2024-25, a total of 2572 cases have been sanctioned by different banks with loan amount of Rs.87.04 crore under PM Mudra Yojna till 31 December 2024. As on 31 December 2024, total outstanding loans under PMMY stood at Rs.344.12 crore.

2.10.4 PM KISAN

Department of Agriculture & Farmers Welfare, GoI had launched PM KISAN which aims at providing financial help to all landholder farmer families in the country. More than 9.7 crore farmer families have been registered on the PM-KISAN portal and the benefit of income support has been transferred to nearly 8.4 crore farmers in the country. The bank account details of most of these farmers are already available with the bank branches where the benefit is being transferred by Govt. of India directly. Since the banks already have most of the information of the PM-KISAN beneficiaries and Aadhar number is available with GoI, they can be easily and quickly provided with the KCC by submitting a copy of the land record and details of crops sown. In this background, it was decided to provide benefit of KCC to all PM-KISAN beneficiaries in Mission Mode. Under the scheme, funds have been transferred to 18,400 beneficiaries in the UT of Ladakh as on 04 March 2025.

2.11 CBS in Cooperatives

J&K State Cooperative Bank serves the UT with 7 branches (4 in Leh and 3 in Kargil). The bank has successfully operated Core Banking Solution (CBS) since 2012. The service provided to customers are NEFT/RTGS, Mobile Banking, SMS Alert, Anywhere Banking, IMPS, ATM, micro ATM, POS services, DBT, CTS, C-KYC, E-KYC, Mobile van services, Govt. PIMS services, e-commerce etc. As regards the Computerization of PACS, in the first phase, 10 PACS have been computerized in the UT of Ladakh.

2.12 Computerisation of Land Records

Under, the Digital India Land Records Modernization Programme, computerization of land records have been completed for 23% of the villages in the UT of Ladakh.

Chapter 3

NABARD's Perception on the Development Perspective of the UT

3.1 Capital formation in agriculture

Capital formation in agriculture is of critical importance for the sustainability of agricultural growth. Since investment credit is the major driver of private sector capital formation in agriculture, a decline in its share raises concerns about sustainable growth in agricultural production. A continuous increase in the share of term loan would lead to the much-needed increase in capital formation in agriculture and the consequent increase in agricultural productivity and production. This would in turn, result in enhanced income for the farmers. Given its importance, NABARD has been extending long-term refinance support to banks and mFIs/NBFCs for asset creation of farm and non-farm activities with repayment periods ranging from 3 to 15 years. The major purposes include farm investments, allied activities, Micro, Small and Medium Enterprises (MSMEs), agro processing, organic farming, renewable energy, Self-Help Groups, Joint Liability Groups and rural housing. Further, medium term refinance product for 18 months to 3 years was introduced during 2014-15. All investment activities under medium-term related to agriculture and allied activities are eligible under the scheme. To give a boost to long-term investment credit in agriculture, the GoI has set up a 'Long-Term Rural Credit Fund' in NABARD, to provide long-term refinance support exclusively to Co-operative Banks and RRBs for investment credit in agricultural activities. Investment credit plays a crucial role in agriculture by providing financial resources for creation of capital assets that improve productivity, sustainability and profitability. In an effort to boost GLC of investment credit in the UTs Jammu & Kashmir and Ladakh, NABARD made an effort to revise the Unit Cost for major agricultural activities by collecting ground level data from actual horticulturists, farm machinery units, drip irrigation units, Agriculture Universities (for floriculture), Government Departments (Animal Husbandry and Fisheries), etc. The revised Unit Cost will not only serve as a guiding document for the lending agencies, it will also help extension of adequate finance to the farmers/ agripreneurs.

3.2 Financing SF/MF Oral Lessees/ Tenant Farmers/ Sharecroppers etc.

Financing Small and Marginal Farmers (SF/MF), oral lessees, tenant farmers and sharecroppers is a critical area for financial inclusion. While SF/MF generally have formal land ownership records, they face challenges such as limited landholdings, low productivity and inadequate access to institutional credit. These challenges are further compounded for oral lessees, tenant farmers and sharecroppers who often lack formal documentation making their access to credit even more difficult. According to the All India Report on Agriculture Census 2015-16, the marginal farmers constitute 65.45% of total agriculture households with 24.03% share in total cultivable land. As per the same report, 86.12% farmers are classified as small and marginal farmers.

The various approaches adopted for financing these groups are as under:

1. Microfinance (MF) for SF/MF Tenants and Share Croppers: Microfinance Institutions (MFIs) provide small loans to farmers who do not have access to formal banking systems. MFIs often do not require collateral which makes them a viable option for landless farmers, oral lessees and sharecroppers and MFIs frequently use

JLGs to extend credit to farmers. In these groups members are jointly responsible for repaying loans mitigating the risks of default.

2. Rural Credit Schemes for Small and Marginal Farmers:

- **Kisan Credit Card (KCC):** Small and marginal farmers can access short-term loans through KCC often without collateral. As per the latest circular of RBI, the limit of collateral free agricultural loans including loans for allied activities has been raised to ₹2.00 lakh per borrower from the existing limit of ₹1.60 lakh w.e.f. 1st January 2025. In Ladakh, there were 24,224 active KCC accounts (including A.H. and Fisheries) with an outstanding amount of ₹ 226.79 crore as on 31 March 2024.
- **PM-KISAN Scheme:** Under this scheme, small and marginal farmers including tenants receive 6000 annually in three installments.

NABARD has signed MoUs with J&K Bank, SBI and J&K Grameen Bank for financing and credit linkage of JLGs in the UT.

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

The KCC Scheme, introduced in 1998-99, is a step towards providing hassle free, adequate and timely credit to the farmers through the banking sector. It also provides for inclusion of incidental requirements of the farmers and their consumption expenses. Banks are expected to leverage their CBS platforms to provide value added services to farmers like ATMs, anywhere banking, debit cards etc. GoI has announced the coverage of 2.5 crore farmers under the second phase of KCC saturation scheme to facilitate credit to the farm sector. Department of Animal Husbandry & Dairying and Department of Fisheries, GoI have also decided to simultaneously launch a special drive to provide KCC to 1.5 crore dairy farmers belonging to milk unions and milk producing companies and 1 crore fish farmers. NABARD has also been actively participating in the drive by monitoring the progress in sanction of KCC by Co-operative banks and RRBs. NABARD obtains real time KCC data from Co-operatives and RRBs on ENSURE portal to monitor the progress under KCC saturation. The data on KCC is closely monitored by GoI. As per the latest circular of RBI, the limit of collateral free agricultural loans including loans for allied activities has been raised to ₹2.00 lakh per borrower from the existing limit of ₹1.60 lakh w.e.f. 1st January 2025. In Ladakh, there were 24,224 active KCC accounts (including A.H. and Fisheries) with an outstanding amount of ₹ 226.79 crore as on 31 March 2024.

3.4 Agriculture and Allied activities

Agriculture and Allied Activities involve the cultivation of crops, rearing of animals and other processes that support the production of food, raw materials and other agricultural products. It includes both primary agricultural activities and those secondary activities that support or enhance agricultural production.

Agriculture Activities:

1. **Crop Production:** Growing food crops like wheat, rice, maize, vegetables and fruits. Allied activities 1. **Animal Husbandry** • Raising livestock for milk, meat, eggs, wool and other products.
2. **Dairy Farming:** • Focuses on the production of milk and milk products. It involves breeding, feeding and management of dairy animals.

3. Fisheries: • Cultivating fish and other aquatic organisms in controlled environments.
4. Horticulture: • Cultivation of fruits, vegetables, flowers and ornamental plants for enhancing nutritional diversity. The activities based directly on natural resources are called primary sector. Example can be Agriculture.

The primary sector which includes crops- agriculture, horticulture etc. traditionally been a cornerstone of Ladakh's economy. The four sub-sectors of Agriculture and allied sectors are: Crop; Livestock; Forestry and logging and Fishing and aquaculture.

3.5 Climate Change - Adaptation and Mitigation

According to the United Nations Framework Convention on Climate Change (UNFCCC) climate change refers to alterations in climate directly or indirectly caused by human activities which affect the global atmosphere and natural climate variability over comparable periods (UNFCCC 2007; IPCC 2007). In this context adaptation means expecting the adverse effects of climate change and taking appropriate action to prevent or minimise the damage they can cause or taking advantage of opportunities that may arise. On the other hand mitigation means making the impacts of climate change less severe by preventing or reducing the emission of greenhouse gases (GHG) into the atmosphere. In Ladakh, which nestles in fragile Himalayan Ecosystem; there are natural fluctuations in climate human induced changes due to large scale urbanization that drives the warming trend. NABARD has sanctioned a ₹1626893 grant to Aquamassifs Private Limited a startup for constructing automated ice reservoirs in two villages of Leh district under CCF-ID as an adaptation measure against the adverse effects of climate. The project will lead to a 20% increase in irrigation water supply during April and May a 15% rise in cultivable area and yield and a 1.25x boost in farming income significantly enhancing agricultural productivity in the region. Also NABARD is advancing watershed development programs across India through its Watershed Development. This initiative aims to scale up small- scale climate proofing projects focusing on enhancing community resilience to shifting rainfall patterns and extreme weather events. One springshed based watershed development project and other project related to artificial glaciers have been implemented successfully in Ladakh by NABARD. For comprehensive development it is essential to mainstream tribal communities by enhancing their livelihoods. In this context NABARD launched the Tribal Development Fund (TDF) in 2003-04 to replicate the orchard model which has since been renamed as TRIBES (Tribal Resilience Initiative for Building Environmentally Sustainable Livelihoods). Under the TRIBES initiative an ambitious Tribal Development project is under implementation in Ladakh (UT). This further underscores NABARD's commitment to promoting sustainable development and climate change mitigation in these regions.

3.6 Farmer Producers' Organizations (FPOs)

The concept of farmers collectivization in India began with the co-operative movement in 1904 but the focused promotion of Farmer Producer Organizations (FPOs) started in 2011-12. This was facilitated under two central sector schemes by the Department of Agriculture & Farmers Welfare (DA&FW) namely "Village Initiative for Urban Clusters (VIUC)" and "Integrated Development of 60000 Pulses Villages in Rainfed Areas." The promotion of FPOs gained further momentum with the formulation of the National Policy and Process Guidelines for FPOs in 2013 leading to the widespread

establishment of FPOs across the country supported by various agencies and corporate partnerships. In Ladakh the National Bank for Agriculture and Rural Development (NABARD) has been instrumental in promoting FPOs. Under the PODF (ID) fund, NABARD created the first two FPOs in the UT benefiting around 800 farmers with women representing more than 20% of the membership. These FPOs have become torch bearers for others and now number of FPOs are being registered in the UT through other Govt. agencies.

3.7 MSME

The UT has a vibrant MSME sector, with 7625 enterprises availing loan of Rs.721.40 crore from the banking sector during FY 2023-24. There exists a rich potential for the creation of demand-driven small-scale industrial enterprises within both organized and unorganized sectors, especially in fields like handloom textiles, intricate handicrafts, and metal-based manufacturing. These sectors not only reflect the region's cultural heritage but also hold the promise of generating significant employment opportunities for individuals who have honed specialized skills and craftsmanship.

Pashmina is a highly significant and promising industry in Ladakh, renowned for producing some of the finest cashmere in the world. The region's unique climatic conditions and the artisanal skills of the local people contribute to the exceptional quality of Pashmina wool, derived from the undercoat of Himalayan goats. This luxurious fiber is not only a symbol of elegance but also supports the livelihoods of many families in Ladakh, creating opportunities for sustainable economic development while preserving traditional crafting techniques. As demand for authentic Pashmina products continues to grow globally, this industry holds immense potential for enhancing the economic landscape of Ladakh and showcasing its rich cultural heritage.

The service sector in the Union Territory of Ladakh is a vital cornerstone of its economic landscape, prominently driven by tourism, public administration, trade, education, and healthcare. Among these, tourism stands out as the most significant contributor, stimulating a diverse array of businesses including hotels, transportation services, and local handicrafts. This influx of visitors not only enhances the region's cultural richness but also provides numerous employment opportunities for the local population.

3.8 Micro Credit

The Ladakh Rural Livelihood Mission (LRLM) has formed around 1980 SHGs in different blocks of the UT of Ladakh. The total loan outstanding in respect of the credit-linked SHGs as on 31 March 2024 stood at Rs.215.55 lakh. NABARD has been supporting these SHGs through different initiative like Micro Enterprise Development Programme (MEDPs). Two such programmes were implemented in Kargil district during the FY 2023-24 with the objective of providing training to SHG members for encouraging entrepreneurship development. My Pad My Right projects were implemented in both Leh and Kargil districts. Furthermore, NABARD has been working with SHGs in different villages under its different projects.

3.9 Rural Infrastructure and linkage support

After formation of the UT, administration is laying huge emphasis on development of infrastructure in the district. As per the Jal Jeevan Mission Dashboard, under the Jal

Jeevan Mission piped drinking water has already reached to 96.54 percent of the households in UT (Feb 2025). Development roads has picked up in the recent years. Despite of the difficult terrain, the public works department and the Border Road Organization (Project Himank and Vijayak) have also constructed a huge chunk of road networks in the district. The UT has good no. of educational and medical institutions as well.

The public works department has constructed and maintained substantial road networks in the districts. The Border Road Organization (Project Himank and Vijayak) has also constructed and maintained a huge chunk of road networks connecting the border areas in the district.

The generation and distribution of power continue to be one of the most problematic areas of development in the district. The major source of power in the district is Nimo-Basgo Hydel Power Project as well as diesel generators in far-flung areas for which generation capacity are 45 MW and 13.53 MW respectively. Solar power also plays an important role in about 5 villages approximately. All 238 villages of the UT are electrified as per statistical handbook 2022-23.

3.10 Financial Inclusion

NABARD has sanctioned the establishment of eight Centres for Financial Literacy (CFLs) as part of its initiative under the Financial Inclusion Fund (FIF). These CFLs are strategically positioned in key locations across the regions of Leh and Kargil to promote financial literacy and enhance financial inclusion among local communities. The specific locations of these centres are as follows: Nimoo, Durbuk, Singay Lalok, and Kharu blocks in Leh district and Lotsum, Bimbhat, Karsha and Lungnak blocks of Kargil district. These centres aim to empower the residents through education about financial practices, enabling them to make informed financial decisions and foster economic growth within their communities.

As part of the Financial Inclusion Fund initiative, Mobile Demo Vans have been sanctioned to the Jammu and Kashmir State Cooperative Bank and the Jammu Kashmir Grameen Bank. This initiative aims to enhance financial literacy and promote greater financial inclusion among the rural populations of Ladakh. These mobile vans will serve as vital resources in remote areas, delivering essential banking services and educational resources directly to communities.

Furthermore, under FIF, support for the installation of advanced communication technologies, such as Very Small Aperture Terminals (VSATs) and Point of Sale (POS) systems, to facilitate better connectivity and transaction capabilities for local banks. Various financial institutions, including J&K Bank, State Bank of India (SBI), Jammu Kashmir Grameen Bank (JKGB), Jammu & Kashmir State Territorial Cooperative Bank (JKSTCB), and India Post Payments Bank (IPPB), have also received assistance for organizing financial literacy camps. These camps are designed to educate residents about financial management, saving practices, and the importance of utilizing banking services, thereby fostering a well-informed and financially savvy community in the region.

3.11 Past trends in credit flow

In the UT of Ladakh, during the FY 2023-24, total credit lending was ₹2303.27 crore compared to ₹1941.20 crore in the FY 2022-23 and ₹1282.96 crore in the FY 2021-22. This represents a CAGR growth of 21.54% over the three-year period in the total credit lending. During the same period, the UT achieved priority sector lending of ₹970.95 crore compared to ₹728.93 crore in FY 2022-23 and ₹628.13 crore in FY 2021-22.

This represents a CAGR growth of 15.62% over the three-year period in the priority sector credit. For the FY 2023-24, the achievement under total credit target (Priority Sector + Non Priority Sector) was 149.44% of the target set by the UTLBC while the achievement under priority sector lending was 120.03 % of the set target. Within Priority Sector Lending for FY 2023-24, the achievement under MSME lending was 163.49%.

The achievement under agriculture lending was 69.24% of the target, with a significant decrease over the last year. Within agriculture lending, the lending for crop loan accounts for 93.72 % while term lending is about 6.27%.

3.12 Sustainable Agriculture Practices

Sustainable farming practices are essential in Ladakh due to the region's unique environmental challenges, including its high altitude, harsh climate, and limited water resources. Implementing these practices can help maintain soil fertility, conserve water, and promote biodiversity while supporting local livelihoods. Techniques like mulching are used to retain soil moisture and reduce evaporation. Growing crop varieties that are adapted to high-altitude and cold conditions, such as certain strains of barley, wheat, and potatoes help enhance productivity. Ongoing research focuses on developing high-altitude crop varieties and sustainable farming techniques suited to Leh's unique conditions.

With the Mission for Organic Development Initiative (MODI), it targeted that the entire UT will go organic by year 2025. Under the mission, the use of chemical fertilizers, pesticides etc. is being discouraged by the administration. Line departments are supporting the farmers in pursuit of organic farming through subsidies on inputs like vermicomposting etc. However, in the absence of knowledge about the proper package of practices, technical know-how, and availability of alternative inputs, farmers are facing multiple issues like reduction in productivity, loss of quality of product and reduction in income. These issues can be addressed through trainings and awareness programmes for farmers at different levels. NABARD has sanctioned a project for development of prototype of an Integrated Organic Farming System (IOFS) having different components of agriculture & allied fields having potential to boost the tribal farmer's soil health, nutrition, income & livelihood security.

3.13 Agro Forestry

Agroforestry in the Union Territory of Ladakh offers a sustainable approach to land use, combining agriculture and forestry practices to improve soil health, enhance biodiversity, and support local livelihoods. Given Ladakh's harsh, arid climate and fragile ecosystem, agroforestry helps diversify income sources by integrating drought-resistant crops with tree species such as willow, poplar, and sea buckthorn. These trees provide timber, fuelwood, and medicinal products, while also acting as windbreaks and improving water retention in the soil. Agroforestry in Ladakh is crucial for addressing challenges such as land degradation, water scarcity, and food insecurity, making it an effective strategy for climate resilience and sustainable development in the region.

3.14 Watershed development initiatives in the UT

NABARD has implemented a springshed-based Watershed Development in Sakti

village of Leh district. A total grant support of Rs.42.68 lakh was provided to Himmothan Society, the project implementing agency for implementation of the project. The project covered an area of 285 Ha benefitting 375 household spread across Tagar and Taknak halqas of Sakti village. The overall aim of the project is to improve the adaptive capacity of farmers in Ladakh in overcoming the effects of depleting natural glaciers on farm sectors through integrated water resources development. The project aims at promoting innovative ideas of water conservation and distribution in Tagar and Taknak Halqa Panchayats of Sakti village. The creation of artificial glacier combined with existing traditional irrigation channels will support optimum utilisation of the water resources. Augmenting the water resources through creation of water harvesting infrastructure will definitely encourage the farmers to farm their lands and also bring more land under irrigation for crops production and tree plantation.

In Sakti Tagar, ten stone embankments (gabions) were built at Zingral, Changla Pass in phase-1. Average length of each stonewall is 90 feet and average height is 5 feet. The artificial glacier is located at 4800m above mean sea level, at a distance of 1km from the road head. It has benefitted 120 families in Sakti Tagar Halqa Panchayat, supplying additional water to 147 ha of agricultural land. Seven number of bunds (gabions) with average length of 50 feet had been constructed in Sakti Tagar in phase 2, totalling 17 stone embankments. In Sakti Taknak, four stone embankments were built at Chumcher Lungpa Phoo, Warila in the phase-1. Average length of the wall is 150 feet and average height is 4 feet. The artificial glacier is located at 4300m above mean sea level, at a distance of roughly 1km from the road head. It has benefitted 210 families in Sakti Taknak, supplying additional water to 138 ha of agricultural land. Three snow barrier bunds (dry masonry walls) with average length of 200 feet had been repaired at Warila Pass in the phase-2. Additionally, 800m long HDPE pipe was installed at Chumcher Lungpa Phoo, Warila for the creation of artificial glaciers.

3.15 PACS as Multi Service Centres (MSCs)

NABARD provides long term refinance to State Co-operative Banks for financing PACS as MSCs. PACS being at the grass root level, are a one-stop shop for the farmers. They play the role of providing credit and credit plus services to the farmers. They are member-driven institutions which serve small and marginal farmers. Being close to the farmers, PACS can play a greater role in post-harvest services to facilitate remunerative prices to farmers. The refinance from NABARD aims at enabling PACS to increase their business portfolio and turn them into self-sustainable entities. The concept of transforming Primary Agriculture Co-operative Societies (PACS) into Multi-Service Centres (MSC) is aimed at strengthening the cooperative movement and promoting rural development. NABARD along with the Ministry of Co-operation, GoI encourages PACS to engage in multipurpose activities that benefit rural communities. By becoming MSCs, PACS can offer a wide range of services to their members including financial and non-financial services. These services may include agro-storage centres, cold storage facilities, agro-service centres, agro-processing units, agri- information centres, agri-transportation, marketing facilities and more. The transformation of PACS into MSCs aligns with the changing landscape of agriculture and recent reforms aiming to create modern and sustainable business entities in rural areas. The objective is to establish co-operatives as member-driven organizations that provide both financial and non-financial services, thereby enhancing mutual interest and benefiting the rural communities. The implementation of various initiatives such as computerization of PACS and the creation of new multi-purpose PACS, enable PACS to obtain credit from the co-operative credit structure at a lower interest rate.

This supports the financial viability and sustainability of MSCs. PACS as MSCs have the potential to play a crucial role in the development of the agricultural sector in India. By providing forward and backward linkages, they can increase income and promote rural entrepreneurship. Additionally, technology-supported activities like Micro-ATMs and Wi-Fi internet can enhance financial inclusion and access to banking services for PACS members. Overall, PACS as MSCs can contribute to the financial viability of agriculture rural development and the goal of doubling farmers' income.

3.16 Skill India Scheme related to agriculture and non-agriculture

3.16.1 Skills are abilities, knowledge and expertise acquired through education, training and experience to perform tasks effectively. The Skill India Mission launched in 2015 promotes a skilled workforce under the slogan 'Kaushal Bharat Kushal Bharat'.

- Skills required in Agriculture Sector: Skills related to farm operations, technology awareness, problem-solving, mechanical repair, time management and adaptability skills.
- Skills required in Non-Agriculture Sector: Skills related to analytical management, creative thinking, client relationship, digital construction and industry-specific skills.

3.16.2. Skill Development Schemes:

a) Agriculture Sector:

1. Pradhan Mantri Kaushal Vikas Yojana: It focuses on skill training in horticulture dairy and agribusiness.
2. Rashtriya Krishi Vikas Yojana: It promotes advanced farming techniques.
3. Krishi Vigyan Kendras: It provides hands-on training in modern agriculture.
4. Mission for Integrated Development of Horticulture: It provides High-tech horticulture training.

b) Non-Agriculture Sector:

1. PMKVY: It provides skill training in manufacturing IT hospitality and more.
2. Deen Dayal Upadhyaya Grameen Kaushalya Yojana: It provides employment-oriented training in retail construction and IT.
3. Tourism & Hospitality Skill Development Programs: It provides training for tourism-related roles.
4. Skill Development in Handicrafts & Handlooms: It provides training to artisans in traditional crafts.

3.16.3 Impact of Schemes:

- Enhanced agricultural productivity sustainability and income.
- Improved employability in sectors like IT, construction and tourism.
- Boosted entrepreneurship and reduced unemployment.

3.16.4 Challenges:

- Geographical constraints and poor infrastructure.
- Limited awareness and skilled trainers.
- Fragmented implementation and lack of industry linkages.
- Socio-cultural barriers particularly for women.

3.16.5 NABARD's Role

- Supports skill training through RSETIs & NGOs.
- Promotes rural entrepreneurship via financial aid and training.
- Builds market access through rural marts and exhibitions.

- Encourages off-farm sector growth via OFPOs.

3.16.6 Way Ahead

- Strengthen infrastructure for remote regions.
- Focus on non-agriculture sectors like IT and tourism.
- Enhance industry linkages and employability through updated training.
- Empower women and marginalized communities.

3.17 **Scope for formation of organic farming promotion of ‘Digital Technological Innovations in Agriculture’**

Organic farming in Ladakh offers significant economic potential. With growing global demand for organic products the UT can leverage its unique agricultural products to tap into both domestic and international markets. Key crops with export potential include apricot, apples, green peas, seabuckthorn, potato and other vegetables etc. These crops are highly sought after for their unique qualities and organic certification could boost their market value. Despite the promising potential, the sector faces challenges such as inadequate infrastructure, limited processing units and the lack of organic certification systems. Farmers also require training and support to transition to organic methods. However, these challenges present opportunities for growth. Investments in infrastructure certification processes and farmer education can foster a supportive ecosystem for organic farming. Additionally, partnerships with local and international buyers along with government support could open new markets for organic products. In conclusion, organic farming in Ladakh holds great promise for economic growth environmental sustainability and rural employment.

Box Item

Title: Geographical Indicators



Geographical Indications (GI) is a form of Intellectual Property Right that identifies goods originating from a specific geographical location and having distinct nature, quality and characteristics linked to that location. A GI provides legal rights to its Registered Proprietor, to prevent its use by a third party whose product does not conform to the applicable standards. Any legal entity such as an association of persons/ producers/ organisation/ authority established by or under any law, representing the interest of the producers of the concerned goods can apply for registering as Registered Proprietor.

GIs can play an important role in rural development, empowering communities, acting as product differentiators, support brand building, create local employment, creating a regional brand, generating spin-off effects in tourism and gastronomy, preserving traditional knowledge and traditional cultural expressions and conserving biodiversity.

NABARD has been providing end-to-end support in facilitating pre-registration as well as post-registration activities for GI Registration. The activities include, but not limited to skill and enterprise development, promotion/ development of clusters and producer organizations, entrepreneurship development and other spin-off activities (Rural Tourism, Hospitality, Value Addition, etc).

In Phase-I, NABARD has facilitated GI Registration of 09 products from the UT of J&K and Ladakh. The details of these products are given as under:

- i) Basohli Paintings, Kathua
- ii) Basholi Pashmina, Kathua
- iii) Chikri Wood Craft, Rajouri
- iv) Bhaderwah Rajma, Doda
- v) Mushkbudji Rice, Anantnag
- vi) Kaladi, Udhampur
- vii) Sulai Honey, Ramban
- viii) Anardana, Ramban
- ix) Ladakh Shingskos (Wood Carving), Leh/ Kargil

In Phase-II, NABARD has sanctioned a project for GI Registration of an additional 9 products from the UTs of J&K and Ladakh (Bina Craft - Kishtwar, Gaba & Blanket - Kishtwar, Calico Printing - Samba, Chilling Metal Work - Leh / Kargil, Thanka Painting - Leh / Kargil, Thikma - Leh / Kargil, Pabu - Leh / Kargil).

Further, under Phase-III, NABARD has sanctioned a project for GI Registration of an additional 9 products from the UTs of J&K and Ladakh (Deodar Oil- Kishtwar , Hazelnut- Kishtwar, Jammu Phulkari- Jammu, Kagzi Badam (almonds)- Anantnag, Karkechu Apple-Kargil, Kishtwari Blue Sapphire- Kishtwar, Shilajeet - Kishtwar)

Chapter 4

Potential Credit Outlay

4.1 Credit potential for Priority Sector Lending

- Priority Sector Lending (PSL) is aimed at ensuring that credit flows to sectors that are vital for the economic and social development such as agriculture micro small and medium enterprises (MSMEs) education housing and others Banks are mandated by the Reserve Bank of India (RBI) to lend in priority sector and the detailed instructions are given in RBI master directions on priority sector. This is particularly crucial in regions where access to formal credit is limited as it helps support inclusive growth and alleviates poverty by providing financial assistance to marginalized groups, rural areas and underdeveloped sectors.
- PSL has a significant role to play in the UT of Ladakh due to its large agricultural base and the presence of a diverse rural economy. The UT's economy is heavily reliant on agriculture and horticulture with a majority of the population dependent on farming and allied activities for livelihood. Additionally, Ladakh has a substantial number of small and medium enterprises which also benefit from the support provided through PSL. The UT's financial institutions including both public and private sector banks, work towards achieving PSL targets by extending loans for agriculture, rural development, housing and other priority sectors. However, the region faces challenges like irregular rainfall, land degradation and limited industrial development which can impact the credit needs of these sectors. From the past trends in flow of credit to various sub-sectors of PSL, it can be observed that overall the status of PSL in Ladakh has a mixed progress. While there has been growth in credit deployment to priority sectors, challenges remain due to factors like geographical constraints, infrastructure limitations and socio-economic issues such as lack of awareness and low financial literacy in rural areas
- NABARD under Financial Inclusion initiatives through Centre for Financial Inclusion (CFLs) and FDLs, skill development initiatives, various interventions in farm sector development, special focus on promotion of FPOs and strengthening of PACS, infrastructure creation for connecting the remotest village, implementation of various government schemes, refinance support to rural financial institutions, etc., is making efforts to slowly improve the outreach and effectiveness of PSL in the UT thereby, helping to improve the livelihoods of rural communities and drive sustainable economic growth. Under ACP 2023-24 as on 31st March 2024, the total credit extended towards priority sector was ₹97095.37 lakh registering a growth of 33.20%. Out of this, credit for agriculture and allied activities was ₹21172.03 lakh. The flow of credit to MSME sector was ₹72140.90 lakh registering a growth of 116%.

4.2 Credit potential for Agriculture

- The economy of Ladakh is predominantly agrarian in nature. Even though it has a peculiar agro climatic condition, most of the working population of the district is engaged in agriculture and livestock activities. This sector has been now affected by the service sector especially Tourism as it attracts the people constantly. The region is known for production of apricot, apple, green peas, wheat, pulses, millet, etc. There is vast potential for crop diversification under protected cultivation practices.
- There are vast stretches of land available yet irrigation facilities being not available and scanty rainfall, these cannot be brought under cultivation and keeping in view

the reclamation of these desert areas, creation of sources of irrigation becomes uneconomical.

- The department of agriculture is working with the main objective to improve the overall production per hectare of cereals, fodder, pulses, and vegetable and oil seeds. In addition distribution of improved agriculture implements, thresher machines, lift irrigation pump sets, trench cultivation and vegetable cellars have been made.
- During 2023-24, the total agricultural credit was ₹21172.03 lakh of which ₹19844.21 lakh was towards crop loan and remaining ₹1327.82 lakh was towards term loan. For 2025-26, the total credit potential for agriculture sector is ₹40,233.25 lakh, which includes Farm credit, agri infrastructure and agri ancillary activities.

4.2.1 Farm Credit

Farm Credit includes all short term, medium term and long term loans extended to individual farmers as well as corporate farmers and FPO/ FPCs, directly engaged in agriculture and allied activities viz. dairy, fishery, animal husbandry, poultry, bee-keeping and sericulture. This will include:

- Crop loans including loans for traditional/non-traditional plantations, horticulture and allied activities.
- Medium and long-term loans for agriculture and allied activities (e.g. purchase of agricultural implements and machinery and developmental loans for allied activities).
- Loans for pre and post-harvest activities viz. spraying, harvesting, grading and transporting of their own farm produce.
- Loans to distressed farmers indebted to non-institutional lenders.
- Loans under the Kisan Credit Card Scheme.
- Loans to small and marginal farmers for purchase of land for agricultural purposes.
- Loans against pledge/hypothecation of agricultural produce (including warehouse receipts) for a period not exceeding 12 months.
- Loans to farmers for installation of stand-alone Solar Agriculture Pumps and for solarisation of grid connected Agriculture Pumps.
- Loans to farmers for installation of solar power plants on barren/fallow land or in stilt fashion on agriculture land owned by farmer.
- Short term credit for production, marketing and food security.

i) KCC and the Rupay KCCs

The Kisan Credit Card (KCC) which emerged as an effective credit delivery mechanism to meet the production credit requirements of the farmers in a timely and hassle-free manner has been extended to fisheries and animal husbandry farmers to help them meet their working capital needs. The KCC facility will help fisheries and animal husbandry farmers to meet their short-term credit requirements of rearing of animals, poultry birds, fish, shrimp, other aquatic organisms and capture of fish. In Ladakh, as on 31st December 2024, there were 21786 active KCCs (crop loan) since inception in the UT with loan outstanding of ₹211.45 crore. Similarly, there were 8705 active KCCs (Animal Husbandry, Sheep/Poultry and Fisheries) since inception in the UT with total loan outstanding of ₹93.45 crore. In order to give thrust to enable each and every farmer with KCC, the GoI has launched KCC saturation drive from 08 February 2020 to issue KCC to all the eligible beneficiaries of PM-Kisan Samman Nidhi. Simultaneously, GoI launched a special drive effective from 01 June 2020 to 30 June 2020 (extended upto 31.07.2022) to provide KCC to 1.5 crore dairy farmers belonging to Milk Unions and Milk Producing Companies.

ii) Subvention of Interest on crop loans

Government of India provides interest subvention to banks to ensure availability of crop loans and post-harvest expenses up to a maximum of ₹3 lakh to the farmers at 7% interest p.a. The interest subvention to banks is 1.5% on own involvement in eligible crop loans. Additional 3% incentive is available to farmers for prompt repayment of these loans.

Support from NABARD by way of refinance:

i) Refinance for ST (Seasonal Agricultural Operations): NABARD provides Short Term refinance at concessional rate of interest to Cooperative Bank and Regional Rural Banks to ensure timely availability of crop loans to farmers for such activities which are undertaken in the process of raising various crops and are seasonally recurring in nature.

ii) Negotiable Warehouse Receipts (NWR) - In order to discourage distress sale and to facilitate better price realization, small and marginal farmers are being encouraged to store their produce in warehouses and avail loan against NWR. Govt. of India had introduced a scheme to extend the benefit of interest subvention to banks so as to enable them to finance small and marginal farmers having KCC for a period of upto six months during the post-harvest period at the same rate of interest of 7% as applicable to crop loans. Refinance from NABARD is available to Cooperative Banks and Regional Rural Banks at concessional rate of interest.

iii) Refinance under ST (Others): NABARD provides refinance to RRBs and Cooperative Banks for financing marketing of crops, fisheries sector, production and marketing activities of artisans (other than handloom weavers) and village/cottage/tiny sector industries, for financing persons belonging to weaker section and engaged in trade/business/service activities including distribution of inputs for agriculture and allied activities.

4.2.1(i) Crop Production, Maintenance and Marketing

Credit Potential for 2025-26

The agriculture of Ladakh is primarily subsistence in nature and represents the Tibetan plateau farming system. Ladakhis historically cultivated and consumed their own grains, cereals, and vegetables, managing their farms in an integrated and balanced manner. Low cropping intensity, low productivity, and a short cropping season have led to dependence on imported food grains, vegetables, and spices. Alongside traditional crops, Ladakh also grows horticultural crops such as apricots, apples, plums, and exotic vegetables etc. Emphasizing vegetable production during winters and using cost-effective technologies to access the local market could benefit local farmers. Innovative technology such as the Ladakh Greenhouse could enhance the production of exotic vegetables even during the deep winter months. Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the district wise credit potential assessed for the year has been assessed at ₹27719.50 lakh. The District wise credit potential is furnished in Annexure I.

4.2.1(ii) Water Resources

Being mountainous with arctic desert condition and scanty rainfall, irrigation in Ladakh depends on the eternal glaciers by a system of channels which funnel water from the ice and snow of the mountains. The net irrigated area of Ladakh stood

around 19827 ha out of which 19488 ha area is irrigated by canals/channels only.

Impact of climate change

The effects of climate change in the Himalayas are more pronounced than in other regions of the world. Being a cold desert, the weather conditions in Ladakh are extreme. Temperate zones of Ladakh face climatic barriers against agricultural growth. The soil is underdeveloped and precipitation is hardly 100 mm in Leh and 300 mm in Kargil. A major source of water for drinking and irrigation is glacial meltwater. Under such extreme fragile conditions, if environmental conditions are altered due to climate change, the capacity of the ecosystem to bounce back to its balance is difficult. Tackling the effects of receding glaciers and storing precious water resources, remarkable engineers from the region like Sonam Wangchuk and Chewang Norphel have constructed ice stupas. Another innovation is the pre-fabricated solar heated mud hut.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the district wise credit potential for the year has been aggregated at ₹237.60 lakh. The district wise credit potential assessed is furnished in Annexure-I.

Thrust Areas which require immediate attention

The precipitation received every year is not enough to sustain the locals and the growing tourist population. All the springs within Leh town becomes dry whenever precipitation dips well below than annual average precipitation. Moreover, due to difficult topographical conditions, there is limited access piped water supply.

Suggestions/ Action Points

- i) Inventory and revival of springs in Ladakh and springshed development can help to achieve water security.
- ii) Large scale harvesting and storing of winter water which can be used during peak demand in summers.
- iii) Technological interventions to provide piped water supply at sub-zero temperature during winter season

4.2.1(iii) Farm Mechanisation

Farm mechanization in the UT is impeded by small and irregular fields, undulating topography, lack of skilled man-power, poor facilities for repair, maintenance and manufacturing of implements and high-cost solar gadgets. Therefore, it is the need of the hour that the UT administration and other funding agencies should focus on agricultural engineering or farm mechanization area. There is a great scope for increasing productivity of land and farmer's economy by funding farm mechanisation like through creation of small water resources for irrigation, land development, use of efficient farm power and implements, disseminating renewable energy gadgets and introducing small scale agro- based industries employing postharvest engineering principles.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and discussions with the line departments, etc., the credit potential assessed for the year 2025-26 is ₹839.72 lakh. The district wise credit potential assessed is furnished in Annexure-I.

4.2.1(iv) Plantation and Horticulture including Sericulture

Ladakh is blessed with a conducive climate to grow plantation and horticultural crops. The region falls in Northern Himalayan belt with an arid temperate climate. A number of horticulture crops are grown in Ladakh. The major horticulture crops are apricot,

seabuckthorn, walnuts, apples, grapes, herbs etc. Ladakh is the largest producer of apricot in India and it is also exported to other nations.

For long, cultivation of fruits has remained confined to lower Sham Valley i.e. Khaltsi, Saspol, Talmachik, Lhedo, Achinathang etc. and Turtuk areas of Nubra Block. Departmental efforts and farmer's initiatives in the past few decades have led to increase in production of apricot and apple. Several new varieties of apple like Delicious, have been introduced and are being successfully grown. At the same time, in Kargil district apple production covered an area of 363.52 ha with an estimated production of 1940 MT during 2020-21. There is good potential for high-density apple plantation in Karkicho, Hardas, Hamdarmal and Shilakchy in Kargil zone in Gargarto, Chulichan, Garkone and Darchicks in Batallic zone and Sanjak in Chiktan zone. Fruit crops could be experimented in Drass region as well. Horticulture activities have been extended to the other areas of the UT. Use of improved technology and value addition has led to the increase in income.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the district wise credit potential assessed for the year has been assessed at ₹765.07 lakh for 2025-26. The district wise credit potential assessed is furnished in Annexure-I.

Issues/Constraints

- i) Water is the major limiting natural resource for agricultural activity in Ladakh.
- ii) Value addition to the farm produce is very less.
- iii) Storage inadequacies and inadequate availability of packing material.
- iv) Lack of technical expertise for food processing.
- v) Lack of extension services of the departments to impart training on raising horticulture, vegetable nursery and management of vegetable production in poly houses.
- vi) Non-availability of sufficient quantity planting material.
- vii) Lack of pre-cooling and pack house facilities and, Refrigerated vans for transport of fresh fruits.

Suggestion/ Action Points

- i) Development of clusters to produce high value horticultural crops in bulk.
- ii) There is need to promote food processing industries to make available local produce during winter months.
- iii) The potential of marketing of apricot in the form of apricot kernel, dried apricot and sea buckthorn needs to be tapped.
- iv) Trainings on post-harvest/ value addition is the need of the hour. Value addition

at the primary producer level enables value retention leading to increased income at the hands of the producers. This aspect needs to be worked on.

v) Technologies like mulching, protected cultivation that includes trenches, low tunnels, and greenhouses etc. which are farmer friendly and cost-effective, should be adopted to grow herbs and vegetables.

vi) More attention should be paid in adopting technologies like drip irrigation to reduce water wastage due to runoff and evaporation.

vii) Suitable varieties and appropriate cultural practices need to be adopted by the farmers of the region for highest and quality yield.

viii) Plasticulture is a proven technology that needs to be promoted among the growers.

ix) Development of Model organic villages and model farm marts and integration with Hub and Spokes

x) Farmer training and extension activities need to be promoted for achieving efficiency. Local people may be sensitized through media about latest technology and experiences in mass.

xi) Farm mechanization is required to combat labor scarcity especially during critical farm activities

xii) Stress may be given on organic farming in Ladakh especially for horticulture crops.

4.2.1(v) Forestry & Wasteland Management

As per the India State of Forest Report 2021, Ladakh has 2272 sq. km. of forest land i.e only 3.84 % area of Ladakh. Raising of tree sapling suited to climate conditions and adoption of suitable agro-forestry models are the thrust areas for development of forest cover in region. Most of the area of Leh district lies above tree line but there are many natural trees, shrubs and herbs. The species of Juniper trees, Myricaria, Caragana, medicinal and aromatic plants need special attention. Further, cultivable wasteland is available in Kargil district, which could be developed under forestry. As of now, the Govt. is running different types of programmes, i.e., Community plantation and rehabilitation of degraded forests, fodder development and snow slide protection works on more than 200 ha. Willow and Poplar are the two major species, which are being propagated in the district by the Forestry Department. For mitigating risks viz. economic as well as environment and for better returns, one of the viable options could be 'Agro-Forestry' which has traditionally been a way of life and livelihood in India for centuries.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the district wise credit potential assessed for the year 2025-26 has been assessed at ₹92.80 lakh. The district wise credit potential assessed is furnished in Annexure-I.

Issues:

i) Fragile ecosystem: The region's unique biodiversity and ecological balance are intricately linked to its fragile ecosystem dynamics. Introducing agroforestry and land management practices must be carefully planned to avoid disrupting these delicate balances.

ii) Border area: Some border areas of Ladakh are habitats for endangered wildlife species, such as the snow leopard and Tibetan wild ass (kiang). Balancing the needs

of wildlife conservation with agricultural and forestry activities in these areas can be challenging, as conflicts may arise between conservation efforts and local livelihoods.

iii) Limited Water Resources: Water scarcity is a significant issue in Ladakh, exacerbated by its arid climate and limited water sources. Effective agroforestry practices require adequate water availability, which is often scarce in Ladakh, leading to challenges in irrigation and tree establishment.

iv) Land Tenure Issues: Land tenure issues and land-use policies may pose challenges to implementing agroforestry and reclaiming wasteland areas.

Suggestions/ Action Points:

i) Infrastructure should be planned as an integral part of overall area development strategy guided by an integrated land use plan.

ii) Identification and promotion of drought-resistant and cold-tolerant tree species suitable for Ladakh's climate.

iii) Implementation of water-efficient irrigation techniques such as drip irrigation and mulching.

iv) Need to establish buffer zones and protected areas to safeguard sensitive habitats and biodiversity in border areas.

v) Engagement with local communities and stakeholders in participatory land use planning processes.

vi) Provision of legal support and advocacy for land rights of marginalized groups and indigenous communities.

4.2.1(vi) Animal Husbandry – Dairy

Dairy products are not only an important source of protein for people of Ladakh but it also has a huge potential to generate income from them. In 2019, Ladakh produced 31000 tonnes, i.e., 280 grams/capita/day. According to the 20th Livestock Census, which was done in 2019, there are more than 35,000 cattle in the Leh-Ladakh region. There are about 22,000 native breeds and about 13,000 exotic breeds.

In Ladakh, the native local breeds of dairy animals are mostly of indigenous type (zebu). They mature very late and yield of milk of these dairy animals is low and have short lactation length, long dry periods and long calving interval periods. DRDO specialists have developed hybrid cows for high altitudes which produce more milk. As per Livestock breeding policy, 2019, in urban and peri-urban areas of Ladakh half breeds of Ladakhi and jersey cattle shall be popularized. For other areas, selective breeding of Ladakhi cattle shall be practiced.

In nutshell, Dairy farming in Ladakh has largely been subsistence-based. Local farmers raise livestock primarily for their own consumption and surplus milk often goes to waste. This lack of structured dairy value chain has prevented the region from tapping into the vast potential of the dairy industry.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the total credit potential for the UT assessed for the year 2025-26 is ₹7195.82 lakh. The district wise credit potential is furnished in Annexure-I

Suggestions / Action Points

i) Banks to encourage dairy farming, vermicompost and setting up of primary milk processing units.

ii) Capacity building of producers in animal health care, maximizing yield and

quality control

iii) Strengthen veterinary services and upkeep of animals through on location service and improve the services available with the veterinary hospitals. Mobile veterinary units/ ambulances can be started for providing medical facilities to far flung area.

iv) Promoting artificial insemination and encouraging genetic breeding of indigenous bovine animals

v) Encourage Dairy co-operatives to take up value chain activities including fodder cultivations, extension services and input supply centres.

vi) Ladakh has a potential for export of yak cheese and butter. More MOUs for development of dairy industry need to be signed on lines of MOU between National Dairy Development Board (NDDB) and UT Administration of Ladakh to conduct a benchmark survey with a view to promote dairying and rural livelihoods in Ladakh.

vii) Development of necessary infrastructure for dairy farming in Ladakh including setting up modern dairy farms, milk collection centers, and processing units. These facilities will not only increase milk production but also enhance its quality.

viii) The establishment of dairy cooperatives will facilitate milk collection, processing, and marketing. By working together, farmers can achieve economies of scale and access larger markets.

4.2.1(vii) Animal Husbandry - Poultry

Today poultry farming has transformed itself into an organized industry. Poultry sector not only plays an important role in fighting against malnutrition but also plays a major role in reducing unemployment and underemployment. Eggs and poultry meat are important sources of low cholesterol, high quality animal proteins. Poultry meat provides all essential amino acids for human body. Poultry farming provides subsidiary occupation to small and marginal farmer. It is very difficult in the cold arid Himalayan region of India. The harsh climatic environment is characterized by hypobaric-hypoxia, low humidity, high UV radiation and extreme variation in ambient temperature (-20 to +30°C), which causes high-altitude stress to poultry.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the district wise credit potential assessed for the year has been ₹438.86 lakh. The district wise credit potential is furnished in Annexure I.

Issues of Poultry Sector in Ladakh

Poultry farming in Ladakh has been a venture that has generally taken a back seat in this cold, arid region for the reasons as under:

i) Unavailability of poultry feed (existence of harsh climatic conditions).

ii) Lack of availability of any specific high yielding variety of layer or broiler breed in this high-altitude region

iii) Poor knowledge regarding poultry farming

iv) The housing of poultry is difficult in this cold, arid climate. The high cost of inputs such as feed, vaccines, and equipment, coupled with transportation expenses due to Ladakh's remote location, significantly impact the profitability of poultry farming operations in the UT.

v) Poultry diseases such as Newcastle disease and avian influenza pose a threat to flock health and productivity. Limited veterinary services and diagnostic facilities in

remote areas of Ladakh make disease management and prevention a significant challenge for poultry farmers.

Suggestions / Action Points

- i) The use of leaves, seeds and fruit residues of sea buckthorn have potential as a feed material for livestock and poultry in cold arid regions.
- ii) Financing of solar poultry house may be subsidized as it is costly.
- iii) Revitalizing backyard poultry and encouraging commercial poultry.
- iv) Development of insulated housing structures for poultry birds to protect them from extreme cold temperatures.
- v) Introduction of poultry breeds sustainable at higher altitudes.
- vi) Establish farmer field capmgains and demonstration farms to promote experiential learning and knowledge sharing.
- vii) Collaborating with Defence Institute of High Altitude Research (DIHAR) for providing scientific training on the management, feeding, disease control, vaccination, market strategies etc.

4.2.1(viii) Animal Husbandry – Sheep, Goat and Piggery

The small ruminants provide livelihood support to the poor underprivileged landless and marginal farm households. The goat and sheep production systems are mainly subsistence oriented but in view of the rising demand for meat, there is great scope for their commercialization. Goat has all the characteristics required for efficient meat production viz. high prolificacy, more than one breeding season in a year, higher milk production and capacity to bear twins and triplets. Since this is the only sector, which provides direct livelihood and income generating opportunities to landless and marginal farmers and the other vulnerable sections of the society, formulation of appropriate schemes for inclusive development of this sector is essential.

Ladakh has some of the world's best animal genetic resource in the form of Changthangi Pashmina goats, Changthangi Sheep, Malra Goat, Malluk and Purig Sheep, semi domesticated Yak and its crosses, Bactrian (Double Humped Camel), Zanskari horse, Ladakhi Cattle and Changthangi Dog. The animal husbandry, apart from the livelihood, contributes towards the health and nutritional security of the people by providing organic products in the form of milk, meat, egg and in textile sector through wool and fine fibers like Pashmina/yak & camel wool. There are 2.21 Lakh Pashmina Goats, 99743 non-pashmina goats and 2.78 lakhs sheeps (Statistical Handbook UT Ladakh 2020-21). The annual production of Wool is 221.02MT, world finest Pashmina production of about 55.06 MT & Mutton 9596.77 Qtls. (<https://ladakh.gov.in/animal-sheephusbandry/>).

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the district wise credit potential assessed for the year has been assessed at ₹1418.21lakh. The District wise credit potential is furnished in Annexure I.

Suggestions / Action Points

- i) The goat rearing shall be taken up through JLGs, SHGs and tribal groups in hilly tracts with support from local bodies.
- ii) Creation of community fodder banks in Ladakh to overcome endemic shortage of fodder in the region.
- iii) Formation of Producer companies of Pashmina Goat Farmers may be promoted to increase the benefits through collective investment.
- iv) Providing credit facility for setting up of mobile units to deal with animal care issues in the region.

4.2.1(ix) Fisheries

UT of Ladakh is bestowed with vast water resources in the form of rivers, lakes, streams and spring water where fish can be reared profitably. Ladakh has distinct cold water resources and aquatic biodiversity which have adapted to the harsh high altitude cold arid climatic conditions. Fisheries play a major role in respect of human nutrition and providing employment to unemployed youth of the region and fisheries related recreational tourism.

Fisheries sector encompasses exploitation of fish production from fresh water, marine and brackish water resources. As the UT is not endowed with a coast line and is bound by land on all sides, the activity is confined to inland fisheries. Inland fisheries is mainly practiced in reservoirs and tanks (both permanent and seasonal). The Fisheries Department, UT of Ladakh has started with the establishment of fish farm at Shey in 1960. Production of fish for revenue generation, creating job opportunities for educated youth and initiating awareness programmes on conservation of indigenous fishes and fish farming for self-employment generation are main activities of Fisheries Department, Leh. A project for promotion of a fish FPO in the district is being implemented by Krishi Vigyan Kendra, Leh. The department manages 10 fish farms across Ladakh where rainbow trout fish are reared and supplied to public.

There is a great potential for rainbow trout production in Ladakh because of its conducive climatic conditions, the absence of viral diseases, availability of quality water, market demand and local population's interest in Rainbow Trout farming. This could be promising source of food as well a livelihood for the residents of Ladakh region. It has some promising areas for aquaculture around the rivers Sindhu or Indus, Suru, Dras, Shingo, Stod (Doda) Lungnak or Tsarap Lingti and Zaskar. Streams and rivers which are snow fed, with highly oxygenated water that is ideal for rainbow trout culture. For popularization of trout culture in Ladakh, trout Rearing Units have been established by Govt. in Diskit (Nobra) and Sindhu Ghat in district Leh, Trout Rearing Unit, Drass, Khachan and Wakha in district Kargil.

Credit Projections for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the district wise credit potential for the year 2025-26 has been assessed at ₹296.00 lakh. The district wise credit potential is furnished in Annexure I.

Issues and constraints

- i) Marketing, feed, insurance are major impediments in expansion of trout farming in private sector.
- ii) Paucity of fish seed suitable for stocking in cold water strains.
- iii) The fisheries sector in Ladakh suffers from a lack of infrastructure, including

hatcheries, ponds, and cold storage facilities. The absence of proper infrastructure hinders the development of aquaculture and fish processing activities in the region.

iv) Ladakh's remote location and rugged terrain pose challenge to market access and inadequate market infrastructure hinder the profitability and growth of the fisheries sector.

Suggestions/ Action Points

i) UT Govt. should prepare a realistic road map for fisheries development in Ladakh with practical solutions and location-specific strategies by

collaborating with all major stakeholders-Department of Animal, Sheep, and Fisheries, ICAR, DRDO-DIHAR and local community

ii) Cluster approach may be adopted by Fisheries Department and other related agencies to promote better aquaculture management practices, collective marketing, common infrastructure and pollution control for sustainable brackish water aquaculture.

iii) Emphasis should be laid on capacity building of local population in fish farming and sustainable development of aquaculture.

iv) Need for conservation of endemic aquatic biodiversity, ornamental fisheries.

4.2.1(x) Sustainable Agriculture Practices

The most crucial aspect of agriculture is the sustainability of the activity ensuring self-sufficiency in food grains and cash crops. Efforts are required to make agriculture sustainable through scientific cultivation and reduction in pesticides. Agricultural practices such as cover crops, reduced tillage, integrated pest management (IPM), natural farming, organic farming, soil nutrient management, etc. can be adopted for sustainability.

4.2.1(xi) Farm Credit- Others including Two Wheelers for farmers

The pack animals are an integral part of the economy of the UT, due to its peculiar topography. Work animals such as Yaks, Dzogs, Dzomos, Horses, Ponies and Mules are used for agricultural operations, transportation, trekking and sports. Yaks are pride of Ladakh. They are indispensable for agriculture. Demo's milk with 13% fat content is a rich diet. Yak wool and hair make sturdy ropes and tents. Horses and ponies are extensively used in Changthang and Durbuk blocks for agricultural works and also for transportation of goods in the most inaccessible regions. The trekkers of foreign nationality also use these animals for transporting their material. Hence, people do avail bank loan for purchase of pack animals such as horses, ponies, mules etc. Zanskari breed horses are famous all over Ladakh for their stamina, sure footedness and intelligence. These horses and ponies are also used for polo, which is a very popular sport of the region. As per the statistical handbook of UT of Ladakh (2019-20), there are around 10266 mules, horses and Ponies in Ladakh.

Credit Projections for 2025-26

Credit potential of ₹139.50 lakh under 'Others' (mule, pony, horse carts) has been projected for the year 2025-26. District wise credit potentials are furnished in Annexure-I.

Issues

- i) Lack of scientific breeding and management resulting in in-breeding.
- ii) Lack of knowledge about genetic diversity among different horses found in different areas of Ladakh.
- iii) Lack of use due to modernization.
- iv) Low income generation in comparison to other Livestock.
- v) Ladakh has been deprived of basic research facilities in animal science sector.

Suggestions/ Action Points:

- i) Formulation of a sound breeding policy involving research institutes.
- ii) Genetic characterization using molecular tools and genetic diversity study.
- iii) Promotion of polo sports for zanskari horses. Tourism related sports trekking can increase their income.
- iv) Upgradation of equine breeding centers in every block of Ladakh
- v) Provision of better health and improvement in management practices.

4.2.2 Agriculture Infrastructure**4.2.2(i) Construction of Storage and Marketing Infrastructure**

Storage is an important marketing function, which involves holding and preserving goods from the time they are produced until they are needed for consumption. The agricultural marketing system in Ladakh is unique with no APMC Act in place and with no market regulation. A few storage infrastructure like warehouses, cold storages are available in the district which are owned by FCI or private entities. On-farm and off-farm storage is practiced in the Ladakh owing to the relatively small size of the local market and weak linkage with national markets. Storage of fruits is either done by the farmers themselves (on-farm) or by the wholesalers in the local market (off-farm) for a relatively shorter period of time. As estimated 10-15 % of dry apricot is stored by the farmers and the rest is sold owing to the urgent cash needs and lack of proper storage systems in Leh.

Credit Potential for the sector – 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc. the district wise credit potential assessed for the year has been assessed at ₹280.80 lakh. District wise credit potentials are furnished in Annexure-I.

Suggestion/ Action points

- i) The horticulture crops like apple and apricot are perishable in nature and require special attention in their harvesting, handling, packaging, storage and processing operations by making use of NABARD scheme such as New AMI.
- ii) In order to get a reasonable price for the farm produce and for ensuring availability of fresh fruits and vegetables round the year, construction of controlled atmospheric storage capacities across the entire region or ordinary storage capacities in cold ice pockets needs to be promoted.
- iii) Provision of a cold storage facility with a processing unit with a capacity to store 50–70 MT of produce. This storage and processing facility can be used for fruits, especially apple, pears as well as potatoes, seasonal vegetables and dairy products.

4.2.2(ii) Land Development, Soil Conservation and Watershed Development

Land development is a broad sector of activities undertaken by farmers to prevent soil erosion, improve land quality and productivity on sustainable basis. It includes land levelling, bunding, land drainage, farm ponds, water harvesting & soil and water conservation, soil fertility restoration/enhancement like reclamation, organic farming techniques like use of bio-fertilisers and bio-pesticides, improved agronomic practices etc. Ladakh, a Trans-Himalayan Region, is versatile in altitude ranging from 2400m to 4500m. It has a great variation in geography and climate from arctic to cold desert with land of high passes and rugged topography and as such is known as one of the “Cold Arid Zone” or “Cold Desert Zone” of India.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the district wise credit potential for the year has been assessed at ₹10.80 lakh. District wise credit potentials are furnished in Annexure-I.

Issues/Constraints

- i) The soils of the region are alkaline, poor in fertility and prone to erosion. The low temperature of the area during most part of the year accompanied with scanty rainfall, low humidity, more evaporation transpiration and soil erosion hazards pose obstacles for agricultural production.
- ii) The glacial erosion is quite predominant in the cold arid region of Ladakh.

Suggestions/Action Points

- i) Application of organic manures, compost and biofertilizer can improve soil health.
- ii) Plantation of agroforestry, medicinal plants, fruits and vegetables can help in management of wastelands and restoration of poor agricultural lands.
- iii) Soil and water conservation including rainwater harvesting, agronomic measures such as crop rotation, mulching and integrated nutrient management, especially green manuring and mixed use of FYM and fertilizers, are useful in management of soil and water resources for sustaining agricultural production.

4.2.2(iii) Others- Tissue Culture/ Agri Bio-tech, Seed Production, Vermicomposting, Bio Pesticides/ Fertilisers, etc

The other important agricultural infrastructure activities are production of biofertilizers, plant tissue culture facility, agri-biotechnology, seed production and vermicomposting. The horticulture activities are being promoted in large scale in the UT and credit for the said activities are required to be supported. The organic farming by use of bio-fertilizers and vermicomposting is very much necessity for sustainable agriculture development and use in horticulture crops.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the district wise credit potential assessed for the year has been at ₹57.60 lakh. District wise credit potentials are furnished in Annexure-I.

Action points/ Suggestions

- i) A standard package of practices recommendation may be evolved for organic cultivation of various horticultural crops for use by farmers, which would help in assessing the requirement of organic inputs and planting materials.
- ii) Promotion of use of organic manure and inorganic formulations in a balanced manner to ensure sustainability of the biological productivity of soils in the region.
- iii) Vegetable production together with production of quality seed shall be promoted.
- iv) Inputs required for sustainable agricultural growth like biofertilizer production, vermicompost units to receive high priority.

4.2.3 Ancillary Activities**4.2.3(i) Food & Agro Processing**

Ladakh region has the potential to produce various high value crops like apricot, sea buck thorn, black current, rhubarb, Russian Olive, fox tail millet, buck wheat and barley and these crops serve as important ingredients for different types of confectioneries and tonics, the value addition link in the complex value chain in respect of this region shall be strengthened by setting up of adequate processing units. In January 2020, the Department of Industries and Commerce, functioning under Ministry of Food Processing Industries organized Food Processing Summit in Ladakh. The Ladakh Action Plan for Food Processing to promote food processing was presented at the summit. The summit focused on chain mapping of food processing and recommended strategies to integrate local population towards agriculture and food processing. Under the PMFME scheme of Ministry of Food Processing Industries (MoFPI), GoI, support has been provided for setting up of 15 micro food processing units in Leh district. Most of these units pertain to processing of dairy and seabuckthorn.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the credit potential assessed for the year 2025-26 for the Agro and food processing sector is ₹664.47 lakh. District wise credit potentials are furnished in Annexure-I.

Constraints/Issues

- i) From the commercial point of view, apricot has been the major source of income for those who are engaged in cultivation and marketing of this fruit. Apricots and apples that grow in Ladakh are highly perishable within the short summer season.
- ii) Farmers lack technology for processing and product development, i.e., drying apricots, seed shelling and taking out kernels, cleaning and packaging of apricot products.
- iii) Lack of necessary skill for sorting and grading apricot products and lack of awareness of the international quality Standards.

Action Points/ Suggestions**a) Government Department**

- i) Provide good quality planting material of improved varieties to the farmers by training and strengthening the capacity of nursery growers.

- ii) Adoption of improved green houses, poultry farming, lambing shed, value addition and marketing of horticultural products and compost pits.
- iii) Build capacities of apricot farmers in grafting techniques and orchards.
- iv) Introduce appropriate technological facilities and build the capacity of producers, especially women and youth, in fruit drying, seed shelling, storage, processing and development of value-added products.
- v) Improve farmers' access to information on markets, market requirements, and market prices.
- vi) Organize farmers to encourage collectives like Farmers Producers Organisations for marketing, sharing of experiences and information on various aspects related to value chain development, and for better bargaining power.

b) Banks

- i) Banks need to extend finance for Agro and Food processing Sector on priority basis as this industry has been declared thrust area for export promotion.
- ii) Thrust may be given to finance units under fruits and vegetables cleaning, grading and processing.
- iii) PMFME may be promoted for apple, apricot and sea buckthorn.

4.2.3(ii) Agri. Ancillary Activities - Others

The activities envisaged in this section include loans to Co-operative societies to dispose their produce, Agri-Clinic/Agri-Business Centres (ACABC), loans to PACS/FSS/LAMPS, loans to MFIs for on-lending to agriculture and food & agro processing. The allied activities provide the necessary vigour to the agricultural sector. It provides the necessary spread and the requisite linkages for the sector to establish, strengthen and grow.

Considering that price realization by farmers for most crops grown in the UT are subject to market fluctuations, there is a need for providing produce loans or loans against warehouse receipts to farmers to enable them to prevent distress selling. In order to reduce the farming expenditure and ensure better price realization there is also a need for collectivization of the efforts of the farmers by forming Farmers Producers Organisations. NABARD has promoted and formed 02 FPOs in the UT. Agri-Clinics and Agri-Business Centers (ACABC) scheme has been envisaged to supplement the efforts of public extension, local needs and affordability of target group of farmers. It also aims to create gainful self-employment opportunities to unemployed agriculture professionals. Agri-clinics are envisaged to provide expert advice and services to farmers on various technologies which would enhance the yield of crops/animals and ensure increased income to farmers. Agri-Business Centres are commercial units of agri-ventures established by trained agriculture professionals for income generation and entrepreneurship development. As per the data available on ACABC portal, 6 ventures have been established under this scheme in Ladakh.

Loans to PACS/FSS/LAMPS for construction of godowns/on-lending to members and loans to Micro Finance Institutions (MFI) for on lending is another opportunity for the bankers in extending agriculture loan facilities. The activities envisaged in this section include loans to cooperative societies of farmers for disposing of their produce, agri-clinic/agri-business centres (ACABC), loans to PACS/FSS/LAMPS, and loans to MFIs for on-lending to agriculture and food and agro processing. Agriculture ancillary activities provide necessary vigour and deepening of the

agriculture sector activities. It provides the necessary spread and the requisite linkages for the sector to establish, strengthen and grow.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the credit potential in the UT, assessed for the year 2025-26 for other ancillary activities is Rs.76.50 lakh and is furnished in Annexure-I.

Issues

1. Slow pace of ACABC Scheme during the last 3 years.
2. Most of the PACS are non-functional/non-profitable.

Action Points

1. PACS need to diversify their activities and undertake the marketing of agricultural produce for the benefit of its members.
2. ACABC Scheme of GoI needs to be popularized.

Others- Loans to distressed persons to prepay non-institutional lenders; PMJDY, SHGs/JLGs, etc

1. Loans to Distressed Persons to Prepay Non-Institutional Lenders: RBI vide its circular No. RBI/2014-15/22. UBD.CO.BPD.(PCB) MC.No.7/09.09.001/2014-15 dated 1st July 2014, has provided for loans to distressed persons, not exceeding Rs.50,000/- per borrower to prepay their debt to non-institutional lenders. The PNB, SBI, BoB, RRBs etc. have made schemes for distressed persons.

2. Pradhan Mantri Jan Dhan Yojana (PMJDY): Financial Inclusion is the process of ensuring access to financial services and timely & adequate credit to needy and vulnerable groups such as weaker sections and low-income groups at an affordable cost. PMJDY aims at ensuring financial inclusion by providing basic banking services to all households. It allows individuals to open zero-balance bank accounts, access overdraft facilities, and receive insurance coverage. In Ladakh, this scheme has been actively promoted to provide financial access to low-income individuals, including SC/ST, rural and economically disadvantaged groups.

3. Loans to State Sponsored Organizations for SC/ST: Loan to SC/ST is provided through the following schemes :

- **Stand-Up India Programme:** The Stand-Up India Scheme has been launched by Hon'ble Prime Minister on April 05, 2016. The Scheme aims to leverage the availability of vast network of more than 1.25 lakh branches of the banking system to reach out to the target group (SC/ST and Woman) by extending loan ranging from 10 lakh to 100 lakh to at least 1 SC/ST and 1 women entrepreneur per branch for setting up green field enterprises. Further, details of the Scheme may be assessed from StandUp India portal www.standupmitra.in. In Ladakh, as on 30 September 2024, an amount of ₹83.46 crore has been released towards 593 accounts under Stand-Up India scheme.

4. Self-Help Groups (SHGs)/Joint Liability Groups (JLGs): SHGs promote savings and lending among group members, while JLGs typically cater to agricultural and rural workers. Under, NABARD programme, as on 31st March 2024, a total of 606053 SHGs has been formed and 196968 SHGs stands credit linked.

National Rural Livelihood Mission (NRLM) - The idea has been conceived as a foundation stone of national poverty reduction strategy. The objective of the Mission is to reduce poverty through building strong grass root institutions of the poor. NRLM would provide a revolving fund support to SHGs in existence for a minimum period of 3/6

months and follow the norms of good SHGs, i.e. they follow “Panchasutra”- regular meetings, regular savings, regular internal lending, regular recoveries and maintenance of proper books of accounts. RF will be provided as corpus, with minimum of Rs. 10,000/- up to a maximum of Rs. 15,000/- per SHG. NRLM has a provision for interest subvention on all credit from the banks/financial institutions availed by women SHGs, for a maximum of Rs. 3,00,000/- per SHG.

5. Joint Liability Group (JLG): JLG is an informal group comprising preferably of 4 to 10 individuals coming together for the purposes of availing bank loan either singly or through the group mechanism against mutual guarantee. The JLG members would offer a joint undertaking to the bank that enables them to avail loans. The JLG members are expected to engage in similar type of economic activities like crop production /KCC. Against a target of 3,52,020 as on 31st March 2024, 3,48,890 no. of JLGs has been formed.

4.3 MSMEs

Promoting inclusive employment progressive industry and resilient infrastructure are vital factors for economic growth and development. MSMEs employ a large share of the vulnerable sectors of the workforce such as women, youth and BPL families. These enterprises provide significant employment and income generation opportunities across the world and have been identified as the major driver of poverty alleviation and development. These small business units depend on an enabling business environment including support for access to finance, information and markets. The Govt of India revised definition of MSME in the year 2020 based on investment and turnover of the company. Micro- Investment < ₹1 crore and Turnover < ₹ 5 crore, Small -Investment < ₹ 10 crore and Turnover < ₹ 50 crore, Medium - Investment < ₹50 crore and Turnover < ₹ 250 crore.

In Ladakh, 95% micro and small industries operate at a household level. According to Udyam Portal, Ladakh in total has 5,454 MSMEs out of which 3692 are in Leh district and 1,762 are in Kargil district. Handicraft serves as the secondary revenue generator, after agriculture and tourism in Ladakh. The position of credit disbursement to MSME sector against the Annual Credit Plan for the UT of Ladakh for last 3 years is as under:

2021-22: ₹271.89 cr (96.37% achievement against ACP)

2022-23: ₹333.28 cr (90.76% achievement against ACP)

2023-24: ₹721.41 cr (161.28% achievement against ACP)

The region has huge potential in the following areas –

- . Availability of horticultural crops like apricots, rare herbal flora and fauna, Seabuck thorn naturally occurring dyes.
- . Native herb and medicinal plants.
- . Huge Potential for energy projects- Geothermal and hydel.
- . Unique Handicrafts/Handlooms-Pashmina, Tibetan styled rugs and tangkhas.
- . Tourism Industry- Aesthetic and spiritual Centre, Adventure sports, Unique Biodiversity.

Credit Potential for 2025-26

Considering the infrastructure available, likely to be made available and based on the discussions with the line departments, etc., the credit potential assessed for the year 2025-26 is ₹75083.20 lakh. District wise credit potentials are furnished in Annexure- I.

Action points/Suggestions

- . Organization of artisan/handicraft-based clusters into formal group and financial support to such groups by government can help enhance the income and revive handicraft/handloom sector. Growth of MSMEs can also minimize the migration of skilled labours from Ladakh to other states.
- . The availability of rare herbal flora and medicinal plants provide provides opportunity for traditional medicine industry.
- . Capacity building on spinning, weaving, dyeing and customizing pashmina products.
- . Diversification of pashmina products besides shawl like Pashmina Paintings.
- . Organizing handicraft-based activities into clusters, providing design support, cluster brands, access to finance and establishing market linkages.
- . Organizing motivation camps, training programmes for encouraging rural youths to take up industrial/ agro-startups.
- . Identification of potential blocks/ areas and barriers for development of the sector. Mapping of location specific activities for cluster development at block level may be taken up.
- . Establishment of 'Rural haats' in semi urban and urban centres will go a long way in solving the problem of marketing of produce of traditional artisans.

4.4 Export Credit

Ladakh is an exporter of Pashmina products and dried apricots. To boost exports of agricultural produce from Ladakh, which would enhance farmers' as well as entrepreneurs' income, the Agricultural and Processed Food Products Export Development Authority (APEDA) in association with officials of the horticulture, agriculture, commerce and industry departments of Union Territory and Defense Institute of High-Altitude Research is working out a comprehensive plan of action.

In September 2021, the first consignment of apricot was exported to Dubai from Ladakh, boosting agricultural product exports from the union territory. Apricot is one of the major horticulture crops of the district and there is huge potential for export of apricots both fresh and dried. During 2021-22 fresh apricots were sent to Dubai from Kargil by a Gurgaon-based startup Krishak Agritech. Other than apricot, pashmina, yak milk and yak wool have been identified as export potential products in case of Kargil District. At present, there is no take off in the export credit sector in the district.

Credit Potential for 2025-26

Considering the prevailing situation and past trends, a total potential of ₹ 45.00 lakh has been estimated under the sector. The district-wise/ sector-wise estimates have been indicated in Annexure I.

Suggested Government Initiatives

- i) Financing of marketing needs of artisans group engaged in making of Ladakh Carpets (Khalidan and TSUKDAN), Papier-mache, embroidery, Namdas, Gabbas, Ladakh Handicraft items (Wood and Metal work), Ladakhi Thangka paintings, Ladakhi Blankets (Chali and Rebo).
- ii) Establish the Craft Development Institute to provide skill, training and legal protection to the traditional Handicrafts products

4.5 Education

Ladakh region with a population of 2.74 lakh as per 2011 census has a student population of 40%. According to India's Census 2011, Ladakh had a literacy rate of

50.96%, the male literacy rate is 56.39% and female literacy rate is 42.87%.

- The UT has 3 Universities (2 in Leh & 1 in Kargil), 7 colleges (4 in Leh & 3 in Kargil), 903 schools of which 118 are higher secondary schools.
- Literacy rate of the district is 77.20 % as per the Census 2011.
- UT Govt. has launched various schemes/programmes to achieve 100 % literacy.
- In the colleges, pupil to teacher ratio is 23:1 whereas pupil to institution ratio is 650:1.

The region lacks higher educational institutes. Due to this many of the students have to migrate to other states for better educational opportunities. In order to develop educational system in Ladakh, GoI took many steps in this direction:

- In February 2019, PM Mr. Narendra Modi launched University of Ladakh, the first-ever varsity in the Ladakh UT. The University of Ladakh comprises degree colleges of Leh, Kargil, Nubra, Zaskar, Drass and Khaltsi under its cluster. In November 2019, the Union Cabinet approved the establishment of the National Institute for Sowa-Rigpa in Leh as an autonomous organisation under the Ministry of AYUSH.
- In April 2021, a Centre of excellence and wellness was established by the Indian Army in collaboration with Hindustan Petroleum Corporation Limited (HPCL) to guide the youth of Ladakh for one year in preparing them for various medical and engineering examinations.
- In August 2021, the Parliament passed a bill to establish Central University in Ladakh to enhance education accessibility in the union territory.
- Financing under education sector can be done more confidently if industry linked vocational courses are taught seeing the employability in tourism and allied activities. With the setting up of new administrative structure in UT, various govt. Jobs may come up for locals who are well educated.

Credit Potential for 2025-26

A bankable potential of ₹215.60 lakh has been assessed under education for the year 2025-26 for the UT. The district-wise/ sector-wise estimates have been indicated in Annexure I.

Suggestions/Interventions

- i) Development of an active learning environment through SMART and digital educational platforms.
- ii) Development of higher Education paradigm by introduction of career focused institutions.
- iii) At present education loans are mostly available for higher education from premiere institutes like IITs, IIM etc. There is a need to explore products for short-duration skill- based courses also.
- iv) Professional Coaching centers to be opened for ensuring more students clearing professional exams.
- v) Participation of private sector in Vocational Education and Industrial Training for Employability.
- vi) Establishing of Industrial Training Institute.

4.6 Housing

Housing is a fundamental product for every human being irrespective of financial standing. Despite the importance of housing to the socio-economic development of man and the nation, housing problems have remained endemic throughout the world. The

Rural communities face unique challenges when dealing with the affordable housing crisis. Because development does not generally occur at a large scale in rural areas, construction costs are often higher in rural areas compared to urban areas. Additionally, a lack of access to credit in many rural areas limits funding for maintenance of existing units.

NABARD initiatives on Rural Housing

Recognizing the importance of housing in rural areas, NABARD had made refinance for rural housing as an eligible activity under the sub-segment of 'Rural Non-farm Sector Refinance' products.

Credit Potential for 2025-26

Considering the prevailing situation and past trends, a total potential of Rs.4303.20 lakh has been estimated in the UT under the sector. The data for 2025-26 is furnished in Annexure I.

Issues

1. In general, the banks prefer to extend housing finance in urban and semi urban areas. Although there exists huge demand, the credit flow through banks for construction of rural houses is smaller in comparison.

Action Points

1. Housing loans for rural areas may be increased by financing banks.
2. Focus of housing needs to move from "access to shelter" to "access to habitat", implying access to civic infrastructure as well as livelihood and community infrastructure such as anganwadis, primary health centres etc., which will create the opportunity to pursue a life of quality and dignity.
3. Rural Housing finance needs to be made an integral part of the Financial Inclusion Plan of all banks.

4.7(i) Social Infrastructure

Though all types of infrastructure development is aimed at improving the standard of living of the people, there are certain types of investment which have a direct bearing on the social lives of the people, especially in the rural areas. Social infrastructure is the interdependent mix of facilities, places, spaces, programs, projects, services and networks that maintain and improve the standard of living and quality of life in a community. Availability of clean drinking water, adequate educational and health facilities, efficient waste management facility, old age homes, and palliative care centers and sanitation facilities etc., are examples of such sectors, which can be termed as Social Infrastructure and these defines the quality of life in a society.

Types of social infrastructure

1. Hard infrastructure - health facilities and centres, educational facilities, recreation grounds, police stations, fire and emergency service buildings, art and cultural facilities and other community facilities.
2. Soft infrastructure - programmes, resources, services, community and cultural development Introduction of schemes like "Swachh Bharat" have re-emphasized the need for better hygiene in the community. GoI has also introduced various schemes for improving the educational facilities, skill development, training etc., which in the long run will improve the GDP of the UT.

Social Infrastructure available in Ladakh as per Ladakh Vision 2050 Document:

- i) As of March 2020, Ladakh had two District Hospitals, three Sub-District Hospitals, 57 Primary Health Centres, 270 Family Welfare Centres and 811 Bed Strength.
- ii) In Ladakh, 96% Households without Functional Tap Water Connection.
- iii) Only 1 Faecal Sludge Treatment Plant (FSTP) in Ladakh for the city of Leh.
- iv) More than 75% of the households are dependent upon on- site sanitation facilities.
- v) Hence there is immense scope for social infrastructure development in Ladakh.

Credit potential for 2025-26

Based on the available infrastructure and gaps, the district-wise potential available for the social infrastructure for the year 2025-26 are estimated at ₹300.00 lakh. The district-wise/ sector-wise estimates have been indicated in Annexure I.

Suggestions/Interventions:

- i) Technological interventions to provide piped water supply at sub-zero temperature during winter season.
- ii) Decentralised Faecal Sludge and Septage Management for waste water treatment
- iii) Large scale harvesting and storing of winter water which can be used during peak demand in summers.
- iv) Expanding the medical resource base in the region.
- v) Door-step medical services to remote population.
- vi) Developing advanced healthcare infrastructure with best quality services.

4.7(ii) Renewable Energy

Renewable energy is energy derived from natural resources that replenish themselves in less than a human lifetime without depleting the planet's resources. These resources – such as sunlight, wind, rain, tides, waves, biomass and thermal energy stored in the earth's crust – have the benefit of being available in one form or another nearly everywhere. They are virtually inexhaustible and cause little climate or environmental damage.

Small-scattered loads and good availability of Renewable Energy resources like hydro, solar, wind and geothermal makes the region ideal for Renewable Energy based decentralized power generation. At present hydro and solar energy play an important role in power generation and rural electrification in Ladakh. Hydroelectricity from small hydroelectric plants (installed capacity 8.5 MW) accounts for about 60% of the total electricity generation.

Currently, approximately 7000 solar photovoltaic (PV) domestic lighting systems provide electricity for lighting to about 25% of the households in Ladakh. The Ladakh region gets approximately 320 days of sunshine for a year and is one of the best places in the world for solar cooking. The Ladakh Renewable Energy Development Agency (LREDA), the nodal agency of the MNRE is currently implementing renewable energy technologies across the region.

Geothermal potential in the Puga valley

The Puga geothermal field is located in the south-eastern part of Ladakh and has been recognized as the most intense geothermal field in India. At an altitude of about 4400 m, it forms a part of the Himalayan geothermal belt. The Puga valley is

surrounded by hills rising up to an altitude of about 6000 m, forming the Puga region as a valley. The 15 km long and about 1 km wide valley trends nearly east-west in direction between Sumdo village in the east and Polokongka La in the west. This area, positioned just south to the

Indus Suture Zone, has hot springs with surface flow temperatures up to 84.8 °C (the boiling point of water at that altitude). Moreover, It is estimated to have the capacity to generate 30-40 MW of electricity at a temperature of 240 °C at relatively shallow depths. Ladakh is an area endowed with substantial natural resources. It has natural advantage due to the cloudless days and a clear mountain sky. The UT also has three major geothermal sites at Puga, Chumathang and Nubra. These unconventional resources could be harnessed to make Ladakh carbon neutral and energy self-sufficient. Ladakh has a potential to generate 35 GW from solar energy and 04 GW from wind energy.

Adoption of technologies like passive solar housing developed, Himalayan Institute of Alternatives can go a long way in minimizing the smoke produced by each household during winters by the use of bukharis (fuel based heater). Bank loans up to a limit of Rs.30.00 crore to borrowers for purposes like solar based power generators, biomass based power generators, wind mills, micro-hydel plants and for non- conventional energy based public utilities viz. street lighting systems, and remote village electrification will come under Priority Sector. For individual households, the loan limit of Rs.10 lakh per borrower will be considered under priority sector.

Credit potential for 2025-26

Based on the available infrastructure and gaps, the district-wise potential available for the renewable energy for the year 2025-26 is estimated at ₹812.162 lakh. The district- wise/ sector-wise estimates have been indicated in Annexure I.

4.8 Informal Credit Delivery

The informal credit delivery system, more precisely the Self Help Group-Bank Linkage Programme (SHG-BLP) was launched by NABARD in 1992-93. SHGs initially conceived as thrift groups to mobilize savings and meet credit needs of rural poor with a view to end their dependence on moneylenders. Now, it has developed as the strongest tool to not only fight poverty but also tackle delicate socio- economic issues. The MoRD, GoI launched NRLM (SHG) by restructuring SGSY scheme on April 1, 2013 to ensure that SHGs are enabled to access repeat finance from banks, until they attain sustainable livelihoods and decent living standards. In November 2015, the programme was renamed as Deendayal Antodaya Yojna (DAY-NRLM). It is the flagship program of GoI for promoting poverty reduction through building strong SHGs.

In Ladakh, the Ladakh Rural Livelihood Mission (LRLM) has formed and promoted 1980 SHGs.

Joint Liability Groups (JLGs):

There are small and marginal farmers, tenant farmers, share croppers and oral lessees who remained excluded from the institutional credit/ formal banking institutions. These mid segment clients had access to productive assets, but were unable to access institutional credit due to their inability to offer adequate security. In order to provide institutional credit to this segment without collateral, financing of JLGs was introduced as a pilot project in 2004-05 by NABARD. The scheme was later mainstreamed for the banking system in 2006.

Credit potential for 2025-26

Based on the available infrastructure and gaps, the district-wise potential available in the UT for the informal credit delivery for the year 2025-26 is estimated at ₹195.30 lakh. (Details in Annexure I)

Issues

1. LRLM is working in all the blocks of both the district. However, there is lack of awareness among public, especially lower strata of society about the availability of overdraft facility/ consumption loan, SHG/ JLG facilities from banks.
2. Some of the women members of SHGs are illiterate and are not aware about bookkeeping.

Action points

1. Banks need to adopt SHG/JLG financing as mainstream activity, particularly in clusters with females.
2. There is a need for effective monitoring of progress of SHGs/JLGs in DCC/DLRC/ UTLBC meetings and maintenance of proper database at LDM/ UTLBC level.
3. Leaders of good performing SHGs/JLGs may act as business correspondents.
4. Best performing SHGs/JLGs leaders may be awarded annually at Block/District/UT level.

Chapter 5

Status and Prospects of Cooperatives

5.1 Background

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’. It 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. Cooperatives strengthen bargaining powers of their members help them get access to competitive markets and to capitalize on new market opportunities. As such they improve income opportunities, reduce costs and manage risks of the members.

5.2 Status of Cooperatives in the Country

As of 30 December 2024, the National Cooperative Database (NCD) portal reports a total of 824000 cooperatives across India. These include 820170 primary cooperatives 1126 state cooperatives or federations and 1710 multi-state cooperatives. The sector is further supported by 19 national cooperative federations and 19 cooperative education and training (CET) institutes. Additionally there are 910 rural cooperative banks 1422 urban cooperative banks (UCBs) and 84 multi-state cooperative urban cooperative banks (MSCS-UCBs). This data underscores the extensive network and diversity of cooperatives in the country highlighting their role in promoting socio-economic development and financial inclusion. Cooperatives contribute significantly to sectors like milk production (through entities like AMUL) sugar production and fertilizers.

Challenges: Lack of professionalism politicization inadequate technology adoption and limited capacity-building efforts.

5.3 Formation of Ministry of Cooperation by GoI

The GoI 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”.

5.4 Latest initiatives by Ministry of Cooperation (MoC) GoI

- The MoC has in consultation, coordination and partnership with state governments, NABARD, national level federations training establishments at state and national level and other stakeholders is working on the following initiatives.

- **Computerization of Primary Agriculture Cooperative Societies:** This scheme aims at computerization of 63000 functional PACS leading to increase in efficiency profitability, transparency and accountability in the working of PACS.
- **Co-operative Education - Setting up of World's Largest Cooperative University:** This 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.
- **World's largest Cooperative Training Scheme:** This aims at revamping strengthening existing cooperative training structure in the country and modernize the training methods through a revamped scheme.
- To provide facilities at par with FPOs to existing PACS.
- Establishing Multipurpose PACS/Dairy/Fisheries cooperatives in every panchayat.
- World's largest food grain storage scheme for cooperatives.
- Revival and computerization of PCARDBs/SCARDBs.
- Establishment of National Cooperative Database.
- Amendment to Multi State Coop. Act 2002 and setting up of 3 new MSCS.
- **New Cooperative Policy - Drafting of new Cooperative policy** with a view to strengthen the cooperatives and make them vibrant with increased contribution to the economy.
- All these initiatives will create immense business potential from grassroots upward in times to come.

5.5 Status of Cooperatives in the UT

The Cooperative movement in Ladakh has played an important role in providing various services to its members as well as other residents as it provides not only various consumer items of daily use on fair prices but also marketing of local agri-horticultural (vegetables, fruits, sea buckthorns, apricots etc.) and livestock produce (milk, pashmina, wool etc.)

The Cooperatives are registered mainly under two Cooperative Acts viz. J&K Cooperative Societies Act, 1989 and J& K Self Reliant Act, 1999. Those registered under the Act of 1989 are called Cooperative societies whereas those under the Act of 1999 are called Cooperatives only. The Cooperative societies registered under Act of 1989 are directly monitored, inspected and audited by the Cooperative Department. They are also being provided financial support by the department and other Govt. agencies through various schemes. On the contrary, the Cooperatives under Act of 1999 are self-reliant and no financial aid is admissible to them from the Cooperative Department and they merely need to submit their annual returns to the office of the Registrar of Cooperatives, UT of Ladakh. It is to be noted that the Jammu and Kashmir Cooperative Societies Act, 1989 and Jammu and Kashmir Self-reliant Cooperative Act, 1999 have not been repealed post reorganization of the Jammu and Kashmir State into 02 Union Territories viz. UT of Jammu and Kashmir and UT of Ladakh, respectively and are operational as adaptation of state laws vide S.O3775 (E) issued by Ministry Of Home Affairs, Government of India on 23rd October, 2020.

The cooperative sector in Ladakh comprises a total of 270 cooperatives, covering 111 Non-Credit Cooperative Societies (like Milk / Fishery /Poultry/ Housing/ Labour/

Consumer/ Weavers/ Marketing/ Industrial societies, etc.) and 159 rural credit co-operatives (PACS). Further, in line with the directions of Ministry of Cooperation, Government of India, formation of more number Multi –purpose Primary Agri Credit Societies is under progress in UT.

5.6 Computerization of Primary Agriculture Cooperative Societies

In the first phase, 10 Primary Agricultural Cooperative Societies (PACS), 5 each from Leh and Kargil districts, have been computerized in the UT of Ladakh. This modernization effort aims to enhance the operational efficiency and administrative oversight of these societies, ultimately benefiting the local farming communities in both regions.

5.7 Way forward

In addition to the 111 non-credit cooperative societies operating within the Union Territory, there are currently 159 Primary Agricultural Cooperative Societies (PACS) established to support local farmers and enhance agricultural productivity. Significant efforts are underway to extend coverage to all Gram Panchayats that currently lack representation by any PACS, aiming to create a more inclusive and supportive agricultural network.

However, one of the most pressing challenges that lies ahead is to prioritize the diversification of business activities within the existing PACS. This strategic focus is crucial for ensuring their long-term sustainability and financial viability. By exploring new avenues for revenue generation, such as agro-processing, marketing of produce, and providing varied services to members, the PACS can strengthen their economic foundation and better serve their communities.

Box Item

Title: Plan for formation of 2 lakh Primary Co-Operative Societies



Cooperative movement has been the backbone of rural economy of our country. Cooperation is the way of life for crores of people across the country. These cooperatives which are collectives and member-owned economic entities, harness the strength of collective effort by aggregating resources including factors of production. Due to member-driven acumen in favour of collective and entrepreneurial action, the cooperatives as organizations have demonstrated the potential to evolve and transform as strong global business units. They provide rural population with not only livelihood opportunities but also as safety net through a community based approach.

With this background, and also to ensure that the primary cooperative societies (Agriculture, Dairy and Fisheries) are spread evenly across the country, Ministry of Cooperation, Govt of India launched a plan to establish new multipurpose PACS or Dairy / Fishery Primary Cooperative society in each uncovered panchayat and to strengthen the existing PACS/ Dairy/ Fishery Cooperative Societies. The plan is to be implemented through social mobilisation with support from NABARD, NDDDB and NFDB.

Further, to improve viability of PACS, the Ministry of Cooperation in consultation with stakeholders, has circulated 'Model Byelaws for PACS' with all States/ UTs for adoption by PACS. This would enable PACS to diversify their business by undertaking more than 25 economic activities.

Under the Plan, two lakh new multipurpose PACS, dairy or fishery cooperative societies would be formed in the country over a period of five years, to saturate the rural landscape with Cooperative ecosystem. The five-year targets of the three implementing agencies are as follows:

- NABARD shall be responsible for formation of around 70,000 new M-PACS in two phases - in Phase-I (2024-2026), around 22,750 new M-PACS shall be registered and in Phase-II (2026-2029), 47,250 new M-PACS shall be registered.
- NDDDB shall be responsible for formation and strengthening of around 1,03,000 dairy cooperative societies.
- NFDB shall be responsible for formation and strengthening of around 11,500 fishery cooperative societies.

Union Home Minister and Minister of Cooperation announced the launch of 10,000 new Multipurpose Primary Agricultural Credit Societies (MPACS), along with Dairy and Fisheries Cooperative Societies, on 25 December 2024. The SOP of the Plan was established in September 2024, and within just 86 days, the registration of 10,000 PACS was successfully completed. Out of 10,000 PACS, around 1057 new cooperative societies were from the UT of Jammu & Kashmir (82 multipurpose PACS, 950 Primary Dairy Societies and 25 Primary Fishery Societies).

Chapter 6

Infrastructure Support

6 Introduction

Infrastructure support in rural areas is essential for promoting development, improving living standards, and ensuring equitable access to basic services. Unlike urban areas, rural regions often face significant challenges such as limited transportation, inadequate healthcare facilities, unreliable electricity, poor water and sanitation systems, and insufficient digital connectivity. As a result, infrastructure development in rural areas plays a crucial role in addressing these gaps, enabling rural communities to thrive and sustain growth.

In rural areas, infrastructure support involves the creation and enhancement of essential services such as roads, power supply, clean water, sanitation, healthcare facilities, and educational institutions. Proper infrastructure enables farmers to transport goods to markets, supports small businesses, and improves access to essential services, contributing to economic stability. Furthermore, access to reliable internet and communication systems allows rural populations to connect with broader markets, gain information, and enhance educational opportunities, which are vital for their overall development.

Addressing the infrastructure needs of rural areas requires tailored, context-specific solutions that account for the unique geographical, economic, and social characteristics of rural communities. Investment in rural infrastructure can significantly reduce poverty, promote sustainable development, and bridge the gap between rural and urban areas, ensuring that all citizens can enjoy equal opportunities and improved quality of life. In essence, infrastructure support is a foundational element in empowering rural areas and unlocking their full potential in a rapidly changing world.

6.1 Rural Infrastructure Development in the UT

1. Power Infrastructure: The Ladakh Power Development Department (LPDD) is implementing schemes such as PMDP Rural and Addl. PMDP Rural for carrying out rural electrification. In collaboration with RECPDCL, LPDD is implementing projects such as 220 kV Extra High Voltage transmission lines and Gas Insulated Substations (GIS) in Nubra and Zaskar valleys and Advanced Metering Infrastructure (AMI), Revenue Management System to improve connectivity to the national grid.

Initiatives in the field of renewable energy has largely benefitted population in far flung areas. Upcoming projects such as livestock grazing-friendly solar project in Pang, 13 GW solar plant, geothermal energy plant at Puga Valley, etc will play a key role in addressing the energy needs of the region, while also driving Ladakh's transition toward sustainable power solutions.

2. Road Infrastructure and Rural Connectivity: The Public Works Department and Border Road Organization are responsible for maintaining road networks in the UT. Key projects such as Zojila Tunnel, Z-Morh Tunnel, and roads to areas like Nubra, Pangong, and Tso Moriri has improved accessibility to remote villages.

Further, support under PMGSY is being availed for creation of rural connectivity infrastructure. Under PMGSY Phase III, a total of 55 projects, which are envisaged to provide 455.63 km length of rural road connectivity have been sanctioned.

3. Water Supply: A robust water supply system is crucial for public health, economic development, and environmental sustainability, providing clean water for drinking, sanitation, agriculture, and industry, and supporting overall community well-being. As per Jal Jeevan Mission dashboard, 96.64% of rural households in Ladakh (39,285 out of 40,650) have access to tap water connections.

4. Healthcare: The UT has seen a significant improvement in healthcare, focusing on strengthening primary health care services. The Universal Health care scheme introduced by the Administration of the Union territory of Ladakh in addition to the Ayushman Bharat PMJAY is a step towards the goal of achieving Universal Health care for all by 2030. As per Ladakh Statistical Handbook 2022-23, there are 339 health institutions in the UT including 39 Primary Health Centres, 08 Community Health Centre, etc.

5. Education: As per UDISE+ dashboard FY 2023-24, there are 931 schools in rural areas of Ladakh. Gross enrolment ratios are 86.4% in middle schools and 66% in secondary schools.

6.2 Critical Infrastructural Gap

6.2.1 Irrigation

There is limited water availability in the region. More focus may be laid in promotion of micro irrigation techniques. Harnessing of groundwater for irrigation purposes through drip and sprinkler systems would improve the production and productivity under horticulture and plantation crops. Traditional water management techniques like construction of artificial glaciers may be promoted and utilized as per suitability.

6.2.2 Agriculture, Allied, Land Development & Soil Conservation

There is a need to promote the use of small farm implements among farmers, particularly, small and marginal farmers, by highlighting their benefits on a cluster basis. It is important to increase awareness about the available farm mechanization schemes among farmers. Small farm equipment suitable to the local conditions can be introduced. Primary Agricultural Credit Societies (PACS) could be involved in supplying small farm implements as custom hiring centres and raising awareness about their usage. There is potential for setting up of seed production units which can improve agricultural productivity and self-sufficiency. Agri Clinics and Agri Business Centres (ACABC) needs to be set up in the UT.

6.2.3 Warehousing

There is lack of private investment in agriculture infrastructure. A detailed survey of the district's warehouse/ cold store/ other infrastructure requirement needs to be undertaken as different stakeholders have different views on the requirement of such infrastructure. Pilot Project i.e. "World's Largest Grain Storage Plan" being

launched by Ministry of Cooperation (MoC) GoI entails setting up of grain storage infrastructure including warehouse and silos along with other agri-infrastructure including Procurement Centre Custom Hiring Center Primary Processing Center Grameen Haats etc. will help in reducing the infrastructure gap.

6.2.4 Animal husbandry/ Dairy development/ Fisheries

The lack of high-quality fodder is a major issue. Enhancing the development of fodder resources in this area can help to improve the situation.

Dairy cooperative societies need to be revived to ensure effective marketing avenues for dairy farmers in the UT.

The UT has not seen much development in commercial fishing. Awareness needs to be created among the farming community for taking up the activity along with imparting of latest skills to the farmers.

There is a scope and need for establishing modern slaughterhouses, dressing units, marketing outlets with approved standard design, equipped with modern tools, machines and other necessary infrastructure to ensure supply of hygienic, quality animal products.

6.2.5 Power

The power infrastructure has considerably improved in the recent past. As per Ladakh Statistical Handbook 2022-23, 100% of the villages have been electrified. However there are still challenges in the form of Transmission and distribution networks, reliance on expensive diesel generators, and low penetration of renewable energy despite high potential.

6.2.6 Social Infrastructure

The private sector involvement in social infrastructure facilities such as higher education, primary education, healthcare facilities, etc is mostly limited to urban areas. Far higher levels of private sector management and investment is required for social infrastructure in rural areas.

6.3 Infrastructure support under RIDF

The Rural Infrastructure Development Fund (RIDF) was set up in NABARD during 1995-96 with a corpus of ₹2000 crore with a view to funding rural infrastructure projects such as medium & minor irrigation which were lying incomplete for want of financial resources. Even though RIDF was set up with the immediate objective of leading the existing incomplete projects to completion, in subsequent years it was appreciated that there is a large void to be filled in terms of unmet demand for rural infrastructure. Hence, subsequently, the coverage of RIDF was broad-based and at present 39 activities are being funded.

NABARD has sanctioned 167 projects under RIDF to erstwhile state of J&K, which are located in the present UT of Ladakh with RIDF loan of ₹375.21 crores. The activities sanctioned include Irrigation sector(11 no. of projects), Rural Connectivity projects(142 projects), Agri related(12 projects) and Social Sector(2 projects).

6.4 Infrastructure Support under NABARD Infrastructure Development Fund (NIDA)

NIDA is a new line of credit support launched by NABARD in 2011 for funding rural infrastructure projects. It is designed to fund the State Govt. /State owned/Central Govt. owned institutions for creation of rural infrastructure which facilitates better communication connectivity, irrigation, social infrastructure and credit absorption capacity in rural areas. For State Governments NIDA provides assistance for rural infrastructure development outside of RIDF borrowing and for other State Owned organizations NIDA offers direct financing based upon risk

appraisal of every specific project. Infrastructure projects largely benefiting rural areas and covered in a harmonized list of projects as approved by the GOI/ RBI and activities covered under RIDF and “Rurban” mission are eligible for funding under NIDA. Keeping in view the infrastructure requirement for rural areas the UT Government can avail assistance under NIDA for projects like Rural Transportation System, Electricity Generation (Renewable Energy only), Electricity Transmission, Solid Waste Management, Sewage Collection Treatment and Disposal System, Agri. Storage and Marketing Infrastructure, Agro Processing, Agro Services, Custom Hiring and Farm Mechanization, Rural Hospitals, Common Infrastructure for Industrial Parks, Special Economic Zones, Tourism Facilities, Rural Education Institutions etc.

6.5 Infrastructure support under Warehouse Infrastructure Fund (WIF)

In the Union Budget of 2011-12 a special window under Rural Infrastructure Development Fund (RIDF) was announced under Tranche XVII with a corpus of ₹2000 crore to provide dedicated funds for the creation of a robust warehousing infrastructure in the country. This was continued in the Union Budget 2012-13 with an allocation of ₹5000 crore under RIDF - XVIII. In order to provide a pointed focus for extending financial assistance to public and private players in the warehousing sector by NABARD GoI had instituted a separate fund called Warehouse Infrastructure Fund with a corpus of ₹5000 crore during 2013-14 which was continued during 2014-15 also with a further corpus of ₹5000 crore. No further addition was made to the corpus. The eligible activities include various storage infrastructure for agricultural commodities including warehouses, silos, agri-logistic parks, storage infrastructure in market yards & food parks and cold chain activities like pre-cooling units cold storage, Controlled Atmosphere (CA) stores, reefer vans, bulk coolers, Individually Quick Frozen (IQF) units and chilling infrastructure etc.

6.6 Infrastructure support under Food Processing Fund (FPF)

With a view to promote food processing industry in the organised sector on a cluster basis GoI instituted the Food Processing fund (FPF) with a corpus of ₹2000 crore during 2014-15 in NABARD for providing affordable credit for setting up of designated food parks notified by Ministry of Food Processing Industries (MOFPI), GoI and establishing food processing units therein.

6.7 Infrastructure support under Long Term Irrigation Fund (LTIF)

Long Term Irrigation Fund (LTIF) was announced in the Union Budget 2016–17 for fast tracking completion of 99 identified Medium and Major Irrigation projects as

identified by MoJS GoI.

Under LTIF, NABARD has provided assistance towards the project "Prakachik Khows Canal" to erstwhile state of J&K, which is located in present UT of Ladakh.

6.8 Way forward

The way forward for rural infrastructure in Ladakh involves addressing key challenges with sustainable and strategic solutions:

Improving Connectivity: Expanding all-weather roads, enhancing air and digital connectivity, and ensuring reliable telecommunications are essential for better access to services and markets.

Water and Irrigation: Implementing efficient water management systems like rainwater harvesting, check dams, and irrigation techniques (e.g., drip irrigation) is critical due to water scarcity.

Renewable Energy: Investing in solar, wind, and micro-hydropower projects can provide sustainable energy, reducing reliance on non-renewable sources and improving rural energy access.

Healthcare: Strengthening primary healthcare centers, mobile healthcare units, and transportation for medical emergencies can improve healthcare access in remote areas.

Education: Building schools, vocational training centers, and promoting e-learning programs can enhance educational opportunities and reduce migration.

Sustainable Agriculture: Promoting organic farming, cold storage, and market linkages will boost local agriculture and rural livelihoods.

Climate Adaptation and Disaster Management: Developing climate-resilient infrastructure and early warning systems will help mitigate natural disasters and climate-related challenges.

Chapter 7

Details of Policy Initiatives

7.1 Govt. of India

7.1.1 Cooperative Development

The Ministry of Cooperation GoI has taken 54 initiatives to strengthen and deepen the cooperative movement at the grassroots level. The ministry in coordination with state governments, NABARD, national level federations and other stakeholders is working on the following initiatives:

- *World's Largest Grain Storage Plan in Cooperative Sector (WLGSP)*

Ministry of Cooperation (MoC) GoI is implementing Pilot Project for World's Largest Grain Storage Plan in Cooperative Sector. The Pilot Project entails setting up of grain storage infrastructure including warehouse and silos along with other agri-infrastructure including Procurement Centre, Custom Hiring Center, Primary Processing Center and Grameen Haats etc.

- *Centrally Sponsored Scheme for Computerization of Primary Agricultural Credit Societies (PACS)*

Government has approved a scheme for Computerization of Primary Agricultural Credit Societies (PACS) with the objective of increasing efficiency of PACS bringing transparency and accountability in their operations; facilitating PACS to diversify their business and undertake multiple activities/ services. A total of 63000 PACS have been taken for computerization under the project.

- *Establishing Multi-purpose PACS/ Dairy/ Fisheries cooperatives in every panchayat with support of NABARD, NDDB, NFDB, NCDC and other National level Federations.*

- *PACS as Common Service Centers (CSCs) for better access to e-services*

Ministry of Cooperation has announced supporting more than 300 e-services through PACS in association with MeitY, NABARD and CSC e-Governance Services India Limited.

- *Micro-ATMs to Bank Mitra Cooperative Societies for providing doorstep financial services.*

- *Computerization of Agriculture and Rural Development Banks (ARDBs)*

To strengthen the long-term cooperative credit structure the project of computerization of 1851 units of Agriculture and Rural Development Banks (ARDBs) spread across 13 States/ Union Territories has been approved by the Government. NABARD is the implementing agency for the project and will develop a national level software for ARDBs.

- *Co-operative Education – Setting up of World's Largest Cooperative University*

This aims at introduction of cooperative education in independent degree / diploma courses in Schools and Universities.

- *World's Largest Cooperative Training Scheme*

This aims at revamping existing cooperative training structure in the country.

- *New Cooperative Policy with a view to strengthen the cooperatives and make them vibrant with increased contribution to the economy.*

- *Amendment to Multi State Cooperative Act 2002 and setting up of 3 new Multi State.*

- *Cooperative Society (MSCS) in the areas of seed production and marketing; organic products and export from cooperative sector.*

- *To provide facilities at par with FPOs for existing PACS.*

- *Establishment of National Cooperative Database.*

7.1.2 Digital Agriculture Mission:

The Digital Agriculture Mission (DAM) aims to revolutionize India's agriculture sector by leveraging digital technology inspired by the success of India's digital revolution in other sectors. With a substantial financial outlay of ₹2817 crore, it focuses on creating a Digital Public Infrastructure (DPI) for agriculture.

- *Agri-Stack Initiative*

Key components of the mission include the Agri Stack—a farmer-centric DPI to streamline services with the creation of a unique digital Farmer ID linked to important farmer data such as land records and crop details.

- *VISTAAR (Virtually Integrated System to Access Agricultural Resources)*

Vistaar initiative of MoA&FW is an open interoperable and federated network dedicated to agricultural information and advisory services with a mission to empower farmers and enhance their farming practices for better sustainable livelihood.

- *JanSamarth Portal*

JanSamarth Portal, a GoI initiative is a unique digital portal linking credit linked schemes for ease of access to the all the beneficiaries and related stakeholders. Schemes such as e-Kisan Upaj Nidhi, KCC, AIF etc. are accessible through the portal.

7.1.3 Agriculture Infrastructure Fund (AIF) Scheme

The Agricultural Infrastructure Fund (AIF) has played a pivotal role in transforming India's agricultural landscape. In addition to existing activities the purview of AIF scheme has now been extended to the following:

- *Viable Farming Assets*

The scheme now includes the creation of infrastructure for viable projects for building community farming assets.

- *Integrated Processing Projects*

The list of eligible activities under AIF now includes integrated primary and secondary processing projects.

➤ *PM KUSUM Component*

The aim is to promote sustainable clean energy solutions alongside agricultural infrastructure development.

➤ *Enhanced Credit Guarantee Coverage*

The government proposes to extend AIF credit guarantee coverage for FPOs through the NABSanrakshan Trustee Company Pvt. Ltd.

7.1.4 Dairy Processing & Infrastructure Development Fund (DIDF)/ Animal Husbandry Infrastructure Development Fund (AHIDF)

Government has approved merger of DIDF with AHIDF and extension of AHIDF for another three years till 31 March 2026. Further NABARD is included as loaning entity under the revamped AHIDF scheme.

7.1.5 Fisheries & Aquaculture Infrastructure Development Fund (FIDF)

GoI has extended the scheme for a period of another 3 years from 01.04.2023 to 31.03.2026.

7.1.6 Framework for Voluntary Carbon Market (VCM) in Agriculture Sector

The Ministry of Agriculture and Farmers Welfare GoI has launched a Framework for Voluntary Carbon Market in Agriculture Sector. Under the Framework the Ministry envisages creating long-term carbon credit benefits primarily for small and marginal farmers by developing a VCM Framework and setting guidelines. NABARD is the nodal agency to coordinate and implement the various pilot projects under the VCM.

7.1.7 PM JANMAN (Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan)

PM JANMAN is a recently launched initiative by the Government of India specifically designed to address the socio-economic challenges faced by the Particularly Vulnerable Tribal Groups (PVTGs) across the country. The program aims for the comprehensive development of 75 PVTGs in 18 states and 1 Union Territory with an allocation of 24104 crore.

7.2 Reserve Bank of India

- Master Circular on Lead Bank Scheme SHG- Bank Linkage Programme and *Deendayal* Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) SHG - Bank Linkage consolidating the relevant guidelines/ instructions issued by Reserve Bank of India.
- RBIs Green Deposit Framework - The Green Deposit Framework by RBI is designed to encourage regulated entities (REs) in India such as scheduled commercial banks and deposit-taking non-banking financial companies to offer green deposits. These deposits are earmarked for financing projects that contribute to environmental sustainability such as renewable energy, energy efficiency and pollution control. REs must develop and publicly disclose a comprehensive policy and financing framework detailing how funds will be allocated and managed.
- Unified Lending Interface (ULI): The Reserve Bank of India (RBI) as part of its strategy to create digital public infrastructure in the country has announced re-engineering of setting up of a new technology platform called the Unified Lending Interface (ULI) which will enable friction-less credit to farmers and MSME

borrowers to begin with. The e-KCC Portal developed by NABARD has already been integrated with the ULI for fetching and validation of land records to facilitate dispensation of crop loans to farmer members of cooperatives.

7.3 NABARD

➤ **Refinance support**

NABARD provides Short Term refinance to Cooperatives RRBs and SFBs for their crop loan lending. 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 Commercial banks, cooperative banks and RRBs.

➤ **Schematic Refinance for Water Sanitation and Hygiene (WASH)**

To provide clean water sanitation and hygienic conditions to rural and semi urban areas and thereby to protect human health during outbreak of infectious disease NABARD introduced a special refinance scheme on Water Sanitation and Hygiene (WASH).

➤ **Special Refinance Scheme (SRS) on PACS as MSCs**

NABARD introduced Special Refinance Scheme to saturate all the potential PACS for conversion as Multi Service Centres over a period of three years commencing from the year 2020-21.

➤ **Credit-linked subsidy schemes of GoI**

- *New Agriculture Marketing Infrastructure sub scheme of Integrated Scheme for Agricultural Marketing (ISAM)*

GoI had approved the continuation of the scheme till 31 March 2026. The scheme lays special focus on developing and upgrading of Gramin Haats as GrAMs through strengthening of infrastructure.

- *Agri Clinics and Agri Business Centres (ACABC)*

The Central Sector Scheme of Agri-Clinics and Agri-Business Centres was launched in April 2002 by Ministry of Agriculture, GoI. Composite subsidy of 44% of the project cost for women SC/ST & all categories of candidates from Northeast and Hill states and 36% of project cost for all other beneficiaries is provided under the scheme.

➤ **Interest Subvention Schemes of GoI**

- NABARD implements crop loan interest subvention scheme of GoI for Cooperative Banks and RRBs under which interest subvention of 1.5% is provided to banks for extending crop loans up to 3.00 lakh at a concessional interest rate of 7% per annum. The scheme also provides an incentive of 3% subvention to the farmers making prompt repayment of loans thereby making credit available at an effective interest of 4% per annum.

- NRLM Interest Subvention: NABARD also implements interest subvention scheme under DAY-NRLM for Cooperative Banks and RRBs. NABARD has developed a web portal for NRLM Interest Subvention claims by RRBs and Cooperative Banks in respect of WSHGs financed by them under DAY-NRLM.

- GoI introduced Sugar Ethanol Interest Subvention scheme in 2018-19 with a view to increase the production of ethanol and its supply under the Ethanol Blended Petrol (EBP). NABARD is the nodal agency responsible for managing the Sugar Ethanol Interest Subvention Scheme of the Department of Food and Public Distribution (DFPD) Government of India. NABARD has launched a sugar ethanol portal to speed up the

claims settlement process.

➤ **Rural Infrastructure Development Fund (RIDF)**

RIDF instituted in NABARD during 1995-96 with the main objective of providing loans to State Governments for completing ongoing rural infrastructure projects at present covers as many as 39 activities classified under three broad sectors viz. (i) Agriculture and Related sector (ii) Social Sector and (iii) Rural Connectivity.

➤ **Micro Credit Intervention**

NABARD has been extending grant support to partner agencies for promotion and nurturing of SHGs training and capacity building of SHG members and other stake holders besides initiating special programmes for backward regions. A few recent initiatives taken under micro credit are as under:

- Scheme for grant support to SHGs/ JLGs/ POs/ Microentrepreneurs for training on onboarding onto E-Commerce platforms/ ONDC/ social media platform.
- Scheme for Grant Support to SHGs/ JLGs/ POs for Physical Marketing of Products.
- NABARD in 2023-24 announced guidelines for a pilot project to be taken up by Regional Offices titled m-Suvidha (Microenterprises through Skill Upgradation for Women) to support need based and location specific developmental projects by strategizing end-to-end interventions.
- Pilot Project: Real-time banking solution for SHGs (Money Purse Application).
- Pilot Project – Graduated Rural Income generation Project (GRIP): A pilot project to build capacities and enable asset generation by ultra-poor rural women and graduating them to access formal financial services through the innovative concept of returnable grant was sanctioned during 2023-24.
- MoU with NRLM MoRD: Marking a strategic alliance to benefit rural women SHGs NABARD and the National Rural Livelihood Mission (DAY-NRLM) under the Ministry of Rural Development GoI inked a landmark MoU on 27 February 2024.

➤ **Financial Inclusion**

Major Policy interventions and launching of new Schemes under the fund during 2023-24 includes:

- Support for the Deployment of micro-ATMs to two District Central Co-Operative Banks in Gujarat with a grant support of ₹3.67 crore for deploying 1631 micro-ATM devices at PACS (440) and cooperative milk societies (1191).
- Financial Inclusion under Special Campaign 3.0: RRBs under guidance of NABARD conducted Special Financial Literacy Camps during October 2023.
- Support under Financial Inclusion Fund (FIF) for Rural Connectivity-HTS-VSAT Dual LTE and SD WAN technologies.
- Incentive Scheme for BCs operating in NE States and hilly states.

➤ **Farm Sector Development**

• **Participatory Sustainable Groundwater Management in Overexploited Blocks/Watersheds**

A pilot project titled "Participatory Sustainable Groundwater Management in Overexploited Blocks/Watersheds" has been launched in five states: Punjab Haryana Rajasthan Uttar Pradesh and Tamil Nadu. This innovative pilot initiative by NABARD is the first of its kind aimed at demand side management of water at the micro-watershed/village level.

- **Expansion of JIVA**

Based on the success of the pilot phase JIVA is being expanded to 25 new projects in central eastern and north-eastern states to further widen and deepen the programme focusing on completed or near-completion watershed/spring shed and tribal development projects with thrust on districts identified under aspirational / low priority sector lending districts.

- **Accelerator approach for growth of FPOs**

NABARD has come up with FPO accelerator programme which is a structured framework to empower FPOs by providing access to specialized training mentorship and resources envisaging the enhancement in FPO's operational efficiency adopt modern agricultural techniques and navigate market complexities.

- **Saturation Drive campaign**

Government has launched the saturation drive to provide FPOs benefits of schemes of Agriculture department in the form of licenses of inputs, seeds, fertilizer etc. FPOs will also be linked to mandis facilitated with registrations under GST FSSAI and onboarding on platforms like ONDC and other E-retailing platforms for sale of their produce.

- **National FPO Policy**

MoA&FW, GoI is working on finalization of a National Policy on FPOs to create a supportive environment for the FPOs after ongoing deliberations and consultative meetings on the draft policy.

- **Climate Action and Sustainability**

NABARD is a Direct Access Entity (DAE) to the Green Climate Fund (GCF) and the National Implementing Entity (NIE) to Adaptation Fund (AF) and National Adaptation Fund for Climate Change (NAFCC).

- **Off Farm Sector Development**

- Capacity Building Fund Social Stock Exchange (CBF-SSE): The Capacity Building Fund of Social Stock Exchange (CBF-SSE) was set up in NABARD with funding to be contributed by NABARD, SIDBI, BSE, NSE and Other CBF is being used to improve the ability of all stakeholders to navigate through the operational dynamics of SSE understand the nuances processes instruments etc.

- “Gram Vihar”, New Scheme for promotion of Rural Tourism: A new scheme in the name of "Gram Vihar" has been introduced to give a fillip to the rural tourism sector in the country by promoting "homestay" wherein tourists stay with the local families and experience rural lifestyle as well as "away-day" i.e. one day trip without night stay.

- **Agriculture Credit during 2023-24**

Disbursement of agriculture credit during 2023-24 was ₹25.10 lakh crore as against target of ₹20.00 lakh crore indicating achievement of 125%. Commercial Banks, RRBs and Co-operatives accounted for 75%, 13% and 12% of the total disbursement respectively.

➤ **Technology Facilitation Fund (TFF)**

NABARD has set up a Technology Facilitation Fund (TFF) with a corpus of 50 crore. The fund is focused on providing support to tech start-ups working in agriculture and rural development sector. The fund provides a range of flexible support mechanisms including grants loans equity and convertible grants designed around the needs of each start-up.

7.4 UT Government

Special Development Package (SDP)

The Special Development Package (SDP) is a major program in the Union Territory of Ladakh that includes a variety of initiatives to improve the lives of the people. This package focuses on addressing the region's unique challenges, including its harsh climatic conditions, sparse population, and geographical remoteness, while leveraging its tourism, cultural, and ecological potential. Some of the key areas of focus are:

- Infrastructure: Construction of office buildings, community halls, marriage halls, ice hockey rinks, playfields, and more
- Water: Installation of winter-friendly water ATMs in Leh and Kargil
- Solid waste management: Construction of Solid Waste Management Units
- Irrigation: Construction of irrigation khuls and tanks

The Planning Development & Monitoring Department (PD&MD) is responsible for monitoring the implementation of the SDP. The PD&MD also monitors other programs, including the Prime Minister's Development Package (PMDP), Flagship/CSS schemes, and the Border Area Development Programme (BADP).

Status of Co-operatives in Ladakh

The Cooperative movement in Ladakh has played an important role in providing various services to its members as well as the residents of the district in the form of providing consumer items of daily use on fair prices, marketing of local agri-horticultural (vegetables, fruits, sea-buckthorns, apricots etc) and livestock produce (milk, pashmina, wool etc). The UT has short Term Co-operative Credit Structure comprising of one State Co-operative 159 PACS with two tier co-operative structures. The JKStCB is unscheduled. As per NCD portal, there are 193 Panchayats in the UT, out of which 132 panchayats (68%) are covered by PACS and 61 (32%) are not covered.

- The UT administration has ensured the adoption of model bye-laws in almost all the PACS of the UT.
- The UT administration is implementing the PACS computerization project across the UT for 10 PACS. Apart from this, other schemes/projects of the Ministry of Cooperation like the Jan Aushadi Kendra, PACS as CSC etc. are also being actively implemented by the UT administration.
- The UT administration is also engaged in the upgradation of assets of Co-operative institutions and Departmental offices on a regular basis.

Initiatives for Development of Agriculture

Subsidies by Agriculture and Horticulture departments:

Under the Special Development Package, the UT administration provides various incentives for promotion of agriculture in the district such as subsidized distribution of cereal/ pulses/ fodder seeds, equipment like power tillers, weeders, brush cutters,

reapers etc. Subsidies are also provided for construction of vermicomposting units, greenhouses etc.

Processing centres for Seabuckthorn and other temperate fruits at Nimoo:

A center for processing for Seabuckthorn and other temperate fruits was approved by the Empowered Monitoring Committee in January 2019 with financial assistance of Rs.789.33 lakh and technical support from Defence Institute of High Altitude Research.

Promotion of protected cultivation:

As Ladakh remains cut off from the rest of the country for almost 6 months due to heavy snowfall, non-availability of fresh fruits and vegetables in Ladakh during the winter months is an issue of great concern for the people of Ladakh. The UT administration is emphasizing on promotion of protected cultivation at a massive scale to intensify the production of high value crops and increase water use and production efficiencies per unit area. Under different schemes, Greenhouses are being established in the UT of Ladakh with up to 75% subsidy provided to the beneficiaries.

Organic Framing:

Organic farming is being promoted in the UT to harness environmental and economic benefits. Under schemes related to organic farming, vermicomposting units and organic input production units are being supported through 50% subsidy by the UT administration

Initiatives for Development of off –farm sector

The policy New Industrial policy for UT of Ladakh:

The UT administration, vide Notification dated 17 January 2023, notified the Ladakh Sustainable Industrial Policy 2022-27 for the UT of Ladakh. The policy aims at harnessing its unique strengths such as its local resources, traditional skill sets by employing modern technology and exploring economic opportunities where the region has an advantage. This would be done in line with its goal of achieving Carbon Neutrality

Homestay Policy 2023:

The Homestay Policy 2023 of UT Ladakh was introduced to promote sustainable tourism while empowering local communities. It encourages residents to offer affordable, eco-friendly accommodations to visitors, showcasing Ladakh's rich cultural heritage and traditional lifestyle. The policy emphasizes training locals in hospitality, providing financial assistance for upgrading facilities, and ensuring adherence to eco-friendly practices. By integrating tourism with local livelihoods, the policy aims to create employment opportunities, reduce the carbon footprint, and preserve the region's fragile ecosystem, fostering a sustainable tourism model.

Success Stories

Success Story 1: Sham Valley Apricot Producers Cooperative Limited (FPO)



Scheme: PODF (ID)

Project Implementing Agency: Himmotthan Society

Duration of the project: 3 Years

Beneficiary:

No. of beneficiaries: 376

Community: Apricot Producers of Lower Sham Valley

UT: Ladakh

District: Leh Ladakh

Block: Khaltsi

Village: Achinathang, Dha- Bema, Domkhar, Hanuthang, Lehdo,
Skyurbuchan and Takmachik

1.1 Support provided

- Financial support was provided to Himmotthan Society for formation and promotion of an FPO in lower sham valley of Leh district of UT Ladakh.
- FPO was formed in the year 2020. The FPO comprises of more than 370 members. A Board of Directors was also formed for the FPO.
- The FPO was registered under the JK Self Reliant Cooperative Societies Act of 1999.
- A Business plan was also prepared for the FPO.
- Trainings were provided to directors, CEO and the members.

1.2 Pre-implementation status

- Apricot is the most important horticulture crops of Ladakh region. The UT is the biggest producer of apricots in India, accounting for nearly 62 percent of the national level production. Absence of proper apricot harvesting and drying methods and lack of proper marketing avenues led to rampant wastage of apricot in Ladakh.
- The fruit, being a perishable produce, it is estimated that nearly 50 percent of the crop was wasted.
- Due to the limited local market the fruit could not fetch satisfactory prices.

1.3 Challenges faced

- The value chain development of the fruit crop was the biggest challenge for the farmers and other stakeholders.

- Absence of proper apricot harvesting and drying methods and lack of proper marketing avenues led to rampant wastage of apricot in Ladakh.
- Mobilization of farmers into an organized cooperative was also a major challenge.
- Poor quality of dried apricots due to traditional sun drying affected the market acceptability of the produce.
- In the absence of proper logistics, supply of apricots outside Ladakh was a big challenge.

1.4 Impact

- 21 MT of fresh apricots were sold by the FPO during FY 2022-23 through DJ Exports, a corporate partner for marketing.
- FPO has also supplied corporate gifts consisting of dried apricot and other products worth Rs.13.50 lakh.
- 31 MT of fresh apricots were sold during 2023-24 through DJ Export Pvt Ltd.
- The FPO has crossed the total business of Rs.1.00 crore.
- The FPO was awarded CII FPO EXCELLENCE AWARD 2023 by Confederation of Indian Industry.
- Apricot farmers of Sham valley are getting Rs.115/kg for fresh apricots on the farm gate.
- The project has made a huge impact not only on the lives of the apricot farmers of Ladakh, but also opened the gates for a flourishing apricot economy in Ladakh region.

Success Story 2: Project on the introduction of Oyster Mushroom as an important commercial crop in tribal areas of Kargil.



Scheme: Farm Sector Promotion Fund - DPR based project

Project Implementing Agency: KVK -1 Kargil

Duration of the project: 3 Years

Beneficiary:

No. of beneficiaries: 200

Community: Farmers from different blocks of Kargil district.

UT: Ladakh

District: Kargil

Block: Kargil

Village: Multiple villages in different blocks

2.1 Support provided

- Training and capacity building of farmers.
- Mushroom spawn production unit at KVK Kargil -1.
- Establishment of 10 demo mushroom units

2.2 Pre-implementation status

- Rural women in villages of Kargil usually do not have their own source of income.
- Farmers needed enhancement in income but tradition agriculture alone was not enough.
- Many farmers wanted to try mushroom cultivation but non-availability of spawn, lack of technical know-how were the challenges.
- Mushroom is in great demand in Kargil and availability is limited

2.3 Challenges faced

- Many farmers wanted to try mushroom cultivation but non-availability of spawn was the biggest challenge.
- The lack of technical know-how also leading to poor harvest was a discouraging factor.

2.4 Impact

- Within a year of commencement, the project has started showing results.
- Mushroom unit set up at Wakha has earned a net profit of Rs.34200/- from the first harvest.
- The unit at Shargiole has earned net profit of Rs.51620/- from the first harvest.
- Unit set up Minjee has earned net profit of Rs.31950/-.
- The spawn production unit at KVK Kargil has been addressing the challenge of non-availability of quality spawn in the district.
- The project has provided a new opportunity for women farmers in Kargil to generate additional income through cultivation and sale of mushrooms.
- The low-capital, low-labor-intensive activity is proving to be a widely favored way for women farmers in Kargil to generate income.

Appendix I

Climate Action and Sustainability

1. Climate Change Scenario and its Impact

India with diverse geographical regions, long coastline, biodiversity, and high dependence on natural resources is one of the most vulnerable countries to climate change risks worldwide. Further, more than half of India's population lives in rural areas and depends on agriculture & allied activities, which are highly sensitive to climate change. There is emerging evidence that the productivity of crops, livestock and fish is likely to be affected with implications to food security, livelihoods, and sustainability in agriculture. In India, several studies have projected declining crop yields in the absence of adaptation to climate change. As per the district level risk and vulnerability assessment of Indian agriculture to climate change undertaken by ICAR-CRIDA2, 109 districts out of 573 rural districts (19% of total districts) are 'very high-risk' districts, while 201 districts are high-risk districts.

1.1 Climate Finance and Challenges

Climate finance requirement of India is enormous. While the preliminary financial estimates for meeting India's climate change actions as per NDC was USD 2.5 trillion between 2015 and 2030, estimated financial requirement of India to become net-zero by 2070 as per IFC is USD 10.1 trillion. To fully meet our NDCs in a timely manner, India requires enhanced new and additional financial, technological and capacity building support. However, financial, and technological commitments by developed countries under the Paris Agreement are yet to be fully transpired.

1.2 Initiatives of Govt. of India

India initiated the National Action Plan on Climate Change (NAPCC) in 2008, which introduced eight National Missions encompassing various efforts. In August 2022, the Government of India submitted its revised Nationally Determined Contribution (NDC) to the UNFCCC. Through Mission LiFE (Lifestyle for the Environment), India advocated for a global shift in mindset and behaviour, moving away from thoughtless and harmful consumption towards purposeful and conscious utilisation.

Ambitious renewable energy targets, promotion of sustainable energy sources and clean cooking fuels, afforestation efforts, climate-resilient agriculture practices etc. are a few among the initiatives of GoI to combat climate change.

1.3 Initiatives of RBI

Climate change is a rapidly emerging area of policy interest in the RBI. RBI has laid out guidance for voluntary initiatives by regulated entities (REs) on green finance, setting up of green branches and green data centres, encouraging greater use of electronic means of communication instead of paper, and renewable energy sources. In early 2023, the RBI issued sovereign green bonds to mobilise resources for the Government for green infrastructural investments. RBI has also released the framework for mobilising green deposits by REs. In February 2024, the RBI has issued draft guidelines on 'Disclosure framework on climate-related financial risks, 2024'. The framework mandates disclosure by REs on four key areas of governance, strategy, risk management, and metric and targets, which is a

step towards bringing the climate risk assessment, measurement and reporting requirements under mainstream compliance framework for financial sector entities in India.

1.4 Initiatives of NABARD

- The whole fulcrum of NABARD's functions and initiatives focus on the attainment of sustainable development. NABARD's initiatives in the Agriculture, Natural Resources, and Rural Development (ANR) sector have integral components of climate action - both mitigation and adaptation, for vulnerable sectors and communities.
- NABARD has been playing a key role in channelising climate finance to the nation as the Direct Access Entity (DAE) and the National Implementing Entity (NIE) for major climate funds such as the Green Climate Fund (GCF), Adaptation Fund (AF), and National Adaptation Fund for Climate Change (NAFCC). This role enables NABARD to access and deploy climate finance effectively, driving impactful initiatives that address the pressing challenges of climate change in the agricultural sector.
- In a significant stride towards sustainable development, NABARD recently unveiled its Climate Strategy 2030. The strategy is structured around four key pillars: (i) Accelerating Green Lending Across Sectors, (ii) Playing a Broader Market Making Role, (iii) Internal Green Transformation of NABARD, and (iv) Strategic Resource Mobilization. This strategic initiative not only reinforces NABARD's commitment to environmental stewardship but also positions it as a pivotal player in India's transition towards a resilient and sustainable economy.

2. Climate Change Scenario - At the UT Level

The opportunities and challenges in tackling climate change in the Union Territory of Ladakh are both encouraging and intricate, primarily due to the region's distinctive environmental characteristics and socio-economic landscape. Ladakh, renowned for its breathtaking landscapes and rich natural resources, is strategically situated at a high altitude, making it a vital area for innovative climate solutions.

One of Ladakh's standout features is its abundant solar energy potential. With over 300 days of sunshine annually, the region is ideally positioned to harness solar power for sustainable energy production. This renewable energy source could play a pivotal role in reducing the local economy's reliance on fossil fuels, which currently contributes to environmental degradation and air pollution. Moreover, leveraging solar energy not only supports climate mitigation efforts but also aligns with Ladakh's development goals, promoting energy independence and enhancing the quality of life for its residents.

Additionally, the region's unique climate and geography pose certain challenges, such as water scarcity due to glacial melt and shifting precipitation patterns. Addressing these issues requires innovative water management strategies and the implementation of adaptive agricultural practices that can withstand changing climatic conditions. By focusing on these areas, Ladakh can pave the way for a resilient future while preserving its natural heritage.

2.1 UT Action Plan for Climate Change, Climate Strategy, UT Green Budget (as applicable)

In February 2024, the Union Territory of Ladakh launched a State Action Plan for Climate Change and Human Health. This plan aims to address the various impacts of climate change on public health within the region. Climate change poses significant threats to human health, including an increased frequency and intensity of extreme weather events, air and water pollution, changes in the patterns of vector-borne diseases, and effects on mental health.

Key Objectives:

1. Risk Assessment and Surveillance:

- Perform thorough risk assessments to identify at-risk populations and prioritize health threats.
- Improve surveillance systems to monitor health impacts related to climate change and enable prompt responses.

2. Health Adaptation and Resilience:

- Develop and implement adaptation strategies to strengthen healthcare infrastructure and enhance resilience to climate-related challenges.
- Promote community-based interventions to address climate-related health risks and build adaptive capacity.

3. Mitigation of Climate-Related Health Impacts:

- Implement policies and regulations to reduce greenhouse gas emissions and mitigate climate change impacts on public health.
- Promote sustainable practices and renewable energy initiatives to improve air quality and reduce environmental health risks.

2.2 Any specific Climate Change initiative in the UT by Govt. of India

The Government of India has announced plans to establish an inter-state transmission system to facilitate the evacuation and grid integration of 13 GW of renewable energy in Ladakh. The project will require an investment of ₹20,700 crore, with a central support of ₹8,300 crore. The progress of the ultra-mega solar project in Ladakh, which aims to not only boost the region's economy but also contribute to India's goal of carbon neutrality by achieving 500 gigawatts (GW) of renewable energy by 2030.

The PM Surya Ghar Muft Bijli Yojana, launched by the Government of India, aims to provide free electricity to households by promoting rooftop solar panel installations. Under this scheme, households can receive subsidies to install solar panels, allowing them to generate their own electricity and reduce dependence on the grid. The initiative targets reducing electricity bills, promoting renewable energy, and making India self-reliant in power generation. This scheme is a significant step toward sustainable development and reducing carbon emissions in India. Ladakh with its enormous solar energy potential can take benefit of the scheme is especially important from Ladakh's perspective as Ladakh receives abundant solar radiation throughout the year, making it an ideal region for harnessing solar energy. With remote villages and difficult terrain, providing conventional electricity is challenging, and solar power offers a sustainable and cost-effective alternative. The scheme can help Ladakhi households achieve energy self-sufficiency, reduce reliance on expensive diesel generators, and promote eco-friendly solutions in the

fragile Himalayan ecosystem.

2.3 Any specific Climate Change Initiative in the UT by UT Government

- The administration is providing subsidies on Solar Water Heaters which play a crucial role in addressing the region's heating needs, given its extreme cold climate and limited access to conventional energy sources.
- The administration at UT is actively championing the adoption of Electric Vehicles (EVs) and promoting sustainable transportation solutions. This initiative is showcased through the introduction of a fleet of state-of-the-art electric buses and cars, which are designed to reduce carbon emissions and enhance environmental sustainability. By integrating these eco-friendly vehicles into their transportation network, UT aims to set a progressive example in green mobility, encouraging the community to embrace cleaner transportation alternatives for a healthier planet.
- The administration is prioritizing several critical initiatives to safeguard Ladakh's delicate ecosystem from the adverse effects of climate change. Key among these efforts is reforestation, which aims to restore native flora and enhance biodiversity, thereby providing essential habitats for local wildlife. In addition to tree planting, the region is focusing on water conservation strategies, such as artificial glaciers to ensure sustainable water resources for the community and agriculture. Furthermore, the promotion of sustainable tourism is essential; this involves educating visitors on eco-friendly practices and encouraging them to engage in activities that benefit the local environment and economy while minimizing their carbon footprint. These concerted efforts are vital to preserving the unique natural beauty and ecological balance of Ladakh for future generations.

2.4 Any specific Climate Change Initiative in the UT by NABARD

- Global climate change is causing natural glaciers to melt much faster than before, which has resulted in depletion of water resources and the situation in Ladakh is no different. More than 35 villages/hamlets are already facing severe shortage of irrigation water, particularly in the sowing season. Water is a particular issue, with reliance on either melt-water or springs for drinking and irrigation purposes. To tackle this shortage and conserve water, NABARD has sanctioned one Springshed based Watershed Development project in Sakti Village of Leh district. Under this project, artificial glaciers are being constructed by building a series of bunds using stone embankments to tap the unused free flowing winter stream water in the form of ice and later to use it for irrigation purpose when it begins to melt in spring season.
- A DPR based project on artificial glaciers is being implemented in the Changthang Region of Ladakh.
- Under Climate Change Fund (ID) NABARD has sanctioned the project for development of Automated Ice Reserviors in Igoo and Ayee villages of Ladakh.

2.5 Any specific Climate Change initiative in the UT by Any Other Agency

Numerous organizations in Ladakh are actively developing artificial glaciers as an innovative solution to bolster the resilience of local communities facing water scarcity caused by the rapid melting of natural glaciers. These artificial glaciers aim to replicate the natural processes of glacier formation, capturing and storing water

during the colder months. As the temperatures rise, the stored water is gradually released, ensuring a more reliable and sustainable water supply for agricultural needs and daily use. By enhancing the adaptive capacity of these communities, artificial glaciers can play a crucial role in mitigating the impacts of climate change and supporting local livelihoods in areas where water resources are increasingly under threat.

Appendix II

Potential of Geographical Indications in the UT

1. GI scenario at national level and benefits of GI

- Geographical Indications (GI) are products, which are linked to a place of origin and possess certain qualities, characteristics or reputation that are due to that place. GI are governed globally under the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) of the World Trade Organization (WTO). In India the GI framework is established through the enactment of the Geographical Indications of Goods (Registration and Protection) Act, 1999.
- GI is a form of Intellectual Property Right that identifies goods originating from a specific geographical location and having distinct nature, quality and characteristics linked to that location. GI provides legal rights to its Authorised Users to prevent its use by a third party whose product does not conform to the applicable standards. GI products can be broadly categorized as (i) Handicrafts, including handloom textiles; (ii) Food items, including sweets and ethnic cuisines; (iii) Wine and Drinks; (iv) Manufactured Products and (v) Agricultural Products.

1.1 Broad Framework to identify Potential GI products:

- The product should have emanated from a particular geographical area;
- The products should possess certain features, characteristics that link it with the particular geographical area. In case of agricultural products, the linkage should be direct i.e. in terms of climate, topography, soil condition etc., whereas in case of non-agricultural products, the linkage can be direct or indirect;
- The product should have a history of production in that area;
- The product should have reputation in that area;
- The product should possess special quality or uniqueness and
- The product/ manufacturers of that product belong to a particular community or are concentrated in that geographical region.

India is bestowed with rich heritage of culture and traditions that are flourishing here for past several centuries. In addition to this it has enormous biodiversity and has diverse agro climatic conditions, which lead to many geographic specific IPR products in agriculture and other sectors. The GI registration has high significance in the country like India as it has been proven in the case of Basmati rice, where foreign exports earning is about ₹38,443 crore. As on 31.10.2024, there were 651 registered GI products in India, highlighting the rich culture and heritage of the country.

Benefits of GI registration are narrated as under:

- a. **Economic Benefits:** A GI tag can help in improving the marketability of products and opens opportunities for international trade. They can boost local economies by adding value to traditional products and attracting premium prices in both domestic and global markets.
- b. **Cultural Preservation:** By protecting traditional products, India can ensure the survival of its unique skills and knowledge.

- c. **Preventing Misuse and Counterfeiting:** GI registration helps prevent unauthorized producers from exploiting the reputation and goodwill associated with a particular region or product.
- d. **Rural Development:** The increased demand for GI registered products can create new employment and/ or enhanced livelihood opportunities, leading to rural development and poverty alleviation in the region.
- e. **Assured Quality:** GI registration guarantees that the product is of a certain standard, quality and is authentic.

1.2 Initiatives of GoI, NABARD and any other agency in promoting GI

1.2.1 Initiatives of Government of India to promote GI:

- Geographical Indications of Goods (Registration and Protection) Act, 1999: The Act provides a legal framework for the registration, protection, and enforcement of GIs in India. It prevents the use of GI tags by non-Authorized users and ensures that the benefits are shared by the actual producers by preventing infringement.
- Establishment of Geographical Indications Registry: The GI Registry has been set up under DPIIT, Ministry of Commerce & Industry for ensuring adherence to quality standards and regulations for GI products.
- One District One Product Initiative: This scheme was introduced by the Government of India to foster balanced regional development across all districts of the country by selecting, branding, and promoting at least One Product from each District of the country. 1102 products from 761 districts across India have been identified, many (around 400+) of them being GI products (Source: KPMG & IBEF).
- National IPR policy, 2016 provides strong emphasis on promotion of GIs across the country.
- Creating awareness about significance of GIs, promoting registered Indian GIs, identify potential GIs and encourage stakeholders towards registration.
- Buyer-Seller Meets (BSMs) and Creating Market Linkages.

1.2.2 Initiatives of NABARD in promotion of GI:

- NABARD introduced a comprehensive scheme in 2019 to provide end-to-end support to facilitate registration of GI for Agri as well as non-Agri products along with pre- registration and post registration activities to enhance quality, improve market access, create awareness and strengthen producers' capacity. NABARD's interventions in the GI domain are as under:
- Mobilization of artisans/ producers & awareness creation
- Support for registration of products as GI and renewal of existing GI products.
- Registration of producers/ manufacturers as Authorised Users
- Marketing Initiatives for GI Products such as Buyer-Seller Meets, Sponsoring stalls, GI exhibitions/ Melas.
- Awareness creation through social media campaigns, e-portals, websites, documentation through brochures and catalogues.

- Capacity building of artisans through workshops, conferences, seminars, training programmes etc. and reviving/ keeping alive 'dying arts'. As on date, NABARD has supported 283 products for GI registration of which 130 products have already been granted GI certification. Further, various exhibitions/ melas and dedicated outlets for marketing of GI products are also being supported.

2. GI scenario at UT level

The Union Territory of Ladakh, known for its unique geographical and cultural heritage, has immense potential for Geographical Indication (GI) tagging to protect and promote its indigenous products. Ladakh's apricots, particularly from Kargil, have already received a GI tag, highlighting their distinct taste and high nutritional value. Other potential GI products include Pashmina wool from Changthang, seabuckthorn-based products, and traditional handicrafts like wood carvings and Thangka paintings. The GI recognition helps in branding, ensures authenticity, and boosts the local economy by providing legal protection to these products, preventing imitation and ensuring benefits reach local producers. However, challenges such as harsh climatic conditions, logistical issues, and awareness about GI benefits need to be addressed for broader implementation.

2.1 Initiatives of UT Government, NABARD and any other agency in promoting GI in the UT

NABARD has been providing end-to-end support in facilitating pre-registration as well as post-registration activities for GI Registration. The activities include, but not limited to skill and enterprise development, promotion/ development of clusters and producer organizations, entrepreneurship development and other spin-off activities (Rural Tourism, Hospitality, Value Addition, etc). After successfully facilitating GI registration of Ladakh Wood Carving, NABARD has sanctioned projects for GI tagging of following Ladakhi products:

- i) Likir Pottery, Ladakh
- ii) Chilling Metal Work, Ladakh
- iii) Thangka Painting, Ladakh
- iv) Thikma, Ladakh
- v) Pabu, Ladakh
- vi) Loom Weaving Woolen products, Ladakh

Currently, applications for the GI tags for these products are pending with the GI Registry at Chennai.

2.2 Successful NABARD's intervention in Geographical Indications in the UT.

With the initiative of NABARD Jammu & Kashmir Regional Office, Ladakh Wood Carving has become the first handicraft product from the Union Territory of Ladakh to be granted a Geographical Indication (GI) tag by the Department for Promotion of Industry and Internal Trade (DPIIT) under the Ministry of Commerce and Industry. Besides, Ladakh Wood Carving, Ladakhi Pashmina, Ladakh Seabuckthorn and Raktsey Karpo (an apricot variety) of the district also have got GI. A project for development of a vibrant local wood carving industry is also under implementation in Kargil district of UT Ladakh.

Annexure I

Credit Potential for Agriculture

A. Farm Credit

(₹ lakh)

Sr. No.	District	Crop Production, Maintenance and Marketing	Water Resources	Farm Mechanization	Plantation & Horticulture		Forestry & Wasteland Development	Farm Credit- Others
					Term Loan	Working Capital		
1	Kargil	13887.82	140.40	389.43	342.72		71.60	22.50
2	Leh Ladakh	13831.68	97.20	450.29	422.35	0.00	21.20	117.00
	Total	27719.50	237.60	839.72	765.07	0.00	92.80	139.50

Sr. No.	District	AH - Dairy		AH - Poultry		AH - Sheep, Goat, Piggery		Fisheries		Subtotal (A)
		Term Loan	Working Capital	Term Loan	Working Capital	Term Loan	Working Capital	Term Loan	Working Capital	
1	Kargil	486.32	3007.00	183.54	99.90	296.58	365.00	135.00	72.50	19500.31
2	Leh Ladakh	495.22	3207.28	87.54	67.88	350.55	406.08	67.50	21.00	19642.77
	Total	981.54	6214.28	271.08	167.78	647.13	771.08	202.50	93.50	39143.08

B. Agriculture Infrastructure

Sr. No.	District	Construction of storage facilities	Land development, Soil conservation, Wasteland development	Agriculture Infrastructure - Others	Subtotal (B)
1	Kargil	150.40	8.64	28.80	187.84
2	Leh Ladakh	130.40	2.16	28.80	161.36
	Total	280.80	10.80	57.60	349.20

C. Ancillary activities

Sr. No.	District	Food & Agro. Processing	Ancillary activities - Others	Subtotal (C)	Total Agriculture I = (A + B + C)
1	Kargil	416.97	40.50	457.47	20145.62
2	Leh Ladakh	247.50	36.00	283.50	20087.63
	Total	664.47	76.50	740.97	40233.25

Other Sector (II to V)

Sr. No.	District	Micro, Small and Medium Enterprises	Export Credit	Education	Housing
		II	III	IV	V
1	Kargil	20654.00	22.50	92.00	2210.40

2	Leh Ladakh	54429.20	22.50	123.60	2092.80
	Total	75083.20	45.00	215.60	4303.20

Other Sector (VI to VIII)

Sr. No.	District	Social Infrastructure	Renewable energy	Others	Total Priority Sector
		VI	VII	VIII	
1	Kargil	187.50	397.44	94.50	43803.96
2	Leh Ladakh	112.50	414.72	100.80	77383.75
	Total	300.00	812.16	195.30	121187.71

Annexure II

**Overview of Ground Level Credit Flow - Agency-wise and Sector-wise - for years 2021-22, 2022-23,
2023-24 and Target for current 2024-25**

Table 1: Crop Loan								(₹ lakh)
Particulars	2021-2022		2022-2023		2023-2024		2024-2025	
	Target	Ach.	Target	Ach.	Target	Ach.	Target	
CBs	15946.64	30822.90	16711.53	34155.51	17298.09	19168.07	19824.22	
RCBs	1676.48	106.20	1710.23	110.20	1710.23	149.00	1710.23	
SCARDBs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
RRBs	489.00	398.09	427.40	504.86	444.40	527.14	554.84	
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sub total (A)	18112.12	31327.19	18849.16	34770.57	19452.72	19844.21	22089.29	
Table 2: Term Loan (MT+LT)								
Particulars	2021-2022		2022-2023		2023-2024		2024-2025	
	Target	Ach.	Target	Ach.	Target	Ach.	Target	
CBs	12213.18	315.37	5381.24	594.49	10558.97	928.02	10778.53	
RCBs	1135.96	91.40	606.41	180.10	831.74	185.44	1135.93	
SCARDBs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
RRBs	397.38	123.66	171.31	154.70	203.17	214.36	172.74	
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sub total (B)	13746.52	530.43	6158.96	929.29	11593.88	1327.82	12087.20	

Table 3: Total Agri. Credit							
Particulars	2021-2022		2022-2023		2023-2024		2024-2025
	Target	Ach.	Target	Ach.	Target	Ach.	Target
CBs	28159.82	31138.27	22092.77	34750.00	27857.06	20096.09	30602.75
RCBs	2812.44	197.60	2316.64	290.30	2541.97	334.44	2846.16
SCARDBs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RRBs	886.38	521.75	598.71	659.56	647.57	741.50	727.58
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub total (C)	31858.64	31857.62	25008.12	35699.86	31046.60	21172.03	34176.49
Table 4: MSME							
Particulars	2021-2022		2022-2023		2023-2024		2024-2025
	Target	Ach.	Target	Ach.	Target	Ach.	Target
CBs	24825.41	24129.10	33382.58	28717.39	39606.23	67937.89	45777.26
RCBs	2450.27	2468.12	2520.07	3917.68	3948.33	2633.50	4206.87
SCARDBs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RRBs	937.62	592.39	817.02	692.70	1175.75	1569.51	1276.06
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub total (D)	28213.30	27189.61	36719.67	33327.77	44730.31	72140.90	51260.19

Table 5: Other Priority Sector							
Particulars	2021-2022		2022-2023		2023-2024		2024-2025
	Target	Ach.	Target	Ach.	Target	Ach.	Target
CBs	7101.91	3364.97	5116.45	3543.13	5784.31	3447.35	6499.05
RCBs	703.84	349.69	375.79	263.58	401.19	256.00	421.69
SCARDBs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RRBs	280.27	52.00	131.32	59.00	140.22	79.09	148.22
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sub total (E)	8086.02	3766.66	5623.56	3865.71	6325.72	3782.44	7068.96
Table 6: Grand Total (C+D+E)							
Particulars	2021-2022		2022-2023		2023-2024		2024-2025
	Target	Ach.	Target	Ach.	Target	Ach.	Target
CBs	60087.14	58632.34	60591.80	67010.52	73247.60	91481.33	82879.06
RCBs	5966.55	3015.41	5212.50	4471.56	6891.49	3223.94	7474.72
SCARDBs	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RRBs	2104.27	1166.14	1547.05	1411.26	1963.54	2390.10	2151.86
Others	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grand Total	68157.96	62813.89	67351.35	72893.34	82102.63	97095.37	92505.64
Note : *OPS includes Export Credit, Education, Housing, Social Infrastructure, Renewable Energy							
Note : # RCBs include StCBs, DCCBs and PACS (if any)							

Annexure III

Critical Infrastructure Support to be provided

Sr. No.	District	Sector	Activity/ Description
1	Leh & Kargil	Transport & Connectivity	<ul style="list-style-type: none"> ➤ All-weather roads: Upgrading NH-1, NH-3 (Leh-Manali), and internal road networks to ensure year-round connectivity. ➤ Tunnels: More tunnels like Zojila Tunnel, Shinkun La Tunnel to reduce dependency on weather conditions. ➤ Railway Network: The proposed Bilaspur–Leh railway line for better connectivity.
2	Leh & Kargil	Power & Energy	<ul style="list-style-type: none"> ➤ Renewable Energy: Large-scale solar & wind farms due to Ladakh's high potential. ➤ Hydropower Projects: Development of micro-hydro plants to meet energy demands in remote villages. ➤ Grid Connectivity: Strengthening Power Grid links with the rest of India.
3	Leh & Kargil	Water & Irrigation	<ul style="list-style-type: none"> ➤ Glacial Water Harvesting: Artificial glacier reservoirs for water conservation.

			<ul style="list-style-type: none"> ➤ Irrigation Networks: Small-scale canals and drip irrigation systems for agriculture.
4	Leh & Kargil	Tourism Sustainable Development &	<ul style="list-style-type: none"> ➤ Eco-Friendly Tourist Facilities: Sustainable hotels, campsites, and waste management. ➤ Cultural Heritage Conservation: Preserving monasteries, traditional houses, and artifacts. ➤ Adventure Tourism Infrastructure: Safe trekking routes, mountaineering facilities, and rescue teams.
5	Leh & Kargil	Industrial & Economic Infrastructure	<ul style="list-style-type: none"> ➤ Cold Storage & Food Processing Units: To support agriculture and horticulture. ➤ Handicraft & Wool Industry Support: Infrastructure for Pashmina wool, apricots, and handicrafts. ➤ Special Economic Zones (SEZs): To promote trade and local employment.

Annexure IV

Critical Interventions Required for Creating a Definitive Impact

1. Farm Credit

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. To promote a self-sustaining system, its important to implement suitable strategies for crop diversification and agricultural intensification, which will in turn rejuvenate the land-based economy.</p> <p>2. The Allied sector has the potential to support farmers in boosting their earnings by revitalizing livestock-based integrated farming systems.</p> <p>3. The implementation of technical strategies such as using high-yielding varieties, quality seeds, appropriate agricultural techniques, integrating traditional crops with newer ones, and adopting moderate farm mechanization to address labor shortages in farming can help reduce Lehs reliance on imported food grains for consumption.</p> <p>4. Collectivization of farmers in the form of FPOs and ensuring more active involvement of existing cooperatives like PACS in agriculture- related activities right from the purchase of inputs to marketing of produce will provide economies of scale to the farmers.</p> <p>5. Traditional crops like buckwheat have very high nutritional value. Cultivation of such crops need to be promoted through incentives.</p>

2. Water Resources

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. In the backdrop of limited water availability, more focus may be laid on promotion of micro irrigation techniques.</p> <p>2. Harnessing of groundwater for irrigation purposes through drip and sprinkler systems would improve the production and productivity under horticulture and plantation crops.</p> <p>3. Traditional water management techniques like construction of artificial glaciers may be promoted and utilized as per suitability.</p> <p>4. Improvement in traditional water conservation methods through innovations may be promoted.</p>

3. Farm Mechanisation

Sr. No.	District	Critical Interventions Required
1	All Districts	<ol style="list-style-type: none"> 1. There is a need to promote the use of small farm implements among farmers, particularly, small and marginal farmers, by highlighting their benefits on a cluster basis. 2. It is important to increase awareness about the available farm mechanization schemes among farmers. 3. Small farm equipment, suitable to the local conditions can be introduced. 4. Primary Agricultural Credit Societies (PACS) could be involved in supplying small farm implements as custom hiring centres and raising awareness about their usage.

4. Plantation and Horticulture

Sr. No.	District	Critical Interventions Required
1	All Districts	<ol style="list-style-type: none"> 1. The availability of quality planting material for apriocots and apples is one of the major challenges. Increased availability may be ensured through accredited nurseries. 2. The development of orchards for seabuckthorn, apricots and apples may be promoted aggressively. 3. Area expansion under horticulture crops may be explored through the use of micro - irrigation techniques. 4. Trainings and capacity building of farmers for improvement in the fruit quality is of vital importance to ensure production of export quality produce. 5. Post-harvest management techniques like solar apricot dryers may be supported to improve the quality of dried apricots. 6. Development of storage, processing and marketing infrastructure to reduce wastage of horticulture produce.

5. Forestry/ Waste Land Development

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. Districts need wasteland schemes and extension services in the field of agro/farm forestry.</p> <p>2. The industries related to processing of forest produce may be set up/promoted by the Govt.</p>

6. Animal Husbandry - Dairy

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. The lack of high-quality fodder is a major issue. Enhancing the development of fodder resources in this area can help to improve the situation.</p> <p>2. Promotion of small dairy farms and collectivization of dairy farmers into cooperatives. Processing of Yak (drimo) milk needs to be promoted.</p> <p>3. Previously, there was a concern regarding the availability of high-quality cows. However, now most dairy farmers in Leh have Jersey cows.</p> <p>4. There are around 33 dairy cooperatives in the district Leh and around 42 dairy cooperatives in the district Kargil, most of them are currently dysfunctional. Dairy cooperative societies may be revived to ensure effective marketing avenues for dairy farmers in the district.</p>

7. Animal Husbandry – Poultry

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. Backyard poultry can help increase farmers' income and can work as alternative livelihood option.</p> <p>2. Small units for processing and marketing of poultry meat may be encouraged with credit support.</p>

8. Animal Husbandry – Sheep, Goat, Piggery

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. There is a scope and need for establishing modern slaughterhouses, dressing units, marketing outlets with approved standard design, equipped with modern tools, machines and other necessary infrastructure to ensure supply of hygienic, quality animal products to protect consumers from facing health hazards.</p> <p>2. Local handlooms has the potential of growing into a vibrant industry in the districts. Focused attention is needed for promotion of the industry.</p> <p>3. Value Chain approach is needed for the development of sheep wool and pashmina wool industry.</p> <p>4. Trainings, capacity building and collectivization of handloom artisans is required.</p>

9. Fisheries

Sr. No.	District	Critical Interventions Required
1	All Districts	<ol style="list-style-type: none"> 1. The districts have not seen much development in commercial fishing. It is important to raise awareness among the farming community about the potential for engaging in fishing alongside agricultural activities, on either a large or small scale. 2. Latest scientific skills need to be imparted to the farmers.

10. Construction of Storage and Marketing Infrastructure

Sr. No.	District	Critical Interventions Required
1	All Districts	<ol style="list-style-type: none"> 1. Pledge finance to farmers and provision of market linkage to food processing/agro-processing units needs to be promoted. 2. There is hardly any private investment in agriculture infrastructure as more than 90% farmers are small / marginal farmers. 3. A detailed survey of the district's warehouse/ cold store/ other infrastructure requirement needs to be undertaken as different stakeholders have different views on the requirement of such infrastructure. 4. Storage for agriculture and horticulture produce including vegetables to be created at MPACS and vegetable societies.

11. Land Development, Soil Conservation and Watershed Development

Sr. No.	District	Critical Interventions Required
1	All Districts	<ol style="list-style-type: none"> 1. Conduct of awareness programs to engage communities in watershed conservation and sustainable practices. 2. Promotion of traditional methods like construction of artificial glaciers in different forms. 3. Foster collaboration between different sectors (e.g., agriculture, forestry, water resources) to ensure a holistic approach to watershed management. 4. Promote the growth of ground cover plants, grasses, and trees to stabilize soil and reduce erosion.

12. Agriculture Infrastructure: Others

Sr. No.	District	Critical Interventions Required
1	All Districts	<ol style="list-style-type: none"> 1. Demonstration, training and extension services for popularizing the best and recommended package of practices may be undertaken. Bankers may encourage and finance for these activities. 2. Setting up seed production units can be a transformative step for improving agricultural productivity and self-sufficiency, especially in regions like Kargil where specific crop varieties are needed to adapt to local conditions.

13. Food and Agro. Processing

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. The post-harvest infrastructure viz., quality testing labs, cold chain, etc., are lacking in the district and needs to be strengthened to enable the agro and food processing industry to grow.</p> <p>2. At present there are a few food processing units operating in the district. However, marketing avenues are limited and needs to be worked upon.</p> <p>3. Marketing avenues to be focused upon.</p>

14. Agri. Ancillary Activities: Others

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. Agri Clinics and Agri Business Centres (ACABC) needs to be set up in the districts.</p> <p>2. Absence of any Nodal Training Institute (under ACABC scheme) in the UT is one of the main challenges.</p>

15. Micro, Small and Medium Enterprises (MSME)

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. Efforts may be made for the mobilization of artisans into Self Help Groups, Joint Liability Groups, Cooperatives and Producer groups.</p> <p>2. Reskilling of artisans engaged in traditional arts and crafts, handlooms etc. to ensure product standardization and market acceptability of products.</p> <p>3. Emphasis needs to put on standardization, branding and marketing of products.</p> <p>4. Development of improved, modern tools for artisans, craftsmen for better productivity</p> <p>5. Market assessment, product assessment study, exposure visits for artisans.</p>

16. Export Credit

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. Pashmina wool obtained from Changthangi goat of Changthang valley, Leh is world's finest Pashmina measuring 12-15 microns in fibre thickness. It takes 3 goats' wool to make one woven shawl. The woolen fabrics made from the wool is loved by tourists due to their utility in harsh winters. This can be exported after processing and can fetch higher prices for the local artists.</p> <p>2. Apricot is one of the major horticulture crops of the district and there is huge potential for export of apricots both fresh and dried. During 2021-22 fresh apricots were sent to Dubai from Kargil by a Gurgaon-based startup Krishak Agritech. Other than apricot, pashmina, yak milk and yak wool have been identified as export potential products in case of Kargil District.</p> <p>3. Need of the hour is to work on improving the quality of products to ensure acceptability in export markets.</p> <p>4. Continuous training and capacity building are required for improvement of the quality of products whether it be agri produce like apricot or off-farm products like pashmina, wood carving etc.</p>

17. Education

Sr. No.	District	Critical Interventions Required
1	All Districts	<p>1. Education loans need to be popularized among students.</p> <p>2. Professional coaching centers can be supported to ensure more and more students clear exams for entry into professional colleges.</p> <p>3. At present education loans are mostly available for higher education from premier institutions like IITs, IIM etc. There is a need to explore products for short- duration skill-based courses also.</p>

18. Housing

Sr. No.	District	Critical Interventions Required
1	All Districts	1. The biggest obstacle to credit flow in the housing sector is the lack of proper land records and titles. Resolving this issue will automatically enhance the credit flow into the sector.

19. Social Infrastructure

Sr. No.	District	Critical Interventions Required
1	All Districts	<ol style="list-style-type: none"> 1. Private clinics may be encouraged in rural areas by providing incentives. 2. Private sector participation in education sector in rural areas may be encouraged by providing incentives.

20. Renewable Energy

Sr. No.	District	Critical Interventions Required
1	All Districts	<ol style="list-style-type: none"> 1. PM Surya Ghar Muft Bijli Yojna provides a avenue for flow of credit into the solar energy sector. Bankers may explore financing customers under the scheme. 2. There is an urgent need for creating awareness among the public about the said scheme. 3. Effective coordination between the Power department and bankers is needed to ensure the success of PM Surya Ghar Muft Bijli Yojna in the district.

21. Informal Credit Delivery System

Sr. No.	District	Critical Interventions Required
1	All Districts	<ol style="list-style-type: none"> 1. Business Correspondents deployed by banks may also be authorized to open saving bank accounts of SHGs, subject to adherence to extant BC guidelines and in accordance with banks' Board approved policy on Business Correspondents. 2. The participating bank may emphasis on multiple doses of credit to SHGs. This would mean assisting a SHG over a period of time, through repeat doses of credit, to enable the group to access higher amounts of credit for taking up sustainable livelihoods and improving the quality of life. 3. The financing banks must follow RBI guidelines for loans to SHGs. For loans up to Rs. 10 lakh, no collateral or margin is required. There should be no lien on SHGs savings accounts or any deposits insisted upon. For loans above Rs.10 lakh and up to Rs. 20 lakh, no collateral should be obtained and no lien should be marked against SHGs savings accounts. The entire loan, regardless of the outstanding amount, is eligible for coverage under Credit Guarantee Fund for Micro Units (CGFMU).

Abbreviations

Abbreviation	Expansion
ACP	Annual Credit Plan
AEZ	Agri Export Zone
ACABC	Agri-Clinics and Agri-Business Centre
AHIDF	Animal Husbandry Infrastructure Development Fund
AMIS	Agriculture Marketing Infrastructure Scheme
APMC	Agricultural Produce Market Committee
APY	Atal Pension Yojana
APEDA	Agriculture and Processed Food Products Export Development Authority
ATMA	Agricultural technology Management Agency
BC	Banking Correspondent
BGREI	Bringing Green Revolution to Eastern India
CBS	Core Banking Solution
CDF	Co-operative Development Fund
CISS	Capital Investment Subsidy Scheme
CFL	Centre for Financial Literacy
CRRI	Central Rice Research Institute
CSO	Civil Society Organisation
CWC	Central Warehousing Corporation
DAO	District Agricultural Officer
DAP	Development Action Plan
DBT	Direct Benefit Transfer
DCC	District Consultative Committee
DCCB	District Central Cooperative Bank
DCP	District Credit Plan
DIC	District Industries Centre
DLRC	District Level review Committee
DRDA	District Rural Development Agency
eNAM	Electronic National Agriculture Market
ECGC	Export Credit Guarantee Corporation
FC	Farmers Club
FFDA	Fish Farmers Development Agency
FI	Financial Inclusion
FIF	Financial Inclusion Fund
FIP	Financial Inclusion Plan
FLC	Financial Literacy Centre
FLCCC	Financial Literacy and Credit Counselling Centres
FPO	Farmer Producer Organisation
FSS	Farmers Service Society
GLC	Ground Level Credit

Gol	Government of India
GSDP	Gross State Domestic Product
HYV	High Yielding Variety
IAY	Indira Awas Yojana
ICAR	Indian Council for Agriculture Research
ICT	Information and Communication Technology
IDDS	Integrated Dairy Development Scheme
IoT	Internet of Things
IPDS	Integrated Power Development Scheme
ITDA	Integrated Tribal Development Agency
JLG	Joint Liability Group
JNNSM	Jawaharlal Nehru National Solar Mission
KCC	Kisan Credit Card
KSK	Krishi Sahayak Kendra
KVI	Khadi and Village Industries
KVK	Krishi Vigyan Kendra
LAC	Livestock Aid Centre
LAMPS	Large Area Multipurpose Society
LDM	Lead District Manager
LEDEG	Ladakh Ecological Development Group
LEDP	Livelihood Enterprise Development Programme
LFPCCL	Ladakh Farmers and Producers Cooperative Limited
LI	Lift Irrigation
LRLM	Ladakh Rural Livelihood Mission
MEDP	Micro Enterprises Development Programme
MDMP	My District My Project
MF	Marginal Farmer
MI	Micro Irrigation
MIDH	Mission for Integrated Development of Horticulture
MNRE	Ministry of New and Renewable Energy
MNREGS	Mahatma Gandhi National Rural Employment Guarantee Scheme
MoFPI	Ministry of Food Processing Industries
MPCS	Milk Producers Co-operative Society
MPEDA	Marine Products Export Development Authority
MUDRA	Micro Units Development & Refinance Agency Ltd.
NABARD	National Bank for Agriculture and Rural Development
NBFC	Non-Banking Financial Company
NFSM	National Food Security Mission
NGO	Non-Governmental Organization
NHM	National Horticulture Mission
NLM	National Livelihood Mission
NMFP	National Mission on Food Processing
NPBD	National Project on Bio-Gas Development
NRLM	National Rural Livelihood Mission
NWDPRA	National Watershed Development Project for Rainfed Areas

PAIS	Personal Accident Insurance Scheme
PACS	Primary Agricultural Cooperative Society
PHC	Primary Health Centre
PKVY	Paramparagat Krishi Vikas Yojana
PLP	Potential Linked Credit Plan
PMEGP	Prime Minister's Employment Generation Programme
PMJDY	Pradhan Mantri Jan Dhan Yojana
PMJJBY	Pradhan Mantri Jeevan Jyoti Bima Yojana
PMSBY	Pradhan Mantri Suraksha Bima Yojana
PMFBY	Pradhan Mantri Fasal Bima Yojana
PMKSY	Pradhan Mantri Krishi Sinchayee Yojana
PWCS	Primary Weavers Cooperative Society
RBI	Reserve Bank of India
RIDF	Rural Infrastructure Development Fund
RKVY	Rashtriya Krishi Vikash Yojana
RLTAP	Revised Long Term Action Plan
RNFS	Rural Non-Farm Sector
RRB	Regional Rural Bank
RSETI	Rural Self Employment Training Institute
RWHS	Rainwater Harvesting Structure
SAP	Service Area Plan
SAO	Seasonal Agricultural Operations
SBM	Swachha Bharat Mission
SCC	Swarojgar Credit Card
SCS	Service Cooperative Society
SDP	Skill Development Programme
SHG	Self Help Group
SHPI	Self Help Promoting Institution
SLBC	State Level Bankers' Committee
STCCS	Short Term Co-operative Credit Structure
SMPB	State Medicinal Plant Board
TBO	Tree Borne Oil-seeds
TFO	Total Financial Outlay
WAT	Water Absorption Trench
WDRA	Warehousing Development and Regulatory Authority
WDF	Watershed Development Fund
WSHG	Women Self Help Group

List of the District Development Managers of Ladakh

Sr. No.	District	Designation	Name of the DDM	Mobile Number	E-Mail Address
1	Kargil	DDM, NABARD	Tsewang Dorjey	7838181573	tsewang.dorjey@nabard.org
2	Leh Ladakh	DDM, NABARD	Tsewang Dorjey	7838181573	tsewang.dorjey@nabard.org



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State/UTs

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|--|--|
| <ul style="list-style-type: none"> Project Management Consultancy IT Based Natural Resources Information System Feasibility, Socio-economic & Impact Evaluation Studies Third Party Monitoring | <ul style="list-style-type: none"> Climate Change & Sustainability Value Chain Development Skill & Livelihood Development Preparation Detailed Project Reports (DPRs) Transaction Advisory Services |
|--|--|

Registered Office: NABARD, 3rd Floor, C Wing, Plot No. C-24, G-Block, BKC, Bandra (E), Mumbai – 400051
☎: 022-26539419 ✉: headoffice@nabcons.in
Corporate Office: NABCONS, 7th Floor, NABARD Tower, 24 Rajendra Place, New Delhi – 110125
☎: 011-41538678/25745103 🌐: www.nabcons.com



NABSanrakshan Trustee Private Limited

Building Trust for Rural Prosperity

- NABSanrakshan, a wholly owned subsidiary of NABARD, offers Credit Guarantee against the credit offered by the Eligible Lending Institutions (ELIs), through the Trusts (Funds) under its Trusteeship.
- Two sovereign Credit Guarantee Schemes offered are:
 - Credit Guarantee Scheme for FPO Financing (CGSFPO) – provides credit guarantee for collateral free credit facility upto Rs. 2 crore to FPOs (including loans to FPOs under AIF)
 - Credit Guarantee Scheme for Animal Husbandry and Dairying (CGSAHD)- provides credit guarantee to MSMEs and Dairy Cooperatives
- More than 1500 FPOs provided credit guarantee till 31st March 2024, covering nearly 13.67 lakh farmers across 23 States
- Operations carried through Credit Guarantee Portal

Registered Office C- 24, G Block, Bandra Kurla Complex, Bandra East, Mumbai – 400051

☎: 022- 2653-9243/ 9241 ✉ : ho@nabsanrakshan.org 🌐 : www.nabsanrakshan.org



NABVENTURES LIMITED | A wholly owned Subsidiary of NABARD

- NABVENTURES Ltd. is incorporated as a public company registered under the Companies Act, 2013 in April 2018 to manage Alternative Investment funds(AIF), with a paid-up capital of INR 25 crore.
- NABVENTURES, Fund I scheme I is the maiden flagship venture equity fund of NABVENTURES Ltd with a corpus of INR 598 crore.
- As of 31 March 2024, NABVENTURES Fund I has invested in 14 startups related to the Agriculture, Rural, Food, and Finance sectors.
- NABVENTURES Ltd is also acting as an Investment Manager to AgriSURE Fund- 'Agri Fund for Start-Ups and Rural Enterprises', a SEBI-registered Cat-II AIF.
- Agri SURE Fund is set up to support innovative, technology-driven, high-risk, high-impact activities in agriculture and rural Start-ups ecosystem.
- The total corpus of AgriSURE Fund is ₹750 crore.

Registered Office: NABARD, 8th Floor, C Wing, Plot No. C-24, G Block, BKC, Bandra (East), Mumbai-400051

☎: 022-26539149 ✉ : nabventure@nabard.org 🌐 : www.nabventure.in



NAB FOUNDATION

Leveraging the power of convergence

NABFOUNDATION is a wholly owned, not for profit, subsidiary of NABARD, established under Sec 8 of Companies Act, 2013. The organization draws its strength and experience from the thousands of development projects grounded by its parent body, NABARD, in multiple domains over nearly last four decades.

WHAT DOES NABFOUNDATION WANT FROM YOU?

IF YOU ARE AN INDIVIDUAL

Reach out to us with your ideas about development projects which you believe need to be implemented. We really look forward to your fresh ideas.

IF YOU ARE A CSR UNIT

Of a corporate and believe that there is a scope for collaborating with us to have access to the vast network of resources of NABARD in a structured manner, just give us a call.

IF YOU ARE A CIVIL SOCIETY ORGANIZATION/NGO

With an idea whose time you think has come and have not been able to find willing partners, reach out to us.

IF YOU ARE WITH THE GOVERNMENT

And believe that there is a need for reimagining implementation of your Central or State government projects, allow us to be a part of your vision.

Registered Office: NABARD, 4th Floor, E Wing, Plot No. C-24, G Block, BKC, Bandra (East), Mumbai-400051

☎: 022-26539404/9054 ✉ : nabfoundation@nabard.org 🌐 : www.nabfoundation.in



NATIONAL BANK FOR
AGRICULTURE AND RURAL
DEVELOPMENT

**Jammu & Kashmir Regional Office,
NABARD TOWER, Railhead Complex,
Near Saraswati Dham, Railway Road,
Jammu - 180 012.**

www.nabard.org |     / [nabardonline](https://nabardonline.org)