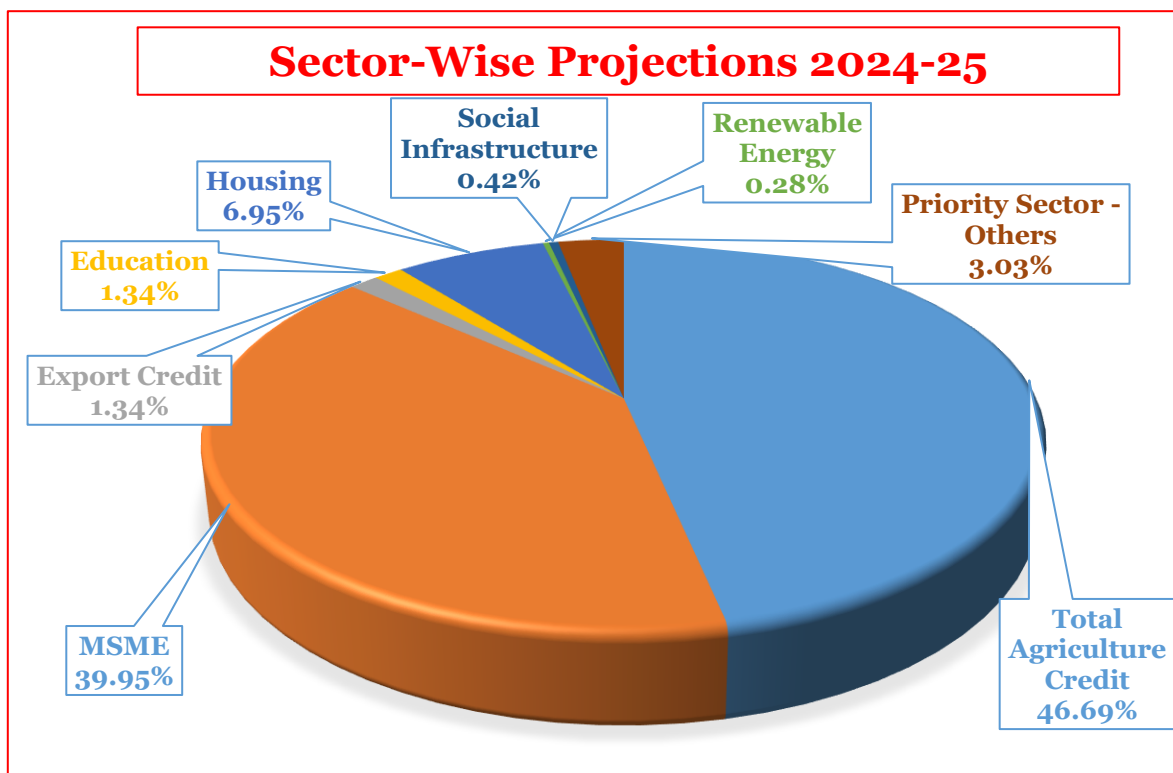


**APPENDIX A**  
**BROAD SECTOR-WISE PROJECTIONS OF CREDIT POTENTIAL**  
**FOR 2024-25**

(₹ lakh)

S. No.	Sector Activity	Projections	% Share
A	<b>Farm Credit</b>		
I	Crop Production, Maintenance and Marketing	11085611.92	27.92
II	Term Loan for Agriculture and Allied Activities	4326126.44	10.90
	<b>Sub Total</b>	<b>15411738.36</b>	<b>38.82</b>
B	Agriculture Infrastructure	826617.22	2.08
C	Ancillary Activities	2298455.87	5.79
I	<b>Credit Potential for Agriculture (A+B+C)</b>	<b>18536811.45</b>	<b>46.69</b>
II	Credit Potential for Micro, Small and Medium Enterprises	15859538.19	39.95
III	Credit Potential for Export Credit	533192.00	1.34
IV	Credit Potential for Education	531083.85	1.34
V	Credit Potential for Housing	2759547.75	6.95
VI	Credit Potential for Renewable Energy	111139.39	0.28
VII	Credit Potential for Social Infrastructure involving Bank Credit	168559.21	0.42
VIII	Priority Sector - Others	1203732.70	3.03
	<b>Total Priority Sector (I to VII)</b>	<b>39703604.54</b>	<b>100.00</b>



**APPENDIX B**  
**SUB-SECTOR-WISE CREDIT POTENTIAL**  
**FOR 2024-25**

(₹ lakh)

S. No	Particulars	Projections
<b>I</b>	<b>Credit potential for Agriculture</b>	
<b>A</b>	<b>Farm Credit</b>	
i	Crop Production, Maintenance and Marketing	11085611.92
ii	Water Resources	444015.59
iii	Farm Mechanisation	645998.69
iv	Plantation and Horticulture (including Sericulture)	1239511.94
v	Forestry and Waste Land Development	42950.36
vi	Animal Husbandry – Dairy	1081561.92
vii	Animal Husbandry – Poultry	281395.68
viii	Animal Husbandry – Sheep, Goat, Piggery, etc.	312676.76
ix	Fisheries (Marine, Island, Brackish water)	123141.69
x	Others – Bullock, Bullock cart, etc.	154873.81
	<b>Sub Total</b>	<b>15411738.36</b>
<b>B</b>	<b>Agriculture Infrastructure</b>	
i	Construction of storage facilities (Warehouses, Market Yards, Godowns, Silos, Cold storage units / Cold storage chains	281591.97
ii	Land Development, soil conservation, Watershed Development	379910.05
iii	Others (Tissue culture, Agri bio – technology, Seed production, Bio Pesticides / fertilisers, Vermi composting	165115.20
	<b>Sub Total</b>	<b>826617.22</b>
<b>C</b>	<b>Ancillary activities</b>	
i	Food and Agro Processing	1073061.26
ii	Others	1225394.61
	Sub Total	<b>2298455.87</b>
	<b>TOTAL AGRICULTURE LOAN (A +B+C)</b>	<b>18536811.45</b>
II	Micro, Small and Medium Enterprises	15859538.19
III	Export Credit	533192.00
IV	Education	531083.85
V	Housing	2759547.75
VI	Renewable Energy	111139.39
VII	Social Infrastructure involving bank credit	168559.21
VIII	Priority Sector Others	1203732.70
	<b>Total Priority Sector</b>	<b>39703604.54</b>

## **EXECUTIVE SUMMARY**

### **1. Introduction**

The State Focus Paper for the year 2024-25 is the culmination of the decentralized planning process of preparation of Potential Linked Credit Plans (PLPs) for all 31 districts of the State. PLPs are prepared after detailed consultations with various line departments of the Government, banks and other stakeholders, to map credit potential under Priority Sector Lending (PSL) as classified by the Reserve Bank of India. Further, the document also identifies the opportunities available, gaps in critical infrastructure and sector wise interventions needed for better credit off take, in tune with the Government's policies and priorities. All this information aggregated at the State level translates into the State Focus Paper. For the year 2024-25, the total credit potential estimated for Karnataka stands at **₹397036.05 crore**.

### **2. Physical Characteristics of the State**

Karnataka is the sixth largest State with an area of 1.92 lakh sq.km, accounting for 5.83% of the total geographical area of the country. The State is the ninth highest in the country in terms of population, accounting for 5.05% of the country's population in 2011. In terms of urbanization, the State has witnessed an increase of 4.68% in proportion of urban population in the last decade.

Karnataka is bestowed with seven critical river systems that are lifelines to the state and the only perennial river of Peninsular India i.e., Cauvery has its origin in Karnataka. The State is divided into 10 agro-climatic zones. On account of the varied agro-climatic features, almost all cereals, pulses, oilseeds and commercial crops are cultivated in different parts of the State. The total net sown area of the state stood at 114.53 lakh ha in 2020-21. The total number of land holdings in the State increased from 75.80 lakh (2010-11 Census) to 86.80 lakh in 2015-16, operating an area of 118.05 lakh ha with the share of small and marginal farmers at 80%. The average size of land holding is 1.36 ha in Karnataka is marginally higher than the all India average of 1.08 ha. The State ranks 1<sup>st</sup> in production of coffee, raw silk, coarse cereals and sunflower, 2<sup>nd</sup> in cooperative milk procurement, 3<sup>rd</sup> in production of sugarcane and flowers, 6<sup>th</sup> in marine fish production and 9<sup>th</sup> in inland fish production.

### **3. Economic Activities of the State**

As per Karnataka Economic Survey 2022-23, the Gross State Domestic Product (GSDP) of the State was anticipated to grow at 7.9% against the national level GDP growth of 7% at constant (2011-12) prices. Karnataka's per capita income of ₹301673 stood higher than all India per capita income of ₹170620. The Gross State Value Added (GSVA) growth rate of agriculture sector was estimated to be 5.5% in 2022-23 as against the growth rate of 8.7% in 2021-22. The contribution of Agriculture sector to the overall GSDP saw a marginal decrease from 15.36% to 15.08% in 2022-23 against 2021-22. The services sector, a largest component of GSDP saw a marginal increase from 63.16% in 2021-22 to 64.04% in 2022-23. Industries sector saw a rise in contribution from 20.88% in 2021-22 to 21.48% in 2022-23.

Information Technology (IT) industry contributes to 23% of the State's GDP and is one of the main growth drivers of the State's economy. The State is home to over 5,500+ IT companies and around 750 MNCs contributing to over USD 58 billion of exports. In Biotechnology sector as well, Karnataka has played a key role in India's emergence as a significant player in the global industry.

### **4. Banking Profile of the State**

The State has a wide network of banks comprising 34 Commercial Banks (CBs), 2 Regional Rural Banks (RRBs), Karnataka State Cooperative Apex Bank (KSCAB), 21 District Central Cooperative Banks (DCCBs) with their 6040 affiliated Primary Agriculture Credit Societies (PACS), 2 Payment Banks (PBs), 8 Small Finance Banks (SFBs) apart from 31 micro-Finance Institutes/micro-Finance Organizations (mFIs/mFOs) and Karnataka State Cooperative Agriculture and Rural Development Bank (KSCARDB). With around 59% of the branches

located in rural and semi urban areas, the per-branch outreach stood at 1118 households during 2022-23.

#### **4.1 Commercial Banks**

With a wide network of 8563 branches, Commercial Banks have a strong presence in the State. As at the end of 2022-23, they accounted for 90% of total loans and 92% of total deposits in the State. While their loans grew by 16%, deposits grew by 7%. The CD ratio has increased from 66.39% during 2021-22 to 70.87% during 2022-23. Their achievement of annual disbursement target under priority sector over the last three years are 99.4% in 2020-21, 71.46% in 2021-22 and 85.16% in 2022-23 respectively.

#### **4.2 Regional Rural Banks**

The two RRBs in the State have a network of 1750 branches. They had a share of 4% in total loans and 4% in total deposits in the State as on 31 March 2023. Their growth in loans and deposits were 8% and 6%, respectively, over the previous year, which has resulted in increase in CD ratio from 77.94% as on 31 March 2022 to 79.35% as on 31 March 2023. The achievement under annual disbursement target was 73.66% as on 31 March 2023.

#### **4.3 Co-operative banks**

The three-tier co-operative credit structure, with the Apex bank at the State level, 21 DCCBs at the district level and 6040 PACS at village level, is an important institution for purveying rural credit. All the 21 DCCBs in the State have been licensed by the RBI. The co-operative banks had a share of 5% in total loans and 4% in total deposits of the State. While their loan portfolio grew by 15%, the deposits showed a growth of 10% during 2022-23. The CD ratio at 102.16% was higher than other agencies except SFBs as on 31 March 2023 due to high refinance portfolio. The Cooperatives were able to achieve 148.35% of their annual disbursement targets under ACP during 2022-23. While the State Apex bank and all the DCCBs have switched over to the CBS platform, they are now in the process of introducing technology-based products like internet and mobile banking.

### **5. Factors facilitating or inhibiting the growth of Agri Credit in Karnataka**

#### **5.1 Facilitating Factors**

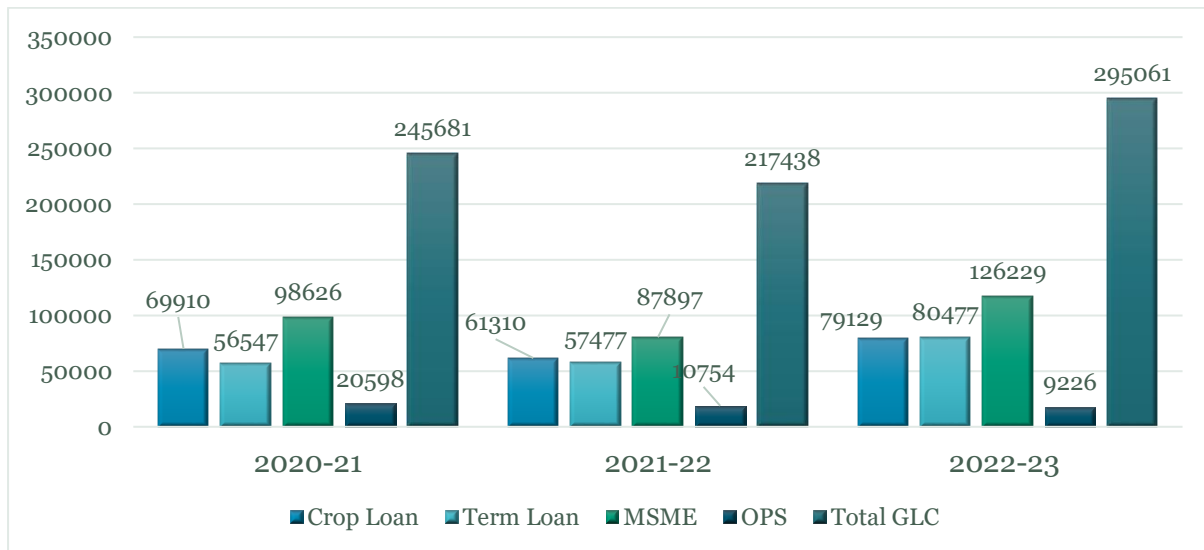
Karnataka leads in several Sustainable Development Goals, ranking third among states. It is a leading state in technology and innovation with number one position in Innovation Index. The state has robust and supportive government policies, schemes, and initiatives aimed at promoting agriculture and rural development. Karnataka was awarded “Best State for Horticulture 2022” for promoting horticultural development and production in the state during the 13<sup>th</sup> Agriculture Leadership Awards 2022. World Bank selected Karnataka to lead other states as a Light House partner for REWARD (Rejuvenating Watersheds for Agricultural Resilience through Innovative Development). Government of Karnataka is in the forefront in initiating and implementing successfully several e-Governance and g-Governance projects, for instance, e-procurement portal, DBT, Crop Survey portal, FRUITS, etc. The presence of well-developed infrastructure and enabling ecosystem alongwith ease of doing business are facilitating factors.

#### **5.2 Inhibiting Factors**

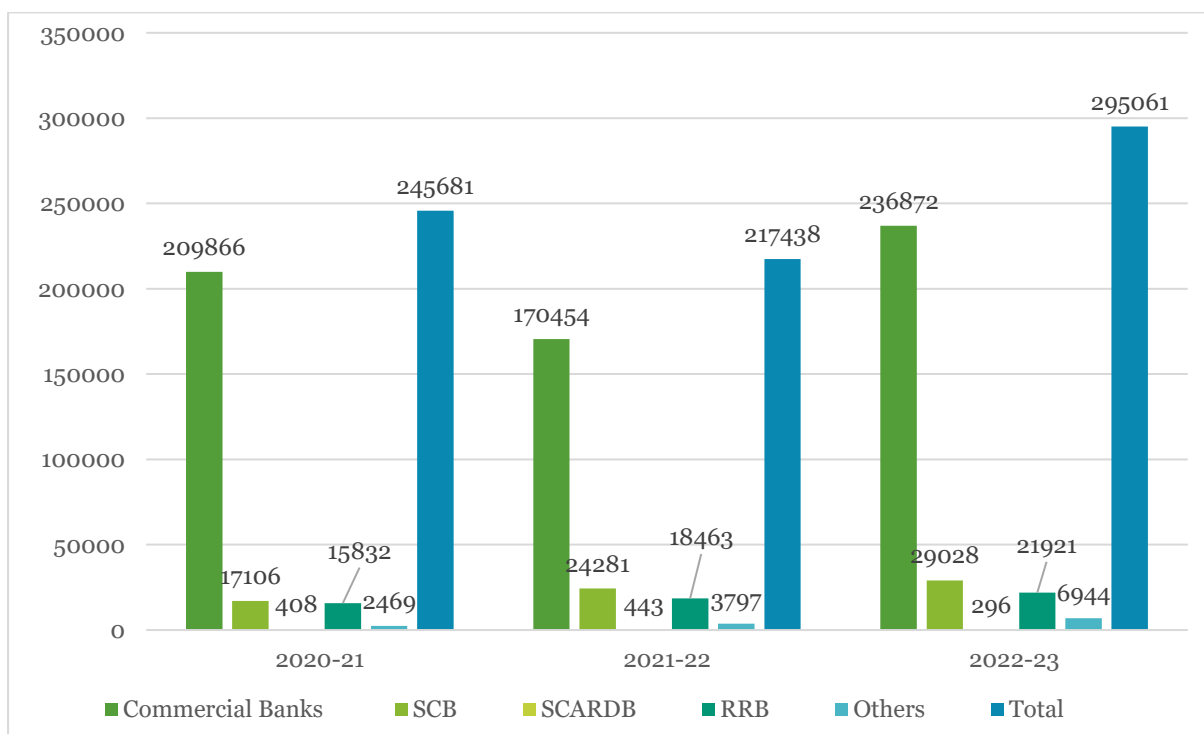
Some of the inhibiting factors are diminishing land and water resources, fragmentation of land holdings, predominance of rain-fed agriculture, lack of Post-harvest management infrastructure, sizeable arid and semi-arid land and high vulnerability to drought and natural calamities.

## 6. Sectoral trends in Credit flow to agriculture and Priority Sectors

(₹ Cr)



### Ground level Credit flow – PSL- Agency-wise



The total priority sector lending during the year 2022-23 stood at ₹295061 crore as compared to ₹217438 crore in 2021-22 registering a growth of 35%. The agency wise growth in GLC during 2022-23 shows that the Commercial Banks had the highest share in priority sector lending in the State and RRBs and Cooperative Banks have wide scope for improving their share.

## 7. Status of Cooperatives in the State

Karnataka is one of the few States in the country where all the three tiers of short term and two tiers of long-term cooperative credit structure are functioning actively to cater to the credit needs of farmers.

The Short-Term Cooperative structure comprises Karnataka State Cooperative Apex Bank (KSCAB), 21 District Central Cooperative Banks (DCCB) and 6040 Primary Agriculture Cooperative Credit Societies (PACS) at the village level. The Long-Term Cooperative structure comprises Karnataka State Cooperative Agriculture and Rural Development Bank (KSCARDB) at the State level with 26 branches and 181 Primary Cooperative Agriculture and Rural Development Bank (PCARDBs) at Taluk level. NABARD provides refinance to both ST and LT structure. The project for computerization of 5491 PACS in the State is under implementation and the groundwork for computerization of KSCARDB is underway.

Besides, the State has over 30512 registered cooperative societies in dairy, fisheries, marketing, housing, agro-processing and other activities, as also 20 Multi State Cooperative Societies. The State Govt is promoting formation of new multi-purpose societies and also encouraging cooperatives to onboard the various schemes/initiatives launched by the Govt for strengthening the sector.

## **8. Potential for Geographical Indication in the State**

Geographical Indication (GI) is defined as “Indications which identify a good as originating in the territory of a member, or a region or a locality in that territory, where a given quality, reputation or characteristic of the good is essentially attributable to its geographic origin”. GI tag can play an important role in rural development, empowering communities, acting as product differentiators, support brand building, create local employment, reduce rural migration, creating a regional brand, generating spin-off effects in tourism and gastronomy, preserving traditional knowledge and traditional cultural expressions and conserving biodiversity.

After Uttar Pradesh and Tamilnadu, Karnataka ranks third in holding number of GI tags with 48 GI tagged products across the four segments namely agriculture (24), Handicraft (20), Manufacturing (3) and food stuff (1).

NABARD’s intervention in Geographical Indications envisages end-to-end support in facilitating pre-registration as well as post-registration activities for Geographical Indications, in order to appreciate quality, improve market access, create awareness, strengthen producer’s capacity to enforce their rights, subsidize cost of registration, enforcement and marketing. In Karnataka, NABARD has supported 5 GI products, namely Kari Ishad Mango in Uttara Kannada, Udupi Sarees in Dakshina Kannada, Tiptur Coconut in Tumkur, Ilkal Sarees & Guledguddakhana in Bagalkote.

## **9. Skill Initiatives**

**9.1 Government of India Initiatives:** Govt. of India announced the Skill India campaign on 15 July 2015 with an aim to train over 40 crore (400 million) people in India in different skills and launched a series of skill development initiatives aimed at skilling unemployed youth to make India the Skill Capital of the world. Some of the Schemes for the skill development launched by Government of India are

- Deen Dayal Upadhyaya Grameen Kaushalya Yojana
- Pradhan Mantri Kaushal Vikas Yojana
- Financial Assistance for Skill Training of Persons with Disabilities
- National Apprenticeship Promotion Scheme
- Craftsmen Training Scheme
- Apprenticeship training
- Pradhan Mantri Kaushal Kendra
- PM Vishwakarma Yojana

**9.2 Government of Karnataka Initiatives:** In Karnataka out of the total population, 55% (3.5 crore out of 6.72 crore) are youth. To reap the advantage, the State Government has introduced a Skill Development Policy with an objective of providing suitable skill training for 15 lakh job seekers and to provide them placement. It has set up the Dept. of Skill Development, Entrepreneurship and Livelihood (SDEL) in 2016 to enable the State youth to acquire necessary skills for decent employment, and to promote sustainable livelihood. State, District and Taluka Kaushalya Missions are constituted to undertake Skill Development on Mission mode. Under this, the following wings are functioning:

- Karnataka Skill Development Corporation
- Centre for Entrepreneurship Development of Karnataka (CEDOK)
- Sanjeevani
- Government Tool Room Centre
- Employment and Training

### 9.3 NABARD's initiatives

Through its Skill Development Programme, Micro Enterprise and Livelihood Enterprise Development programmes, NABARD has aimed at bringing skill improvement and employability of rural populace through skilling/upskilling/re-skilling. With a cumulative investment of ₹241 lakh in this sector since last six years, NABARD has created more than 3600 skilled youth/women in various fields viz., weaving, basic computer skills, repair and maintenance of farm machineries, health care, tailoring, banking, financial services, insurance, para medical services, etc. The skilled population could considerably contribute to the concerned sector and address the issue of lack of quality production.

Skill development interventions in other sectors have resulted in remarkable outcomes like revival of GI tagged Udupi sarees, revival of desi sarees like Pattada Anchu, Gomi Teni, etc., to mention a few. NABARD has also supported state government for creation of infrastructure for skill development viz. Establishment of Government Tool Rooms & Training Centres under RIDF.

## 10. Aspirational District & Aspirational Block Programme (ABP)

### 10.1 Aspirational District Programme

In Karnataka, two districts have been identified as aspirational districts viz. Raichur and Yadagiri. During the year 2022-23, NABARD took following interventions in the two aspirational districts:

- 16 rural infrastructure projects with loan component of ₹651.54 Cr sanctioned under RIDF
- Sanctioned Short-term Multipurpose Credit limit of ₹97.39 Cr to DCCB Raichur
- Grant support provided to banks for conducting 456 Financial & Digital literacy camps
- Grant support sanctioned for conducting four Micro Enterprise Development programmes
- Sanctioned grant support of ₹13.77 lakh to University of Agriculture Science, Raichur for implementing millet-based Integrated farming system for improving livelihood and doubling farmers' income in Kalyana Karnataka
- Sanctioned grant support of ₹2.46 lakh to three identified PACS affiliated to DCCB Raichur to enable PACS to procure fixed assets

During the year 2023-24 (as on 31 December 2023), details of NABARD-supported interventions in the two aspirational districts are as under:

- 9 rural infrastructure projects with loan component of ₹50.21 Cr sanctioned under RIDF
- Grant support sanctioned to banks for conducting 275 Financial & Digital literacy camps and 600 PoS machines
- Grant support sanctioned for conducting two Micro Enterprise Development programmes, one Livelihood Enterprise Development Programme, Four skill development programmes and one rural mart

## 10.2 Aspirational Block Programme

The Hon'ble Prime Minister launched the Aspirational Block Program throughout India with a special emphasis on the "India-First Approach" in January 2023. The programme aims at developing the most backward blocks of the country identified based on a variety of factors as recognized by NITI Aayog. 500 blocks from 329 districts across 27 states and 4 Union Territories are part of the programme.

In Karnataka, 14 aspirational blocks have been identified, covering seven districts viz. Ballari (Kampli), Bidar (Aurad, Chittaguppa, Humnabad, Kamalanagara), Kalaburagi (Afzalpur, Kalagi, Shahbadha), Raichur (Maski, Sirivara), Uttara Kannada (Mundgod, Supa), Vijayapura (Thalikoti) and Yadagiri (Vadagera). NABARD strives to implement various developmental initiatives in the Aspirational blocks.

## 11. Major Constraints

- **Fragmentation of land holdings**

As per 2015-16 Agricultural Census, the state has 86.81 lakh farm holdings covering 118.05 lakh ha. Though the share of small and marginal holdings was 80% of the total holdings, it accounted for only 44% of the total area covered. The average size of operational holding size declined to 1.36 ha in 2015-16 from 1.55 ha in 2010-11. Similarly, per capita land availability for marginal farmers also decreased to 0.44 ha in 2015-16. Fragmentation results in reduced Agricultural Efficiency, Limited Crop Choices, Environmental Impact like soil erosion and degradation.

- **Pre-dominance of Rain-fed Agriculture**

About two-third cultivated area in the State is drought-prone and is exposed to vagaries of the monsoon. The state has a Gross Cropped Area of 149.09 lakh ha out of which only 41% is irrigated. This is a major constraint in achieving enhanced yield, crop diversification and better income for farmers. This also makes the agriculture vulnerable to chronic draughts. During Kharif 2023 season, 216 out of the 236 blocks have been declared as drought-affected.

- **Lack of Post Harvest Management Infrastructure**

Due to improper post-harvest management activities, the losses of Fruits and Vegetables account for 20 to 22 percent. There is a dire need to prevent the post-harvest loss of horticultural products and to provide incentives to entrepreneurs/FPOs with greater emphasis on processing and value addition of horticultural crops.

- **Climate change and its effect on productivity:**

The State of Karnataka has moderate vulnerability among the 29 states of India. The highest vulnerability index was seen for Chikkaballapur district (0.728) and the lowest was of Kodagu district (0.492). Six districts in Karnataka namely Chikkaballapur, Kolar, Gadag, Bidar, Udupi and Dharwad were found to have high vulnerability.

Due to both spatial and temporal variation in rainfall, hydro-meteorological disasters like droughts and floods occur simultaneously in the different regions of the state. Droughts are more common than the other disasters in the state thus affecting rain-fed agriculture production system. The State also has huge arid and semi-arid land and is highly vulnerable to drought. In the last 15 out of 20 years (2001- 2020), parts of the State have been subjected to severe drought. Some of the Talukas in the State have witnessed drought for more than five consecutive years. Devastating floods, hailstorm, Lightning and thunderstorms have hit Karnataka during pre-monsoon season frequently causing huge damage to standing crops, especially horticulture crops.

Changes in Precipitation Patterns, Temperature Changes, Altered Pest and Disease Dynamics, Shifts in Agro ecological Zones affecting the cropping patterns and crop productivity



## 12. Major Thrust areas

- **Collectivisation through FPOs**

Promotion and incentivising FPOs for collectivisation will ameliorate the issues of land fragmentation. Promotion of hi-tech agriculture for marginal farmers which include greenhouses, poly houses, and shade nets to improve horticulture productivity. FPO's to leverage Agri-tech startup solutions, create brand Karnataka for fruits, vegetables and other products in global markets to improve product demand and provide opportunities for exports.

- **Irrigation with special emphasis on Micro Irrigation**

The net area cultivated under different crops during 2020-21 is 114.53 lakh ha., of which net area irrigated is 49.31 lakh ha. Hence, the remaining 65.22 lakh ha. is to be brought under irrigation in phases. Promotion of sustainable agri-practices by creating awareness of the existing schemes around subsidizing micro-irrigation (Per Drop More Crop, Micro-Irrigation Fund), preserving soil health (Paramparagath Krishi Vikas Yojana, Soil Health Card) and host of initiatives under National Mission for Sustainable Agriculture.

A holistic approach including precision farming, protective cultivation, automation in irrigation, fertigation, use of treated waste water for irrigation and collective farming are some of the methods suggested to address major concern of water scarcity in the state. A marked shift from traditional method of irrigation to innovative micro irrigation system is the solution to conserve water and thus increase the availability of water for various other purposes. Adoption of poly houses, net houses, green houses will not only save water, energy and labour costs but also will increase crop productivity and quality of the produce. Converting more and more areas of canal based and tank-based flood irrigated land into drip irrigation and promotion of less water-intensive crops will lead to substantial reduction in the usage of fresh water.

- **Improving Post Harvest Management**

Effective post-harvest management is crucial for minimizing losses, enhancing marketability, and promoting food security. During Covid-19 pandemic, the state had marketable surplus of 47.60 lakhs metric tonnes of Fruits and Vegetables due to lack of cold storage and processing centers. Creation of adequate cold storage infrastructure and processing facilities coupled with development of end-to-end value chains for high-value/export-oriented commodities will reduce post-harvest losses to a great extent.

- **Climate adaptation & proofing techniques**

Karnataka State Action Plan on Climate Change (KSAPCC) Version 2.0 developed needs to be implemented through sector-specific projects in the area of adaptation and mitigation for disaster risk reduction, as the state is already experiencing increased occurrence of floods and droughts and aspires to enhance use of renewable energy, energy efficiency, water management, agricultural resilience, afforestation, efficient waste management and use of public transport.

Drought proofing-watersheds, efficient resource use (micro-irrigation), promoting climate-resilient crops will help in adapting and mitigating climate change.

## 13. Suggested Action points

- Promotion of farm ponds and water-storage structures for optimal management of rainwater may be used for critical irrigation, enhancing farm productivity and farmer income. Farm ponds as an integral part of IFS, and a crucial option to improve farmer income in 65 percent of the state's rainfed area
- Utilization of Cultivable Waste: Geographical area of the State is 190.50 lakh ha. of which 7.87 lakh ha. is fallow and 3.93 lakh ha. is Cultivable waste which can be productively reclaimed/cultivated to improve the GDP.

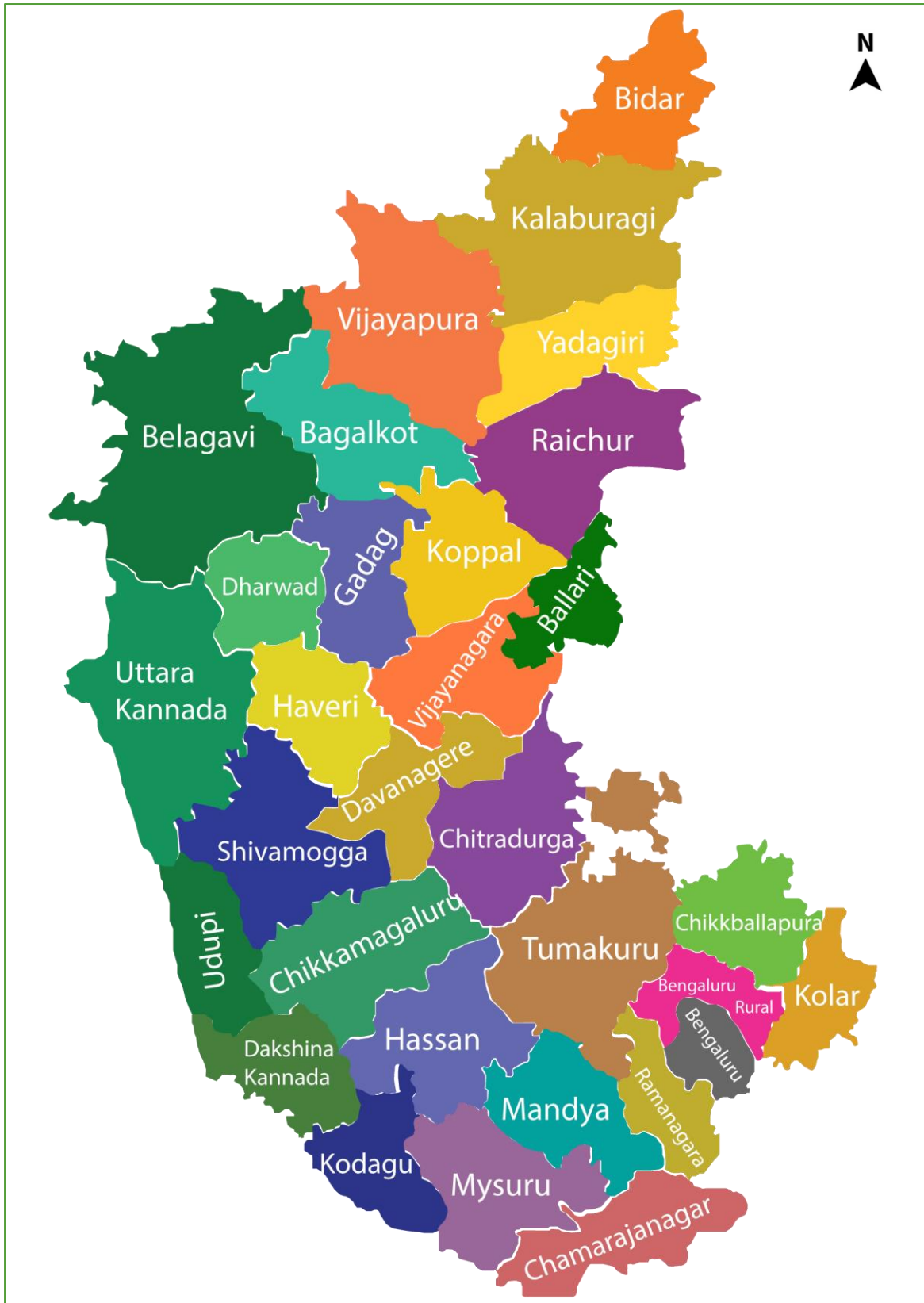
- Promote and incentivize FPO's to leverage Agri-tech startup solutions to get real time market intelligence, D2C inputs, and market linkages to improve D2C business thus improving farmer earnings.
- Acceleration of the FPOs programme, with two to three FPO models in each district as an alternative market ecosystem.
- Promotion of Integrated farming System: As per 2020-21 cropping pattern, the net area cultivated in the state is 114.53 lakh ha, of which only 34.56 lakhs ha. (31%) of area cultivated more than once. The remaining 79.97 lakh ha. of area may be brought under integrated farming systems or multi cropping. Minor irrigation practices as per the local needs shall be emphasised in each district.
- A Price Differential Payment scheme for guaranteeing MSP on crops other than rice, wheat and sugarcane could be considered in Karnataka.
- Setting up State-of-the-art Post Harvest Management centres within 25kms of production to improve post-harvest processing from 1%-2% and reduce spillage from current levels of 25%-30%, improve the proportion of horticulture product meeting Grade-A criteria from current levels of 30%-45% and fetch better prices for farmers
- A well-functioning agricultural value chain, allowing for efficient production, processing, and distribution of agricultural products. Collaboration among stakeholders, including farmers, processors, retailers, and policymakers, is essential for the development of a sustainable and resilient agricultural value chain. Additionally, advancements in technology and data-driven solutions can further optimize the efficiency and competitiveness of the entire agri-food value chain.

#### **14. Way Forward**

NABARD's perception on development perspectives of the state envisages all-round development of the state encompassing increase in capital formation in agriculture, financial inclusion, development of MSMEs, climate change resilience and sustainable development of farm as well as non-farm sectors.

The momentum in combating one of the most pressing issues of our times - climate change if maintained, will lead to development of farm and off-farm sectors, enhance its productivity, remunerative prospects and subsequently lead to betterment of livelihoods of the rural populace dependent on them. The share of Agri exports needs to be increased by leveraging the FPOs in the state. Food processing, Agri Value chain, Post Harvest Management of the farm produce should be the focus areas in the coming years. DigiTech Innovations like smart farming, digital agriculture, Internet of Agriculture Technology (IoAT), Crop Management, Weed and Pest control, Crop protection, Big Data Analytics and Digital technologies, such as artificial intelligence (AI) and machine learning (ML), remote sensing, block chain are the keys for sustainable future of agriculture.

### Map of Karnataka



Source: [karnataka.gov.in](http://karnataka.gov.in)

## CHAPTER 1

### STATE PROFILE

**Table No.1.1: Basic statistics depicting the profile of Karnataka State**

KARNATAKA STATE PROFILE								
<b>1. PHYSICAL &amp; ADMINISTRATIVE FEATURES</b>		<b>2. SOIL &amp; CLIMATE</b>						
Total Geographical Area (lakh sq.km.)	1.92	Agro-climatic Zone	Zone X -Southern Plateau and Hilly Region; Zone-XII - West Coast Plains & Ghat Region					
No. of Sub Divisions	4	Climate	Tropical Monsoon in Coastal belt, hot weather in Northern State & pleasant weather in other areas					
No. of districts	31	Soil Type	Vast stretches of deep black soils to shallow red soils					
No. of Blocks	235	<b>4. RAINFALL &amp; GROUND WATER</b>						
No. of Inhabited Villages	27383	Rainfall [in mm]	Normal	Actual	2019	2020	2021	
No. of Gram Panchayats	5952		1220		1340	1350	1376	
<b>3. LAND UTILISATION (lakh ha)</b>			Variation from Normal		120	130	156	
Total Area Reported	190.50	Ground Water Scenario	Stage of GW Devpt. (%)	No. of Blocks				
Forest Land	30.73		69.93	Safe	Critical	Semi-Critical	Over Exploited	Total
Area not available for cultivation	22.59			139	11	35	49	234
Permanent Pasture and Grazing Land	8.72	<b>5. DISTRIBUTION OF LAND HOLDING 2015-16</b>						
Land under Miscellaneous Tree Crops	2.12	Classification of Holding	Holding		Area			
Cultivable Wasteland	3.93		Nos. (lakh)	% to Total	Ha (lakh)	% to Total		
Current Fallow	4.76	<= 1 ha	47.67	55	20.80	18		
Other Fallow	3.11	>1 to <=2 ha	22.14	26	31.07	26		
Net Sown Area (2020-21)	114.53	>2 ha	16.99	20	66.18	56		
Total or Gross Cropped Area (2020-21)	149.09	Total	86.80	100	118.05	100		
Area Cultivated More than Once	34.56	<b>7. DEMOGRAPHIC PROFILE [in lakh]</b>						
Cropping Intensity [GCA/NSA] (%)	130.17	Category	Total	Male	Female	Rural	Urban	
<b>6. WORKERS PROFILE [in lakh]</b>		Population	610.95	309.67	301.28	370.01	240.94	
Cultivators	65.81	Scheduled Caste	104.75	52.65	52.10	74.04	30.71	
Of the above, Small/Marginal Farmers	47.67	Scheduled Tribe	42.49	21.35	21.15	34.03	8.46	
Agricultural Labourers	71.56	Literate (%)	75.4	82.5	68.1	68.7	85.8	
Workers engaged in Household Industries	9.13	BPL	110.94	NA	NA	77.43	33.51	
Other workers	132.23	<b>9. HOUSEHOLD AMENITIES [Nos. in lakh households]</b>						
Total	278.73	Having brick/stone /concrete houses	108.27	Having electricity supply		88.89		
<b>8. HOUSEHOLDS [in lakh]</b>		Having source of drinking water	133.17	Having independent toilets		152.84		
Total Households	133.57	<b>11. INFRASTRUCTURE RELATING TO HEALTH &amp; SANITATION [Nos.]</b>						
Rural Households	78.42	Anganwadis	66312	Dispensaries		2139		
<b>10. INFRASTRUCTURE</b>		Primary Health Centers	2396	Hospitals		36514		
Households Electrified [lakh]	88.89	Primary Health Sub-Centers	9476	Hospital Beds		235060		
Post Offices [No.]	9593	<b>12. INFRASTRUCTURE &amp; SUPPORT SERVICES FOR AGRICULTURE</b>						
Bank branches [No.]	11654	Seed Farms [No.]	NA	Agro Service Centres [No.]		742		
Primary Schools [No.]	62964	Fertiliser Outlets [lakh No.]	NA	Soil Testing Centres [No.]		321		
Telephone Exchanges [No.]	2313	Pesticide Outlets [lakh No.]	2.22	Approved Nurseries [No.]		NA		
Households having Potable Water Supply (%)	98.92	Registered FPOs [No.]	1382	Krishi Vigyan Kendras [No.]		32		
Habitations with access to all weather roads [No.]	51887							
<b>13. IRRIGATION COVERAGE [lakh ha.]</b>								
Total Area available for Irrigation (NIA+Fallow)	57.18							
Irrigation Potential Created	42.01							

Net Irrigated Area (Total area irrigated at least once)	49.31	<b>14. INFRASTRUCTURE FOR STORAGE, TRANSPORT &amp; MARKETING</b>						
Gross Area irrigated by Canals	17.68							
Gross Area irrigated by Wells / Tube / Bore wells	30.54							
Gross Area irrigated by Tanks	2.16							
Gross Area irrigated by Other Sources	10.26							
Irrigation Potential Utilized (Gross Irrigated Area)	60.64							
<b>15. AGRO-PROCESSING UNITS</b>			<b>16. AREA &amp; PRODUCTION OF MAJOR CROPS IN THE STATE</b>					
<b>Type of Processing Activity</b>	<b>No of units</b>	<b>Cap.</b>	<b>2021-22</b>		<b>2022-23</b>		<b>Average Yield</b>	
Food Processing	8782	NA	<b>Area (lakh ha)</b>	<b>Prodn. (lakh MT)</b>	<b>Area (lakh ha)</b>	<b>Prodn. (lakh MT)</b>	<b>(MT/ha)</b>	
Agro Processing	407	NA	Cereals	50.80	123.95	48.92	114.81	2.39
			Pulses	32.53	19.73	32.64	20.08	0.61
			Total Food grains	83.33	143.68	81.56	134.89	1.69
			Oilseeds	12.22	11.21	12.70	12.18	0.94
			Cotton*	6.87	19.53	9.15	21.48	2.56
			Sugarcane	6.50	611.52	7.18	562.91	85.85
			Tobacco	0.82	0.64	0.70	0.49	0.74
<b>17. ANIMAL POPULATION AS PER CENSUS 2019 [in lakh]</b>			<b>* Cotton in lakh bales of 170 kg in lint form</b>					
<b>Category of animal</b>	<b>Total</b>	<b>Male</b>	<b>Female</b>	<b>18. INFRASTRUCTURE FOR DEVELOPMENT OF ALLIED ACTIVITIES (No.)</b>				
Cattle - Cross breed/Exotic	38.98	1.24	37.74	Vet. Hospitals/Dispensaries	2813	Dairy Coop. Societies	17088	
Cattle - Indigenous	45.61	17.52	28.09	Disease Diagnostic Centers	10	Milk Collection Centers	14,000	
Total-Cattle	84.59	18.76	65.83	AI Centers	4234	Fishermen Societies	530	
Sheep - Exotic/CB	1.00	0.19	0.81	Animal Breeding Farms	11	Fish seed farms	58	
Sheep - Indigenous	109.50	20.98	88.52	Animal Feed Manufacturing Units	17	Poultry hatcheries	40	
Buffaloes	31.47	1.62	29.85	Fodder Farms	12	Licensed Slaughter houses	95	
Goat	61.69	12.60	49.09	<b>19. MILK, FISH, EGG PRODUCTION &amp; THEIR PER CAPITA AVAILABILITY</b>				
Pig - Exotic/CB	0.72	0.21	0.51	Fish	Production [Lakh MT]	10.80	Per cap availability [gm/day]	48.45
Pig - Indigenous	2.52	0.81	1.71	Egg	Production [lakh No.]	80914	Per cap avail. [No./p.a.]	132.44
Horse/Donkey/Camel	NA	NA	NA	Milk	Production [lakh LPD]	317.10	Per cap avail. [gm/day]	519.02
Poultry - Layer	156.70	NA	NA	Meat	Production [Lakh MT]	3.87	Per cap avail. [gm/day]	17.35
Poultry - Broiler	275.58	NA	NA	<b>Source: (1) Karnataka at a glance - 2021-22 (2) Economic Survey of Karnataka - 2022-23</b>				

Karnataka is the sixth largest State, with an area of 1.92 lakh sq.km accounting for 5.83% of the total geographical area of the country. (Source: Economic Survey 22-23) The State was formed on 01 November 1956, with the passing of the States Reorganisation Act. Originally known as the State of Mysuru, it was renamed as Karnataka in 1973, deriving its name from the term '*Karunadu*' meaning 'land of black soil'. The State has 31 districts and 04 revenue divisions.

The predominant economic activities of the State include agriculture since the agro climatic features suit cultivation of almost all cereals, pulses, oilseeds and commercial crops. Besides, the State has a vibrant industries sector with automobile, agro, aerospace, textile and garment, biotech, and heavy engineering industries. Karnataka is also the IT hub of India & home to the fourth-largest technology cluster in the world. Further, since the State is blessed with diverse flora and fauna and around 320 km natural coastline, it also boasts of a flourishing tourism and hospitality sector.

### **Physiography of Karnataka**

The State is located within 11°35' N and 18°30' N latitude and 74°5' E and 78°35' E longitude on a table land where the Western and Eastern Ghat ranges converge into the Nilgiri hill complex. It is bordered by the Arabian Sea to the west, Goa to the northwest, Maharashtra to the north, Andhra Pradesh and Telangana to the east, Tamil Nadu to the southeast and Kerala to the southwest. The State covers approximately 750 km from North to South and about 400 km from East to West. Geographically, the State has 03 principal Regions viz. (i) Coastal Region or Karavali, (ii) Hilly Malanadu Region comprising the Western Ghats and (iii) Bayaluseeme Region comprising the plains of the Deccan plateau. The State is endowed with two major river systems, the Krishna and its tributaries (Bhima, Ghataprabha, Vedavathi, Malaprabha and Tungabhadra) in the north and the Cauvery and its tributaries (Hemavati, Shimsha, Arkavati, Lakshmana Thirtha and Kabini) in the south. Other basic features include:

- 31 districts, 235 talukas and 27,383 inhabited revenue villages
- 31 Zilla Panchayats, 235 Taluk Panchayats and 5952 Grama Panchayats
- First State to enact the Panchayat Raj Act, during 1993, incorporating the features of the 73<sup>rd</sup> Constitutional Amendment.
- Two third of the land area is rain-fed. The land use pattern is shown in Fig.1.2
- 10 Agro Climatic Zones on the basis of distribution & percentage of rainfall, soil quality, height from the sea level and major crops.

### **1.2 State Demographics**

In terms of population, Karnataka is the ninth largest state in India. The key socio-demographic characteristics are presented in Table 1.2 below:

- During 2001 to 2011, the population of the State grew at a rate of 15.60% as against 17.70% at national level
- Birth rate declined from 18.3% in 2015 to **16.5%** in 2020 and the death rate declined from 7.0% in 2015 to **6.2%** in 2020. The sex ratio increased from 979 in 2015-16 to 1034 in 2019-20 (NFHS 5).
- The literacy rate in the State was **75.36%** in 2011, which was above the National average of 74.00% (Census 2011).

**Table No.1.2: Socio-Demographic Characteristics**

S. No.	Particulars	Units	Karnataka	India
<b>1</b>	<b>Geographical Area</b>	lakh Sq.Kms.	1.92	32.87
<b>2</b>	<b>Population as per Census 2011</b>	in '000s	61095 (5.05%)	1210570
2.1	Rural (% of Rural population to total population)	in '000s	37469 (61.33)	833463 (68.85)
2.2	Urban (% of Urban Population to total population)	in '000s	23626 (38.67)	377106 (31.15)
2.3	Density of Population	Per Sq.Km	349	382
2.4	Literacy Rate %age	%	75.36	73.00
2.5	Sex Ratio	Females per 1000 males	1034	943
<b>3</b>	<b>State Income - at Current Prices</b>	₹ crore	22,41,368	2,73,33,756
<b>4</b>	<b>Agriculture</b>			
4.1	Net Sown Area	'000 ha	11453	139510
4.2	Gross Cropped Area	'000 ha	14909	197050
4.3	Gross Irrigated Area	'000 ha	6064	96620
4.4	No. of Operational Holdings	in '000s	8681	145727
4.5	Area of Operational Holdings	'000 ha	11805	157142
4.6	Average size of Operational Holdings	ha	1.36	1.08
<b>5</b>	<b>Demographic Status</b>			
5.1	Birth Rate	'000s	16.5	20
5.2	Death Rate	'000s	6.2	6.2
5.3	Infant Mortality Rate (NFHS 5)	Per 1000 live births	19	35.2
5.4	MMR *(2020)	(per 1,00,000 live births)	69	113
5.5	Average Life expectancy (years)-2020		69.4	67.01

Source: Economic Survey of Karnataka 2022-23 \* Data from SRS 2020\*\*\*NHP-2019 (2011 census)

### 1.3 Agricultural Scenario in Karnataka

Agriculture employs more than 60% of Karnataka's workforce. As per the population Census 2011, it supports 13.74 million workers, of which 23.61% are cultivators and 25.67% agricultural workers. Two third cultivated area of the State is drought-prone and is exposed to the vagaries of the southwest monsoon. With only 33.77% of the sown area under irrigation, 70.68% of the total geographical area is under cultivation.

#### Characteristics of Agriculture in Karnataka

- Net Sown Area (NSA) is 114.53 lakh ha (60.12%) of the total geographical area
- 34.56 lakh ha of land sown more than once with cropping intensity of 130.17%.
- 11.86% of the geographical area is not available for cultivation. 4.13% is fallow land and 16.13% forest land.
- 86.80 lakh farm holdings with a total operational area of 118.05 lakh ha.
- Small and Marginal Farmers (SF/MF) accounted for 80% of the total farm holdings and operate 44% of the total operated area.
- Per capita landholding size, which was 3.2 ha. in 1970-71, decreased to 1.5 ha. in 2010-11 and to 1.36 ha in 2015-16.
- Per capita land availability for marginal farmers in 1970-71 was 0.51 ha which declined to 0.48 ha in 2010-11 and further to 0.44 ha in 2015-16.
- The State ranks first in production of coffee, raw silk, coarse cereals and sun-flower, 2nd

in cooperative milk procurement, 3rd in production of sugarcane and flowers, 4th in marine fish production and 9th in inland fish production. Karnataka is also a major producer of cotton, groundnut and maize.

(Source: Karnataka Economic Survey 2022-23; Agricultural Census 2015-16)

### Water availability: Irrigation in Karnataka

The State has a Gross Cropped Area (GCA) of 149.09 lakh ha (Karnataka Economic Survey 2022-23) out of which only 41% is irrigated, indicating the high dependency of agriculture on rainfall. The gross irrigated area as a % of GCA has shown a trend of upward movement in the last couple of years as depicted in the following table:

**Table No.1.3: Trends in Irrigated Area in Karnataka (lakh Ha)**

Year	Gross Cultivated Area (GCA)	Gross Irrigated Area (GIA)	Net Irrigated Area (NIA)	Gross Irrigated Area as a % of Gross Cultivated Area
2010-11	130.62	42.79	34.9	33
2011-12	120.59	41.37	34.4	34
2012-13	117.48	40.07	34.2	34
2013-14	122.67	41.12	35.56	34
2014-15	122.47	41.86	35.89	34
2015-16	120.09	37.42	32.43	31
2016-17	117.79	35.48	31.04	30
2017-18	119.94	36.39	31.55	30
2018-19	135.27	47.45	40.32	35
2019-20	138.31	50.34	42.35	36
2020-21	149.10	60.64	49.31	41

Source: Karnataka Economic Survey 2022-23

The Cumulative Irrigation Potential created under major, medium and minor irrigation in the State has increased considerably from 38.82 lakh ha in 2014-15 to 42.45 lakh ha in 2021-22. The anticipated irrigation potential for 2022-23 is 43.17 lakh ha. The gross irrigated area as percentage of total cultivated area has increased from 16% in 1980-81 to 41% in 2020-21. Among all irrigation sources, tube wells/bore wells accounted for the highest proportion (43.83%) of the net irrigated area followed by canals (29.95%) and wells (7.00%).

Since irrigation is an important source of raising productivity in agriculture, optimum utilization of surface and ground water resources to ensure assured irrigation support would be the key for faster growth of agricultural sector in the State.

**Table No.1.4: Source-wise irrigation (lakh ha)**

Source	2018-19			2019-20			2020-21		
	Irrigated Area		% to NIA	Irrigated Area		% to NIA	Irrigated Area		% to NIA
	Gross	Net		Gross	Net		Gross	Net	
Canals	13.51	11.61	28.96	14.04	12.62	29.80	17.68	14.77	29.95
Tanks	1.63	1.38	3.44	1.74	1.38	3.26	2.16	1.65	3.35
Wells	3.78	3.21	8.01	3.81	3.22	7.60	4.07	3.45	7.00
Tube/Bore Wells	21.24	18.08	45.10	22.43	18.63	43.99	26.47	21.61	43.83
Other Sources	7.03	5.81	14.49	8.33	6.50	15.35	10.26	7.83	15.88
<b>Total</b>	<b>47.19</b>	<b>40.09</b>	<b>100.00</b>	<b>50.34</b>	<b>42.35</b>	<b>100.00</b>	<b>60.64</b>	<b>49.31</b>	<b>100.00</b>

Source: Karnataka Economic Survey 2021-22



## 1.4 Economic Indicators

### 1.4.1 GSDP and Per Capita Income of the State

As per Economic Survey 2022-23, advance estimates indicate that Gross State Domestic Product (GSDP) of Karnataka has grown at 7.9% whereas the GDP at national level is 7% at constant (2011-12) prices. At current prices, the GSDP has reached ₹22,41,368 crore with a growth of 14.2% and GDP has attained a level of ₹2,73,07,751 crore with a growth rate of 15.4%. The share of Karnataka's GSDP in All India GDP is 8.2% during 2022-23.

There is a significant contribution of the services sectors to GSVA in Karnataka. During 2022-23, the services sector contributed 64.04% to GSVA, followed by 17.88% by industry sector and 15.08% by the agriculture sector.

The revised estimates indicate that the contribution of Agriculture sector to the overall GSDP saw a marginal decrease from 15.36% to 15.08% in 2022-23 as compared to 2021-22. Industries sector saw a marginal decrease from 21.48% to 20.88% in 2022-23 against 2021-22. The services sector, the largest component of GSDP, saw a marginal increase from 63.16% in 2021-22 to 64.04% in 2022-23. The contribution of 'Real estate, Professional Services & Ownership of Dwellings' is highest with (34.31%) in 2022-23 followed by Computer related services and R&D (24.34%), 'Manufacturing (13.28%)', 'Crops (9.80)' and 'Trade and Repair Services (9.52%)'.

### 1.4.2 Allocation from Budget under important sectors

Total Budget estimate (Consolidated Fund) for 2023-24 is ₹3,27,747 crore and allocation for Agriculture and Allied Activities is ₹33,700 crore.

Information Technology (IT) industry contributes to 23% of the State's GDP. The State is home to over 5,500+ IT companies. 750 MNCs contributing to over USD 58 billion of exports. IT sector is one of the main growth drivers of the State's economy providing direct employment to over 12 lakh professionals and creating over 31 lakh indirect jobs. The IT companies are largely concentrated in Bengaluru, a global brand in the IT space. The share of Karnataka in total IT exports of 155 billion USD by the country is nearly 40%. The Government had brought out an IT Policy-2020 i.e., Karnataka IT Policy, under which several incentives are being offered to new IT/ITES and other knowledge-based sectors to set up their facility in Tier 2/3 Cities across the State.

Karnataka has played a key role in India's emergence as a significant player in the global biotechnology industry. It is home to 60% of the country's biotech units. Biotechnology ecosystem in Karnataka comprises of nearly 750 large, medium and small companies, including ~300 biotech startups.

**CHAPTER 2**  
**BANKING/FINANCIAL SECTOR PROFILE**

**Table No.2.1: Banking Profile**

<b>BANKING PROFILE</b>										
<b>State – Karnataka</b>						<b>Lead Bank – Canara Bank</b>				
<b>1. NETWORK &amp; OUTREACH(As on 31/03/2023)</b>										
Agency	No. of Banks/ Soc.	No. of Branches				No. of Non formal agencies associated			Per Branch Outreach	
		Total	Rural	Semi-urban	Urban/M	mFIs/m FOs	SHGs	BCs/BFs	Villages	Households
Commercial Banks	34	8563	2313	2058	4192	NA	270104	44780	3	1560
Regional Rural Banks	2	1750	1268	287	195	NA	30974	1989	16	7633
KSCARDB	1	207	0	181	26	NA	0	0	132	64527
KSCAB	1	52	0	0	52	NA	47566	0	527	256866
DCCBs	21	869	476	209	184	NA	NA	0	32	15371
Others-(KSFC)	2	33	0	0	33	NA	NA	0	830	404758
PACS	6040	6040	NA	NA	NA	NA	NA	0	5	2211
Payment Banks	2	31	0	8	23	NA	NA	24375	883	430872
SFBs	8	437	53	158	226	NA	NA	124	63	30565
All agencies (exl. PACS)	71	11942	4110	2901	4931	31	348644	71268	2	1118
Agency	<b>2. DEPOSITS OUTSTANDING</b> (Amount of Deposit [₹ crore])					<b>3. LOANS &amp; ADVANCES OUTSTANDING</b> (Amount of Loan [₹ crore])				
	31-Mar-21	31-Mar-22	31-Mar-23	Growth (%)	Share (%)	31-Mar-21	31-Mar-22	31-Mar-23	Growth (%)	Share (%)
Commercial Banks	1054264	1204495	1291885	7	92	715659	799625	928629	16	90
RRBs	47167	49434	52616	6	4	36530	38528	41750	8	4
Cooperative Banks	44854	49090	54088	10	4	43378	48046	55255	15	5
Others	5219	8369	11268	35	1	6530	8741	11196	28	1
All Agencies	1151504	1311388	1409857	8	100	802097	894940	1036830	16	100
<b>4. CD-RATIO</b>				<b>5. PERFORMANCE UNDER FINANCIAL INCLUSION (No. of A/cs) (in lakh)</b>						
Agency	31-Mar-21	31-Mar-22	31-Mar-23	Schemes	Cumulative up to 31 March 2023					
					PMJDY	PMSBY	PMJJBY	APY		
Commercial Banks	68	66.39	70.87	Commercial Banks	134.72	240.11	98.49	20.72		
RRBs	77	77.94	79.35	RRBs	47.85	26.77	12.86	7.55		
Cooperative Banks	91	97.87	102.16	Cooperative Banks	0.21	3.22	2.78	0.07		
Others	125.12	95.74	99.36	Others	0.01	0.00	0.01	0.02		
All Agencies	69.45	68.24	73.54	All Agencies	182.79	270.09	114.14	28.36		
<b>6. PERFORMANCE TO FULFIL NATIONAL GOALS (As on 31/03/2023) – Amount in ₹ Cr.</b>										
Agency	Priority Sector Loans		Loans to Agr. Sector		Loans to Weaker Sections		Loans under DRI Scheme		Loans to Women	
	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total	Amount	% of Total
Commercial Banks	236872	25.51	114695	12.35	156870	16.89	0.00	0.00	76626	8.25
RRBs	21921	52.51	19922	47.72	28527	68.33	0.00	0.00	6625	15.87
Cooperative Banks	29769	53.88	22093	39.98	14580	26.39	0.00	0.00	5458	9.88
Others	6498	58.04	2895	25.86	6033	53.89	0.00	0.00	4890	43.67
All Agencies	295060	28.46	159605	15.39	206010	19.87	0.00	0.00	93599	9.03

7. AGENCY-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS – Amount in ₹ Cr.										
Agency	2020-21			2021-22			2022-23			Average Ach [%] in last 3 years
	Target	Ach'mnt	Ach'mnt [%]	Target	Ach'mnt	Ach'mnt [%]	Target	Ach'mnt	Ach'mnt [%]	
Commercial Banks	211146	209867	99.39	238527	170454	71.46	278157	236872	85.16	85.37
RRBs	24104	15832	65.68	28235	18463	65.39	29761	21921	73.66	544.55
SCB/ CCB	18213	17106	93.92	22195	24281	109.40	17943	29028	161.78	68.25
SCARDB	1039	409	39.34	1540	443	28.79	1633	296	18.10	81.22
Others	1438	2467	171.56	1894	3797	200.47	2734	6944	254.02	390.39
All Agencies	255940	245681	95.99	292392	217438	74.37	330227	295061	89.35	86.57
8. SECTOR-WISE PERFORMANCE UNDER ANNUAL CREDIT PLANS – Amount in ₹ Cr.										
Broad Sector	2020-21			2021-22			2022-23			Average Ach[%] in last 3 years
	Target	Ach'mnt	Ach'mnt [%]	Target	Ach'mnt	Ach'mnt [%]	Target	Ach'mnt	Ach'mnt [%]	
Crop Loan	66018	69910	105.9	71924	61310	85.24	81896	79129	96.62	95.92
Term Loan (Agr)	46181	56547	122.4	54069	57477	106.30	58978	80477	136.45	121.72
Total Agri. Credit	112199	126457	112.7	125992	118787	94.28	140875	159606	113.30	106.76
Non-Farm Sector	132987	98626	74.16	156902	87897	56.02	178798	126229	70.60	69.92
Other Priority Sector	10754	20598	191.54	9498	10754	113.22	10554	9226	87.42	130.72
Total Priority Sector	255940	245681	96.0	292392	217438	74.36	330227	295061	89.35	86.57
9. NPA POSITION – Amount in ₹ Cr.										
Agency	2020-21			2021-22			2022-23			Average NPA [%] in last 3 years
	Total O/s	NPA Amount	% NPA	Total O/s	NPA Amount	% NPA	Total O/s	NPA Amount	% NPA	
Commercial Banks	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
RRBs	35505	4972	14.0	37423	5426	14.5	41038	4408	10.7	13.06
Cooperative Banks	33470	1766	5.3	38528	1911	5.0	44528	2991	6.2	5.67
Others	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
All Agencies	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Source: SLBC, Karnataka and banks

## 2.1 Banking Network

Karnataka State is known as the “cradle of banking in India” since seven of the country's leading banks originated from the State. As on 31 March 2023, the State has a total network of 11942 branches, with 59% in rural and semi urban areas constituted by 12 Public Sector Commercial Banks, 22 Private Sector Commercial Banks, 02 Regional Rural Banks, 8 Small Finance Banks, 02 payment banks, Karnataka State Cooperative Apex Bank Ltd. (KSCAB), 21 DCCBs and Karnataka State Cooperative Agriculture and Rural Development Bank Ltd. (KSCARDB). Besides, 6040 PACS and 181 Primary Cooperative Agriculture & Rural Development Bank Ltd. (PCARDBs) are functioning as grass root level arms of the short-term and long-term co-operative credit structure, respectively.

The State also has around 31 MFIs and NBFCs that cater to the micro finance needs of the marginalized sections. As on 31 March 2023, the State had 16892 ATMs with 5558 ATMs located in rural & semi urban areas. (Source: SLBC).

## 2.2 Deposits, Advances and Credit Deposit Ratio (CD Ratio)

The total deposits of the banks in the State stood at ₹1409856.21 crore and loans and advances outstanding in the State stood at ₹1036829.60 crore as on 31 March 2023 reporting a Y-o-Y growth of 8% in deposits and 16% in advances as on 31 March 2023. The share of Cooperative banks and RRBs in total deposits in the State was only 10% and 6%, respectively.

The CD Ratio in the State stood at 73.54% as on 31 March 2023 as compared to 68.24% as on 31.03.2022, which is above the national benchmark of 60%. The CD ratio of RRBs was 79.35%, which was higher than the State average as on 31 March 2023. However, the CD ratio in Uttara Kannada (43.70%) and Udupi (46.79%) was lower than the benchmark of 60%. (SLBC)

## 2.3 Priority Sector Advances

The share of Priority Sector advances outstanding as a percentage to total advances is 37.88% as on 31 March 2023. A comparison of agency wise Priority Sector Advances outstanding as on 31 March 2023 is presented in Table No. 2.2

**Table No.2.2: Agency-wise Priority Sector Advances Outstanding**

Agency	No of accounts	Amount outstanding (₹ crore)	Average amount o/s per account (₹ lakh)
Scheduled CBs	10665351	309953.66	2.91
RRBs	2360280	38246.63	1.62
Cooperative Banks	3718040	36791.42	0.99
Others	1624793	7729.66	0.48
<b>Total</b>	<b>18368464</b>	<b>392721.37</b>	<b>2.14</b>

Source: SLBC

It may be inferred from the wide variation between agency-wise per account loan outstanding that Cooperative Banks need to catch up with SCB and RRBs in credit deepening and ensure availability of adequate quantum of credit to their clientele.

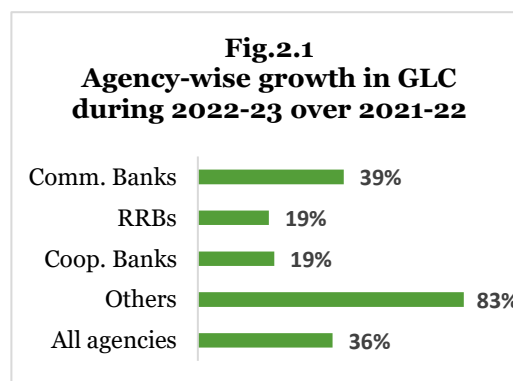
## 2.4 Ground Level Credit (GLC) Flow during 2022-23

The total priority sector lending during the year 2022-23 stood at ₹295061.15 crore as compared to ₹217437.97 crore in 2021-22 registering a growth of 35.70% (Table 2.3). The agency wise growth in GLC during 2022-23 is given in the Fig 2.1. It shows that the Commercial Banks had the highest share in priority sector lending in the State and RRBs and Cooperative Banks have wide scope for improving their share.

**Table No.2.3: Agency-wise share in GLC**

Agency	2021-22		2022-23	
	Amt. (₹ crore)	% Share	Amt. (₹ crore)	% Share
Comm. Banks	170454	78.39	236872	85.37
RRBs	18463	8.49	21921	7.43
Coop. Banks	24724	11.37	29324	10.09
Others	3797	1.75	6944	2.20
<b>Total</b>	<b>217438</b>	<b>100</b>	<b>295060</b>	<b>100</b>

Source: SLBC



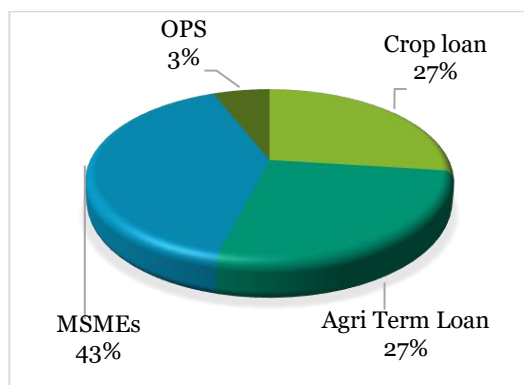
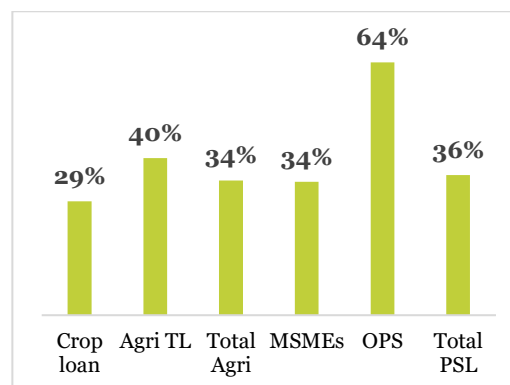
## Broad Sector-wise Share in GLC

The broad sector-wise disbursements and share of each sector in the total priority sector lending during the last two years are given below in Table 2.4 and Fig 2.2

**Table No. 2.4: Sector-wise share in GLC**

Agency	2021-22 (₹ crore)		2022-23 (₹ crore)	
	Amount	% Share	Amount	% Share
Crop loan	61309.86	28.20%	79128.74	26.82
Agri Term Loan	57477.25	26.43%	80476.92	27.37
<b>Total Agriculture</b>	<b>118787.11</b>	<b>54.63%</b>	<b>159605.66</b>	<b>54.09</b>
MSMEs	87896.86	40.42%	126229	42.78
Other Priority Sector	10754.00	4.95%	9226	3.13
<b>TOTAL</b>	<b>217437.97</b>	<b>100.00%</b>	<b>295061.15</b>	<b>100.00</b>

Source: SLBC

**Fig. 2.2 Sector-wise share in GLC during 2022-23****Fig. 2.3 Sector-wise Growth in GLC during 2022-23 over 2021-22**

The disbursements under all sectors recorded positive growth during 2022-23, over the previous year.

## 2.5 Progress under Annual Credit Plan in the State

During the FY 2022-23, as against the aggregate Annual Credit Plan of ₹ 330226.73 crore for the State, the achievement stood at ₹ 295061.15 crore which is 89% of the target. The total credit for Agriculture Term loan exceeded the total Crop Loan. While achievement under agriculture term loan exceeded the target (136%), the achievement under MSME was only 71% of the target. For the year 2023-24, the State credit potential of ₹358763.48 crore under Priority sector has been estimated by NABARD in the State Focus Paper for 2023-24. The Ministry of Finance, Government of India has envisaged the ground level credit target for agriculture, by the banks in Karnataka as ₹1,26,633 crore for 2023-24. Considering the budgetary formulations and on the basis of the ground level disbursements, the projections made by NABARD in the Potential Linked Plans, the annual credit plan for agriculture for the year 2023-24 for the State of Karnataka has been pegged at ₹1,79,037.89 crore. The crop loan target for 2023-24 has been fixed at ₹1,03,506.34 crore and Agriculture Term loan target at ₹75,531.54 crore. As on 30.09.2023, the achievement of ACP for the FY 23-24 under Crop loan is ₹53842 crore (54.94% of Target) and ₹39065 crore (49.15% of Target).

## 2.6 Financial Inclusion

Financial inclusion (FI) is a major step towards inclusive growth which ensures overall economic development of marginalised sections of society. GoI, RBI, NABARD and the State Govt. have launched several programmes to promote financial inclusion. The National Mission in this regard has a multi-pronged collaborative approach aimed at addressing financial literacy and awareness related gaps as also ensuring availability of adequate, timely and affordable credit and credit-plus services to the masses.

NABARD, during the last decade, has been utilising Financial Inclusion Fund (FIF) to place the required financial inclusion infrastructure in banks, as well as for providing the much-

needed financial literacy to generate demand for various financial services. During 2022-23, NABARD has extended support of ₹6.14 crore under various FI interventions in the State.

**A brief overview of important FI initiatives is as under:**

**a. Providing banking services in all villages with population above 5,000**

Financial Inclusion Plans (FIPs) were drawn by all the banks to ensure coverage to unbanked and under-banked villages through brick & mortar branches, Business Correspondents (BCs), Ultra Small Branches to ensure availability of banking services. Out of the identified 210 villages in the State with a population above 5,000 to be covered with a Brick & Mortar branch as on 31 March 2023, identified banks have opened banking outlets in all allotted villages.

**b. Business Correspondent (BCs)/ Bank Mitra**

Out of 71268 BCs enrolled in the State, 59379 BCs are active and doing transactions through Micro ATMs as on 31.03.2023. 7631 BCs are certified by IIBF. In 11889 BC locations, BCs are reported to be inactive which needs to be looked into by the respective banks. Further, all the banks are being encouraged to provide training to all BCs/ Bank Mitra through the respective R-SETIs/RUDSETIs as also to apply for IIBF certification and render banking services more effectively.

**c. Financial Literacy Centres (FLCs)**

Financial literacy is critical to enable people to take informed decisions and plan prudently for greater resilience during predictable and unpredictable events. Further, it holds the key to generating demand for financial services and products being made available to the public. To undertake financial literacy on a mission mode in the State, it was decided to open FLCs at taluka level as per the allocation made in District Consultative Committee (DCC). So far 177 FLCs have been opened in the State, of which 151 were functional as on 31.03.2023. Effective functioning of the FLCs and conduct of Financial Literacy Programmes is being ensured by the Banks. During FY 2022-23, total 26347 literacy programmes were conducted by these FLCs benefitting 18.54 lakh individuals. NABARD has extended financial support of approximately ₹3.27 Cr towards 7607 programs during FY 22-23 in the State. During FY 23-24, as on 31.12.2023, NABARD has extended financial support of approximately ₹1.92 Cr towards conduct of 3830 programs.

**d. Rural Self Employment Training Institutes (RSETI)**

RSETIs are an initiative of Ministry of Rural Development (MoRD) to have dedicated infrastructure in each district of the country to impart training and skill upgradation of rural youth, for entrepreneurship development and promoting self-employment. In Karnataka, there are 31 RSETIs/RUDSETIs sponsored by various banks. As on 31.03.2023, these institutions have trained 3,55,812 candidates through 12,640 programmes on various self-employment vocations. (Source: SLBC) Banks are encouraged to consider financing the eligible certified trainees of RSETIs and reduce the turn-around time for loan applications. During FY 23-24, NABARD has sanctioned ₹1.38 crore as grant assistance towards CAPEX for 31 RSETIs in Karnataka.

**e. Social Security Schemes**

**Progress under Prime Minister's Jan Dhan Yojana (PMJDY)**

Under the PMJDY launched in 2014, as on 31 March 2023, 182.79 lakh accounts were opened in the State, of which, nearly 52% were in rural areas. Further, 78.78% of the accounts were Aadhar-seeded while 55.70% of accounts were covered by RuPay Cards. However only 52.83% of RuPay cards issued were activated. Further, 74.56% of the CASA accounts were seeded with Aadhar. GoK is also actively leveraging the JAM trinity and encouraging Aadhaar based DBT in all government schemes.

The comprehensive PMJDY programme now under implementation focusses on expanding coverage from “one Account per household” to “one Account for every adult” with changes like

raising overdraft limit from ₹5000 to ₹10000, upward revision in age limit for OD from 60 to 65 years and increase in accidental insurance coverage for new RuPay card holder to ₹2 lakh for new account opened after 28/08/2018.

In view of the importance of micro-insurance/pension products to cater to the hitherto uncovered populace, GoI launched three social security schemes namely, Pradhan Mantri Suraksha Bima Yojana (PMSBY), Pradhan Mantri Jeevan Jyoti Bima Yojana (PMJJBY) and the Atal Pension Yojana (APY) on 09 May 2015, to be implemented by all banks. The progress in enrolment of applications as on 31.03.2023 is furnished in Table 2.5.

**Table No. 2.5: Progress under Social Security Schemes (lakh No.)**

Scheme	Total Enrolment
PMJJBY	114.14
PMSBY	270.09
PMJDY	182.79
APY	28.36

Source: SLBC

#### **f. PM Kisan Samman Yojana and farmers benefitted in Karnataka**

Pradhan Mantri Kisan Samman Nidhi Yojana is implemented as a central sector scheme by the GoI to augment the source of income of small and marginal farmers by providing them with income support of ₹6,000 per year in three installments through DBT.

The State Government has been providing additional financial assistance of ₹4,000/- in two installments under the PMKISAN-Karnataka Scheme to all eligible farmers of the Central Government's PMKISAN scheme directly to the farmers' account through Aadhaar based DBT. During 2022-23 the State Government has transferred total financial assistance of ₹956.71 crore to 47,83,562 farmers in the State. (Source: Economic Survey 2022-23)

#### **g. Implementation of CBS in Cooperative Banks**

In Karnataka besides the StCB, all 21 DCCBs are on CBS platform. As the CBS platform is now fully functional and cooperatives are using RTGS/NEFT/DBT, the focus has shifted to adoption of other user friendly and efficient technologies like internet banking, mobile banking, SMS alerts and other value-added customer friendly services. Further, all these banks have now migrated to Card technology based Rupay Kisan Card and Rupay Debit Cards. The banks have also been advised to work on mobile banking, using CKYC, AUA, KUA, UPI etc. Further, NABARD is also exploring the prospects of a Shared Services Entity jointly owned by stakeholders for providing Technology, Operations and Support Services to Cooperative banks across the country. This initiative will bring down the cost incurred by the banks in onboarding CBS and various CBS plus technology and services platforms.

With an aim to strengthen the cooperative sector, 63,000 functional PACS in the country have been taken up for computerization under the Centrally Sponsored Project for Computerization of PACS, being implemented through NABARD. In Karnataka, 5491 PACS have been identified under the project in the first phase with a total project outlay of around ₹175.26 crore. This initiative will bring in transparency, operational efficiency and uniformity in accounting practices followed by PACS and enhance their capacity to offer a bouquet of services to the rural populace.

Further, for the Long-Term Cooperative Credit Structure as well, the GoI has approved the project of computerization of 1,851 units of ARDBs in the country including their branches and units, with a total estimated outlay of ₹ 119.40 crore to be shared by GoI, State Govt and ARDBs. This project shall also be implemented through NABARD and groundwork for the same has already commenced in the State.

## CHAPTER 3

### NABARD'S PERCEPTION ON THE DEVELOPMENT PERSPECTIVES OF THE STATE

#### 3.1 Introduction

Karnataka is the sixth largest and the ninth most populous state in the country and is blessed with varied agro-climatic features suited for cultivation of a wide range of crops. The State ranks first in India Innovation Index and renewable energy, second in milk production and procurement by Cooperatives, sixth in Public Affairs Index (growth, equity, sustainability) and seventh in Sustainable Development Goals (Niti Ayog-SDG India Index,2020). The State is a major IT and biotechnology destination in the country and has gained global significance in this sector.

NABARD's initiatives in the State have been focused on inclusive development to further unleash the State's potential optimally. NABARD has been playing a catalytic role in facilitating sustainable rural development by ensuring the financial soundness of Rural Financial Institutions (RFIs) in the country. In discharging its role as a facilitator for rural prosperity, NABARD is entrusted with providing refinance to RFIs in rural areas, fostering institutional development by evaluating, monitoring and supervising the client banks.

NABARD's support to state governments for creation of rural infrastructure through RIDF has made a visible and lasting impact on the rural economy. Besides, the social and livelihood interventions through Tribal Development Fund (TDF), Watershed Development Fund (WDF), Farm Sector Promotion Fund of NABARD and Promotion of FPOs, implementation of Skill Development programmes etc., have brought a visible impact on the sustainable development of the target groups/areas. Thus, NABARD has been acting as a change agent for bringing rural transformation by partnering with all stake holders. NABARD is also facilitating the identification of bottlenecks which stand in the way of development of the state's rural economy and suggesting ways and means to remove them by facilitating appropriate policy prescriptions. In Karnataka, NABARD has successfully implemented various developmental initiatives partnering with Banks, State Government departments, about 300+NGOs, 381 FPOs and 49000+SHGs, OFPOs and other stake holders.

#### 3.2 Capital formation in agriculture for increase in production and productivity

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, 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 into enhanced income for farmers. Given its importance, NABARD has been extending long-term refinance support to banks and mFIs/NBFCs for asset creation of farm, farm related and non-farm activities with repayment periods ranging from 3 to 15 years. Further, medium-term refinance product for 18 months to 3 years was introduced during 2014-15. All investment activities under medium-term relating 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**' with NABARD, to provide long-term refinance support exclusively to Cooperative Banks and RRBs for investment credit in agricultural activities. In Karnataka, to facilitate capital formation in agriculture and related sectors term loan refinance of ₹9345.26 crore was disbursed during 2022-23. Further, an amount of ₹1979.34 Crore was sanctioned under RIDF to State government for implementation of 281 Rural Infrastructure Projects and ₹1367.76 Crore was disbursed for implementation of ongoing projects.

#### 3.3 Financing SF/ MF, Oral Lessees/ Tenant Farmers Share Croppers etc.

Agriculture in India has progressively become predominantly smallholder driven. As per Agricultural Census 2015-16, at All India Level, 86.12% farmers possess less than 2 ha of land and average size of land holding has declined from 1.15 ha (2010-11) to 1.08 ha. In Karnataka,



86.80 lakh farm holdings are operating an area of 118.05 lakh ha. The average size of holding is 1.36 ha. Small (25.25%) and Marginal (54.92%) land holdings together account for 80.17% of the total land holdings and operate 44% of the total operated area.

These small holders suffer from poor access to quality inputs, institutional credit, organised markets, modern technical know-how. Thus, financing these farmers assumes importance. Agriculture credit flow should be inclusive, in the sense, it should cover small and marginal farmers on priority basis. At present, there is no specific scheme of Government of Karnataka to provide loan/ subsidy/ interest subvention to sharecroppers, tenant farmers and leaseholders farmers in Karnataka. Canara Bank, which is also the SLBC convenor and other banks viz. SCBs, RRBs and State Cooperative Bank are having scheme in place to provide KCC loan to tenant/ leaseholders/ sharecropper farmers. The loans are being provided to such farmers through JLG mode. For tobacco growers in Mysore, Mandya & Chamara Nagar region, banks have loan products for advancing to tobacco growers, irrespective of whether they hold land or not, based on the licence for tobacco cultivation.

### **3.4 KCC/Rupay KCC**

The KCC Scheme, introduced in 1998-99 was a major step towards providing hassle free, adequate and timely credit to the farmers from the banking sector. Out of the 39.43 lakh RuPay Kisan cards issued in Karnataka 31.40 lakh Rupay KCC is issued through cooperatives and 8.02 lakh Rupay KCC have been issued through RRBs. During 2019, the scheme was made applicable for Dairy, Fisheries and Animal Husbandry sector as well. Subsequently, the GoI has taken various steps to ensure saturation of all eligible farmers under the Scheme.

GoI launched the 'Ghar Ghar KCC Abhiyan' in September 2023 for reaching out to non-KCC account holder PM KISAN beneficiaries and fostering the saturation of KCC Accounts among eligible PM Kisan beneficiaries. There are about 8.80 Crore PM Kisan beneficiaries in the country as per last instalment released by DA&FW for Dec 2022-Mar 2023 period, of which around 1.50 crore farmers are not covered under KCC. NABARD is entrusted with the overall execution and monitoring responsibility for this Abhiyan being carried out through the active support of banks, Line Departments and so other stakeholders.

In the state of Karnataka, around 4.10 lakh PM Kisan beneficiaries were left out when the campaign started in September. NABARD, Karnataka RO in coordination with the SLBC and State Government, is making all out efforts to bring all PM Kisan beneficiaries in the State under the ambit of KCC scheme.

#### **3.4.1 Land Records – Digitization and Creation of charge**

##### **Bhoomi Project for digitization of Land Records:**

It is a flagship project of Karnataka Government for Land Records management. It was launched in the year 2000. Under this project, data regarding Rights, Tenancy and Crops (RTC) were digitized and made available to citizens. Integration of Bhoomi with Registration Software, Land acquiring Bodies and Banks was a major step in bringing uniqueness to the Land Records System in Karnataka.

##### **Farmer Registration and Unified Beneficiary Information System (FRUITS):**

Government of Karnataka in association with NIC has developed a software application called Farmer Registration & Unified Beneficiary Information System – FRUITS. Under this, digital data on agriculture land records is captured and integrated with banking system, which enables banks to have hassle free unified IT system for sanction/ disbursement of bank loans. It also provides crop and farm analytics and help bankers with farm and crop related historical data for quick decision.

### 3.5 Agriculture & Allied activities in Karnataka

#### 3.5.1 Performance, prospects and strategies

The agricultural sector of Karnataka is characterized by vast stretches of drought prone region and sporadic patches of irrigated area. Thus, a large portion of agricultural land in the state is exposed to the vagaries of monsoon with severe agro-climatic and resource constraints. Agriculture employs more than 68% of Karnataka's workforce. Agriculture in Karnataka is heavily dependent on the southwest monsoon. While only 26.5% of the sown area is under irrigation, 60.12% of the total geographical area is under cultivation. The state ranks sixth in India in terms of total area under horticulture which occupies about 26.20 lakh ha with an annual production of about 241.50 lakh tonnes. Karnataka was awarded "Best State for Horticulture 2022" for promoting horticultural development and production in the state during the 13th Agriculture Leadership Awards 2022. It stands first in production of Coffee and raw silk, fifth in production of vegetables and third in fruit production. It is also the largest producer of spices, silk, aromatic and medicinal crops and tropical fruits. It is the second largest milk-producing state after Gujarat and in floriculture, grapes. It is the third largest producer of sugar and ranks fourth in sugarcane production.

It has a coastline of 320 km and yields an annual marine production of 10.80 lakh MT with 276 varieties of fishes. The fisheries sector is now emerging as one of the most important in allied activities in the state. Karnataka leads in the export of silk in India with an approximate share of 25.00% of the total Indian export market.

Agriculture plays an important role in the overall growth of Karnataka's economy despite a fall in its share in the state domestic product. Smoothing of access to credit, creating opportunities for alternate sources of income, strengthening of extension services, encouraging small and marginal farmers to form producer organisations and integrating them to the value chain etc., are some of the suggested strategies. Government of Karnataka has already taken notable steps in this regard. The budget allocation to the agricultural sector is showing an increasing trend every year. In view of comprehensive development of agriculture, thrust has been given on flagship programmes viz., Soil health mission, Supply of quality seeds, Farm mechanization, Custom hiring centres, Micro-irrigation, besides giving emphasis for millet production and processing aspects.

#### 3.5.2 State specific policies

**a) Crop Survey:** A unique project of Government of Karnataka is taken up by e-Governance department implemented by Agriculture department for enumeration of crops of all farm lands/ owners in Karnataka. The geo-referenced mosaic cadastral map available with Karnataka State Remote Sensing Applications Centre (KSRSAC) is used for validation of geo-fencing and ground data collection of all plots. Around 2.5 crore records are captured with validation. The data is being used by SSLR, Revenue department to update the RTC, used for Crop Insurance, loan, Crop Cutting experiments, MSP and other subsidy programs of Government.

**b) Minimum floor price scheme** Minimum Floor Price Scheme is operated in Karnataka for perishable agriculture commodities like onion, potato, tomato and green chilies. The agricultural Marketing Department arranges the procurement of these commodities through HOPCOMS in districts/talukas after the sanction of cabinet subcommittee. During 22-23, action has been taken to procure green gram & black gram under this scheme. 1,57,308.80 quintals of green gram have been procured from 22,181 farmers.

#### 3.5.3 State Budget Highlights 2023-24 for Agriculture and allied Sector

Total Budget estimate (Consolidated Fund) for 2023-24 is ₹3,27,747 crore, and allocation for Agriculture and Allied Activities is ₹ 22,158 crore. Government has also introduced various schemes and initiatives for the year 2023-24 for enhancing the income of farmers. This includes re-launching Krishi Bhagya Scheme in convergence with MNREGS, branding and promotion of indigenous agricultural products, establishing Mini cold storages, eight cold

storage units and processing units, 100 Hi-tech Harvester hubs in Custom Hiring Centres to promote Farm Mechanisation, 'Navodyama' scheme to encourage innovation in agro-industries, etc. The State Govt has also focused on promoting the allied sector by schemes such as 'Anugraha' to address livestock fatality related issues, enhancement of limit for interest-free bank loans for fisherwomen, enhancing the quantum of subsidised diesel for fishing boats, etc. State government is giving renewed emphasis on completion of ongoing irrigation projects, prioritising lift irrigation schemes, and filling tanks to enhance water availability for agricultural activities. This includes:

- Two projects under Pradhan Mantri Krishi Sinchayee Yojana – Accelerated Irrigation Benefits Programme (PMKSY-AIBP), two projects of the State, i.e., extension of Phase 1 and Phase 2 Upper Krishna Project and Sannati lift irrigation project
- Construction of a Balancing Reservoir near Navale in Koppala District to address the problem of contraction in water storage capacity of Tungabhadra Dam due to silt accumulation;
- Expedient implementation of Upper Krishna Project Phase-3, to utilize 130 TMC water awarded by the Krishna Tribunal;
- Implementation of second phase of Lift Irrigation Scheme, to fill 296 tanks of Kolar and Chikkaballapura districts at a cost of ₹529 crore.

NABARD has been supporting the infrastructure development in Irrigation sector under RIDF and it remains one of the priority areas for the State Govt. During the year 2023-24, irrigation sector constituted 49.19% of total RIDF loan sanctioned under RIDF-XXIX. Further, to align with State Government's thrust on increasing area under micro irrigation, NABARD has sanctioned an amount of 290.33 Cr under Micro Irrigation Fund. In order to obviate the difficulties faced by farmers in dryland areas, the following proposals are suggested for incorporation in the state budget:

#### **Budget Proposal-1**

##### **1. Name / Subject of the Proposal:**

Scaling up of Farm Ponds across the vulnerable parts of Karnataka for enhancing farmers income

##### **2. Background and rationale**

Several drought prone areas in the country bring upon adverse conditions for irrigation needs for agricultural land. The distribution of rivers not being uniform, at places even canal systems are not available, which is worsened by the salinity of water from borewells and huge depth to fetch ground water. In such a situation, the farmer is not able to grow any crop during summers. The deccan plateau region is quite affected by this scenario and is also a rain-shadow area.

To cope up with uncertainty of rains, dry spells of rains and water shortage during dry seasons, it is essential that farmers find an alternative solution. Farm Pond is one such measure, which is an adaptation measure in Indian Agriculture, as well as climate change. Farm ponds, however, cannot be scaled up by means of grants alone. It requires a sustainable solution, which can neither be a burden of government treasury, nor affect the pockets of farmers. The scaling up of farm ponds can be done through bank finance model, supported by NABARD by incentivizing the involved partners. Joint Liability Groups (JLG) are the best modus operandi, wherein 4 to 10 farmers can form a group and take a loan from bank. Every individual member can be the beneficiary of the loan, and every individual member will also be liable to repay the loan. NABARD incentivizes the agency involved in promoting the JLG, facilitating for credit linkage through financial institutions, and handholding for a period of 3 years. This ensures that the JLG mode is sustainable, and beneficiaries are brought under formal credit sector.

##### **3. Whether it involves Budgetary support from State Government: Yes**

##### **4. If yes, Budgetary implications and financial details:**

NABARD has done some pilot by partnering with banks and NGOs, by incentivizing them for JLG formation and credit linkage in respect of those farmers who were involved in formation of Farm ponds. The experiment involved areas in black soil and red soil region. The farmers who were previously dependent on rains for agriculture, could now also grow crop in dry seasons, as a result

of which, the income of farmers has reportedly increased. Data on different types of soil, different types of pond sizes and pond bottom type, and the resulting yield are as under;

Soil Type	Pond Size	Pond bottom type	Area covered under irrigation	Increase in yield reported by farmers on an average
Black Soil	100*100*12 feet	Open	5 acres	80% yield
Red Soil	30*60*8 feet	Polythene	2 acres	60% yield
Alluvial Soil	55*45*10 feet	Cement	5 acres	60% yield

\* The cost of the above ponds' construction varies **from ₹80,000 to ₹4.75 lakh.**

The resulting farm income enables the farmers to repay the loans. These loans can be spread over maximum tenure, so that EMIs are minimized. Further, the higher the number of ponds and JLGs to be formed, the lower the interest rates can be by the financing bank.

State government may consider providing subsidy for Farm Pond construction, calculated either in form of labour cost or total cost of farm pond construction. The balance amount is to be borne by farmers, which can be sometimes a burden. In such a circumstance, bank loan under JLG mode will again help the farmers. For banks too, JLG is a more reliable mode of lending, than individual lending.

## 5. Proposal

- The proposal is envisaged for dryland areas / districts. Around 15 districts of Karnataka are proposed to be covered
- Average unit cost of ₹2.50 lakh per farm pond may be assumed. Unit Cost will depend on different soil type/ Pond size.
- Budgetary outlay required: Interest subvention on the lines of KCC – IS may be provided. Farmers/JLGs may be provided loan @7% and prompt repayment incentive @3%. FIs will be subvented @1.5-2%.

In Karnataka 1 lakh farm ponds may be considered, the financial details are placed below:

S.No	Components	Financial Outlay (in ₹)
1	Avg TFO	2.5 Lakh
2	Bank loan component (80% on "1")	2.00 lakh
3	IS@ 2% to FIs	0.04 lakh
4	PRI@ 3% to farmers/JLGs	0.06 lakh
5	IS Subvention	0.10 lakh
6	For 1 lakh farm ponds	100 Cr

- ✓ Enhanced KCC limit of ₹5 lakh may be considered for those availing the loans under Farm ponds.

### **Budget Proposal-2**

#### **1. Name/ Subject of the Proposal**

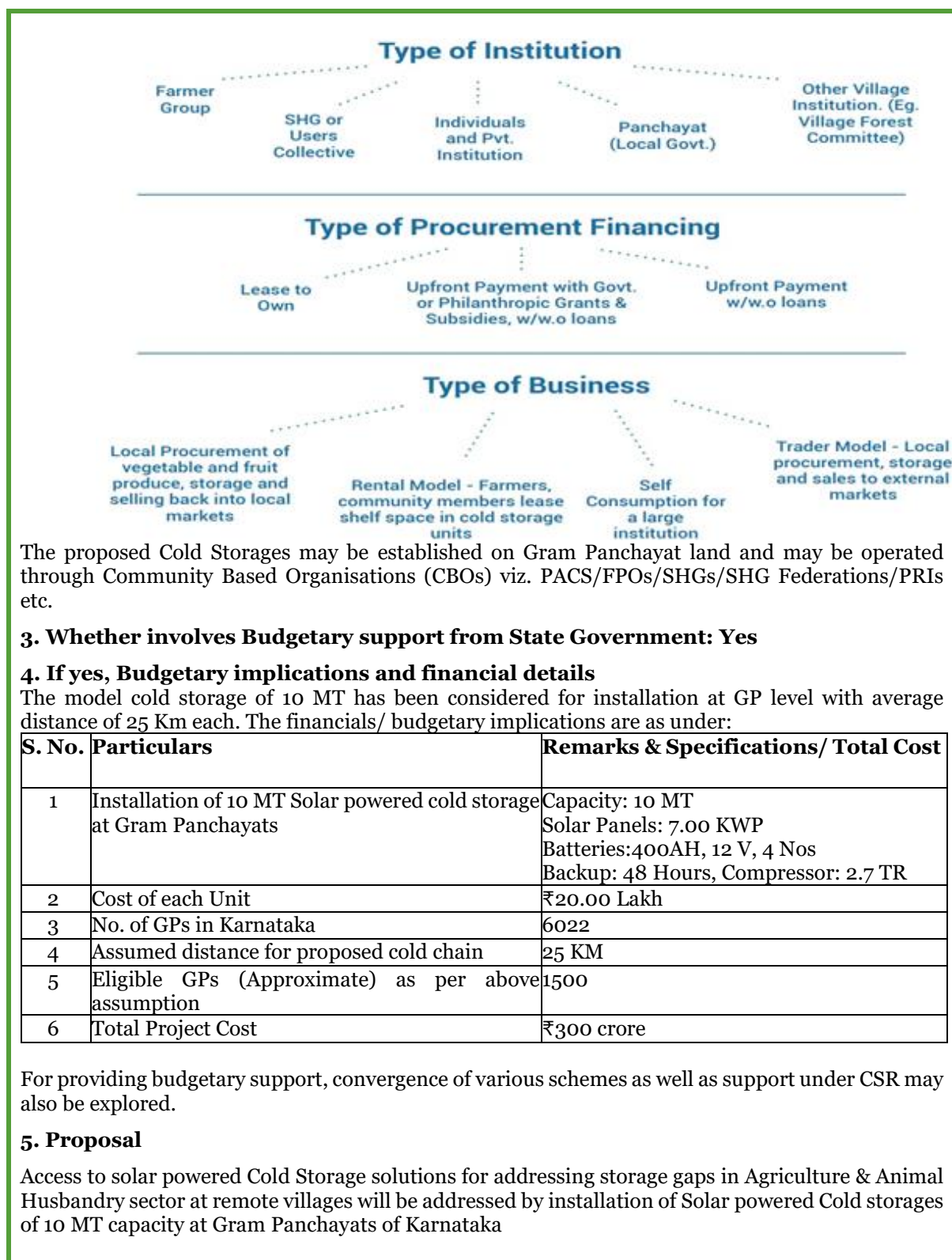
Provision of solar-powered Cold storages at Gram Panchayat level - Access to Cold Storage solutions for Agriculture and allied activities

#### **2. Background and rationale**

As per the study titled “Study to determine Post Harvest Losses of Agri-produce in India” commissioned by Ministry of Food Processing Industries, Government of India through NABARD Consultancy Services Pvt. Ltd. (NABCONS) in 2022, post-harvest losses of major crops and commodities in India are as under:

<b>S.No.</b>	<b>Crops/Commodities</b>	<b>Loss (%)</b>
1	Cereals	3.89-5.92
2	Pulses	5.65-6.74
3	Oilseeds	2.87-7.51
4	Fruits	6.02-15.05
5	Vegetables	4.87-11.61
6	Plantation Crops & Spices	1.29-7.33
7	Milk	0.87
8	Fisheries (Inland)	4.86
9	Fisheries (Marine)	8.76
10	Meat	2.34
11	Poultry	5.63
12	Egg	6.03

- The varied shelf life and storage conditions of commodities makes it difficult for farmers to preserve their produce leading to distress sales.
- Currently, there is limited access to farm/village level cold storages. Large units are quite often located in urban / semi-urban centres. Farm/village level cold storage can assist farmers in aggregation and store produce for better price realisation.
- Access to finance and minimal use of farm cold storage during non-harvesting cycles is a challenge if such farm cold storages are proposed to be installed by individual farmers. Tackling this requires a strategy of financing and owning cold storage solutions using alternative group based/participative community models.
- Small cold storages of capacity 10 MT to 20 MT at GP level will create the efficient cold chain addressing above all storage, spoilage, losses issues in Agri & allied sector.
- Vaccination in India is the most critical component that plays an important role to reduce livestock mortality and increase the income of the farmer. It is generally seen that almost 15% - 20% mortality in livestock happens due to diseases. It has to be considered that the availability of vaccines, required human resource for doing it and the refrigerators for storing these vaccines are essential part of any vaccination program. Often erratic power supply disrupts the cold chain resulting in ineffectiveness of vaccination which results in high mortality despite vaccination. The cold storage facility will help availability of vaccines at required & remote places of India. The proper vaccination and deworming can bring the kid mortality down to 20% by following the proper schedule.
- The Ownership and Procurement Models for above Agricultural Cold Storage Solutions are as under:

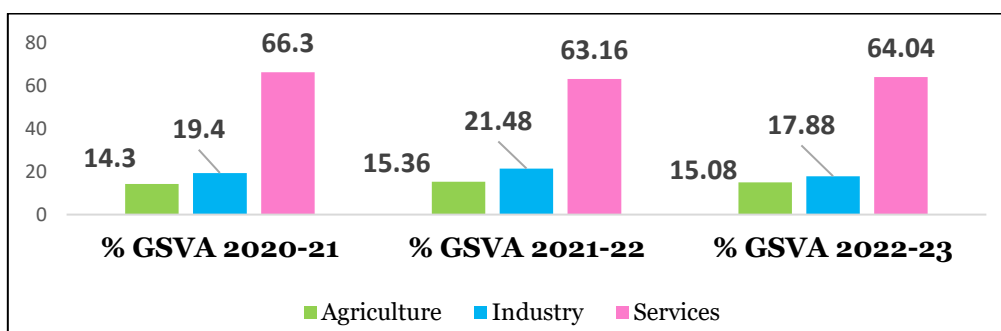


### 3.5.4 Agricultural GDP vs. Total GSDP

Advance estimates indicate that Gross State Domestic Product (GSDP) of Karnataka had grown at 7.9% whereas the GDP at national level is 7.0% at constant (2011-12) prices. At current prices, the GSDP has reached ₹22,41,368 crore with a growth of 14.2% and GDP has attained a level of ₹2,73,07,751 crore with a growth rate of 15.4%. The share of Karnataka's GSDP in All India GDP is 8.2% during 2022-23.

The GSVA growth rate of agriculture sector has been estimated to be 5.5% in 2022-23 as against the growth of 8.7% in 2021-22. The contraction is on account of lower growth rate of crop sector to 3.2% in 2022-23 compared to 6.0% in 2020-21.

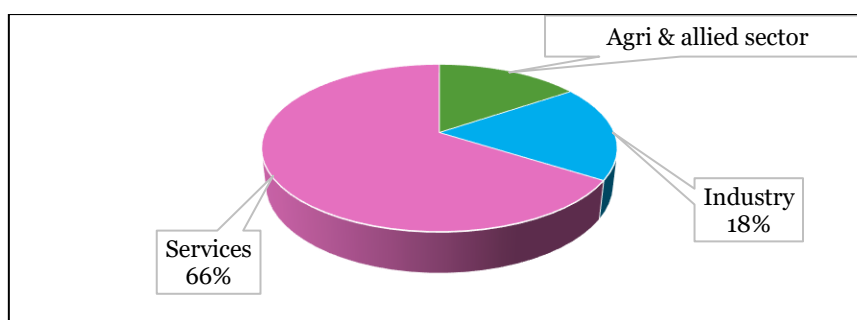
**Fig. 3.1: Composition of GSVA during 03 years (in %)**



Source: Economic Survey 2022-23

The revised estimates indicate that the contribution of Agriculture sector to the overall GSDP saw a marginal decrease from 15.36% to 15.08% in 2022-23 against 2021-22. Industry sector saw a decrease from 21.48% to 17.88% in 2022-23 against 2021-22. The services sector a largest component of GSDP saw a marginal increase from 63.16% to 64.04% in 2022-23 against 2021-22.

**Fig. 3.2: Sectoral Composition of GSDP in 2022-23 (in %)**



**3.5.5 Operational holdings and area:** With rising population, the number of farm holding in the state increased from 35.5 lakh in 1970-71 to 78.32 lakh in 2010-11 and to 86.80 lakh in 2015-16. As a result, the per capita land availability decreased from 3.2 ha in 1970-71 to 1.5 ha in 2010-11 and 1.36 ha in 2015-16. (At all India level, decrease from 1.15 ha to 1.08 ha).

Table 3.1 presents the details of the operational holdings and operational area in Karnataka in some selected years during the period between 1970-71 and 2015-16. While the number of marginal holdings increased from 30.4% in 1970-71 to 49.1% in 2010-11 and further to 54.90% in 2015-16, the operational area of marginal farmers increased from 4.8% to 15.2% and then to 17.46% in 2015-16. As a result, the per capita area held by marginal farmers, which was 0.51 ha in 1970-71 declined to 0.48 ha in 2010-11 and to 0.43 ha in 2015-16.

**Table No.3.1: Distribution of average size of holdings as per Different Agriculture Census**

Year	Number of Holdings-lakh No.			Operational area-lakh ha			Per capita area-ha	
	Total	Marginal farmers	% of Total	Total	Marginal farmers	% of Total	Total	Marginal Farmers
1970-71	35.5	10.8	30.4	113.7	5.5	4.8	3.2	0.51
1980-81	43.1	14.9	34.6	117.5	7.3	6.2	2.7	0.49
1990-91	57.8	22.6	39.2	123.2	10.7	8.7	2.1	0.47
2000-01	70.8	32.5	45.9	123.1	14.9	12.1	1.7	0.46
2010-11	78.3	38.5	49.1	121.6	18.5	15.2	1.5	0.48
2015-16	87.8	47.7	54.9	117.24	20.8	17.6	1.3	0.43

Source: [www.raithamitra.kar.nic.in](http://www.raithamitra.kar.nic.in), Agricultural Census 2015-16

### 3.5.6 Cropping pattern and crop production

Cropping pattern in Karnataka has undergone several changes. Traditionally, the major crops grown in the state are cereals, pulses, paddy, groundnut, cotton and sugarcane which constituted about 80% of the gross sown area in 2000-01 and also in 2022-23. Karnataka is the only state across the country that has shown stable growth in crop diversification. This is attributed to the varied 10 agro-climatic zones of the State, suitable for cultivation of almost all cereals, pulses, oilseeds and commercial crops.

**Table No.3.2: Area under Principal Crops in Karnataka (Area - lakh ha)**

Crops	2000-01	% Area to Total Gross Cropped Area	2022-23	% Area to Total Gross Cropped Area
Cereals	57.6	46.91	48.92	40.77
Pulses	20.5	16.69	32.64	27.20
Food grains	78.0	63.52	81.56	67.97
Oilseeds	18.9	15.39	12.70	10.58
Cotton	5.5	4.48	9.15	7.63
Sugarcane	4.2	3.42	7.18	5.98

Source: Agriculture Profile of Karnataka: Govt. of Karnataka, Raitamitra, GoI website – dacnet/Economic Survey of Karnataka 2022-23

The Table shows that, percentage of area under cereals and oil seeds to total gross cropped area during 2022-23 has declined as compared to that of during 2000-01. On the other hand, in case of Pulses, the percentage of area to total gross cropped area has increased to 32.64% during 2021-22 as compared to 16.69% during 2000-01. Similarly, the area under cotton and sugarcane has increased considerably.

### 3.5.7 Potential for cultivation of Millets and Scope of promotion of Organic farming

United Nations General Assembly had adopted a resolution initiated by India and other countries and declared the year 2023 as the International Year of Millets. This gave a big boost to the efforts of popularizing millets globally, since they are nutrients-rich C4 crops that can tolerate extreme weather conditions and require lesser inputs for production.

Karnataka has a long history of organic farming and growing millets. Being a drought prone state, it has been pushing the idea of millets and organic crops to mitigate the impact of failing rains and lack of productivity, in order to stabilize farmer incomes and promote effective water management and consumer health. The advantage of growing millets is that they require less water and are suitable for arid regions. Input cost is low and it is good as fodder.



Besides, Karnataka is the first State to formulate Organic Farming Policy way back in 2004 and a revised Organic Farming Policy during 2017. Several promotional programmes are being implemented in the State resulting in nearly one lakh ha under certified organic cultivation. The State stands 5<sup>th</sup> in the country in terms of total cultivated area under organic certification at 93,963 ha as on March 2016 and 3<sup>rd</sup> in the country in terms of total certified production at 2,82,633 MT.

Karnataka State Organic Certification Agency (KSOCA) is established to provide reliable & efficient certification services at affordable fee. Regular Trade Fairs & exhibitions in Organics and Millets are being organized for awareness creation, promotion and to establish linkages.

Important Crops under Organic Cultivation in Karnataka are:

1. Cereals and Millets (Non-Basmati Paddy, Maize, Bajra and Ragi) and Fruits (Mango, Pineapple, Banana)
2. Spices and Condiments (Areca nut, Black Pepper, Chilli, Cinnamon, Cloves, Ginger, Turmeric, Nutmeg, Parsley and Bay leaves),
3. Sugar cane
4. Plantation crops (Coffee, Coconut)
5. Pulses (Black gram, Green gram, Bengal gram, Horse gram and Pigeon pea)
6. Oilseeds (Sesame, Groundnut and Soyabean)
7. Medicinal and aromatic plants (Amla, Aswagandha)

### **3.5.8 Promotion of Digital technological Innovations in Agriculture**

India's Digital Agriculture Mission (2021-2025) aims to combat food security challenges amid climate change. Partnering with CISCO, Ninjacart, Jio Platforms, ITC, and NCDEX, the government seeks to leverage technologies like A.I., Blockchain, drones, and robots for precision agriculture. The COVID-19 pandemic accelerated the adoption of Agritech platforms, emphasizing trends like smart farming, IoAT, crop management, and big data analytics. These technologies modernize operations, optimize resource use, and enhance supply chains, fostering resilience in the face of rising demands and limited resources. The mission underscores India's commitment to sustainable, tech-driven agriculture to ensure food security and reduce waste.

#### **3.5.8.1 Scope in Karnataka**

Karnataka, with its 10 agro-climatic zones and other natural advantages, offers immense opportunities for accelerated growth in agriculture and allied sectors with the help of digital technological innovations. On account of this varied agro-climatic features, almost all cereals, pulses, oilseeds and commercial crops are cultivated in different parts of the State. Farmers in Karnataka are very innovative and take lead in diversification as per the market trends.

Strategic investment and structural changes are required to entrench the large number of well-funded Agri-tech platforms in Karnataka to connect farmers to markets and increase their incomes. At government level, convergence of programmes and policies for agricultural technology services is important.

Efforts are needed to build a standardized platform for farmers and farmer producer's organizations (FPOs) to be able to discover various hi-tech services, such as financial technology and insurance services, farm level agriculture advisories, drones-as-a service and market connect platforms. NABARD has been playing a major role in promotion of FPOs and also promoting digital agriculture through various collaborative pilots under its Farm Sector Development Fund.

The State has 165 Agricultural Produce Market Committees (APMC's) to facilitate and regulate the marketing of agricultural commodities of which 156 APMCs have been linked to Unified Market Platform of Rashtriya e-Market Services and the Kalaburagi & Chincholi APMCs have been linked to e-NAM platform of the GoI. In addition to this, action has also been taken to link 03 more APMCs to e-NAM platform. These platforms can be used to connect the farmers

with modern digital and technological innovations. Direct support and incentives to farmers and FPOs will help in encouraging them to utilise agricultural technology services.

The constraints in this area include predominance of small and marginal farmers in the State (80%) with average size of holding of 1.36 ha. This complicates data gathering at farm level. Further, limited penetration of mechanisation tools and frequent natural calamities, like droughts, floods and excessive monsoon rains have constrained the deployment of digital solutions in the field. Therefore, a customised approach is needed to implement digital agriculture. Some of the measures to popularize implementation of digital agriculture in the State are use of low cost technology, portable hardware, renting and sharing platforms for agriculture equipment and machinery and academic support.

### **3.6 Climate Change - Adaptation and Mitigation**

**3.6.1** Climate change has become the most serious global challenge. A country like India, having predominantly agrarian economy dependent on seasonal monsoon, is more prone to impact of climate change like unpredictable rainfall, leading to rising sea-levels, extreme weather conditions such as droughts, floods and heat waves. The same stands true for the State of Karnataka. Agriculture is the most vulnerable sector to climate change. The direct effects of climate change include variability in temperature, precipitation and carbon dioxide concentrations while changes in soil moisture content and increased frequency of pest infections and diseases are indirect effects. It is a challenge to sustain rapid economic growth amidst the increasing global threat of climate change and the Central as also State Govts have, therefore, accorded top priority for addressing climate change related concerns.

#### **3.6.2 Climate trends in Karnataka**

In terms of area prone to drought, Karnataka ranks second after Rajasthan. Although endowed with two major river systems, 54% of the geographical area of Karnataka is drought prone, affecting 18 of the 31 districts. The State has experienced four consecutive droughts between 2014-2017 and rainfall has been deficient since 2012-13. The State as a whole is receiving less actual rainfall than the normal range during the last four years. In October 2023, 216 out of 236 taluks were declared as drought-hit in the State. Of these, 189 taluks are 'severely hit' and 27 are 'moderately hit.' The deficit northeast and southwest monsoons in the state is the main reason for the drought. As per the 'Drought Vulnerability Assessment in Karnataka' Report by Karnataka State Natural Disaster Monitoring Centre (KSNDMC), 2017, considering vulnerability to drought, Northern dry zone is highly vulnerable (81 %), followed by North-eastern dry zone (65 %), Central dry zone (49 %), North-eastern transition zone (62 %) and North-eastern dry zone (35 %). As per Report, the occurrence of rainfall and its spatial distribution is highly variable and uncertain. Taluk wise normal rainfall of the state vary from 408 mm to 5051 mm. Taluk wise annual rainfall variation is increasing over most of the taluks in south interior Karnataka. More than 2/3rd of the state receives less than 750 mm of rainfall. Taluk wise annual variability (CV) of the rainfall ranges from 16 to 40 %.

#### **3.6.3 Climate Change Scenario for the State**

The climate change studies of Karnataka have indicated that, there is a long-term warming trend and negative trend in rainfall for Karnataka and the area affected by drought will increase. In the Kharif season, most northern districts are projected to have an increase in drought incidences by 10-80% with some districts projected to have almost a doubling of drought frequency. Floods are becoming common every year due to heavy rainfall which is higher than the long-term average in some days and sometimes 10 to 20 times above the normal.

A warming trend in Karnataka has been observed for the period June to September in northern interior Karnataka. Both minimum and maximum temperature were found to have risen by up to 0.6°C over the last 100 years. According to projections made, average temperatures may rise further by 1.7°C to 2.2°C by 2030. Projected increases are more pronounced in the northern districts. It is estimated that overall reduced precipitation and continuous warming

could be a probable scenario for Karnataka. It is predicted that regions that already witness less rainfall and higher temperatures, will further experience further less rainfall and increases in average temperatures.

### **3.6.4 Karnataka State Action Plan on Climate Change**

As a State actively involved in formulating adaptation strategies and mitigation measures, Karnataka has taken lead in identifying and implementing Climate Change projects. The Karnataka State Action Plan on Climate Change discusses climate trends, projected vulnerabilities, adaptation and mitigation priorities. It includes a review of policies and programmes for possible mainstreaming of climate change. A State Level Steering Committee (SLSC) under the Chairmanship of Chief Secretary, GoK has been formed and notified. The coordination between different line departments for generating quality proposals to be funded under Climate Change is being done by Environmental Management & Policy Research Institute (EMPRI), which is the State Level Nodal Agency (SLNA) for Climate Change in Karnataka.

### **3.6.5 NABARD's initiatives**

NABARD has been designated as the National Implementation Entity (NIE) /Direct Access Entity (DAE) for three important funds, viz. National Adaptation Fund for Climate Change (NAFCC) and 02 International Climate funds viz., Adaptation Fund (AF) and Green Climate Fund (GCF). As on 31 March 2023, 40 climate change projects are under implementation with a total financial outlay of ₹1,852.6 crore.

**3.6.6 NAFCC project in Karnataka:** Under National Adaptation Fund for Climate Change (NAFCC), a project titled 'Conservation and Management of Indigenous cattle & sheep in the wake of Climate Change in Karnataka' is being implemented in Karnataka. The project was sanctioned by Ministry of Environment, Forest and Climate Change (MoEFCC) with a total outlay of ₹18.10 crore against which ₹18.10 crore has been released as on date. Executing Entity (EE) for the project is Karnataka Livestock Development Agency (K LDA), Department of Animal Husbandry and Veterinary Services (DAK&VS), GoK. The project aims to conserve and revitalize indigenous livestock varieties of the State as an adaptation strategy.

### **3.7 Farmer Produce Organisation (FPO)**

**3.7.1** Aggregation and building up the scale of operations is one of the methods for ensuring stability and ultimate growth of an organization. The problems, which the farmers as an individual face, can be solved to a great extent if they are in a position to organize themselves into a larger collective body. The Farmers Producers Organisation (FPO) is one such method. NABARD has been supporting promotion and nurturing of FPOs since 2011-12 through its various funds.

The Govt. of India, in the Union budget 2019-20, announced a Central Sector scheme for promotion and nurturing of 10,000 FPOs across the country to be implemented over a period of next five years. In order to facilitate adequate credit support for smooth implementation of the scheme, two separate credit guarantee funds have been created (a fund of ₹1000 crore in NABARD and ₹500 crore in NCDC) besides further augmenting the corpus of equity grant fund earlier set up in SFAC.

For the promotion of Agriculture and Allied Sector, GoI has announced two Credit Guarantee Schemes which are being managed by NABSAnrakshan Trustee Private Limited, a wholly owned subsidiary of NABARD.

Item	Credit Guarantee Scheme for FPOs	Credit Guarantee Scheme for Animal Husbandry and Dairying
Guarantee Cover	85% of the sanctioned amount max. ₹1.5 crore	25% of the Credit Facility
Annual Guarantee Fee	Up to 0.85% of sanctioned amount	0.50% of the sanctioned amount
Eligible Lending Institutions	Scheduled Commercial Banks, Co-operative Banks, NEDFI, NABKISAN, etc.	Scheduled Banks
Eligible Borrower	FPOs (Agri based)	FPO, Pvt. Company, Sec. 8 Company, Individual Entrepreneur, MSME, etc.

### 3.7.2 Current Status of FPO across the Country

NABARD has promoted 7101 FPOs in the country as on 31 March 2023 under PRODUCE, PODF-ID Fund & CSS on FPO, of these, 5613 FPOs are registered as Producer Companies. The total grant assistance sanctioned was ₹1232.00 crore and of which ₹494.70 crore was disbursed as on 31 March 2023. These FPOs covered around 22 lakh farmers as shareholders with average shareholder membership of 309 farmers and ₹238.80 crore collected by these FPOs towards share capital as on 31 March 2023. (Source NABARD Annual Report 2022-23).

### 3.7.3 Status of FPOs in Karnataka

1290+ FPOs have been promoted in the State as on 31 March 2023 of which, NABARD and GoK have promoted 381 and 811 FPOs respectively. Out of 381 FPOs (159 FPOs under PRODUCE Fund and 158 FPOs under PODF-ID Fund and 64 FPOs under CSS-GoI) promoted by NABARD, 376 are registered under Companies and State Societies Act and 05 FPOs are under registration process. NABARD had sanctioned a cumulative grant assistance of ₹64.50 crore and released ₹32.42 crore against the sanctioned grant for nurturing of 381 FPOs. More than 2,12,714 farmers are shareholders of the these FPOs covering 31 districts of the State. Share capital of ₹20.73 crore has been contributed by the FPO members. Majority of the FPOs are involved in input business and a few of them have also taken up output business such as procurement, marketing, processing, value addition, etc. The average membership of FPOs is ranging from 500-550 shareholders and presently all the FPOs promoted under PRODUCE and PODF-ID have been digitized at NABARD dedicated portal i.e., NABFPO portal. Equity grant of ₹ 2.51 crore has been provided for FPOs supported under CSS.

### 3.7.4 NABARD's Support to Farmer Producers' Organizations

#### 3.7.4.1 Promotion of New FPOs

During 2022-23, NABARD has promoted 10 FPOs in Animal Husbandry Sector by sanctioning a grant assistance of ₹89 lakh. NABARD has also supported 24 existing FPOs with grant assistance of ₹96.31 lakh towards Business Development Assistance (BDA) for undertaking various activities such as input business, creating infrastructure, procuring and marketing of produce, etc. 12 FPOs were provided enhanced assistance for 2 more years with grant support of ₹61.92 lakh.

#### 3.7.4.2 Important Measures initiated by NABARD

NABARD's Karnataka Regional Office, with BIRD Mangaluru, conducted three training programs for "C" and "D" Rated FPOs, emphasizing NABARD's rating mechanism, identifying performance issues, and promoting ideal FPO models. Additionally, four tailored programs on Dairy Animal Management and Value Addition were organized for 40 AH FPOs in collaboration with AIC-SRS-ICAR-NDRI, focusing on profit-oriented dairy farming strategies at the ICAR-National Dairy Research Institute, Bengaluru.

### Buyer seller meets

NABARD actively supported the Buyer Seller Meet cum exhibition in Mandya featuring 16 buyers and 25 FPOs from various districts. Twelve MoUs were signed between buyers and FPOs. NABARD also conducted a successful buyer-seller meet in Belagavi with 59 FPOs, 11 buyers, and generated business of ₹ 10.00 lakh from FPO stalls and ₹ 42.50 lakh from buyers.

### Export led initiatives of FPOs

Karnataka RO's efforts enabled 50 FPOs to obtain APEDA and DGFT licenses, and 29 FPOs were onboarded on the ONDC platform, expanding their transaction scope through e-platform market players. NABARD conducted two workshops on NeML and NCDEX, attracting 174 participants, focusing on alternate marketing through NCDEX, registration, and trading.

### 3.8 Micro, Small & Medium Enterprises (MSME)

The Micro Small and Medium enterprises (MSMEs) have been accepted as the engine of economic growth and for promoting equitable development. The labour intensity of the MSME sector is much higher than that of the large enterprises. The MSMEs constitute over 90% of total enterprises and are credited with generating the highest rates of employment growth and account for a major share of industrial production and exports. The scope and coverage of MSME sector was broadened significantly under Micro, Small and Medium Enterprises (MSME) Act, 2006 which recognized the concept of enterprise to include both manufacturing and services sectors.

MSME sector is considered important because of its significant contribution to employment generation, GDP of the country (38%) and export basket. The sector has the potential to market “**Made in India**” vision brand globally. Bank loans to MSME are eligible to be classified under priority sector.

#### 3.8.1 Status in Karnataka State

The details of Micro, Small & Medium Enterprises registered indicating number of units, investment and employment provided are furnished below:

**Table No.3.3: MSME Status in Karnataka**

Period	No. of Units	Investment (₹ lakh)	Employment (No.)
Cumulative up to 2018-19	6,95,877	65,87,652	4776
Cumulative up to 2019-20	7,93,109	84,47,379	5478
Cumulative up to 2020-21	3,32,233	60,00,678	3631

For the FY 2021-22, upto 30 November 2022, a total of 5.85 lakh micro, small and medium enterprises were registered in the state and employment to 50.81 lakh people. A total of 7.38 lakh MSMEs are registered in the state providing employment to 68.72 lakh people. (Source: Economic Survey 22-23)

An amount of ₹1,17,835 crore was disbursed during the year 2022-23 by the banking sector as against the target of ₹1,29,604 crore under MSME sector. Target amount of ₹1,32,129.35 crore has been fixed for disbursement during the year 2023-24 against this achievement as on 30.09.2023 is ₹91,378 crore.

### 3.9 Micro Finance Programme

The micro finance sector is an important tool for policy makers to reach out to the grass root level and it has a vital role to play in complementing the efforts of the Government of India in addressing the issues like financial inclusion, providing livelihoods and empowering the citizens, and women in particular.

### **3.9.1 SHG-Bank Linkage Programme**

The Self Help Group - Bank Linkage Programme (SHG-BLP) pioneered by NABARD, has expanded substantially since it was first launched on a pilot scale in 1992 and is acclaimed as one of the largest micro finance programmes in the world. The programme has been expanded with a view to cover all eligible poor rural households, with a focus on resource-poor States, providing livelihood opportunities to SHG members and covering the areas which have not been reached so far. Efforts are being made to revive dormant SHGs and prevent the functional ones from disintegrating, through measures such as capacity-building and hand-holding support. In close coordination with the National Rural Livelihoods Mission (NRLM), an attempt is being made to form and nurture groups by involving NGOs, community based organizations, community resource persons, secondary level institutions, state government departments, etc. Emphasis is being laid on the convergence of the SHG-BLP with the financial inclusion initiatives of the GoI and RBI, in addition to other Government programmes, including the Prime Minister Jan Dhan Yojana. The support system for promoting and nurturing SHGs is being suitably incentivized.

### **3.9.2 Status of SHG - BLP in Karnataka**

Karnataka State has been in forefront of micro credit movement in the country. The SHG- BLP was flagged off through the NABARD-MYRADA Pilot Project in Karnataka in the year 1992. As on 31 March 2023, there were 8.70 lakh SHGs in the State savings linked to various banks. The credit outstanding was ₹ 21150.64 crore for 9.32 lakh SHGs. (Status of Microfinance in India, 2022-23). The bank loan disbursed stood at Rs 20559.57 crore with 7.44 lakh SHGs. To arrive at a realistic picture of SHG- BLP in the State, the banks sanitize the SHG data and weed out inactive SHGs not operating the SB a/c for more than two years and show them separately. By this exercise more realistic data of active SHG available in the State and the district can be derived. To bridge the gap between savings-linked and credit-linked SHGs and to decrease the level of NPA %, efforts need to be taken by all the stakeholders. NABARD has kept up its efforts to train and build the capacity of the stakeholders in the microfinance programme which has created a strong back-up team for the implementation of the programme.

### **3.9.3 Micro Enterprise Development Programme (MEDP)**

NABARD has been supporting MEDP since 2006, to provide skill training to the members of matured SHGs to enable them to take up income generating livelihood activities. The main objective of the programme is to enhance the capabilities of participants through appropriate skill up-gradation in existing or new livelihood activities in farm or non-farm activities and enrich knowledge of participants on enterprise management, business dynamics and rural markets. During 2022-23, 21 MEDPs covering 630 SHG women have been sanctioned in the state.

### **3.9.4 Livelihood and Enterprise Development Programme (LEDP) for creating sustainable livelihoods amongst SHG members**

LEDP is a cluster based participatory enterprise development programme conceived by NABARD to facilitate graduating of SHG members into producer group. The programme is to encourage mutual support through collectivisation in contiguous villages. Project Implementation Agency to provide intensive training programme on local demand driven livelihood activity and also to provide mentoring and hand holding support to ensure that trained SHG members establish their livelihood activity successfully. Grant assistance is available from NABARD for both agriculture and allied sector and low input NFS/handicraft activities. During FY 22-23 in Karnataka, 18 LEDPs have been sanctioned and 1470 SHG members have been trained to take up the income generating activities and are being extended handholding support by the Implementing Agencies in credit linkage and marketing of the products.

### 3.9.5 Joint Liability Groups (JLGs)

Joint Liability Groups are informal groups of 4-10 members who are engaged in similar economic activities like crop production and are willing to jointly undertake the responsibility to repay the loans taken by the groups from the bank. Their credit needs are met through either individual loan or group loan from financial institutions. The scheme of financing JLGs was introduced by NABARD in 2004-05 as a pilot project in eight States. Apart from extending 100% refinance support to Banks, NABARD also extends financial support for awareness creation and capacity building of all stakeholders of this programme. As on 31 March 2023, 6.39 lakh JLGs have been credit linked and amount disbursed is ₹6956.34 crore (SLBC Karnataka 31.3.2023) by the banks in Karnataka. During the year 2023-24, target has been set for bank credit linkage of 6.77 lakh JLGs.

### 3.9.6 Business Models for financing of JLGs

To enhance the credit flow to targeted population through JLG mode, NABARD extends grant assistance of ₹4,000 per JLG to banks for formation, nurturing and financing of JLGs through Corporate BCs. This is a win-win situation for all the stake holders as the JLGs get timely credit, the Corporate BCs get additional income for managing the JLGs and the bank can externalize some of its functions viz., monitoring, hand holding, and following up for timely repayments. Under this Scheme, NABARD in the last 3 years has entered into MoU with KVGB, KGB, South Canara DCCB, SBI & Canara Bank for formation and credit linkage of 20010 JLGs, covering all 31 districts across Karnataka. These MOUs also include the tripartite MoUs entered with Deshpande Foundation and SBI, HDFC Bank and KVGB for formation and credit linkages of JLGs' exclusively for construction of farm ponds in arid North Karnataka.

### 3.10 Rural Infrastructure and Linkage Support

Indian farmers face challenges not only from marketing and processing constraints but also inadequate infrastructure. NABARD's Rural Infrastructure and Development Fund (RIDF) partners with state governments to address this, covering 39 activities in agriculture, rural connectivity, and social sectors. In addition to RIDF, Food Processing Fund (FPF), Long Term Irrigation Fund (LTIF) and Micro Irrigation fund (MIF) established with NABARD cater to creation of irrigation under the respective sectors.

#### 3.10.1 Status in Karnataka

Since inception of RIDF in the year 1995-96, 40338 projects involving RIDF loan of ₹ 21023.04 crore have been sanctioned and ₹ 15842.74 crore have been disbursed to Government of Karnataka as on 31.12.2023. These projects brought 4.10 lakh hectares of area under irrigation, strengthening/laying of 44,405 km of Rural Roads, construction of 55501.92 metres of Rural Bridges.

During 2022-23, a total no. of 281 projects involving RIDF loan of ₹1979.34 crore was sanctioned in the State. The total disbursements under RIDF during FY 2022-23 was ₹1367.76 crore. With this, the cumulative sanctions and disbursements from Tranche I to XXVIII as on 31 March 2023 stands at ₹19010.52 crore and ₹15080.46 crore respectively.

Impact of NABARD's efforts through RIDF can be best summarized by outlining the phenomenal achievements as on 31<sup>st</sup> March 2023: Creation/restoration of irrigation potential of 5.09 lakh ha, establishment of 1730 Veterinary Institutions, 839 Rural Market Infrastructures, 258 Raitha Samparka Kendras, 33 Fishing Jetties, 10 Cocoon quality testing labs for Sericulture, 22 cold storages, creation of 202 Rural Godowns with storage capacity of 3.94 lakh MT, establishment of 13480 Rural Education Institutions including 27 GTTCs, 7314 Anganwadis, 338 Primary Health Institutions and 07 Rural Drinking Water Projects covering 3103 Habitations and creation of rural connectivity of 45,688 km of Rural roads and 58,872 m of rural bridges.

Under LTIF, five irrigation projects viz Upper Tunga Irrigation, Bhima LIS, Karanja, Sri Rameswar Irrigation, and NLBC System have been supported with ₹1837.34 crore financial assistance under Central share component.

The importance of infrastructure in the development of rural areas of the state and the status of various infrastructure projects, potential investments to be made etc., are discussed in detail in Chapter-5.

### **3.11 Financial Inclusion**

**3.11.1** Information Technology has changed Banking industry phenomenally as it has done to any other industry. From being a business enabler to being the Business driver, IT in Banks has evolved over the years. Although our country has adopted several measures to advance financial inclusion, an estimated 35% of its population is still without access even to basic financial services. To succeed, financial inclusion needs organizational clarity, operational efficiency and coordination between institutions.

#### **3.11.2 Status in Karnataka**

All 22 RCBs and 2 RRBs in Karnataka are on CBS platform, this robust CBS platform has enabled Banks to integrate new payment systems like Aadhaar Pay, Unified Payment Interface (UPI), Micro ATM and Point of Sale (PoS /mPoS) and made the banks to offer services on par with the commercial banks. NABARD has supported the RCBs to integrate with the Public Financial Management System (PFMS) which will enable the beneficiaries to receive payments from GoI directly to their bank account Both the RRBs have been onboarded to Account Aggregator Platform.

Further, issuance of RuPay cards to all the KCC account holders is yet another initiative to proliferate financial inclusion. Out of the 39.43 lakh RuPay Kisan cards issued in Karnataka 31.40 lakh Rupay KCC is issued through cooperatives and 8.02 lakh Rupay KCC have been issued through RRBs. To attain the objectives of financial inclusion, GoI had adopted multifaceted approach by providing no frill accounts for each household under PMJDY, affordable insurance products through PMJJBY(Life), PMSBY(Accidental) and pension product APY to secure the future of workers in unorganized sector.

NABARD under Financial Inclusion Fund (FIF) has funded SCBs, RRBs and Co-op Banks towards various Financial Literacy and Banking Technology initiatives. During FY 22-23, grant assistance of ₹218.73 lakh was released towards conducting 5882 Financial Literacy programmes, ₹2.51 crore to Cooperative Banks and RRBs for deployment of Micro ATMs at branches and PACS level, ₹45.94 lakh was released to Payment Banks for deployment of PoS/MPoS in Tier-3 to Tier-6 centre in the State and ₹39.58 lakh is provided to 12 DCCBs for implementing Positive Pay System (PPS). NABARD also telecasted various Financial and Digital Literacy Messages in Prasar Bharati (DD Chandana, AIR) using L Bands, Short Videos, Jingles with grant support of ₹21.69 lakh during FY 22-23.

### **3.12 Agro Forestry**

Karnataka's diverse climate and topography sustain rich biodiversity, notably in the Western Ghats, a global biodiversity hotspot. The State Forest Department focuses on community-involved forest protection, biodiversity conservation, and eco-tourism. Agroforestry initiatives, combining agriculture with tree planting, address food and resource shortages while mitigating environmental degradation. The Department promotes commercial forestry, demonstrating profitable tree species on farmers' lands, emphasizing Casuarina, silver oak, and teak. Encouraging wood industries and processing units aims to add value to forest products, fostering economic growth and enhancing farmers' income sustainably.

### **3.13 Watershed Development initiatives**

NABARD has supported 344 Watershed Development Projects in the State with grant assistance of ₹219.26 crore. These projects are implemented across 27 districts bringing 3.24 lakh ha land under treatment. Currently there are 30 watershed & 3 springshed development projects under implementation covering 38,200 ha area in 22 districts



### 3.14. Tribal Development Initiatives

NABARD has supported 34 Tribal Development Projects with grant support of ₹121.60 crore over the years. These projects have brought 21,494 acres of land under wadis (fruit orchards) and benefited around 26,300 tribal families in 13 districts. Currently 9 ongoing tribal development projects in Karnataka covering 1300 tribal families in 8 districts supported under Tribal Development Fund of NABARD.

### 3.15 Special Refinance Schemes launched by NABARD:

NABARD has announced following Special Refinance Schemes

Apart from the regular refinance support extended in the agriculture and rural sector, NABARD was instrumental in formulating timely policies to rejuvenate the rural economy with innovative products at times of stress. Some of the Special Refinance Schemes introduced to boost the agri and rural sector post covid have come a long way by touching the life of farmers in many ways:

#### a) Special Refinance Facility for Transformation of Primary Agriculture Cooperative Societies (PACS) as Multi-Service Centre (MSC)

The scheme, launched in 2020, aimed to transform Primary Agricultural Credit Societies into Multi Service Centres (MSCs) by providing concessional refinance at 3%. In Karnataka, 1117 projects received ₹475.89 crore with ₹388.18 crore NABARD refinance as of September 30, 2023. Aligned with the Agriculture Infrastructure Fund, PACS could claim a 3% interest subvention, ensuring a 1% effective interest rate.

#### b) World's Largest Grain Storage in Cooperative Sector

The plan focuses on establishing comprehensive agricultural infrastructure at the Primary Agricultural Credit Societies (PACS) level, including warehouses and processing units. Elevating PACS to multifunctional entities aims to reduce food grain wastage, strengthen food security, and empower farmers by obtaining better prices. The pilot phase at Ekamba PACS in Bidar, Karnataka, is underway, with ongoing infrastructure construction. The second phase involves identifying five PACS in each district for further implementation.

#### c) Special Refinance Scheme for promoting Micro Food Processing Enterprises

NABARD will provide concessional refinance @4% to all eligible FIs i.e., CBs, SFBs, RRBs and DCCBs to encourage banks to lend micro food processing activities and create sustainable livelihood and employment opportunities for rural youth. Ultimate lending rate will be 6 months MCLR+1% or EBLR+2.5% whichever is less. Loans sanctioned to Micro food enterprises from ₹1 lakh to ₹25 lakh will be eligible for concessional refinance. Banks may converge this scheme with PM-FME and seek refinance from NABARD.

### 3.16 Skill Initiatives

**3.16.1 Government of India Initiatives:** Govt. of India has announced the Skill India campaign on 15 July 2015 with an aim to train over 40 crore (400 million) people in India in different skills for which Govt. of India has launched a series of skill development initiatives aimed at skilling unemployed youth to make India the Skill Capital of the world. Some of the Schemes for the skill development launched by Government of India are

- Deen Dayal Upadhyaya Grameen Kaushalya Yojana
- Pradhan Mantri Kaushal Vikas Yojana
- Financial Assistance for Skill Training of Persons with Disabilities
- National Apprenticeship Promotion Scheme
- Craftsmen Training Scheme
- Apprenticeship training
- Pradhan Mantri Kaushal Kendra

**3.16.2 Government of Karnataka Initiatives:** In Karnataka out of the total population, 55% (3.5 crore out of 6.72 crore) are youth population. To reap the advantage, the State Government has introduced a Skill Development Policy with an objective of providing suitable skill training for 15 lakh job seekers by 2020 and to provide them placement. It has set up the Dept. of Skill Development, Entrepreneurship and Livelihood (SDEL) in 2016 to enable the State youth to acquire necessary skills for decent employment, and to promote sustainable livelihood. State, District and Taluka Kaushalya Missions are constituted to undertake Skill Development on Mission mode. Under this, the following wings are functioning:

- Karnataka Skill Development Corporation
- Centre for Entrepreneurship Development of Karnataka (CEDOK)
- Sanjeevani
- Government Tool Room Centre
- Employment and Training

### **3.16.3 NABARD's initiatives**

Through its Skill Development Programme, NABARD has aimed at bringing in collectivisation of weavers/artisans through skilling/upskilling/re-skilling. With a cumulative investment of ₹241 lakh in this sector since last six years, NABARD has created more than 3600 skilled youth/women in various fields viz., weaving, basic computer skills, repair and maintenance of farm machineries, health care, tailoring, banking, financial services, insurance, para medical services, etc. About 80% of the trainees have successfully attained wage/self employment. The skilled population could considerably contribute to the concerned sector and address the issue of lack of quality production.

Skill development interventions in other sectors have resulted in remarkable outcomes like revival of GI tagged Udupi sarees, revival of desi sarees like Pattada Anchu, Gomi Teni, etc., to mention a few.

### **3.17 Conclusion**

NABARD's developmental vision for the state is geared towards inclusive development by enhanced capital formation in agriculture, inclusive financial practices, climate resilience initiatives, and sustained growth across both agricultural and non-agricultural domains in Karnataka. This chapter provides a condensed overview of NABARD's strategic interventions, shedding light on the critical role of addressing climate change in advancing the agricultural and allied sectors. The ongoing efforts to combat climate change are positioned as catalysts for augmenting productivity, improving remuneration prospects, and ultimately enhancing the livelihoods of the rural population dependent on these sectors. Furthermore, the narrative emphasizes the transformative potential of innovations and its identification as indispensable keys for steering agriculture towards a sustainable future, concurrently contributing to global developmental objectives.

## CHAPTER 4

### POTENTIAL CREDIT OUTLAY

#### 4.1 Credit Potential for Agriculture

##### 4.1.1 Farm Credit:

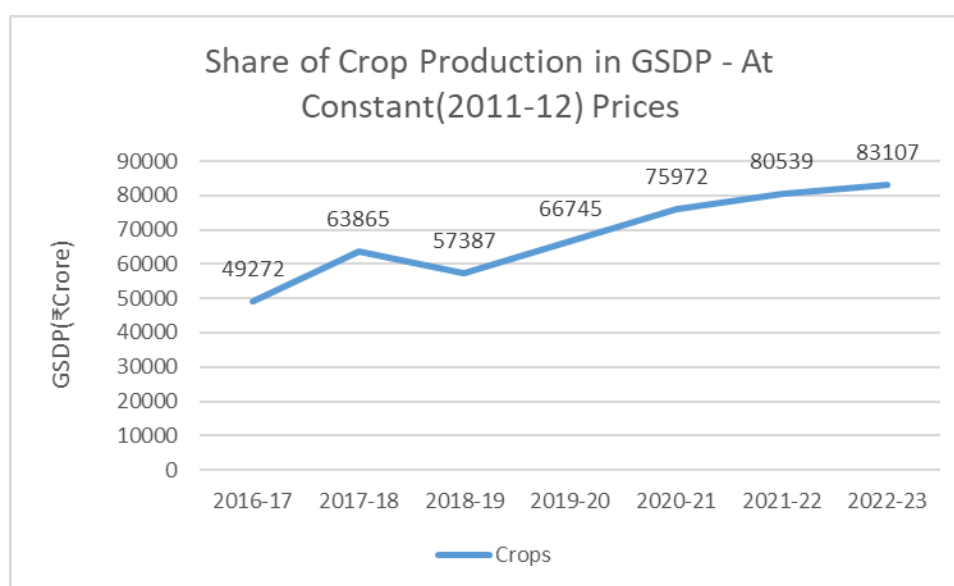
##### 4.1.1.1 Crop production, Maintenance and Marketing

##### 4.1.1.1.1 Introduction

India celebrated Azadi ka Amrit Mahotsav on 15 August 2022, the 75<sup>th</sup> anniversary of its independence, and entered into Amrit Kaal with the objective of making India a developed nation by 2047. To achieve the objective, it is imperative to reform the agriculture sector and revitalize rural contribution to the national economy. Agricultural performance, agri-exports, farmers' income, agri-value chains, rural infrastructure, investment and employee generation – each plays an important role in shaping India through the Amrit Kaal.

##### 4.1.1.1.2 Present Status

In Karnataka, though the contribution of agricultural sector in the GSDP is less, agriculture continues to be the largest employment generating activity. The share of agriculture & allied sector in 2022-23 is 15.08%. (Source: Karnataka Economic Survey 2021-22).



Source:- Karnataka Economic Survey 2022-23

##### a) Land Utilization

As per the Economic survey 2022-23, GoK, the net area cultivated during 2020-21 is 114.53 lakh ha. which constitutes 60.12% of the total geographical area. 3.93 lakh ha. of the total geographical area is cultivable waste, 7.43 lakh ha. is barren and uncultivable land and 8.72 lakh ha. is permanent pasture.

##### b) Major crops cultivated

The extent of area under cultivation and production of major crops are indicated in Table No.4.1

**Table No.4.1: Area and Production of Major Crops in Karnataka State  
(Area lakh ha; Production lakh tons)**

Crop/ Group	2022-23		2021-22	
	Area	Production	Area	Production
Cereals	48.92	114.81	50.80	123.95
Pulses	32.64	20.08	32.53	19.73
Total Food grains	<b>81.56</b>	<b>134.89</b>	<b>83.33</b>	<b>143.68</b>
Oilseeds	12.70	12.18	12.22	11.21
Cotton#	9.15	21.48	6.87	19.53
Sugarcane>	7.18	562.91	6.50	611.52
Tobacco	0.70	0.49	0.82	0.64

(# lakh bales of 170 kg lint, >Sugarcane production for harvest area during the year. Source: Economic Survey 2022-23, GoK.)

### c) Average farm size/ holdings

As per 2015-16 Agricultural Census, the State has 86.81 lakh farm holdings covering 118.05 lakh ha. Though the share of small and marginal holdings was 80% of the total holdings, it accounted for only 44% of the total area covered. Semi-medium, medium and large holdings accounted for 20% of the total holdings, but their share of operational land holdings was 56 %. The average size of operational holding has declined to 1.36 ha in 2015-16 from 1.55 ha in 2010-11.

### d) Cropping Pattern

The average area (2017-18 to 2021-22) of agriculture crops grown in three seasons' viz. Kharif (77.17 lakh ha.), Rabi (24.72 lakh ha.) and summer (6.14 lakh ha.) is 108.03 lakh hectares.

### e) Production/ productivity of major/ predominant crops

The productivity of major agriculture crops based on the final estimates of 2020-21 and the districts where it is less than the State Average is given below:

S.No.	Crop	State Average Yield(kg/ha)	Districts where it is less than the State Average Yield
1	Paddy	4766	Uttara Kannada, Haveri, Hassan, Kalburgi, Kodagu, Belagavi, Shivamogga, Udupi, Yadgir, Mysuru and Mandya
2	Jowar	1206	Vijayapura, Gadag, Dharwad, Haveri, Koppal, Bidar and Yadgir
3	Ragi	1745	Hassan, Chikmagalur, Belagavi, Davangere, Ballari, Chitradurga, Tumkur, Mysuru and Mandya
4	Maize	3689	Gadag, Koppal, Dharwad, Haveri and Vijayapura
5	Wheat	1292	Gadag, Koppal, Dharwad, Haveri, Raichur, Yadgir, Ballari, Bidar and Vijayapura
6	Tur	759	Tumkuru, Belagavi, Vijayapura, Koppal, Mysuru, Chitradurga, Kolar, Raichur, Chikkaballapur, Ramnagar and Ballari
7	Bengal Gram	625	Gadag, Koppal, Davangere, Dharwad, Haveri, Bidar and Vijayapura
8	Groundnut	1000	Gadag, Vijayapura, Tumkuru, Chitradurga, raichur, Koppal and Chikkaballapur
9	Sunflower	895	Gadag, Dharwad, Kalburgi and Koppal

**f) Comparison of Area and Production of major/ predominant crops in Karnataka with All India level**

Crops	Area (Million Hectares)			Production (Million Tonnes)		
	All India	Karnataka	% to All India Level	All India	Karnataka	% to All India Level
Nutri / Coarse Cereal	22.65	3.24	14.34	50.9	7.3	14.3
Jowar	3.81	0.62	16.36	4.23	0.75	17.75
Bajra	6.7	0.15	2.19	9.62	0.17	1.77
Maize	10.04	1.59	15.87	33.62	5.22	15.53
Total pulses	31.03	3.19	10.27	27.69	1.97	7.11
Oilseeds	29.17	1.25	4.27	37.7	1.17	3.11
Sugarcane	5.15	0.64	12.37	431.81	61.15	14.16
Total Foodgrains	130.53	7.99	6.12	315.72	13.81	4.37

Source:- Agriculture Statistics at a Glance – 2022, DoAFW, GoI

**Table No.4.2: Agency-wise crop loan disbursements (₹ crore)**

Agency	2018-19	2019-20	2020-21	2021-22	2022-23
<b>CBs</b>	22112.68 (53.87)	37290.00 (74.44)	45078.74 (105.22)	27950.27 (63.91)	39711.42 (74.7)
<b>RRBs</b>	4823.52 (41.36)	6970.00 (53.44)	8038.67 (70.32)	15061.54 (114.66)	18726.13 (120.43)
<b>Co-ops</b>	10585.97 (98.57)	13084.00 (138.94)	16366.69 (143.05)	18296.68 (122.29)	20683.58 (157.77)
<b>Others</b>	301.83 (23.01)	460.00 (24.21)	425.66 (18.11)	1.47 (1.63)	7.61 (9.88)
<b>Total</b>	37824.00	57804.00	69909.76	61309.96	79128.74 (96.63)

Source: SLBC. (Figures indicated in bracket is percentage of achievement against target.)

Commercial Banks continue to be the largest purveyor of crop loans among all agencies. The overall credit flow towards crop loan has increased during last three years.

#### 4.1.1.1.3 Major Issues, Constraints and Opportunities

- **Fragmentation of land holdings**

The average size of operational holding size declined to 1.36 ha in 2015-16 from 1.55 ha in 2010-11. Similarly, per capita land availability for marginal farmers also decreased to 0.44 ha in 2015-16. Fragmentation results in reduced Agricultural Efficiency, Limited Crop Choices, Environmental Impact like soil erosion and degradation.

- **Pre-dominance of Rain-fed Agriculture**

About two-third cultivated area in the State is drought-prone and is exposed to vagaries of the monsoon. The state has a Gross Cropped Area of 149.09 lakh ha out of which only 41% is irrigated. This is a major constraint in achieving enhanced yield, crop diversification and better income for farmers. This also makes the agriculture vulnerable to chronic draughts. During Kharif 2023 season, 216 out of the 236 blocks have been declared as drought-affected.

- **Climate change and its effect on productivity**

Due to both spatial and temporal variation in rainfall, hydro-meteorological disasters like

droughts and floods occur simultaneously in the different regions of the state. Droughts are more common than the other disasters in the state thus affecting rain-fed agriculture production system. The State also has huge arid and semi-arid land and is highly vulnerable to drought. Changes in Precipitation Patterns, Temperature Changes, Altered Pest and Disease Dynamics, Shifts in Agro ecological Zones affecting the cropping patterns and crop productivity

### **PLP Projections for 2024-25**

**The aggregated PLP projection for “Crop Production, Maintenance and Marketing” sub sector for the year 2024-25 for Karnataka State has been assessed at ₹110856.12 crore**

#### **4.1.1.1.4 Suggested action points**

- Ensuring prompt assistance in supply of quality seeds, fertilisers and use of bio-fertilisers and organic manure to be promoted.
- Soil testing facilities are essential in ensuring judicious use of fertilizers on field and preserving the quality of soil. GoI in its latest budget has announced PM PRANAM scheme to encourage balanced use of fertilizers in conjunction with bio-fertilizers and organic fertilizers.
- To create awareness among farmers to adopt alternate cropping /mixed farming system for maintaining soil health and ensuring sustainable income.
- Better awareness about prices of various agricultural commodities to be created amongst farmers for improving their bargaining power.
- Creation of storage infrastructure commensurate with market surplus of various crops will encourage farmers to hold the produce during market glut and avail working capital finance against their produce through Negotiable Warehouse Receipts (NWR). Banks may encourage pledge financing to enable farmers to avoid distress sale for which interest subvention is being extended by GoI for a period of 6 months post-harvest.
- In order to ensure accessibility of credit to SF/MF who do not have clear title to land, JLG mode of financing may be encouraged.
- Agricultural Universities and Krishi Vigyan Kendras (KVKs) may suggest various models of Integrated Farming Systems (IFS) suiting the agro-climatic regions of the State. Special focus may be given on millet based IFS models.
- Banks may finance FPOs for collectivisation and marketing of the produce for better price realisation. Credit guarantee scheme for FPOs may be utilised for the purpose.
- Farmer Producer Organisations (FPOs) may be encouraged and credit-linked for effective credit delivery and also to facilitate farmers in having a common platform for accessing extension services from various sources and adopt advanced technologies for crop production.
- Govt. may introduce a system to compensate the farmers if market price falls below the MSP to stabilize farmer’s income.
- Proper implementation of Pradhan Mantri Fasal Bima Yojana (PMFBY) to facilitate farmers to get compensation in case of occurrence of natural calamities has to be ensured by banks.
- Strengthening of PACS/STCCS through capital contribution & technology adoption.

#### **4.1.1.2 Water Resources**

##### **4.1.1.2.1 Introduction**

Karnataka is one of the most water-stressed states in India, with large area of the State being drought prone. Efficient water use is important as Karnataka has limited water resources (1,608 m<sup>3</sup> /person/ year overall and approximately 1,072 m<sup>3</sup> /person/year in eastward flowing rivers). Of the total water usage approximately 26% is from groundwater. The allowable surface water utilization for various uses is limited to 35,916 Million m<sup>3</sup> (1268 TMC) and safe utilization of groundwater is limited to 11,477 Million m<sup>3</sup> (405 TMC) during an average rainfall year, though the water availability and demands do vary across the state spatially. In 2023, drought situation has been observed in 216 out of 236 taluks of 31 districts in the State, which calls for groundbreaking reforms in the irrigation systems of the State.

Agriculture accounted for about 84% of water diversions and estimated water demands in the State may reach 45,052 Million m<sup>3</sup> (1591 TMC) by 2030 from 42,225 Million m<sup>3</sup> (1,491 TMC) in 2020. (Source:-Karnataka State Water Policy 2022)

##### **4.1.1.2.2 Present status**

The net area cultivated under different crops during 2020-21 is 114.53 lakh ha. of which net area irrigated is 49.31 lakh ha. Hence, the remaining 65.22 lakh ha. have to be brought under irrigation in phases based on the dominant crop grown which is prone to higher yield upon irrigation.

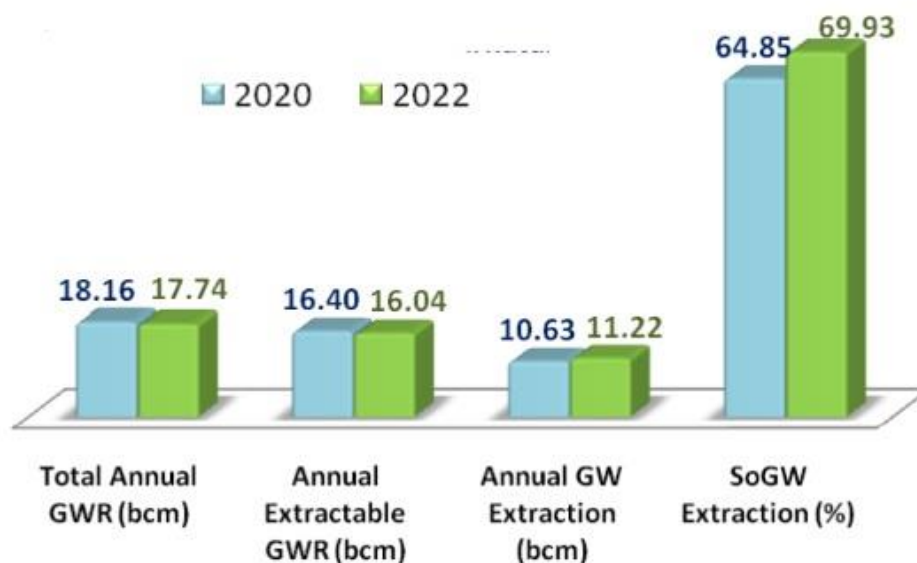
The rainfall in the State was 512 mm during the period 01.06.2023 to 02.09.2023 & was observed to be 27% less than the normal rainfall (701 mm), thereby indicating depleting water resources situation in the State.

##### **4.1.1.2.3 Ground Water Scenario in the State**

The Annual Ground Water Recharge has been assessed as 17.74BCM and the Annual Extractable Ground Water resource is 16.04BCM. The Current Annual Ground Water Extraction is 11.22BCM and the Stage of Ground Water Extraction is 69.93%. Out of the 236 assessment units (taluks), 49 units (20.94 %) have been categorized as 'Over exploited', 11 units (4.70 %) as 'Critical', 35 units (14.96 %) as 'Semi critical' and 139 units (59.40 %) have been categorized as 'Safe'. There is no taluk under "Saline" category. Similarly, out of 1,70,647.10 sq km recharge worthy area of the State, 39352.66 sq km (23.06 %) area is under 'Over-Exploited' category, 6580.96 sq km (3.86 %) under 'Critical', 26593.23 sq km (15.58 %) under 'Semicritical' and 98120.25 sq km (57.50 %) under 'Safe' categories of assessment units. Out of total 16043.89 mcm annual extractable ground water resources of the State, 2935.09mcm (18.29 %) are under 'Over-exploited', 680.03mcm (4.24 %) under 'Critical', 2481.16mcm (15.46%) under 'Semicritical' and 9947.61mcm (62.00%) are under 'Safe' categories of assessment units.

As compared to 2020 assessment, there is decrease in Annual Ground Water Recharge from 18.16BCM to 17.74BCM, Annual Extractable Ground Water Resources from 16.40BCM to 16.04BCM. This is mainly due to decrease in recharge due to surface water irrigation and ground water irrigation. There is marginal increase in the Current Annual Ground Water Extraction for all uses from 10.63 to 11.22BCM during this period. Hence overall, the Stage of Ground Water Extraction has increased from 64.85% in 2020 to 69.93 % in 2022.

##### **GWRA Resource Comparison - Karnataka**



Source:- *Dynamic Ground Water Resources Assessment Of India - 2022*

#### 4.1.1.2.4 Sources of Irrigation

Water for irrigation purpose comes from various sources such as wells, ponds, canals, rivers, dams, reservoirs, rainfall etc. Among all the sources of irrigation, the net area irrigated from tubewells is the highest (i.e. 43.83%). The second important source is canals covering 29.95% and 7% area is covered by wells. Historically, though tanks have been considered the principal source of irrigation, their contribution is very minimal (3.35%).

In 2022-23(Anticipated), 30.82 and 12.35 lakh Ha irrigation potential was created for major and medium irrigation and minor irrigation respectively. (Economic Survey of Karnataka – 2022-23)

#### 4.1.1.2.5 Major Issues, Constraints and opportunities

- As of March 2022, Karnataka had 49 talukas with over-exploited groundwater. They are spread among 15 districts, of which Bengaluru Rural, Bengaluru Urban, Chikkaballapura, and Kolar are growing high-intensity crops.
- Contamination of water sources due to industrial discharge, agricultural runoff, and inadequate sanitation practices further reduces the availability of clean water.
- Limited infrastructure for water storage, distribution, and treatment hampers efficient management and utilization of available water resources.

#### PLP Projections for 2024-25

The aggregated PLP projection for 'Water Resources' sub sector for the year 2024-25 for Karnataka state has been assessed at ₹4440.16 crore.

#### 4.1.1.2.6 Suggested action points

- Implementation of 'Bhagya Jyothi Scheme' for energisation of pump sets may be expedited. Further, GoI's PM-KUSUM scheme may be leveraged to solarise pumpsets.
- Integrated Water Resources Management (IWRM) is necessary to ensure water for health, food, and energy, while maximising sustainable, economic, social and environmental outcomes.



- Banks may finance small Lift Irrigation Schemes, in suitable locations/ banks may extend credit support to farmers for construction of Artificial Recharge Structures of Bore wells for Irrigation, rain water harvesting schemes, farm ponds, small weirs/check dams, roof top water harvesting system, etc.
- PM KUSUM schemes provide incentives for farmers to install solar pumpsets. This will enable farmers to address the issue of erratic power supply.
- Govt of Karnataka is promoting micro-irrigation under various schemes (with subsidy upto 90%) and the same should be complemented with Bank finance to increase the coverage of area under micro-irrigation in the State.
- Improving water use efficiency and enhancing water productivity of irrigation systems should be a high priority area with focus on the management, operation and maintenance (MOM) of irrigation systems to sustain the water delivery service requirements of farmers.
- Reclamation of water-logged soils and saline soils may be given special attention to enhance the irrigation water use.
- A system of motivational measures and incentives may be brought into place to encourage farmers for changing from water intensive crops to less water intensive.
- The State can encourage coordination among Animal Husbandry, RDWS departments and Gram Panchayat to setup & rejuvenate water troughs and promotion of green fodder production & efficient use by AH Department to reduce wastage of water.
- There is need to switch over from canal irrigation to piped irrigation system and drip irrigation by individual farmers to improve the water use efficiency, ensure equitable distribution of water, reduce land acquisition problems, better control and management and 50% more land can be irrigated with the same water.
- Construction of farm ponds may be taken up in rainfed areas to facilitate water harvesting, storage and ground water recharge.

#### **4.1.1.3 Farm Mechanization**

##### **4.1.1.3.1 Introduction:**

Farm Mechanization is one of the most important elements of modernizing agriculture. It leads to increased production and productivity, reduction in drudgery, reduced losses during harvest, etc. The level and appropriate selection of agricultural machinery have a direct impact on land and labour productivity, farm output and income, environmental safety and quality of life of farmers. Studies show that the use of improved implements has the potential to increase productivity by up to 30% and reduce the cost of cultivation by up to 20%.

A 2021 study conducted by GKVK, Bangalore & UAS Raichur in Mandya, which examined the profitability of paddy cultivation under different level of mechanization showed that the net return was more in mechanized farms compared to traditional and partially mechanized farms. Majority of the farmers reported increase in output of main product of crop and decrease in fodder length as well as quantity by mechanical harvesting and threshing over traditional practices.

##### **4.1.1.3.2 Present Status**

As per report the Transport Department, Government of Karnataka, the total number of tractors and trailers registered as on 31 March 2020, were 5,86,969 nos. and 3,21,415 nos. respectively.

In case of Power-operated sprayers & dusters across the division of Karnataka, it is very much interesting to observe Gulbarga division stood first in the application of mechanization with 39% of (AAG P.A) for the overall growth rate for the entire state. Mysore division stood first in the application of power tillers with 40% of (AAG P.A), Belgaum division occupied second place with 33%, followed by the Gulbarga division with 14% and the Bangalore division stood at the last with 13% in terms of usage of Power Tillers in their fields across Karnataka. In the availability of Tractors for other Agricultural purposes on their farms Bangalore division ranked first by 40% (AAG P.A).

#### 4.1.1.3.3 Major Issues, Constraints and opportunities

- Due to the small size of landholdings, there is a requirement for designing machines suitable for smallholdings.
- Mechanizing small and non-contiguous groups of small farms is against economies of scale, especially in operations like land preparation and harvesting. With continued shrinkage in average farm size, more farms will fall into the adverse category thereby making individual ownership of agricultural machinery progressively more uneconomical.
- The average farm power availability needs to be improved from 2.02 kW per ha (2016-17) to 4.0 kW per ha by the end of 2030 to cope with the increasing demand for food grains and to address the labour issues projected due to the reduction in the percentage of agricultural workers in the total workforce.
- The quality and after-sales service of farm machinery are the other concerns as majority of the farmers are cost-conscious. There are inadequate service centres for the proper upkeep of the machinery. In addition, the inability of local low-cost manufacturers to come up to the levels of standard designs of equipment also poses a big challenge to farm mechanization.
- Matching equipment for tractors, power tillers and other prime movers are either not available or farmers make an inappropriate selection in the absence of proper guidance, resulting in fuel wastage and high cost of production.
- Collectivisation of farmers through FPOs, establishing Custom Hiring Centres envisages promoting the establishment of farm machinery banks for hiring by way of providing financial assistance to FPOs/SHGs or farmers' co-operatives since the prohibitive cost of hi-tech and high productive equipment renders it difficult for individual ownership.

#### PLP Projections for 2024-25

**The aggregated PLP projection for the 'Farm Mechanization' sub-sector for the year 2024-25 for Karnataka State has been assessed at ₹6459.99 crore.**

#### 4.1.1.3.4 Suggested Action points

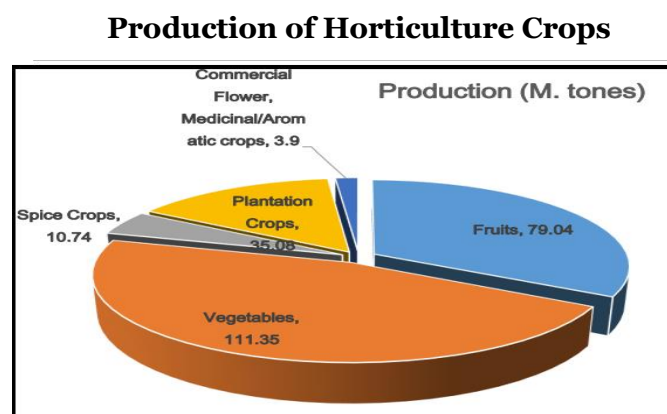
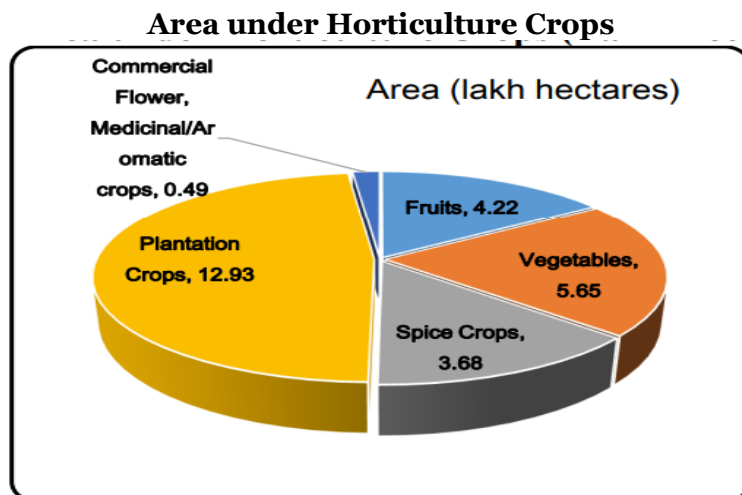
- Bank may support custom hiring service centres (CHSC) promoted by farmers producer organizations and subsidy, if any, from State and GOI may be credit linked.
- As a majority of the small and marginal farmers are dependent on the custom hiring centres or individuals, these centres may be regulated by State Government in terms of fixing uniform charges and transparency in operations to save the farmers from overcharging during peak agricultural operation periods.
- State Govt. Departments, KVKs etc., may look into providing training to agri entrepreneurs on the repair and maintenance of farm machinery
- Extension agencies may advise farmers on the suitability of various makes, models and horsepower for different sizes of operational holdings.
- Banks may develop credit products for financing handheld and power-operated farm equipment suitable for small landholders.
- Banks may encourage agri-business centres by Agri Graduates under the ACABC scheme and to provide custom hire services to small and marginal farmers at affordable rates.
- The use of drones may be explored which have some distinct advantages such as high field capacity and efficiency, less turnaround time and other field operational delays, wastage reduction of pesticide and fertilizers due to high degree of atomization, water saving due to ultra-low volume spraying technology in comparison to traditional spraying methods, reduction in cost of spraying and fertilizer application in comparison to conventional methods etc. besides reduction of human exposure to hazardous chemicals.

#### 4.1.1.4 Plantation and Horticulture

##### 4.1.1.4.1 Introduction

Karnataka is a predominant player in the Indian Horticulture with coffee, pepper and spices being the key horticultural crops of the state.

##### 4.1.1.4.2 Present Status



Source:- Department of Horticulture Annual Report 2022-23

As per All India Horticulture State Ranking 2021-22, Karnataka holds 6<sup>th</sup> position in production of fruits, 7<sup>th</sup> in vegetable production, 4<sup>th</sup> in spice production, 3<sup>rd</sup> in production of plantation crops, 3<sup>rd</sup> in commercial flower production.

Horticultural crops are grown in almost all districts, although each district of Karnataka has concentration of specific horticultural crops. Bengaluru and Vijayapura districts are known for grapes, Chitradurga, Belagavi, Koppala and Bagalakote are known for pomegranate, Kodagu, Chikamagaluru districts are known for coffee. Some crops like mango, tomato are widespread throughout the State, while floriculture is concentrated in peri-urban districts of Bengaluru. The vegetables are grown in most districts except coastal and hilly districts (only to a limited extent).

Area and production of Plantation & Horticulture crops for the last 04 years are detailed as under:

**Table No.4.3 (a): P&H Area ('000 ha)**

S No.	Crop	2019-20	2020-21	2021-22	2022-23(2 <sup>nd</sup> Advance Estimates)
1	Fruits	398.03	425.71	376.26	354.27
2	Vegetables	379.91	490.90	459.99	412.11
3	Flowers	34.31	36.71	38.91	36.68
4	Medicinal & Aromatic Crops	1.88	2.22	1.65	1.57
5	Plantation Crops	1271.09	1343.73	1249.45	1470.04
6	Spices	297.29	383.71	368.35	380.50

(Source: <https://agricoop.nic.in/en/statistics/state-level>)

**Table No.4.3(b): P&H Production ('000 MT)**

S No.	Crop	2019-20	2020-21	2021-22	2022-23(Second Advance Estimates)
1	Fruits	7083.20	7995.97	7186.72	6762.94
2	Vegetables	7449.64	7846.32	7153.47	6964.07
3	Flowers	422.55	503.01	366.35	273.65
4	Medicinal & Aromatic Crops	13.86	18.08	8.39	6.74
5	Plantation Crops	4121.96	4707.99	5237.21	4945.54
6	Spices	635.44	974.50	732.41	762.54

(Source: <https://agricoop.nic.in/en/statistics/state-level>)

The crops covered and the identified districts in Karnataka under **National Horticulture Mission** are furnished in following table.

**Table No.4.4: Crops covered under National Horticulture Mission**

<b>Crops Covered</b>	Mango, Grapes, Pomegranate, Banana, Pineapple, Cashew, Cocoa, Pepper, Ginger, Aromatic crops and flowers.
<b>Districts Covered</b>	Bengaluru (U), Bengaluru (R), Tumakuru, Kolar, Chitradurga, Hassan, Mysuru, Kodagu, Udupi, Dakshina Kannada, Belagavi, Vijayapura, Bagalkote, Kalaburgi and Koppal.

#### 4.1.1.4.3 Major Issues, Constraints and opportunities

- Due to improper Post-harvest management activities, the losses of Fruits and Vegetables account for 20 to 22 percent. There is a dire need to prevent the post-harvest loss of horticultural products and to provide incentives to entrepreneurs/FPOs with greater emphasis on processing and value addition of horticultural crops.
- Plantations are susceptible to various pests and diseases. Managing and controlling these issues can be challenging and may require the use of pesticides and other interventions.
- Ensuring fair market access and prices for plantation produce is crucial for the economic sustainability of farmers.

### PLP Projections for 2024-25

The aggregated PLP projection for 'Plantation & Horticulture' sub sector (including sericulture) for the year 2024-25 for Karnataka State has been assessed at ₹12395.12 crore.

#### GI tagging of KARI ISHAD MANGO

Kari Ishad Mango is endemic to Ankola Block of Uttar Kannada District. Known for its luscious sweet pulp and aroma, Kari Ishad is the top shelf pick of mango lovers in the coastal area of Ankola. They are mainly used to prepare 'hashale' (also known as *rasayana* or *seekarane*), a pulpy dish.

NABARD's intervention in Geographical Indications envisages end-to-end support in facilitating pre-registration as well as post-registration activities for Geographical Indications, in order to appreciate quality, improve market access, create awareness, strengthen producer's capacity to enforce their rights, subsidize cost of registration, enforcement and marketing. NABARD provided fund assistance for obtaining Geographical Indication (GI) tag of Kari Ishad Mango.

#### 4.1.1.4.4 Suggested Action Points

- Protected cultivation technology has the potential to increase the vegetable production upto 5 to 6 times as compared to open field conditions.
- Formation of FPOs /Growers Co-operatives/ associations on horticulture crops may be promoted and they may be extended similar facilities as being made available to FPOs promoted by State Govt. Organic farming and Zero-Based Natural Farming (ZBNF) have to be encouraged to tap the marketing potential available in urban markets.
- Contract farming in horticultural crops need promotion as there is lot of scope for the agri-business and corporate sector to enter into horticulture sector in a big way and therefore relevant act needs amendment favouring written and legal contract between the corporate and small farmers.
- Effective utilisation of Agri Infrastructure Fund (AIF) created by GoI for creation of farm-gate infrastructure for farmers, Primary Agricultural Cooperative Credit Societies, Farmers' Producer Organisations (FPOs), agriculture entrepreneurs, start-ups, etc.

- Promote and incentivize FPOs to leverage Agri-tech startup solutions to get real time market intelligence, D2C inputs, and market linkages to improve D2C business thus improving farmer earnings.
- The Central Sector scheme of ₹10,000 crore for the formalization of Micro Food Enterprises (PMFME) may be popularised in the State for enhancing processing avenues and thereby minimising post-harvest losses of horticultural produce.
- In the marketing front, create brand Karnataka for fruits, vegetables and other products in global markets to improve product demand and provide opportunities for exports.
- Banks may adopt the cluster/area development approach for promotion of horticulture and plantation crops and sensitize/orient the branch level staff on potential available for financing.
- Setup state of the art Post Harvest Management centres in the vicinity of districts with marketable surplus of fruits and vegetables to improve post-harvest processing, reduce spillage and improve the proportion of horticulture product meeting Grade-A criteria.
- Cold storage capacity can be analysed and established and utilizing the existing capacity by producing high value horticultural crops which can be stored and processed.
- Introduction of export-oriented crops and varieties can fetch better market and price for farmers.

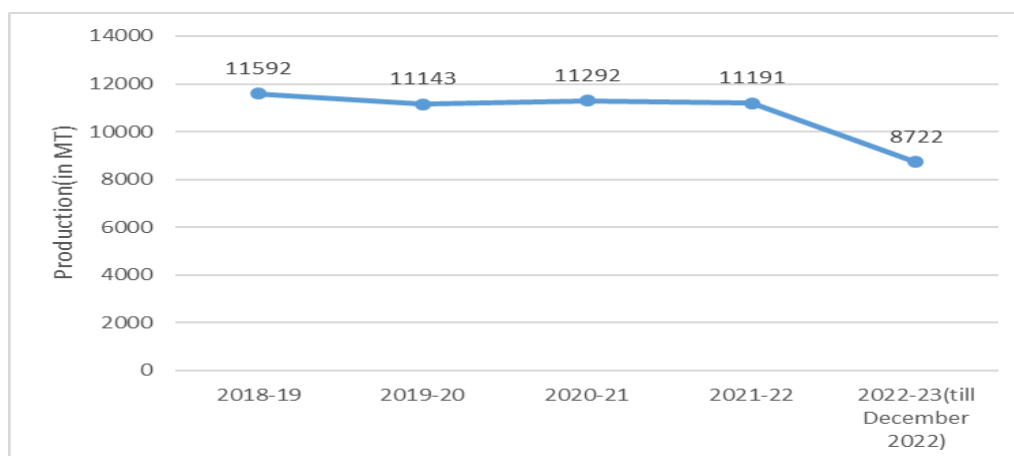
#### 4.1.1.6 Sericulture

##### 4.1.1.6.1 Introduction

Sericulture is a traditional agro-industry in the State since more than 350 years. It is an important occupation in the State by virtue of high employment potential, low gestation and high returns, women friendly occupation and ideal programme for weaker sections of the society. Silk production in the State is remarkably high and it produces half of the country's silk. The climatic condition of Karnataka favours the silk worm production in all months of the year. About 60% of the work in sericulture is done by women and thereby playing a key role in rural women empowerment. In several districts of the State, the sericulture is mainstay and livelihood of small, marginal farmers and weaker sections of the society and traditional source of livelihood. Sericulture and silk industries are important sectors of employment for nearly 12 lakh households in Karnataka. Traditional districts of Karnataka viz., Mysuru, Chamarajanagara, Ramanagara, Bengaluru Rural, Chikballapura and Kolar have the strong base for sericulture, where almost every village has sericulture as profession. In past few years, it has spread to non-traditional districts like Tumkuru, Chitradurga, Hassan, Shivamogga, Davanagere.

##### 4.1.1.6.2 Present Status

**Fig 4.1: Raw Silk Production in the State during 2018-19 to 2022-23 (till December 2022)**



Source:- Central Silk Board, Bengaluru

The State has a dedicated Department of Sericulture and an exclusive Sericulture Research and Development Institute to take care of the interests of the sector. Central Silk Board, established for the development of Sericulture & Sericulture industry in the country has been implementing a Catalytic Development Programme (CDP), with an aim of synergizing and disseminating technologies, innovations developed by its research and development units and incentivizing investments among the stakeholders to enhance production and productivity. CSB has also set up two laboratories, Silkworm Seed Technology Laboratory and Seri Biotech Research Laboratory at Bengaluru to carry out various research programmes. Silk Samagra Scheme (Central Govt.), an integrated scheme for development of silk industry through research, training, market linkage guidance etc. is also in vogue. It also aims to set up Silkworm Seed Technology Laboratory in Bengaluru (Karnataka). Other interventions for the development of the sector include:

- SILKS Portal: Sericulture Information Linkages and Knowledge System portal for collection, analysis and potential identification of selected geographical location for development of silk sector.
- Silk Quality Certification System scheme: Two components viz. “Cocoon and Raw Silk Testing Units” and “Promotion of Silk Mark” are being implemented under the scheme which can help silk rearing farmers assess the quality and fetch better market prices.
- Karnataka Silk Marketing Board Ltd with Silk Exchange shall be a revolutionary intervention for market linkage to specialized products like Silk fibre.
- Ministry of Textiles, Govt. of India has sanctioned an amount of ₹20.00 crore towards implementation of Tribal Sub Plan (TSP) under sericulture for the year 2020-21 in 5 states including Karnataka. It offers incentives for mulberry plantation, handholding and support for equipment and training to silk reelers.

Further, since inception of RIDF, NABARD Karnataka RO has sanctioned 38 Sericulture projects in the state. These projects have been sanctioned involving loan amount of ₹140.03 crore.

#### **4.1.1.6.3 Major Issues, Constraints and opportunities**

- Dumping of Chinese silk at cheap prices, lack of monitoring of demand and supply of raw silk, urbanisation in traditional sericulture areas, and augmentation of bivoltine raw silk production among others have posed significant challenges for the sericulture industry.
- Sericulture is susceptible to diseases and pests that can affect silk production. Effective management strategies are essential to prevent outbreaks and minimize damage.
- Silk prices can be subject to market fluctuations, impacting the income of sericulture farmers. Changes in demand and competition from synthetic fabrics may also affect the silk market.
- Changes in climate patterns can affect the growth of mulberry trees (essential for silkworm rearing) and impact overall silk production
- Economic Viability due to high initial investment costs and the time required for the silk production cycle.

#### **4.1.1.6.4 Suggested action points**

- Demand for silk products is increasing day by day. However, we are still dependent on import for raw materials. During FY 2021-22 nearly 1978 MT of raw silk worth around ₹819 crore has been imported. There is a great scope to enhance the production of raw silk in dry land with improved mulberry varieties which will add benefits to enhance the farm income.
- Improved mulberry varieties and silkworm races need to be widely popularized in suitable areas/zones, with necessary support and incentives especially in non-traditional areas.
- There is good potential for corporate/contract farming (soil to silk) to achieve international quality and ensuring continuous supply to the industries. Government and banks may promote such models.

- A comprehensive package may be evolved in collaboration with the financial institutions for upgrading the machinery and cost-effective technology to enhance the productivity and quality of the post cocoon sector and flow of required credit.
- The weakest link in the sericulture sector is the reeler. The Department of Sericulture in collaboration with the financial institutions need to work out a realistic working capital cycle and also arrive at the need based working capital requirements of reelers.
- Regular sensitization of bankers to create continuous awareness on potential available for financing the sector especially in the potential reeling clusters is needed.
- Promotion of solar powered spinning and reeling machineries amongst individual spinners and reelers and also providing the same in common facility centers is needed.
- Central Silk Board may conduct training for end-to-end value chain knowledge transfer and introduction to various schemes to enhance the quality and quantity of silk production.
- State Govt may consider seeking assistance under RIDF for construction of reeling centres, cocoon quality testing labs, multivoltine seed farms, cocoon market complexes, construction & installation of water softener plant for the existing reeling complex etc.

#### 4.1.1.7 Forestry and Wasteland Development

##### 4.1.1.7.1 Introduction:

The State is endowed with diverse climate, topography and soils which has resulted in rich biodiversity. The diverse ecological niches support characteristic flora and fauna. The evergreen forests of the Western Ghats, which cover about 60% of forest area of State, is recognized as one of the 36 Biodiversity Hotspots in the World and one of the four Biodiversity Hotspots of the India. As per the Champion & Seth classification of the Forest Types (1968), the forests in Karnataka belong to eight Forest Type Groups, which are further divided into 21 Forest Types. Protection and management of degraded forests through community participation is a major thrust area of the State Forest Department besides bio-diversity conservation and eco-tourism. Karnataka has geographical area of 190.5 lakh ha out of which 30.73 lakh ha of land is under forests (*Karnataka at a Glance – FY 2021-22*).

The major species found in the forests of the State are *Tectona grandis*, *Santalum album*, *Terminalia* spp, *Dalbergia latifolia*, *Pterocarpus* spp, etc. In the Scrub and Thorny Forests, *Acacia* spp, *Balanites roxburghii*, *Cordiamyxa*, *Capparis* spp., *Prosopis* spp., etc are found. In terms of forest canopy density classes, the State has 4532.94 sq km under Very Dense Forest (VDF), 20984.85 sq km under Moderately Dense Forest (MDF) and 13212.20 sq km under Open Forest (OF).

##### 4.1.1.7.2 Present Status

As per Wastelands Atlas of India 2019, Department of Land Resources, Ministry of Rural Development, the total wastelands in Karnataka is 13229.68 sq.km as against total geographical area of 191791 sq.km, i.e., 6.90%. Decrease in wastelands area by 99.94 sq. km. is observed compared to the previous reports. The species which are suitable for growing in the wastelands of Karnataka are Bamboo, Melia dubia, Silver Oak, Simarauba, Pongamia, Acacia, Subabul, Casuarina, Neem and Jatropha.

The following table depicts top seven districts where cultivable wasteland as area of respective geographical areas of the districts is maximum:

S.No.	Districts	Cultivable Waste (Area in hectare)	% of Geographical Area
1	Udupi	30258	8.5
2	Mandya	41955	8.4
3	Tumkur	62642	5.9
4	Dakshin Kannada	17860	3.7
5	Bidar	19381	3.6
6	Mysore	21407	3.2



S.No.	Districts	Cultivable Waste (Area in hectare)	% of Geographical Area
7	Raichur	20084	2.4
	<b>Total</b>	<b>213587</b>	

(Source: Economic Survey 2022-23)

Seven districts namely Udupi, Mandya, Tumakuru, Dakshina Kannada, Bidar, Mysore and Raichur constitute more than 50% of the Cultivable Waste, which can be used for cultivation by incentivizing Agro forestry and horticulture crops.

#### 4.1.1.7.3 Major Issues, Constraints and opportunities

- Unregulated and illegal logging activities lead to the depletion of forest resources, loss of biodiversity, and socio-economic issues for local communities dependent on forests.
- Unproductive and degraded wastelands contribute to soil erosion, reduced water retention, and diminished agricultural productivity.
- Encroachment for agriculture, settlements, and infrastructure development can lead to the fragmentation and loss of forest land, affecting the overall health and biodiversity of the forests.
- There is general lack of awareness about the economics / bankability of agro-forestry/ farm forestry schemes among the farmers/ bankers.
- There is good potential for bio-diesel plantation on private/revenue wastelands of the State through private investments.

#### PLP Projections for 2024-25

**The aggregated PLP projection for 'Forestry and Wasteland Development' sub- sector for the year 2024-25 for Karnataka State has been assessed at ₹429.50 crore.**

#### 4.1.1.7.4 Suggested Action Points:

- Agro forestry could be strengthened by promoting high value forest species like raktachandana, sandal wood, teak wood, rose wood in fallow lands to encourage farmers to augment their income.
- As per Karnataka Forest (Amendment) Act 2001, every occupant or holder of land shall be legally entitled to the sandal tree in his land except where such sandal tree is declared to be the property of the State Government in any grant, lease, contract or other instrument. Farmers may be motivated for cultivation of sandal trees in their land.
- There is good potential for raising Bamboo, *Acacia* hybrids, *Melia dubia* plantations in the State.
- Central and State Govt. have made policy for bamboo cultivation through bamboo cultivation missions. These schemes will support for nursery development, technological upgradation, development of indigenous capacities/enterprises, linkages with markets etc. with an aim to promote bamboo sector in the country.
- There is a need for popularization of fast growing leguminous tree species for creating live wind breaks on all the farms to use them as fodder in case of scarcity.
- Farmers need to be encouraged to take up plantation of fruit species such as mango, drumstick, custard apple, amla, chikoo and guava under agro-forestry.

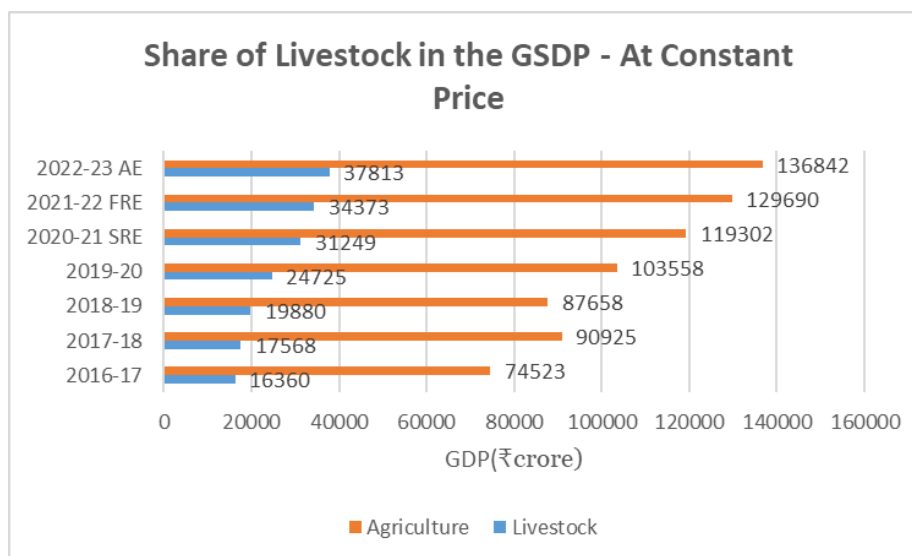
#### 4.1.1.8 Animal Husbandry- Dairy

##### 4.1.1.8.1 Introduction

The livestock sector has emerged as a vital sector for ensuring a more inclusive and sustainable agriculture system. Evidence from NABARD All India Rural Financial Inclusion Survey 2016-17, showed that almost 51% of agriculture household owned milch animals. It is well known that farming households with some cattle could withstand distress due to vagaries of weather.

##### 4.1.1.8.2 Present Status

In Karnataka majority of the population is dependent on agriculture and animal husbandry activities. The animal husbandry activities play vital role in development of rural economy of the State.



Livestock sector is contributing to provide health care to the animals and for improvement and development of breeds of animals, various programmes are implemented successfully by the Department of Animal Husbandry and Veterinary Services through its institutional network. Income from Animal Husbandry to GSDP was 3.53%. The density of livestock in the state was estimated at 151.21 per sq.km and 47468 per lakh human population. Livestock is vital for people living in drought-prone, hilly, tribal and other less favoured areas where crop production may be uncertain. It supports the earning capacity of landless, marginal and small farmers and is strongly integrated with various farming systems. Besides providing draught power and transportation, it is a major source of income. Since crop residues form the major portion of animal feed, the integration of livestock rearing in farming systems is common. Moreover, the progress of dairy sector in some districts viz., Tumakuru, Hassan, Belagavi, Mysuru, Dakshina Kannada and Kolar is in the process of redefining the concept of “dairying as a commercial activity” rather than as an allied agriculture activity.

The total livestock in the state is 30.30 million as per 20<sup>th</sup> Livestock Census and has shown increase of 4.48% over the 19<sup>th</sup> Livestock Census. As per the 20<sup>th</sup> Livestock Census, the share of Karnataka in all India livestock and poultry population was 5.47% and 6.98% respectively.

##### 4.1.1.8.3 Major Issues, Constraints and opportunities

- Shortage of good quality animals in the local markets: As per the 20<sup>th</sup> Livestock Census there is a sharp decline in the population of cattle and buffaloes which form the majority share of assets financed by banks. In addition to this the natural calamities/ recent floods in the state have severely affected the population figures of livestock. Indiscriminate slaughter of good quality milch animals (in dry period) / selling the milch animals to neighbouring states is also one of the reasons for shortage of milch animals.
- Availability and affordability of quality feed and fodder.

- High cost of concentrate feed and Milking machines.

### PLP Projections for 2024-25

**The aggregated PLP projection for Dairy Development sub sector for the year 2024-25 for Karnataka State has been assessed at ₹10815.62 crore.**

#### 4.1.1.8.4 Suggested action points

- Animal Husbandry Infrastructure Development Fund (AHIDF) scheme may be leveraged to provide financial assistance to individuals/ FPOs for establishment of infrastructure for dairy processing and value addition infrastructure and establishment of animal feed plant in the private sector.
- Area under permanent pasture in the state is 8.72 lakh hectares. While livestock population is 3.03 crores as per 20th census. Eleven districts have lower per capita pasture land. Hence, in these districts high nutrition feed is to be encouraged by distributing the fodder seeds kits
- KMF may help the banks in identification of potential dairy farmers and in recovery of the loan amount through tripartite agreement. Absence of tripartite agreement in some districts is hindering credit flow to dairy sector.
- Credit linkage of functional Dairy Cooperative Societies for establishment of modern infrastructure of quality milk production and processing.
- Strengthen conservation efforts for indigenous breeds both at institutional level by selection of elite animals and at farmers field by forming breeders' association. Efforts may be made by the premier Research Institutions in the state for methane emission reductions by making available better and economically viable technology for animal feeding and management.
- Establishment of organized livestock markets to facilitate ease in trading of quality cattle and to eliminate middle-men.
- Ensure regular vaccination livestock programme, livestock ambulance service, wider coverage and bridge the gap of access of veterinary hospital, timely action and prevention of disease outbreak.

#### 4.1.1.9 Poultry

##### 4.1.1.9.1 Introduction

- Karnataka has very congenial atmosphere for growth of poultry industry. The factors responsible for growth include better climate, presence of natural wealth, availability of skilled and unskilled labourers, technical expertise, access to modern technology such as computer software, spreadsheets etc. The availability of advanced equipment for automation, good quality feed and substitutes of feed ingredients at lower prices have all added to reduce the cost of production of birds.

##### 4.1.1.9.2 Present Status

- According to 20th Livestock Census (provision), State of Karnataka has 6.18 crores Poultry population.
- According to 2021-22 Integrated Sample Survey report, production of eggs is 82638 lakhs and of meat is 395528 tons (2021-22). The per capita availability during 2021-22 is around 124 eggs per annum. Karnataka ranks 7th in per capita availability of eggs during 2021-22 in India as per Animal Husbandry statistics 2022, which is still very low compared to the ICMR's recommended consumption of 180 eggs per person per annum. Karnataka ranks 5<sup>th</sup> in egg production in India. As per Animal Husbandry statistics 2022, estimated egg production during 2021-22 was 82638.14 lakh eggs (7183.46 lakh – 8.69% - Desi eggs,

2486.40 lakh- 3.00%- Improved fowl eggs and 72968.29 lakh – 88.31% - Eggs from Commercial Poultry farms ) indicating an increase of 8.45% over the previous year's production (76199 in 2020-21). Over 88 % of the egg production was from commercial birds.

- The districts leading in broiler chicken production include Bangalore rural, Tumkur, Kolar and Chikkaballapur. The districts popular in chicken egg production include Ballari, Mysuru, Davangere, Raichur and Koppal.
- Day Old Chick (DOC) needs of the commercial farms are mainly met by the private sector. Broiler farming is mostly through contract farming by the companies like Suguna, VHL, Godrej, Komarla, CP farms, etc.
- There are 24 poultry farms functioning under the Department of AH&VS for development of poultry in the State. The major developmental activities are breeding and rearing of Giriraja parent stock and supply of day-old chicks to the farmers.
- Marketing of eggs is through private channels and it is based on the declared rates of NECC. Broiler marketing is through contract route. The poultry meat production during 2021-22 was 4.78 Million tons, contributing about 51.44% of total meat production. The total installed capacity for production of poultry and livestock feed in the State by 67 licensed feed manufacturers is 32.65 Lakh Metric Tons which is marketed by 51 licensed feed dealers.

#### **4.1.1.9.3 Major Issues, Constraints and opportunities**

- High cost of feed/ chicks/ labour.
- Volatility of broiler prices in the market
- Lack of insurance products in poultry sector
- Lack of promotional activities for manufacturing of own feed by broiler farmers.

#### **PLP Projections for 2024-25**

**The aggregated PLP projection for Poultry Development sub sector for the year 2024-25 for Karnataka State has been assessed at ₹2813.96 crore.**

#### **4.1.1.9.4 Suggested action points**

- “Feed Formulae” for low cost feed developed by the Veterinary Colleges and Research Institutions may be supplied to the poultry farmers through “Lab to Land programme” and other extension services.
- Strict enforcement of biosecurity norms for setting up of poultry farms and establishment of common incinerator facilities by local bodies.
- Promotion of maize and soya production through contract farming by private entrepreneurs with institutional support.
- Insurance companies may consider creating special product for poultry insurance as the existing poultry insurance cover is not being utilized by most poultry farmers.

#### **4.1.1.10 Sheep, Goat and Piggery etc.**

##### **4.1.1.10.1 Introduction**

Sheep and Goats are important livestock species that contribute greatly to the agrarian economy, especially in the arid/semi arid and mountainous areas where the crop or dairy farming are not economical. They play an important role in the livelihood of a large percentage of small and marginal farmers and landless labourers. A number of rural-based industries use wool and sheep skins as raw material. Sheep manure is an important source of soil fertility. Sheep and goats in India are mostly maintained on natural vegetation on common grazing lands, wastelands and uncultivated (fallow) lands, stubbles of cultivated crops and top feeds.

Traditionally they are not reared on grain or cultivated fodder. However, since past 4-5 years stall fed goat rearing is picking up in some areas.

#### **4.1.1.10.2 Present Status**

- As per Livestock Census 2019, the population of Sheep, Goat and Pigs in the State was 11.05 million, 6.10 million, and 0.30 million respectively which is 15.31%, 28.63% and 6.25% growth over the previous Census year.
- In Karnataka the estimated total Meat produced during the year 2020-21 was 3.87 lakh MT showing an increase of 20% over previous year (3.04 lakh MT). This includes 1.45 lakh MT of Chicken meat. Out of this, 1.16 lakh MT was from sheep, 0.76 lakh MT from goat and 0.07 lakh MT from pig comprising 54.88% of total meat produced in the State.
- The total wool produced during the year 2020-21 stood at 1051 MT as against 1742 MT produced during the year 2019-20 showing decrease of 39.66% over previous year.
- While sheep and goat rearing is taken up by farmers in almost all the districts, pig rearing and breeding is taken up as livelihood activity in few districts of the state viz., Kodagu, Chikkamagaluru, Mandya, Dakshina Kannada, parts of Hassan and Kolar.

#### **4.1.1.10.3 Major Issues, Constraints and opportunities**

- Non availability of adequate grazing lands is one of the major constraints for farmers taking up sheep/goat rearing.
- Lack of hygienic/modern Slaughterhouses/abattoirs
- Inadequate vaccine availability at village levels.

#### **PLP Projections for 2024-25**

**The aggregated PLP projection for Sheep, Goat and Piggery Development sub sector for the year 2024-25 for Karnataka State has been assessed at ₹3126.77 crore.**

#### **4.1.1.10.4 Suggested action points**

- Improvement in market linkages for live animals as well as meat may be addressed so as to ensure fair and remunerative prices, especially to small farmers/ shepherds.
- Defunct Sheep and Wool Producers Co-operative Societies need to be revived, to assist farmers in production and marketing of produce.
- Modern abattoirs and slaughter houses cum meat processing centers may be financed by banks.
- As per the operational guidelines of AHIDF scheme the scheduled banks may provide financial assistance to individuals/ FPOs for establishment of infrastructure for meat processing and value addition infrastructure and establishment of animal feed plant in the private sector.
- NARI Suvarna Rams may be popularized among sheep farmers.
- Private Entrepreneurs may be encouraged to set up retail marketing units and live markets for selling pigs. In the districts where pig meat is in demand, pig breeders as well as rearers need to be provided with credit support.
- If a farmer raises ten sheep or goats in addition to farming, it would give the farmer additional revenue. The earning not only comes from selling of goats but also from its droppings as it is considered as good organic manure. Farmers may also establish stall fed goat rearing units to augment their income.

#### 4.1.1.11 Fisheries Development

##### 4.1.1.11.1 Introduction

The fisheries sector plays an important role in the socio-economic development of Karnataka, in view of its contribution to the food basket, nutritional security, employment generation and foreign exchange earnings. The state has vast potential for fish production, processing and export.

##### 4.1.1.11.2 Present Status

- Karnataka state has vast marine, brackish water and inland fisheries resources. The State has vast potential for fish production. It has 5.74 lakh ha. of freshwater sources consisting of 3.02 lakh ha. of ponds and tanks and 2.72 lakh ha. of reservoirs. In addition, the State has 8,000 ha. of brackish water resources and 313 Km coastline with a continental shelf area of 27,000 Sq. Km (Annual Report 2022-23, Dept. Of Fisheries, GoK).
- All these resources provide good scope for fisheries activities like composite fish culture, ornamental fish breeding, cage culture in reservoirs, fish seed rearing/fish seed hatcheries, integrated farming and shrimp culture etc. The three coastal districts namely Dakshina Kannada, Udupi and Uttara Kannada, together comprises of the coastline of 313 km. This gives a wide scope for marine capture fisheries, mariculture and brackish water aquaculture. The coastal line stretches from Majali (Karwar) in the north to Ullal (Mangalore) in the south covering the three coastal districts viz., Uttara Kannada, Udupi and Dakshina Kannada bordered by the high Western Ghats in the east and Arabian Sea to west.
- Comprising of 162 marine fishing villages, these three districts have one village for every 2.00 km of the coastline. The coast is rich in pelagic fishes like sardine and mackerel. Traditionally, Karnataka Coast is known as “Mackerel Coast”. The fisheries department is implementing several schemes for the scientific exploitation of these resources and for the welfare of fishermen in particular and public in general. (Source: Karnataka State Annual Report for Fisheries 2022)
- The marine fisheries resource potential of the state has been estimated at 4.25 lakh MT, of which 2.25 lakh MT come from inshore areas up to a depth of 70 m and the remaining 2.0 lakh MT hail from off shore/deep sea zone.
- The marine fish production during 2022-23 was 7.30 lakh metric tons. Presently, 4646 mechanized boats, 10961 motorized boats and 8657 traditional crafts are operating along the coast. More than 85% of total fish catch of the State is caught through mechanized fishing boats.
- The state has 9.84 lakh fishermen and 729 Fishermen cooperative societies (132- marine and 597- inland) of which 667 are active societies (127- marine, 540- inland)

Karnataka is in 6<sup>th</sup> position in marine fish production in the country and 9<sup>th</sup> position in inland fish production when compared to fish production in the country. The per capita availability of fish in Karnataka is about 17.69 kg.

The state has 8 major fishery harbours viz. Mangalore fishing harbor in Dakshina Kannada (D.K), Malpe and Gangolli fishing harbors in Udupi and Bhatkal, Honavar, Tadadi, Belekeri, and Karwar in Uttara Kannada (U.K) districts. About 90% of the marine fish production in the state comes from these major ports. There are also 16 fish landing center and 91 beach landing centers providing landing facilities to the small boats and traditional crafts. Though these fishing ports are well connected to the roadways, some of the basic amenities such as toilet, retiring room, potable water supply, electricity and sanitation are found to be lacking. There is need for improving the post-harvest facilities in these harbours in addition to developing fish landing centres; RIDF and FIDF facilities could be made use of for developing these facilities. Further, the Pradhan Mantri Matsya Sampada Yojana (PMMSY) being implemented to address critical gaps pertaining to fisheries and aquaculture value chain including infrastructure, modernization, traceability, production, productivity, post-harvest management and quality control etc. may also be utilized effectively.

#### 4.1.1.11.3 Major Issues, Constraints and opportunities

- Shortage in the supply of fish seeds and local feed companies
- Poor reservoir production and unscientific harvesting and quality processing for global markets
- Lack of deep sea fishing facilities and optimal utilization of inland water resources

#### PLP Projections for 2024-25

**The aggregated PLP projection for Fisheries Sector for the year 2024-25 have been assessed at ₹1231.42 crore for the State.**

#### 4.1.1.11.4 Suggested Action Points

- Subsidy schemes under fisheries sector need to be credit linked for developing the sector with formal credit. This will ensure effective end use of resources. Subsidy facilities available from NFDB needs to be made use of by guiding the potential entrepreneurs.
- Average productivity of inland water bodies is less due to non-adoption of scientific fish culture practices, low water holding capacity due to heavy siltation and weed infestation, lack of awareness about scientific aquaculture, etc. Transfer of technology to farmers and strengthening of extension services at field level are required for dissemination and adoption of good management practices.
- There is scope for promoting cage culture in reservoirs, brackish waters and in open seas with the technology developed by ICAR institutes like CMFRI, CIBA, CIFRI, etc. The State Government may come out with a programme and facilitate cage culture with credit support from the banks through SHG/JLG/ Producer Organisation models.
- Fish Farmers Collectives/Fish Farmer Cooperatives can be promoted in potential areas to take up collective fish farming by taking on contracts/leased lakes and ponds to increase their turnover and enhancing their income through marketing.
- Establishment of soil and water testing facilities in potential taluks/clusters will speed up the development of inland fisheries sector.
- Hygienic fish handling and e-marketing strategies should be given prime importance in the post-COVID-19
- Banks may encourage and support JLGs of fishermen/women by extending adequate credit support as the formal sector always focus on loaning for mechanisation and thereby concentrates on large loans backed by collaterals resulting in deprivation of small loans for fisher folks.
- More thrust may be given to bivalve farming such as mussels as they give the highest production per unit area. Areas suitable for such activities may be identified by expert assistance and interested SHGs/JLGs may take up activities under the same.
- Subsistence backyard fish farming should be encouraged through proper financial assistance.

#### 4.1.1.12 Sustainable Agriculture Practices

##### 4.1.1.12.1 Introduction

Sustainable agriculture insists on moderate consumption of non-renewable resources, with nature and future generations in mind. The approach advocates switching to renewable energy sources, sparing land use, and eliminating nature pollution. Agricultural growth can be sustained by promoting conservation and sustainable use of these scarce natural resources. At present, farmers concentrate mainly on crop production which is subject to uncertainty in income and employment. In this context, the integration of various agricultural enterprises has great potential to supplement farmers' income and increase family labour employment.

### **Promoting Sustainable Fisheries and Livelihood- Kodi Bengere-Udupi**

Fisheries projects play a crucial role in promoting sustainable aquatic ecosystems, supporting livelihoods and ensuring food security. These projects encompass a wide range of initiatives, including the construction of fish jetties, restoration of fish pond and development of fish markets, which collectively contribute to the growth and development of the fisheries sector. Aligned with SDG 2 (Zero Hunger) and SDG 14 (Life Below Water), fisheries projects aim to enhance the productivity and sustainability of aquatic resources, while also improving the livelihoods of fishing communities.

**Project Outlay:** ₹270 lakh

**RIDF Loan:** ₹256.50 lakh under RIDF XXVIII

**Impact:** The fishermen of Kodi Bengere, Udupi district were facing difficulty in berthing fishing vessels. Extension of the fishing jetty with this project has changed the lives of fishermen in the village by providing scope for more boats and easing the load at Malpe harbour. Around 9000 people from 10 villages have benefitted from the project.



India's National Agricultural Policy stresses on the requirement of non-environment degrading, technologically sound, and economically achievable ways like rationalising the use of land and water in different agro-oriented states, sensitising the community of farmers regarding the environmental effects of reckless agriculture.

#### **4.1.1.12.2 Present Status**

As regards Integrated Farming in the State, many farmers cultivate crops and also rear dairy animals or sheep/ goat for additional income. In terms of cropping systems, finger millet is accompanied by vegetable/bengal gram/bajra as an intercrop.

Initiative for popularising integrated farming has been encouraged by KVKs by demonstrating in farmer's field. KVK, Uttar Kannada had demonstrated IFS in 04 blocks targeting SC and ST households in the district. The project was designed so that the beneficiaries get regular income from short term field crops, flower crops and vegetables and fixed income at regular intervals by planting agroforestry species like teak, bamboo etc.

In addition, Agriculture Department conducts field day and also through RSK encourages integrated farming. NABARD, under the Farm Sector Promotion Fund, has funded a project to the University of Agricultural Sciences, Dharwad on Integrated Farming, which has led to



the establishment of a model IFS village in the area. Karnataka Regional Office has conducted Regional Advisory Group on IFS to develop and disseminate upon various models of IFS.

A few Integrated farming models with Unit Costs are detailed below:

### Integrated Farming Models

**Table No. 4. 5: Unit Cost for Integrated Farming Models**

Activity*	Total Cost (₹)
Cereal-Maize (1.5 acre)+cowpea (1.5 acre) + farm pond + 2 cows (4 lpd/cow)	144000
Cereal-Maize (1.5 acre)+cowpea (1.5 acre) + sheep rearing (20 ewes +1 ram)	168000
Mango (1 acre)+ cows (4 lpd/cow) + Brinjal (1 acre)	130000
Farm pond (various sizes)/Dairy (2 animals)/Sheep & goat (10+1)/poultry (50 Giriraja)/ apiary	Varies with the combination of enterprises

\*The Unit Costs may vary depending upon the enterprise proposed in the integrated model.

### Integrated Farming System

NABARD in Karnataka has associated with UAS, Dharwad on IFS in Honnapur village of Alnavar taluka, Dharwad extending a support of ₹25 lakh for setting up of 25 IFS demonstration units, which would indirectly benefit 3.7 lakh farmers in the district. On implementation of the project, there is a threefold increase in the income of the farmers.

Considering the importance of Integrated Farming System (IFS) in the agro- economy of the State, Karnataka Regional Office of NABARD has conducted a Regional Advisory Group Meeting on “Integrated Farming System-Strategies for scaling up”, which witnessed participation from Agriculture Universities, Research Institutions, SLBC, Banks, progressive farmers etc. Detailed deliberations on IFS, the potential and opportunities, models suitable in Karnataka, various issues affecting the sector such as need for zone specific models, adequate access to credit, creating rural market infrastructure etc. were undertaken during the meeting.

As a sequel to the RAG meeting, during FY 22-23, NABARD could support three projects under Integrated Farming System. Brief of the project are as under:

1. 1) Supported University of Agricultural Sciences, Raichur, for ‘Millet based Integrated Farming System for improving livelihood and doubling the farmers income in irrigated area of Kalyana Karnataka districts to promote millet cultivation with an outlay of ₹13.77 lakh.
2. 2) To promote IFS based farming, Demonstration of IFS for enhancement of income of farmers under Mango based cropping system’ has been sanctioned to ICAR – IIHR at Bangalore rural with an outlay of ₹15.35 lakh.
3. 3) To demonstrate the benefits of IFS among the tribal population, an IFS project is being implemented in the Tribal Development Project of NABARD in Doddaballapura taluk of Bangalore Rural district with an outlay of ₹127.88 lakh.

#### **4.1.1.13 Farm Credit – Others, including Two Wheelers for farmers**

##### **4.1.1.13.1 Introduction**

Most of the SF/MF still depend on the animal power for their farm operations and transportation. The average size of land holding is shrinking due to demographic pressure and consequently, the use of bullocks as draught animals is widely prevalent amongst the farmers whose land holding is small.

##### **4.1.1.13.2 Present Status**

Due to easy availability of two wheelers, it has become a popular choice for farmers. They provide farmers with a cost-effective and efficient mode of transportation, reducing the time and effort required for commuting between farms and markets. These are mostly used for small quantities of inputs as well as ferry outputs to sell in nearby towns. As per RTO, Karnataka Annual Report 2022-23, 885511 two wheelers have been registered in Karnataka from April 2022 to March 2023.

There are many miscellaneous activities not covered in the subsector, which form a part of priority sector, such as loans to SF/MF for purchase of land, loans to distressed farmers indebted to non-institutional lenders etc., and instead covered in this segment as per PSL guidelines.

##### **4.1.1.13.3 Major Issues, Constraints and opportunities**

- Individuals seeking two-wheeler loans may face challenges related to their credit history, income stability, and overall creditworthiness.
- Economic conditions, including inflation and economic downturns, can affect the overall credit environment, making it more challenging for individuals to secure loans.
- High-interest rates on loans can be a significant constraint, making the overall cost of financing a two-wheeler higher and potentially limiting access for certain income groups.

#### **PLP Projections for 2024-25**

**The aggregated PLP projection for sub sector Farm Credit – Others, including Two Wheelers for farmers for the year 2024-25 for Karnataka State has been assessed at ₹1548.74 crore.**

##### **4.1.1.13.4 Suggested Action Points**

- The department may motivate farmers for rearing of male calves for draught purposes.
- DIC may train artisans to develop workmanship in manufacturing pneumatic tyre/ rubber bound iron wheel cart.
- Banks need to facilitate debt swapping for farmers on flexible terms.
- Vaccination for Foot & Mouth disease and lumpy skin disease may be made mandatory especially for animals traded in village fairs / livestock markets.
- Two wheelers financing by banks can increase the income level of the farmers by increasing their mobility for procurement and marketing of the produce. This is especially important for those districts which are closer to cities, where perishable agricultural produce such as fruits and vegetables can be carried by farmers for sale in urban areas on motorcycles to avoid wastage.

#### 4.1.2. Agriculture Infrastructure

##### 4.1.2.1 Construction of Storage Facilities:

###### 4.1.2.1.1 Introduction

Karnataka is one of the leading producers of food grains, fruits and vegetables in the country and the production of fruits and vegetables have surpassed the production of food grains in the State.

###### 4.1.2.1.2 Present Status

The total food grain production in the State was 160.27 lakh MT (Karnataka at a Glance 2021-22). Horticulture sector has also emerged as an important component of the State economy and has contributed more than one third share to the economy of agriculture and allied sectors. In many dry regions of the State, horticultural crops have evolved as an alternative crop to agricultural crops. Horticulture crop covers an area of 26.97 lakh ha and the annual production is 240.11 lakh MT. (Annual Report, Dept of Horticulture 2022-23).

In this backdrop, the role of storage and marketing infrastructure is crucial in realizing the full potential of the agriculture sector. Development of such infrastructure helps in addressing the vagaries of nature. Moreover, it is only through the development of post-harvest management infrastructure that the produce can be optimally utilized with opportunity for value addition and fair income for the farmers.

###### Availability of Dry Storage Facilities

The annual food grain production data for the period 2000-01 to 2022-23 indicates that the food grain production in Karnataka has crossed 100 lakh MT and is increasing y-o-y. Thus, pegging the maximum annual food grain production at 150 lakh MT, total warehouse capacity required in the State is estimated at 75.00 lakh MT. In order to cater to the requirements of food grain storage for PDS and MSP operations by the State and Central Government, both Central and State Government agencies have created scientific storage structures in the State. The warehouse capacity available in the State for storage of agriculture produce (public & 50% of GBY) is 40.66 lakh MT and the estimated gap in capacity is 34.34 lakh MT. Details of the storage space available with various agencies for storage of agriculture produce are as under:

**Table No.4.6: Storage Godowns present in Karnataka**

S. No.	Warehousing Agency	Capacity (lakh MT)
i.	Central Warehouse Corporation	4.99
ii.	Karnataka State Warehouse Corporation	15.22
iii.	Food Corporation of India	3.81
iv.	Rural Godowns under GBY (50%)	16.64
	<b>Total</b>	<b>40.66</b>

Financing for warehouse capacity creation in the State comes from various schemes of GoI and NABARD. NABARD provides financial assistance to the State Govt. and State Owned Agencies for construction of Rural Godowns, Cold Storages and agriculture marketing infrastructure under Rural Infrastructure Development Fund (RIDF), Warehouse Infrastructure Fund (WIF) and NABARD Infrastructure Development Assistance (NIDA). Government of India has various credit linked subsidy schemes like Agriculture Marketing Infrastructure scheme through which creation of agri marketing infrastructure and storage facilities in public and private sector are encouraged.

The details of dry Storage Godowns and Market Yards created in Karnataka under different schemes of NABARD and Government of India (as on 31 March 2022) are furnished in following Tables.

**Table No. 4.7: Dry Storage Godowns supported under NABARD & GOI schemes**

S. No.	Assistance under	No. of Godowns	Capacity (lakh MT)
i.	Rural Infrastructure Development Fund	203	3.94
ii.	NABARD Infrastructure Development Fund (NIDA)	25	1.22
iii.	Warehouse Infrastructure Development Fund (WIF)	320	3.67
iv.	Grameen Bhandaran Yojana (GoI scheme, now part of AMI)	4422	37.51

**Table.No. 4.8: Market Yards supported under NABARD & GOI schemes**

S. No.	Assistance under	No. of Market Yards supported	No. of Covered Auction Platforms
i.	RIDF	871	205
ii.	WIF	111	365

### **Cold Storage & Cold chain for Fruits & Vegetables**

- Cold chain infrastructure may be classified into Pack houses, Ripening chambers, Cold Storages and Reefer transportation. As per a study supported by NABARD on Cold Chain Technologies – Transforming Food Supply chains for assessing the Cold Chain requirements in the country, there are only 250 fully equipped functional pack houses in the country, as against the required number of 70,000.
- In Karnataka, only 1% of the total production of fruits and vegetables are processed into different products. About 25-30% of the produce is lost due to improper Post Harvest Management. In order to avoid post-harvest losses, the practice should be towards Integrated Post Harvest management by creation of pack houses, integrated pack houses, cold room staging, reefer vans, processing units, cold storage units, ripening chambers, dryers and marketing facilities. Among Post Harvest Management practices pre cooling, cold storages and refrigerated transport are most important.
- Karnataka State has 147 cold storages, of which 136 are in private and 11 are in public sector, with a total capacity of 5.13 lakh MT. Under RIDF Tranche XXIX assistance of ₹85.95 crore has been extended for creation of cold storage facilities of 22650 MT to the Govt of Karnataka.
- Since Horticulture produce like fruits, vegetables and flower are perishable, it is important to provide proper post-harvest management practices for these produces. The fruits and vegetables that are readily stored are Potato, Grapes, Tamarind, Citrus, Pomegranate, Pineapple, Chilli, Apple. Private cold storages are also used for cut flowers. The state has huge potential for establishing viable cold chains for horticulture crops, vegetables & sea food to cater to both domestic and export markets.
- Government intends to create an online marketing platform for 47 lakh tonnes of marketable surplus of fruits and vegetables, by creating infrastructure facilities like markets, cold storages, processing centres under Atmanirbhar Scheme through Public-Private Partnership.
- Based on the production of horticulture crops, marketable surplus and availability of storage facilities, the potential of the cold storage facilities in the districts can be classified as follows:

**Table.No. 4.9: Classification of Cold Storage Facilities in the districts**

S. No.	Deficit in Cold Storage Facility capacity in MT	Districts
1	<50000 MT	Bidar, Yadgir, Raichuru, Gadag, Davanagere, Shivamoga, Udupi, Dakshina Kannada, Kodagu, Mandya, Bengaluru Urban.
2	50000- 100000 MT	Uttara Kannada, Dharwad, Koppal, Chikkamagaluru, Chikkaballapura, Bengaluru rural.
3	>100000 MT	Kalaburgi, Vijayapura, Bagalkot, Belagavi, Haveri, Chitradurga, Tumakuru, Kolar.

Strengthening of Centre of Excellence has been a major objective of State Govt in order to impart training and create awareness among farmers on flowers and high tech cultivation of flower crops. An amount of ₹7052.32 lakh under RIDF Tranche-XXVII has been sanctioned to Agriculture Department during 2022-23 for establishment of Centre of Excellence in various Districts.

#### 4.1.2.1.3 Major Issues, Constraints and opportunities

- Lack of new agri. markets, certification/ standardization centres and other post-harvest facilities near the major production centres.
- Need to support creation of pack houses, new cold storages, renovate existing cold storages, develop cold chains / cold chambers, etc.

#### PLP Projections for 2024-25

The aggregated PLP projection for 'Construction of Storage Facilities' sub sector for the year 2024-25 for Karnataka State has been assessed at ₹2815.92 crore.

#### 4.1.2.1.4 Suggested action points

- Strengthening of FPOs to organise the various post-harvest activities necessary at the farm gate and undertake the collection, aggregation, grading and transportation of the produce to the market centres to ensure maximum returns to the farmers.
- Warehouse receipt system may be adopted by all warehouses and farmers may be provided pledge loans against NWRs.
- Development of cold chain infrastructure and cold storage units for improving the storage and handling of perishable horticulture produce has to be taken up expeditiously.
- Financing of cold storages to be done by integrating with roof-top solar panels.

#### 4.1.2.2 Land Development, Soil Conservation, Watershed Development

##### 4.1.2.2.1 Introduction

Karnataka is predominantly an agrarian State. As two third of the cultivated area in the State is under rainfed cultivation, the failure of monsoon leaves a significant impact on agricultural production. During 2022, the State as a whole recorded 1474 mm of rainfall as against the Normal Annual rainfall of 1153 mm with a departure from Normal being (+) 28%. Among the 31 Districts, all districts recorded Normal to Large Excess rainfall. During 2023, state received a rainfall of 642 mm against the average normal rainfall of 852mm, resulting in drought in 216 taluks of the state.

##### 4.1.2.2.2 Present Status

**Land development and soil conservation:** About 63 per cent of the geographical area (71 per cent of the NSA) of the state is in dry zones. Dry land agriculture is important as substantial contribution to agricultural production comes from these dry lands.

The State has about 13.5 lakh hectare (ha) area under different categories of wastelands and problematic soils requiring different management practices and reclamation measures. Out of 190.50 lakh ha. of geographical area of the state, about 129.70 lakh ha. of area including 12.80 lakh ha. of the degraded reserve forests require treatment under watershed development.

**Watershed development:** The total geographical area of the State is 190.50 lakh ha, out of which 129.70 lakh ha area is available for watershed interventions. Upto March 2022, 72.00 lakh ha rainfed area was brought under watershed interventions. So far 70.13 lakh hectare, area has been treated with watershed interventions through various watershed development programmes. Implementation of these soil and water conservation programmes in watershed area has resulted in several benefits such as reduction in soil erosion, improvement in ground water table, improvement in crop productivity, crop diversification etc. (Parisaramahiti, ENVIS centre Karnataka).

Krishi Bhagya yojana for promotion of assured water for sustainable agriculture in all the rainfed area of state, Raitha Siri for promotion of minor millets production and enhancing soil productivity, Saavayava Yojane to enhance the adoption of organic farming are few schemes under implementation. Sujala – III for watershed development, Watershed development for drought proofing, Pradhan Mantri Krishi Sinchai Yojana-Watershed Development (PMKSYWD) (erstwhile IWMP) with a notion to enhance recharge of underground water and agricultural productivity, to conserve soil, moisture and nutrients etc., are also being implemented.

The Government of India, the State Governments of Karnataka and Odisha and the World Bank have signed a \$115 million (INR 869 crore) Programme (Rejuvenating Watersheds for Agricultural Resilience through Innovative Development Programme) that will help national and state institutions adopt improved watershed management practices to help increase farmers' resilience to climate change, promote higher productivity and better incomes.

**Production of Organic inputs:** Due to indiscriminate use of chemical fertilizers, the soil health is adversely affected. This is being realized by farmers who are evincing interest in using organic manures. Vermicomposting and NADEP composting and organic manures prepared from crop residues, off-farm wastes are considered to produce good quality manures. Application of these manures improves soil biophysical, chemical and microbiological properties and hence improves drainage in saline soils and reduces alkalinity in alkaline soils also rectifies acidity in acid soils. Around 10% of potential arrived at for reclamation of acid, saline/alkali soils may be included under these activities. Orchard areas offer potential for setting up of vermi composting units due to increase in demand for organic manures. Sugar mill areas offer potential for setting up of vermi composting units by procuring solid wastes.

The increase in area and crop diversification in the state will result in more demand for organic manures/fertilizers.

**Soil improvement by tank silt application:** Red soil areas constitute about 53% of the cultivated area. These soils in many places are light textured with low water, nutrient holding and buffering capacity. Productivity of these soils could be improved by application of tank silt. Some NGOs are popularizing the practice and organizing farmers to take up the work. The activity is financially viable. The major work being taken up is desilting with manual labour under NREGP. As the government role is limited to the excavation of tank silt under food for work programme, bank credit is required for transportation and application of tank silt to the field. Since the activity is an age-old practice and the state government is taking keen interest in desilting of tanks, preparing the ground for linking bank credit to the activity is important.

The state government was implementing construction of Krishi Honda (farm ponds) in the individual farmers fields on a massive scale. Several ponds constructed during previous years have silted up and need de-silting to restore their storage capacity. Silting up of these farm ponds is faster where catchments are untreated with soil and water conservation works like Farm bund, Waste weir etc. Majority of the farmers usually do not resort to treatment of

catchment areas of their ponds due to ignorance. This is a potential area for bank credit as farmers will be willing to borrow for the purpose.

Village/MI tanks developed from 2002-2012 by Jala Samvardhana Sangha (JSYS-MI department) under World Bank also require de-silting on a massive scale.

**Reclamation of Problem soils:** These soils include acid, waterlogged, saline, saline alkali, and alkali. Acid soils could be reclaimed by application of suitable quantities of lime like limestone, dolomite etc. Waterlogged and saline soils may be reclaimed by providing suitable drainage. Saline alkali and alkali soils are reclaimed by application of Gypsum (sodic soils), Pyrites (alkaline soils) and providing drainage in the field.

**Farm Ponds as Water Harvesting Structures:** Erratic behavior of monsoon entails that rainwater be harvested and stored during rainy season to use for supplementary irrigation during dry spells. Over exploitation of ground water resources is resulting in dark and grey blocks and conservation of rain water particularly in these blocks has assumed greater importance.

#### 4.1.2.2.3 Major Issues, Constraints and opportunities

- Insufficient vegetation cover, especially in hilly or sloped areas, leaves soil exposed to erosion. Planting cover crops and implementing agroforestry practices can mitigate this issue.
- Intensive and unsustainable farming practices, such as monoculture, excessive use of chemical fertilizers and pesticides, and poor irrigation management, can degrade soil health and structure.
- Deforestation can lead to increased runoff, loss of organic matter, and diminished soil structure.

#### PLP Projections for 2024-25

**The aggregated PLP projection for 'Land Development, Soil Conservation, Watershed Development' sub sector for the year 2024-25 for Karnataka State has been assessed at ₹3799.10 crore.**

#### 4.1.2.2.4 Suggested Action Points:

- Promote Integrated Farming System (IFS) with emphasis on multi-cropping, rotational cropping, inter-cropping, mixed cropping practices with allied activities like horticulture, livestock, fishery, agro-forestry, apiculture etc., to enable farmers to not only maximize farm returns to sustain livelihood, but also to mitigate the impacts of drought, flood or other extreme weather events.
- Area based measures like terracing, bunding, growing vegetative cover, etc., could be taken up by farmers on a community basis.
- Banks may prepare activity-wise banking plans in treated watersheds and ensure effective implementation of the same.
- Promotion of measures to improve soil quality and soil health, e.g., integrated nutrient management using organic fertilizers, tank silt application, mulching, green leaf application, vermi-composting, promotion of agro-forestry and related soil protection measures. Govt. can establish Soil Testing Laboratory at each taluk level.
- Desilting of water storage bodies like rivers, check dams, lakes, ponds, etc., can be carried out on a regular basis.
- Focus may be given on construction of series of rain water harvesting structures like farm ponds and check dams that will aid in increasing the ground water table. By introduction of JIVA project in the watersheds, prioritising soil health through traditional cultivation practices is in implementation stage.

- Promote soil health mapping, use of micronutrients, soil health improvement by adoption of reclamation measures, use of green manures and integrated nutrient management methods
- Development and promotion of models for ‘integrated farming system’

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

##### **4.1.2.3.1 Introduction**

“Agri Infrastructure - Others” includes financing to plant tissue culture, agri bio-technology units, seed production, bio-pesticides, bio fertilizer units and vermi-composting with an aggregate sanctioned limit of ₹100 crore per borrower from banking system to form a part of agriculture - ancillary activities.

##### **4.1.2.3.2 Present Status**

###### **i. Agri-Biotechnology & Tissue culture**

- Karnataka has been at the forefront of biotechnology in India and is rightly known as the Biotech Capital of India. Karnataka is home to a large array of biotechnology enterprises, including large companies, medium-sized and many promising biotech start-ups. Biotechnology enterprises in Karnataka contribute 50% of India’s revenue in biotechnology.
- The State Govt. on 28 September 2017 approved a new Biotechnology Policy, with which the State Government hopes Karnataka will take the lead in making India a \$100 billion market for the sector. Government of Karnataka also released draft Biotechnology Policy 2023-28 at the recently concluded Bangalore Tech Summit.
- Department of Horticulture has developed Biotechnology Centres at Belagavi, Davangere, Shivamogga and Mysore all of which have been actively functioning. Germplasm conservation, production of tissue culture saplings, mushroom development, production of Bio-fertilizers and Bio-pesticides, soil, water & leaf analysis are the important production and service providing activities being carried out in these centres. Propagation of horticulture crops including medicinal and aromatic plants and production of fruit grafts/seedlings, is also an important activity of the centre.
- In the year 2020-21 a total of 6.60 lakhs tissue culture plants have been produced. During the year 2021-22 a total production of 0.88 lakh Tissue Culture plants by utilizing ₹13.78 lakh and 3 tonnes of bio-fertilizers have been produced upto the end of November-2021. The production had reached to 1.23 lakhs Tissue Culture plants at the end of November 2022.

###### **ii. Bio-Pesticides**

- Currently a small segment, bio-pesticides market is expected to grow in the future owing to government support and increasing awareness about use of non-toxic, environment friendly pesticides. Bio pesticides, in which the main ingredient is derived from a natural source, are actively championed by the government agencies under integrated pest management (IPM) programmes.
- Under a new scheme, there is a provision to provide necessary techniques and technology along with distribution of bio pesticides which reduce environmental pollution, under subsidy to farmers to control insects, diseases and weeds of crops effectively. Bio-pesticides are being distributed to the farmers at 30-50% subsidy by State Government.

###### **iii. Seed Production/Certification**

Karnataka was the first State to establish the Seed Certification Agency as an autonomous body during 1974. Under Swabeejabhivridhi scheme, Govt. of Karnataka is supplying high yielding varieties and good quality certified and truthfully labelled seeds of major crops to farmers at subsidized rate. Govt. of Karnataka has set up a Seed Risk Fund to protect the Govt. agencies like Karnataka State Seed Corporation, Karnataka Oil Federation and State Agriculture



Universities, against the unforeseen losses. The grafts/seedlings of different horticulture crops are made available to farmers and public at a common point of place through special programme called "Sasya Sante" which was implemented in all districts.

#### **iv. Vermicomposting**

To give a boost to vermi compost sector, Govt. of Karnataka, Dept. of Agriculture is implementing a scheme called "*Enrichment of Soil Fertility*" to restore and enrich soil fertility by application of bio-fertilizers. The objective of this programme is to enrich soil fertility and increase income level of farmers. In order to encourage organic farming and promote production and utilization of organic manures, farmers are provided with financial assistance for establishment of bio-digesters, vermicomposting units and distribution of micronutrients. Karnataka Compost Development Corporation Limited is involved in training on production of vermi compost.

Despite all efforts and support rendered by the State Government and various nodal agencies, the development of the sector is not commensurate with the vast potential existing.

#### **4.1.2.3.3 Major Issues, Constraints and opportunities**

- Lack of awareness among the entrepreneurs/bankers about the potential available in the sector results in poor credit flow.
- Lack of proper expertise and presence of biotechnology hubs only in and around Bangalore is hampering the progress of this sector.
- Development of the sector is concentrated in few pockets of the State. Efforts towards spreading these developments to other potential clusters need to be initiated.
- Use of bio-fertilizers can improve productivity, consume smaller amounts of energy, mitigate contamination of soil and water, increase soil fertility and biological control of phytopathogenic organisms. This will translate into profitable benefits for farmers. The activity will also result in sustainability and environment protection.

#### **PLP Projections for 2024-25**

**The aggregated PLP projection for 'Others- Tissue culture, agri-biotech, seed production, bio-pesticides/fertilizers, vermicomposting, etc.'" sub sector for the year 2024-25 for Karnataka State has been assessed at ₹1651.15 crore.**

#### **4.1.2.3.4 Suggested action points:**

- Schemes of the Central/State Govt. related to this sector may be disseminated to the farmers/entrepreneurs/corporate for taking up such activity.
- The implementation of Biotechnology policy should be fast tracked.
- Bankers need to be sensitized about the scope available for credit flow to this sector.
- Banks to formulate schemes which will cater to the need of this sector.

### 4.1.3 Ancillary Activities

#### 4.1.3.1 Food and Agro Processing

##### 4.1.3.1.1 Introduction

The State is blessed with the resources to become an Agri-processing hub. In many dry regions of the State, Horticultural crops have evolved as an alternative crop to agricultural crops.

##### 4.1.3.1.2 Present Status:

- About 30 per cent of the total workers are engaged in agricultural and allied sector activities which accounting for approximately 15% of the Karnataka's GSV for the year 2022-23.
- Ranks fifth in India in terms of total area under horticulture. Stands fifth in production of vegetable crops and third in fruit crop production.
- Largest producer of spices, aromatic and medicinal crops and tropical fruits.
- Second largest milk-producing state after Gujarat.
- Second largest producer of grapes in the country
- Accounts for the 2.00% production of 12.00% of total fruits, 8.00% of total vegetables and 70.00% of coffee in the country.
- Third largest producer of sugar and ranks fourth in sugarcane production

However, one of the daunting issues faced by the agriculture sector is post-harvest wastage. The losses in respect of the major crops grown in Karnataka as per the study on Post Harvest losses of agriculture & horticulture crops conducted by CIPHET are indicated below:

S. No	Crop	Over all Post-Harvest Loss from Farming operations and Storage Channels%
1	Paddy	6.30%
2	Maize	4.97%
3	Bajra	5.04%
4	Black gram	2.37%
5	Pigeon pea	4.90%
6	Groundnut	4.54%
7	Onion	5.66%
8	Tomato	9.83%
9	Chilly	7.48%
10	Guava	9.00%
11	Mango	9.01%
12	Banana	6.26%

In order to prevent these post harvest losses, the Food & Agro processing Industry is of enormous significance as it provides vital linkages and synergies that it promotes between the two pillars of the economy, i.e. agriculture and industry. Processing of agricultural produce is not only a means for ensuring food security, but also a vital step for post-harvest waste reduction and improved income generation. Food processing enhances shelf life and adds value to the produce, which enables remunerative prices to farmers. Enhanced shelf life leads to reduction in wastages.

- Presently, there are 10 MoFPI designated food parks in the State. Food Karnataka Ltd., has been identified as the nodal agency to manage the implementation of these food park projects. The list of Food parks and Agro-Processing Clusters notified by MoFPI in Karnataka are indicated below:

**Table No.4.10: Food Parks and Agro Processing Clusters notified by MoFPI in Karnataka**

S.No	Name of the DFP	Location	Category
1	India Food Park	Tumakuru	Mega Food Park
2	Favorich Mega Food Park	Mandya	Mega Food Park
3	Green Food Park	Bagalkot	Food Park
4	Jewargi Food Park	Kalaburgi	Food Park
5	Akshaya Food Park	Chitradurga	Food Park
6	Innova Agri Bio Park	Kolar	Food Park
7	GEM Food Park	Davanagere	Agro Processing Cluster
8	Udupi Food Park	Udupi	Agro Processing Cluster
9	M/s Agro cluster	Vijayapura	Agro Processing Cluster
10	Hiriyur Food Park	Chitradurga	Agro Processing Cluster

- Food Processing Fund, with a total outlay of ₹2000 crore was instituted with NABARD to provide direct term loans at affordable rates of interest to Designated Food Parks and food processing units within these Parks.

#### **4.1.3.1.3 Major Issues, Constraints and opportunities in Food and Agro Processing**

- **Poor post-harvest management infrastructure facilities at the farm gate.** As per a study on Post-Harvest Losses of Agri Produce in India by NABCONS, the wastage of food grains is 4-6% and in case of fruits and vegetables, it is higher at 15.05%.
- **Lack of cutting-edge infrastructure.** The unorganized food processing sector in the country comprises nearly 25 lakh food processing enterprises which are unregistered and informal. The processors in this sector deal with seasonal, perishable materials which need to be processed in a short period. Consequently, such units are neither able to generate adequate surplus for their expansion nor invest in supporting infrastructure. Such industries are often characterised by poor adoption of quality standards which causes reduced brand value of Indian Food Industry in the global trade. Therefore, the sector needs support for creation of infrastructure and targeted incentives to attract investment for creation of processing capacity.
- Lack of focus on quality and safety standards, and not having enough of product development and innovation
- Seasonality of operations and low-capacity utilization

#### **PLP Projections for 2024-25**

**The aggregated PLP projection for ‘Food and Agro Processing’ sub sector for the year 2024-25 for Karnataka State has been assessed at ₹10730.61 crore.**

#### **4.1.3.1.4 Suggested action points**

- To arrest post-harvest losses of produce, considerable investments are required in rural infrastructure and components of the supply chain by way of grading and packing centers, controlled atmosphere storage facilities, reefer vans, testing laboratories, etc., which may not come from private sources at this stage of the development of the food processing industry. It is therefore essential that public investment is significantly increased to fund these components of rural infrastructure to enable private enterprise to take up the remaining commercially viable components of the supply chain.
- The sector offers immense potential for export of processed food by adhering to the quality

standards. Initiatives for strengthening quality standards through creation and provision of services like R&D, testing, quality improvement, marketing and enhancing competitiveness of the sector through promotion of innovations in products and processes, creating adequate infrastructure for food testing and training manpower for food safety will provide impetus to the sector.

- Several schemes have been rolled out by various ministries and the State Government for the development of food processing and allied industries. However, most schemes are standalone schemes with little reference to other schemes even though the beneficiary sub-segments are common. This has resulted in a fragmented approach where the advantages of one scheme are not captured by another scheme. Convergence of various schemes considering the common components involved and to avoid overlaps may be considered going forward.

#### **4.1.3.2 Ancillary Activities – Others**

##### **4.1.3.2.1 Introduction**

The activities envisaged under Ancillary Activities - Others include loans to cooperative societies of farmers for disposing off their produce, Agri-clinic/Agri-business centres (ACABC), Loans to PACS/FSS/LAMPS and Loans to MFIs for on-lending to agriculture and allied activities. Ensuring sustained credit availability to the sector will help in providing the necessary spread and the requisite linkages for the sector.

##### **4.1.3.2.2 Present Status**

- Considering that price realization by farmers for most crops grown in the State are subject to market fluctuations, providing produce loans or loans against warehouse receipts to farmers will prevent distress sale of produce. Further, collectivization of farming community through Farmers Producers Organizations will help reduce farming expenditure and ensure better price realization. The loans under this category would be to those institutions, which are typically farmers' producer societies and PACS against agri. Produce.
- Loans to PACS/FSS/LAMPS for construction of godowns/on-lending to members and loans to Micro Finance Institutions (MFIs) for on lending is another opportunity for bankers in extending agriculture loan facilities.
- There are several agencies in micro finance sector like SKDRDP, ODP, SRFS, NABFINS, Dhan Foundation etc., operating in the state. Further, there are several MFIs like Credit Access, Fincare, SSFL, Navachetana etc. operating in the state who extend credit to SHG/JLGs. Banks lend to SHG/JLGs directly as well as through refinance.

##### **4.1.3.2.3 Major Issues, Constraints and opportunities**

- The off-take of ACABC scheme is not encouraging. Banks are not financing under ACABC to the desired extent.
- Financing Farmer Producer Organizations (FPOs) can be challenging due to various issues and constraints like limited or no credit history the absence of which makes it difficult for FPOs to secure loans, challenges in providing traditional collateral, such as land, which is often required by financial institution, weak governance structures and inadequate management capacities within some FPOs can impact their ability to attract financing.

#### **PLP Projections for 2024-25**

**The aggregated PLP projection for ‘Ancillary Activities – Others’ sub sector for the year 2024-25 for Karnataka State has been assessed at ₹22984.56 crore.**

#### 4.1.3.2.4 Suggested action points

- PACS may create adequate storage and other infrastructure with support under Agriculture Infrastructure Fund (AIF) and concessional Special Refinance Facility of NABARD to provide pledge finance and value addition infrastructure to enhance farmers income.
- Finance under ACABC scheme is classified as priority sector finance. Banks can provide finance for setting up of Agri Clinics and Agri Business Centres which provides agriculture extension service to farmers. Under ACABC scheme there is capital subsidy on such loans.
- Banks may utilise the Credit Guarantee Fund created by NABSanrakshan for financing FPOs.
- Agriculture Infrastructure Fund (AIF) is another initiative of GoI aiming to address the existing infrastructure gaps and to provide a fillip to agriculture infrastructure by mobilizing medium / long term debt financing facility to PACS, Marketing Cooperative Societies, FPOs, Self Help Group (SHG), Farmers, Joint Liability Groups (JLG), etc. The scheme provides interest subvention of 3% per annum up to a limit of ₹2 crore and credit guarantee coverage fee.

#### 4.2 MSME

##### 4.2.1 Introduction

Micro Small and Medium enterprises (MSMEs) are considered an engine of economic growth and for promoting equitable development and a significant contributor to employment generation, Gross Domestic Product, exports and entrepreneurship development especially in semi-urban and rural areas of India.

##### 4.2.2 Present Status

Karnataka is home to more than 8.5 lakh MSMEs, which provide employment to over 55 lakh people. The state has invested about ₹ 4 lakh crore in the last 5 years and is in 5th place in the country in terms of industrial growth. Karnataka's top 5 major industries are food processing, electronics, readymade garments manufacturing, automobile, and chemical plants. Bengaluru's Peenya Industrial Area is home to more than 3,500 MSMEs from different sectors, making it one of Asia's largest Industrial areas. The majority of the MSMEs in Peenya are in the light engineering and auto components sector.

- Registration of small-scale industrial units in Karnataka (Cumulative)

Year	No of MSME Units	Units Investment (₹ in Lakh)	Employment in 000s
2017-18	626599	5099954	4193
2018-19	695877	6587652	4776
2019-20	793109	8447379	5478
2020-21*	332233	6000678	3631
2021-22	585504	2360000	5081
2022-23	738000	2360000	6872

\* Udyam Registration, the details of no. of registered MSME

The Government of Karnataka has set up and distributed sites and stores through the Karnataka Industrial Area Development Board (KIADB) and Karnataka State Small Industrial Development Corporation Ltd (KSSIDC) to facilitate entrepreneurs to set up industries.

- Karnataka ranks first in shaping industrial policy. In the 1980s, the Karnataka government first implemented an “industrial policy” to utilize the resources of the state to create

employment and economic growth. Keeping this as a model, other states set their own industrial policies. Today the Government of Karnataka has implemented the “New Industrial Policy - 2020-25” from 13/8/2020 with emphasis on holistic industrial development in the Tier II and Tier III cities.

Karnataka has secured 46 geographical Indication (GI) tags and is in the verge of being geographically recognized state in terms of MSME.

#### **4.2.3 Major Issues, Constraints and opportunities**

- Increase in property taxes charged by the state for industrial establishments has increased by 200 percent resulting in increase in business cost for MSMEs
- Shortage of trained labour affecting the productivity of MSMEs
- Limited access to formal credit remains a significant challenge for many MSMEs. Some face difficulties in meeting traditional collateral requirements, and others may find interest rates prohibitive.
- MSMEs may face difficulties in accessing markets, especially in the face of competition from larger enterprises. E-commerce penetration and global competition can also pose challenges.
- MSMEs can be particularly vulnerable to global economic fluctuations. Changes in international markets, trade policies, or exchange rates can impact their operations.
- Adapting to environmental regulations and incorporating sustainable practices may be challenging for some MSMEs due to cost implications and limited awareness.
- Many MSMEs may lack the resources to invest in updated technologies. This can affect their competitiveness and ability to adapt to changing market trends.

#### **PLP Projections for 2024-25**

**The aggregated PLP projection for “Micro, Small and Medium Enterprises (MSME)” sector for the year 2024-25 for Karnataka State has been assessed at ₹158595.38 crore.**

#### **4.2.4 Suggested Action Points**

- Simplify regulatory procedures and compliance requirements.
- Encourage the adoption of digital technologies and Industry 4.0 practices.
- Facilitate market linkages and collaborations with larger enterprises.
- Create and support industrial clusters to encourage collaboration and economies of scale
- Promote entrepreneurship through awareness campaigns and mentorship programs.

### **4.3 Credit Potential for Export Credit**

#### **4.3.1 Introduction**

Exports play an important role in accelerating the economic growth of the country. Of the several factors influencing export growth, credit is a very important factor that enables exporters to efficiently execute their export orders. Export credit is granted in INR as well as in foreign currency.

RBI has initiated several measures in the recent years to ensure timely and hassle-free flow of credit to the export sector. These measures, inter alia, include rationalization and liberalization of export credit interest rates, flexibility in repayment/prepayment of pre-shipment credit, special financial package for large value exporters, export finance for agricultural exports, Gold Card Scheme for exporters etc. Advances made by banks under ‘Export Credit’ up to sanctioned limit of ₹40 crore per borrower have been brought under the ambit of the Priority Sector as per the guidelines issued by the RBI. These include pre-shipment export credit and post shipment export credit.

### 4.3.2 Present Status

Karnataka has a long tradition of overseas trade. Historically, Karnataka has been a major exporter of commodities like coffee, spices, silk, cashew nuts, handicrafts and agarbattis.

Karnataka is one of the State that outpaced the national average growth rate of exports. There are 6 districts from Karnataka, which are in the top 100 districts of the country that contributes to 87% of the total exports of the country and district of Bengaluru Urban is in the top 10 districts of the country. Bengaluru Urban and Dakshin Kannada are the top exporting districts from Karnataka, with Medicine and Petroleum as their primary exports. (Export Preparedness Index 2022 by NITI Aayog).

Nearly 65% of India's aerospace exports originate in Karnataka. It is India's largest Electronics chip design hub. 50% of India's machine tools production happens in Karnataka. 63% of installed power capacity is in renewable energy sources. Bengaluru has multiple thriving industries such as Aerospace, as it has an Aerospace Special Economic Zone, R&D centres of HAL, aeronautic centres and presence of various leading players in the industry such as Airbus, DRDO, and ISRO among others.

The state attracted \$39.36 billion FDI equity inflow over the period October 2019 to September 2022, which is 23% of all India. Karnataka with ₹ 41,678 Crore stood second position on FDI inflows among 26 Indian States from April to September 2022. Karnataka's exports amounted to about ₹ 9,51,794 crore in 2021-22 which constituted about 18.9% of the Country's exports. The share of Merchandise exports in the National exports constitutes around 6.13% and Software/ Service exports around 41 % for the year 2021-22. State's exports in Agriculture Commodity amounted to about \$1,300 million in 2019-20 and \$1,582 million in 2020-21 with a significant increase of 21.7%. (Economic Survey 2022-23).

Karnataka has been chosen as one of the Pilot States for setting up 5 Export Development Centres in the districts of Shivamogga, Hubballi - Dharwad, Ramanagara, Bidar and Mysuru. Govt. of Karnataka has already taken steps and signed MoUs with leading e-commerce players like Amazon Global Selling and Flipkart to provide e-marking access to MSMEs, artisans, Geographical Indications (GI) producers for promotion of domestic as well as export market. The State initiated 9-product specific industrial clusters, with a focus on less developed Northern Karnataka region.

In the last two decades, the State has emerged as a major player in the export of electronic and computer software, engineering goods, ready-made garments, petrochemical, agro and food processing products, chemicals, minerals and ores, marine products, etc. Karnataka has carved out a niche for itself in the global marketplace as the knowledge and technology capital of the Country. The State has made rapid and spectacular strides in the new economy. Information technology, biotechnology and research and development institutions have enhanced Karnataka's achievements at national and global levels. Karnataka accounts for more than one third of electronics and computer software exports from the country. It is also a leader in exports of readymade garments, petro-chemicals and engineering commodities from Southern Region. The state has sector-specific SEZs for key industries such as IT, biotechnology, engineering, food processing and aerospace

### Export performance of Karnataka

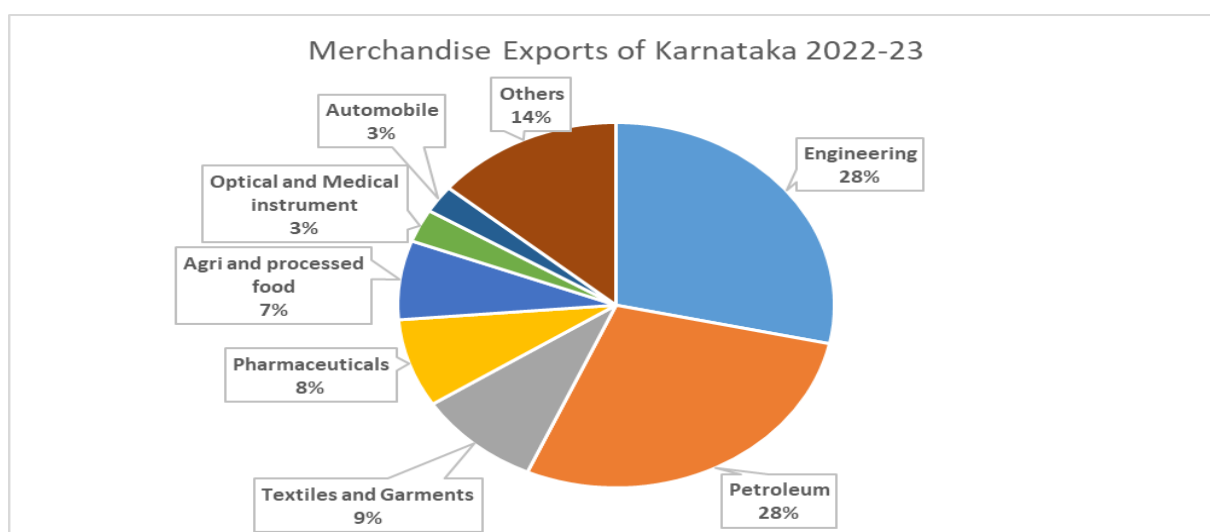
**Table No.4.11: Karnataka's Exports in terms of value (₹ crore)**

S. No	Commodity	2019-20	2020-21	2021-22	2022-23 (Apr-Sep)
1	Electronics & Computer Software	593422.70	586302.00	758734.75	475459.44
2	Petroleum	18025.00	7405.85	33215.83	39668.52
3	Engineering	35535.20	42290.11	69681.64	28875.50
4	Others	10103.16	10503.71	20189.82	12166.23
5	Readymade garments	15707.11	12336.39	17512.49	10653.58

S. No	Commodity	2019-20	2020-21	2021-22	2022-23 (Apr-Sep)
6	Basic Chemicals, Pharmaceuticals and Cosmetics	13431.10	15180.14	23518.83	8403.50
5	Agriculture & Processed food including seeds and beverages	5128.11	7247.71	11312.23	6181.83
6	Coffee	2767.15	2982.20	4409.43	2908.47
7	Iron Ore and Minerals	2209.26	2689.75	3935.09	1353.73
8	Plastic Goods	1222.13	1455.65	2407.91	1028.13
9	Marine Products	1048.72	1118.06	1599.96	853.86
10	Chemicals & Allied Products	702.26	694.42	1019.53	607.53
11	Spices	509.76	807.64	1327.96	513.95
12	Gems and Jewellery	351.73	182.26	414.00	508.39
13	Handicrafts	1353.62	784.62	955.98	399.78
14	Leather products	502.28	331.29	463.84	281.23
15	Cashew & Cashew Kernels	797.92	668.15	658.13	241.64
16	Silk Products	283.80	290.82	424.72	189.60
17	Wool & woollen Products	4.84	5.11	11.55	17.37
	<b>Total</b>	<b>703105.85</b>	<b>693275.88</b>	<b>951793.69</b>	<b>590312.28</b>

(Source: Economic Survey Karnataka 2022-23)

Overall, Karnataka has been contributing about 18% of India's total exports in services and merchandise exports. State ranks first in software exports and stands fourth in merchandise exports in India. 41% share of software and services exports of the country is from Karnataka.



Source:- VTPC

#### 4.3.3 Major Issues, Constraints and opportunities

- Complex documentation requirements and compliance procedures can create administrative burdens for exporters seeking credit.
- Exporters face the risk of non-payment or delayed payment by foreign buyers, leading to financial losses.



- Limited financial support programs may constrain the ability of exporters to explore new markets.

#### PLP Projections for 2024-25

**The aggregated PLP projection for “Export Credit” sector for the year 2024-25 for Karnataka state has been assessed at ₹5331.92 crore.**

#### 4.3.4 Suggested action points

- Settling the pre-shipment credit within the stipulated time after the dispatch of goods or converting them into Post Shipment credit should be ensured.
- The backward integration especially for perishables may be organised and strengthened to address quality and longevity issues.
- Exporters to be encouraged to avail the export credit insurance facilities extended by ECGC.
- Wide publicity in media regarding conduct of Trade Fairs on exports by VTTC.
- To create a strong network with Export Promotion Councils, FIEO, ITPO, NCTL, and Products Sectoral Associations to give impetus to Public – Private partnership.
- To Provide E – Governance Support to exporters in Karnataka for ease of filing documentation for export related compliance and regulatory requirement.
- To promote Public –Private initiative in developing export infrastructure

#### 4.4 Education

##### 4.4.1 Introduction

Education plays a significant and remedial role in balancing the socio-economic fabric and progress of the country. Since the citizens are the most valuable resource, our billion-strong nation needs nourishment and care in the form of basic education to achieve a better quality of life. Investment in education is investment in human capital as it is central to the Human Resources Development and empowerment in any country.

Karnataka’s growing economy is also based on the knowledge base of the society. The State has embarked on significant reforms in the education sector with increased public investment to ensure access, equity and quality in education. The state has institutions of national importance viz., Indian Institute of Astrophysics, IISc, IIM Bangalore, NIT, Surathkal and NIMHANS.

The literacy rate in the State during 2001 was 66.64 %, which increased to 75.4% in 2011. Karnataka's overall literacy rate, male and female literacy rates are above the national average.

While Dakshina Kannada district holds the highest literacy rate in the State, the districts like Kalburgi (undivided), Bengaluru Rural, Bagalkot, Raichuru, Kolar, Chamarajanagara, Vijayapura and Bidar with a lower literacy rate in 2001 have crossed the State average literacy rate in 2011. This is attributed to literacy programmes implemented by the Department of Education with a focus on backward districts/regions of the State. The Sarva Shiksha Abhiyan (SSA) and Rashtriya Madhyamika Shiksha Abhiyan (RMSA) initiatives resulted in good schooling facilities, attractive incentive schemes to improve learning, quality assurance measures and increased awareness among the community.

##### 4.4.2 Present Status:

###### 4.4.2.1 Status of Pre-University Education:

All colleges imparting PU education in the State come under the purview of the 'Directorate of Pre-university Education'. Pre University Education is considered as a preparatory stage for

university courses and is an important milestone between school education and higher education.

#### **4.4.2.2 Status of College Education**

The Department of Collegiate Education oversees the administration of 412 Government First Grade Colleges and 319 Private aided colleges affiliated to 14 state universities, through its 6 regional offices located at Bengaluru, Mysuru, Mangaluru, Shivamogga, Dharwad and Kalaburagi.

#### **4.4.2.3 Status of Technical Education**

Department of Technical Education is playing a vital role in contributing to the growth of Information Technology and Industries in Karnataka State by making its products capable of competing across the globe. There were 57 technical institutes, under Department of Technical Education initially but now there are a staggering 535 institutes across the state ranging from Degree to Diploma and Junior Technical Schools.

#### **4.4.2.4 Status of Medical Education**

There are 63 Medical Colleges in the State which have a summated intake capacity of 6786 students. Of them, 20 colleges are run by the Government along with 8 other Super Specialty Institutions. Further, there are 72 Ayurvedic Colleges and 294 Nursing Colleges recognized by Indian Nursing Council in the State.

#### **Credit facilities for Education**

National and State level policies are framed to ensure that this basic need of the population is met through appropriate public and private sector initiatives. As per the RBI guidelines, loans to individuals for educational purposes including vocational courses, not exceeding ₹20 lakh will be considered as eligible for priority sector classification.

GoI has developed a portal known as Vidya Lakshmi ([www.vidyalakshmi.co.in](http://www.vidyalakshmi.co.in)) which is a first of its kind portal for students seeking Education Loan developed by GoI. Students can view, apply and track the education loan applications to banks anytime, anywhere by accessing the portal. The portal also provides linkages to National Scholarship Portal for the benefit of deserving students.

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

To provide financial support to meritorious students who secure admission in institutes for pursuing higher education, including vocational courses in India or abroad, education loan is available from financial institutions.

#### **4.4.3 Major Issues, Constraints and opportunities**

- Variations in the quality of education, including inadequately trained teachers, outdated curriculum, and limited resources.
- Disparities in access to digital technology, exacerbating inequalities in remote and online learning opportunities.
- Challenges in measuring and assessing learning outcomes, leading to difficulties in identifying areas for improvement.

#### **PLP Projections for 2024-25**

**The aggregated PLP projection for “Education” sector for the year 2024-25 for Karnataka state has been assessed at ₹5310.84 crore.**

#### 4.4.4 Suggested Action Points

- There is a need to spread awareness on the Central Sector Interest Subsidy scheme for studies in India among the students from the economically weaker sections with parental income of up to ₹4.50 lakh during the moratorium period through the colleges.
- Proper coordination between college management and bankers in the district will help in guiding /assisting students to enroll for professional courses. This will help students avail hassle free timely education loan.
- Conducting campus recruitment drives/ensuring maximum placement of students graduating from specialised/vocational institutions, etc., will encourage students for availing education loan.
- Institutes/colleges offering professional/specialised courses may assess the employability of students post completion of the course.
- Banks may assess the employability and expected remuneration attached to the course and also the institution's standing in a realistic manner to ensure that repayment of loan is ensured.
- Banks are not eager to finance loans up to ₹4 lakh as it requires no collateral or margin. This approach affects the Low Income Group customers the most. Thus, banks may be encouraged to converge with existing schemes of the State Govt to extend credit.

#### 4.5 Housing

##### 4.5.1 Introduction

The vision for Rural Housing aims at “Ensuring adequate and affordable housing for all and facilitate development of sustainable and inclusive habitats in rural areas by expanding government support, promoting community participation, self-help and public private partnership within the framework of Panchayat Raj”. GoI's launching of the “Housing for all” policy aimed at urban areas for rehabilitation of slum dwellers with participation of private developers using land as a resource, promotion of affordable housing for weaker sections through credit linked subsidy, affordable housing in partnership with Public & Private Sectors and subsidy for beneficiary-led individual house construction or enhancement. The scheme has been extended upto 31.03.2024.

##### 4.5.2 Present Status

Loans provided up to ₹35 lakh in Metro (population of 10 lakh and above) and ₹25 lakh in other centres are eligible to be considered under Priority Sector Lending (PSL), provided the overall cost does not exceed ₹45 lakh and ₹30 lakh, respectively. Loans for Repair to houses up to ₹10 lakh (metro) and up to ₹6 lakh in other places are also considered PSL.

##### 4.5.3 Major Issues, Constraints and opportunities

- Affordable housing remains a significant challenge, especially in urban areas. High land prices, construction costs, and other factors contribute to the unaffordability of housing for many residents.
- Limited availability of land, particularly in urban and peri-urban areas, can drive up land prices, making it challenging for developers to offer affordable housing options.
- Inadequate infrastructure, including roads, water supply, sanitation, and electricity, in certain areas can impact the habitability of housing developments.
- In some cases, unclear or outdated land records can create disputes and legal issues, complicating the development and ownership of properties.
- Limited access to affordable housing finance can be a constraint for potential homebuyers. This includes challenges related to high-interest rates, stringent eligibility criteria, and limited financial literacy.

- With more number of people preferring Tier II cities as a retirement destination, there exists a good scope for disbursement of more and more housing loans. Notwithstanding this, post COVID-19 pandemic and nation-wide disruptions in economic activities, housing sector has been facing issues like lack of liquidity, low demand and high inventory levels.

#### PLP Projections for 2024-25

**The aggregated PLP projection for “Housing” sector for the year 2024-25 for Karnataka state has been assessed at ₹27595.47 crore.**

#### 4.5.4 Suggested Action Points:

- There is a need for banks not only for sanctioning loans realistically for construction/ purchase of ready-built houses/ flats but also develop a Housing Loan Guarantee Fund leveraging and linking the same with insurance wherein in the event of the untimely demise of the loanee, the loan can be adjusted against the claim out of the guarantee fund.
- There is a need to create awareness of the various government schemes under which subsidy is available among eligible beneficiaries.

#### 4.6 Social Infrastructure Involving Bank Credit

##### 4.6.1 Introduction

Though the State has good schools, colleges, Engineering colleges & Medical Colleges, there is further scope for setting up more hospitals, private nursing homes, schools, and colleges.

##### 4.6.2 Present Status

##### 4.6.2.1 Rural Education

In the state, general education system is divided into different levels such as pre-primary level, primary level, higher primary, secondary education, under graduate and post-graduate education. School education in Karnataka is imparted through Lower Primary Schools (LPS, class I to V), Higher Primary Schools (HPS, class VI to VII / VIII) and High Schools (VIII to X).

These schools fall under three categories based on type of management, namely (i) Government schools managed by the Departments of Education, Social Welfare and local self governments (ii) Government aided schools and (iii) Private unaided schools. There are also a few 'other' schools consisting of mixed categories. In 2021-22 there were 24153 Lower Primary, 30876 Higher Primary and 17265 High Schools in the State

**(i) Primary Education** – There are 55029 primary schools in the State, of which 42653 (77.51%) are in the Government sector. Many rural schools lack basic infrastructure like building, sanitation and water supply resulting in poor enrolment of students. Under the ongoing schemes of the State Govt., additional class rooms are being constructed both in rural and urban areas since 1993, but have not been adequate to meet the actual requirement.

**(ii) Secondary Education** - At present there are 17265 high schools in the State imparting secondary education out of which 43.72% are under private management. Among Government high schools, the majority are in rural areas. Many rural schools do not have basic infrastructure like building, sanitary and drinking water facilities although there was increase in student enrolment and starting of new schools in areas which were not covered earlier.

**(iii) Higher Secondary / Pre-University Education** - The number of Pre-University Colleges in the State is 5591, out of which 2035 are managed by the Government/Government aided Institutions as on 30.11.2021. Many of the Government Pre-University Colleges do not have adequate and proper infrastructural facilities like class rooms, water supply and sanitation. However, the enrolment of students in colleges has been increasing year after year, especially enrolment of girl students.

**(iv) Degree Colleges** – There are 853 institutions for graduate education in the State out of which 430 are managed by the Government. The average strength in government and aided degree colleges is 882 and 496 respectively.

Under RIDF, 7314 Anganwadi projects, 13376 education infrastructure projects comprising of Primary & Secondary schools, Preuniversity colleges, Polytechnic, ITI, GTTC, agriculture & horticulture colleges, Backward class hostels and Morarji Desai residential schools & 338 Health infrastructure projects comprising of Primary Health Centres, Community Health Centres and Maternity & Child care hospitals have been supported.

#### **4.6.2.2 Social Sector - Rural Health / Child Care**

##### **a. Health Infrastructure:**

Karnataka State is one of the pioneering states in the country to provide comprehensive public health services to its people. As per the present system, the three tier health infrastructure is as follows:

- Sub-Centre (SC) - One sub-centre for every 5000 population in plain area and 3000 population in hilly areas. As of now, there are 9269 Sub-centres and 207 urban Sub-centres.
- Primary Health Centre (PHC) - There are 2396 PHCs, one PHC for every 30,000 population in plains and 15,000 population in tribal and hilly areas. Accommodation for housing 6 bed wards, labour room, dispensary, laboratory, store, office, etc. have to be provided and at least one medical officer with other para medical personnel is required to be posted.
- Community Health Centres (CHC) –At present, there are 207 community health centres in the State with one Community Health Centre for every four PHCs or for 1.00 lakh to 1.25 lakh population. Accommodation for housing ward of 30 beds and four specialists with other accessory services are to be provided.
- Taluk Hospitals - These hospitals are located in Taluk headquarters with a sanctioned bed strength of minimum 100 beds and currently there are 146 Taluk Hospitals. Taluk hospitals are provided with 10 specialists and one dental Surgeon supported by other staff.
- District Hospitals- There are 15 District hospitals.

##### **b. Drinking Water**

In Karnataka, more than 90% of habitations, especially rural, depend upon groundwater and are facing major risks of depletion of the ground water resource. The groundwater resources cater to the irrigation, industrial and other domestic water requirements in a region and availability of ground water is largely dependent on the rainfall pattern in that region.

As on 31 March 2021, the drinking water infrastructure of the State comprised 35024 bore wells fitted with hand pumps, 28483 piped water supply schemes and 28657 mini water supply schemes. Under rural water scenario in Karnataka there are 59,774 rural habitations in the State. (Source: Karnataka Economic Survey 2021-22)

The State Government is implementing “Jaladhare” project in a phased manner at an estimated cost of ₹53,000 crore over a period of 7 years to provide safe and sustainable safe drinking water at the rate of 55 LPCD for the rural areas, by drawing water from rivers or reservoirs.

Jal Jeevan Mission (JJM): Government of India has launched “Jal Jeevan Mission” during 2019 in order to provide safe and adequate drinking water to all rural households. The main objective of this Mission is to provide Functional Household Tap Connection (FHTC) to all the rural households by 2024. Under centrally sponsored Jal Jeevan Mission, Government of Karnataka has launched new programme called “Mane manege Gange” and intended to provide Functional Household Tap Connections (FHTC) to all rural households by 2023 at the rate of 55 LPCD in the State.

In line with the Central Governments' priority for providing drinking water supply to all households in the country through Jal Jeevan Mission, as on 31.12.2023, RIDF loan amounting to ₹1960.12 Cr has been sanctioned for 10 Rural Drinking Water Supply Projects in Belagavi, Chikkamagaluru, Chitradurga, Davanagere, Yadgir, Hassan, Tumkur and Udupi districts.

#### PLP Projections for 2024-25

**The aggregated PLP projection for “Social Infrastructure involving Bank Credit” sector for the year 2024-25 for Karnataka state has been assessed at ₹1685.59 crore.**

#### 4.6.3 Major Issues, Constraints and opportunities

- High costs associated with accessing essential social services, particularly in healthcare and education, leading to exclusion for certain populations.
- Disparities in access to modern technology for education and information, leading to a digital divide and limited opportunities for those without access
- Limited community participation and engagement in the planning and decision-making processes related to social infrastructure projects

#### 4.6.4 Suggested action points

- Karnataka is a preferred location for various types of enterprises as well as to people who prefer to settle down here. Covid 19 has shown gaps in medical facility, hospitals and nursing homes. There is a need to set up more hospitals and encourage setting up of nursing homes at rural centres and taluka level as well.
- Banks should come forward to finance social infrastructure projects, which are socially desirable and commercially viable.

#### 4.7 Renewable energy

##### 4.7.1 Introduction

Karnataka is blessed with abundant renewable energy resources of all forms including Solar, Wind, Small hydro, Biomass, Waste to Energy, Tidal, etc. In SDG 13- Climate action, percentage of renewable energy out of total installed generating capacity (including allocated shares) state is the best performer as compared to neighbouring state Kerala (40.16) and the country- India (36.37). (Economic Survey 2022-23).

##### 4.7.2 Present Status

Karnataka Renewable Energy Development Ltd., (KREDL) is the nodal agency for the development of renewable energy sources in Karnataka. The agency also envisages private sector investment for renewable energy development in the State. As per the Karnataka Economic Survey 2022-23, the capacity addition in private sector under renewable energy during 2021-22 was 383.09 MW and it is 361.84 MW during 2022-23 (up to Nov'22).

The Karnataka Renewable Energy Policy 2022-27 has the objective to facilitate development of 10 GW of additional RE projects with or without energy storage systems in the State, including up to 1 GW of Rooftop solar PV projects. The policy intends to position Karnataka as a preferred renewables investment location and to build a sustainable and green energy-friendly economy.

Karnataka has developed Solar Park (concentrated solar generation) at Pavagada, a unique project in the world having operational capacity of 2050 MW in a single cluster of 13,000 acres of land obtained on an annual lease basis with the consent of farmers in Pavagada Taluk, Tumakuru District. In the 2023-24 Union Budget, it has been announced to promote 4,000 MWH capacity Battery Storage systems by provision of Viability Gap Funding. Under

assistance from this scheme, 2 MW capacity solar plant with Battery Storage System will be set up by KREDL at Pavagada Solar Park. This will be implemented with an expenditure of ₹ 48 crores.

The allotted & present commissioned capacity under different renewable energy sources are presented below:

**Table No.4.12: Different Renewable Energy Sources in Karnataka**

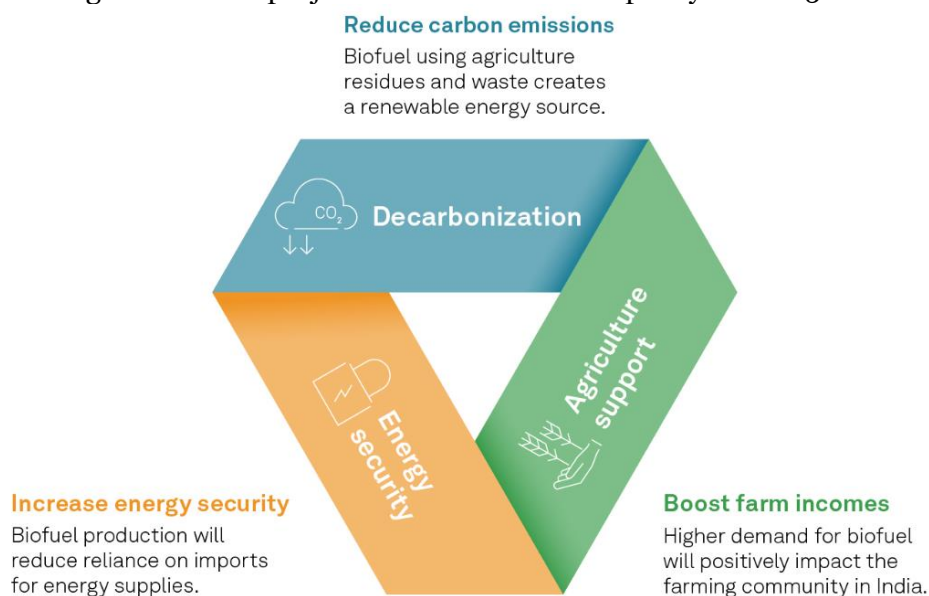
S. No	Renewable Energy Sources	Potential Available	Allotted Capacity	Installed Capacity
1	Wind	124139	24974.87	5223.39
2	Small/Mini Hydro	3100	3010.25	903.46
3	Cogeneration	2000	2212.65	1731.16
4	Solar (including Solar Rooftop)	24700	14445.83	7877.89
5	Biomass	1000	395.13	139.03
6	Waste to Energy	135	51.00	0
	<b>Total</b>	<b>155074</b>	<b>*34692.79</b>	<b>15874.93</b>

As on 30.11.2022(Source: Economic Survey 2022-23)

**Investment in Green Hydrogen:** In the Global Investors Meet held in 2022, about ₹ 1.68 Lakh crore worth of MoUs for renewable energy investment including Green Hydrogen have been signed.

**Hybrid Energy Projects:** Additionally, efforts are being taken up by private sector to expand use of hybrid projects (both solar and Wind energy). For instance, recently on 28 June 2023, ReNew, a conglomerate launched solar and wind energy plant in Kudligi (Vijayanagara district) in Karnataka. The 33 MW solar power plant and 9.9 MW wind power plant developed by Renew Sandur Green Energy Private Limited is expected to make a significant impact on the region's renewable energy landscape.

**BioEthanol Production:** Karnataka has an installed capacity of 118.7 crore litres of Bio Ethanol production per annum (33 molasses based projects with installed capacity of 100.2 and 6 grain based projects with installed capacity of 18.5 crore litres per annum).



### Government interventions in the sector

- a) Pradhan Mantri Kisan Urja Suraksha Evam Utthan Mahabhiyan (PM KUSUM): This scheme is one of the largest initiatives in the world to provide clean energy to more than 3.5 million farmers by solarising their agriculture pumps. It aims to install grid connected ground mounted solar power plants (up to 2 MW) aggregating to a total capacity of 10 GW under Component A; install 20 lakh standalone solar pumps under Component B; and solarize 15 lakh grid connected agricultural pumps under Component C. All components combined would support installation of additional solar capacity of 30.80 GW.
- b) Solar Roof Top Grid Connected Systems: Government of Karnataka initiated scheme of generating power from solar roof top power plants on the buildings with Net and Gross Metering facility with a target of 1000 MW and ESCOMs are operating the scheme. As on 30.09.2022, 382.11 MW capacity has already been commissioned under grid connected Solar Rooftop Systems in Karnataka.
- c) Surya Raitha Scheme: It helps farmers in irrigation as the farmers need not switch on their Irrigation Pump Sets during night. Subsequently, the solar water pumps keep a check on the power and water wastage. The excess solar power generated can be transmitted to the grid thereby providing extra income to the farmers. The farmers can avail the following benefits:
1. Increase in the agricultural production.
  2. Steady and sufficient power supply during day time.
  3. Steady source of income for farmers even in the adverse climatic conditions.
- d) Central Financial Assistance and Fiscal Incentives for Biomass power projects and Bagasse cogeneration projects: Central Financial Assistance is provided depending upon category and type of grid connected projects. The amount of assistance would be calculated for biomass combustion power projects based on installed capacity and for bagasse cogeneration project in sugar mills based on surplus power exported to grid. Presence of sugar mills in the state provides additional avenue for cogeneration.
- e) New National Biogas and Organic Manure Programme (NNBOMP): It promotes the use of biogas produced from cattle manure and other organic wastes available in rural areas. The programme has helped establishing multiple small-scale biogas plants with installed capacity ranging from 1 to 25 m<sup>3</sup> per day. Families in rural areas use the plants to obtain cooking fuel and organic fertilizer. The NNBOMP also supports community-scale biogas plants with installed capacity ranges of up to 2500 m<sup>3</sup> per day. MNRE provides back-ended subsidies to the extent of 30 to 35% of project cost for setting up the biogas plants.
- f) Galvanising Organic Bio-Agro Resources Dhan (GOBAR-Dhan): This initiative aims to improve sanitation in Indian villages by funding projects that process livestock manure and agricultural waste to produce biogas. MNRE provides up to 100% of the project cost for small-scale digesters in villages and larger-scale projects at dairies and other waste generating facilities.

#### 4.7.3 Major Issues, Constraints and opportunities

- High capital cost, lack of awareness of the suitable technology, corrosion of various forms, formation of scales in absorbers, improper selection and processing of materials etc. are the main constraints in popularizing and creation of solar energy. Wind Mills and Hydro-Electric projects are not coming up on account of environmental considerations, difficulties in resettlement of local inhabitants, inter-state river water disputes, etc.
- Long term policies for installation of wind mills/ hydro-electric projects by the Government will help to support the sector. Extension support by the implementing departments, imparting training to farmers and rural youth about skills for installation and maintenance of bio gas plants are needed to revive the bio gas programme.
- Involvement of NGOs, SHGs and Farmers Clubs to disseminate the knowledge about the use of plants and also benefits derived to the rural people are needed to popularize the scheme.



### PLP Projections for 2024-25

**The aggregated PLP projection for “Renewable Energy” sector for the year 2024-25 for Karnataka State has been assessed at ₹1111.39 crore.**

#### 4.7.4 Suggested action points

- Government of Karnataka may explore possibilities of conducting exclusive training to rural youth on maintenance and servicing of solar transmission and creating awareness about solar lighting, solar pump sets, solar cookers, wind pumps etc. across the state.
- Implement regulations that encourage industries to meet a certain percentage of their energy needs through renewable sources.
- Promote decentralized energy systems, such as rooftop solar installations, to enhance resilience and reduce transmission losses.
- Explore innovative financing mechanisms, including green bonds and venture capital, to attract investment.

#### 4.8 Informal Credit Delivery System

##### 4.8.1 Introduction

The Self Help Groups Bank linkage (SHG BLP) programme which started as a bank outreach programme, has through the passage of time slowly metamorphosed into a holistic programme for financial, economic, social inclusiveness and development and of late, technological capital building in rural areas. The SHG-BLP has its roots in the state of Karnataka, when a pilot programme was launched by NABARD in association with MYRADA way back in early 1990's. This programme has since expanded at a fast pace in India to evolve into the largest savings-led microfinance programme in the world, touching more than 16 crore households by linking 134 lakh SHGs to formal banking channel

##### 4.8.2 Present Status

###### Status of SHG- BLP – All India

As on 31 March 2023, SHG-BLP covers 16.19 crore families through 134.03 lakh SHGs (of which 84.25% are women) with savings deposits of ₹58,892.68 crore. Out of these, 69.57 lakh SHGs are credit linked with banks and outstanding loan amount is 1,88,078.80 crore.

###### Karnataka Status

- As on 31 March 2023, 3.48 lakh SHGs have savings bank accounts in various banks and all the banks in the State have played a major role in providing credit. The credit outstanding was ₹21255.17 crore. There exists a gap of 17% in the credit linkage of SHGs as compared to savings linked groups and this may be more as this cumulative number includes new as well repeat linked SHGs. The average loan size is ₹2.76 lakh per SHG and NPA as percentage to loan outstanding is 2.44 %.
- To arrive at realistic picture of SHG- BLP in the State, banks need to sanitize the SHG data and weed out inactive SHGs not operating the SB a/c for more than two years and show them separately.
- NABARD has continued with its' endeavour to fine tune policies in terms of extending promotional support to eligible institutions for forming SHGs, JLGs, capacity building of bankers, NGOs/ VAs, SHGs, training SHG members in setting up micro enterprises and livelihood promotion through MEDPs and LEDPs, etc.
- **Increasing Farmers' Income through Joint Liability Groups (JLGs):** The JLG mode of financing serves as collateral substitute for loans provided by banks to the small, marginal, tenant farmers, oral lessees, share croppers, landless labourers, etc. It enables

banks to reach to farmers through group approach, adopt cluster approach, facilitate peer education and credit discipline. Extension of credit to allied and agriculture activities and NFS activities by JLGs will enhance farmers' income. NABARD provides incentive of ₹4000 per JLG to the Project Implementing Agencies, over a period of 03 years for formation, nurturing and financing of JLGs.

**Business Model on financing of JLGs** - To scale up the JLG portfolio in the State, NABARD in the last 2 years has entered into MoUs with KVGB, KGB, SBI, South Canara DCCB & Canara Bank for formation and credit linkage of 20010 JLGs covering all 31 districts across Karnataka.

- **Micro Enterprise Development Programme (MEDP)**

NABARD has been supporting MEDP since 2006, to provide skill training to the members of matured SHGs to enable them to take up income generating livelihood activities. The main objective of the programme is to enhance the capabilities of participants through appropriate skill up-gradation in existing or new livelihood activities in farm or non-farm activities and enrich knowledge of participants on enterprise management, business dynamics and rural markets. As on 31 March 2023, at all India level, 5.90 lakh SHG women have been trained under the programme with a grant support of ₹10 Cr.

- **Livelihood and Enterprise Development Programme (LEDP)**

LEDP is a holistic intervention mechanism conceived to take care of the entire ecosystem required for livelihood promotion in both farm and off-farm activities under project mode in SHG clusters within contiguous villages. Till 31 March 2023, at all India level, 2.70 lakh SHG women have been supported with a grant support of ₹106.1 Cr

#### 4.8.3 Major Issues, Constraints and opportunities

- Identification/ re-activating dormant/ inactive group by providing various capacity building initiatives both to bankers and SHG members.
- Issues relating to multiple membership and multiple financing to be addressed.
- Thrust on sustenance of existing groups with focus on quality of SHGs, which is key to sustenance. SHPIs/Banks need to introduce regular grading of SHGs. The SHGs need to be provided training for reiterating the basic tenets, group dynamics and proper book keeping.
- Addressing regional imbalance by targeting blocks where there is less development.
- The role of banks is critical to the success of microfinance programmes since credit is the stepping stone for graduating towards livelihood interventions.

#### 4.8.4 Suggested action points

- Identification of active SHGs linked with Banks and revival of dormant SHGs.
- Assessing the quantum of credit needs of the microfinance sector and encouraging banks to fulfill the same.
- Support to be extended for setting up micro enterprises and skill development for producing/processing, packing and marketing of products.
- Exploring market avenues and assessment of support requirement.
- Identification of potential SHG members/enterprise which can be graduated from subsistence to growth enterprise. NRLM/SRLM to provide necessary intensive training and sponsor applications from potential entrepreneurs under various schemes.
- Banks to utilize SHG members as Bank Sakhi i.e., they can play the role of business facilitator and business correspondent to the banks.
- The concept of "Bank Bandhu"/ Sakhi to be vigorously pursued by NRLM/ SRLM for enabling credit linkage of all eligible SHGs.

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

Cooperative enterprises help their members to collectively solve shared socio-economic problems. 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.

Indian cooperative movement, the world's largest movement covers almost 98% of rural India, having more than 8.50 lakh societies with the membership of about 290 Million. Within a short span of time, role of cooperatives has extended to agricultural credit, real estate, power, insurance, health-care, tourism sector, etc.

#### 5.2. Formation of Ministry of Cooperatives by GoI

The GoI has set up a separate Ministry for Cooperation on 06 July 2021 for providing 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'.

#### 5.3. Recent initiatives by Ministry of Cooperation (MoC), GoI

The MoC, in consultation, coordination and partnership with state governments, NABARD, national level federations, training establishments at state and national level and other stakeholders has introduced a host of initiatives to strengthen the sector. Some of the important initiatives are as under:

**5.3.1. Computerization of Primary Agriculture Cooperative Societies:** This scheme aims at computerization of 63000 functional Primary Agricultural Cooperative Credit Societies (PACS) leading to increase in efficiency, profitability, transparency and accountability in the working of PACS. ₹2,516 crore has been earmarked for implementation of the scheme over the next five years.

**5.3.2. Co-operative Education - Setting up of World's largest Cooperative University:** It aims at introduction of cooperative education as a course curriculum and as independent degree / diploma courses in Schools and Universities. This will also take care of research in the field of cooperation.

**5.3.3. World's largest Cooperative Training Scheme:** This aims at revamping and strengthening the existing cooperative training structure in the country and modernize the training methods through a revamped scheme.

**5.3.4. To provide facilities at par with FPOs for existing PACS:** 1,100 additional FPOs to be formed by PACS in those blocks where FPOs have not yet been formed or the blocks that are not covered by any implementing agency.

**5.3.5. Establishing Multipurpose PACS/ Dairy/ Fisheries cooperatives in every panchayat:** Government has approved the plan for establishing two lakh new Primary Agricultural Credit Societies (PACS) or primary Dairy/ Fishery cooperative societies with the support of NABARD, NDDB and NFDB.

**5.3.6. World's largest food grain storage scheme for cooperatives:** The “World’s Largest Grain Storage Plan in Cooperative Sector”, to be rolled out as a Pilot Project for creation of various agriculture infrastructure at Primary Agricultural Credit Societies (PACS) level, including warehouses, custom hiring centres, processing units, Fair Price Shops etc.

**5.3.7. Establishment of National Cooperative Database:** A national cooperative database is being prepared by Ministry of Cooperation where country-wide mapping of PACS, dairy and fishery cooperative societies at panchayat and village level is being carried out. This exercise would help in identifying those panchayats and villages which are not served by the cooperative societies.

**5.3.8 Amendment to Multi State Coop. Act, 2002:** The Multi-State Co-operative Societies Act, 2002 was enacted to consolidate and amend the law relating to co-operative societies, with objects not confined to one state and serving the interests of members in more than one state, to facilitate the voluntary formation and democratic functioning of co-operatives as people's institutions based on self-help and mutual aid. In August 2023, Parliament has passed Multi-State Co-operative Societies (Amendment) Bill, 2023 allowing state co-operative societies to merge into existing multi-state cooperative societies.

**5.3.9 New Cooperative Policy:** Suggestions on the draft of new Cooperative policy with a view to strengthen the cooperatives and make them vibrant with increased contribution to the economy was sought from stakeholders and formulation of new cooperative policy is expected soon.

Apart from these, the MoC has launched several other initiatives to strengthen the cooperative sector that will create immense business potential from grassroots upward in times to come.

## **5.4 Status of Cooperatives in the State**

**5.4.1.** Karnataka is one of the few States in the country where all the three tiers of short term and two tiers of long term cooperative credit structure are functioning actively to cater to the credit needs of farmers.

The Short Term Cooperative structure comprises Karnataka State Cooperative Apex Bank (KSCAB), 21 District Central Cooperative Banks (DCCB) and 6040 Primary Agriculture Cooperative Credit Societies (PACS) at the village level. The Long Term Cooperative structure comprises Karnataka State Cooperative Agriculture and Rural Development Bank (KSCARDB) at the State level with 26 branches and 181 Primary Cooperative Agriculture and Rural Development Bank (PCARDBs) at Taluk level. NABARD provides refinance to both ST and LT structure.

In terms of purveying credit in rural areas, the quantum of loan disbursed by cooperatives in the State in the last 3 years is as under:

**Table 5.1: Details of co-operative societies functioning in the State is presented below:**

S. No.	Type	Number of societies
<b>A. Details of Non Credit Cooperative Societies</b>		
1	AH Sector (Milk/Fishery/ Poultry etc.) No. of Dairy Societies No. of Fishery Societies No. of Livestock/Poultry Societies	15275* 636* 50
2	Consumer Stores	1344
3	Housing Societies	1736
4	Textile/Handloom/Spindlage/Handicraft	1227
5	Marketing	111
6	Labour societies	194
7	Industrial societies	954
8	Agro-allied/Agro-Processing	3941
9	Sugar	38
10	All others (pl. specify) Multi-purpose societies Women societies Tribal/SC-ST societies Service sector	2511 1462 26 250
	Total	30512*
B	Details of Credit Cooperative Societies	
	Primary Agriculture Credit Societies	6040
C	Details of Multi State Cooperative Societies	
	No. of MSCS	20
Source i (For items marked *): National Cooperative Database Portal, MoC Source ii : National Cooperative Union of India (NCUI) publication – 2018		

**5.4.3. Recent developments/Latest initiatives in the State for strengthening the outreach and activities of cooperatives:****5.4.3.1. Interest Subvention for Agricultural Loan by State Govt.**

- As per budget announcement for the year, the limit for interest-free short-term loans is to be increased from ₹3 lakh to ₹5 lakh. Mid-term and long-term loans will be provided at a subsidised interest rate of 3 percent, with the loan limit increased from ₹10 lakh to ₹15 lakh.
- 7 percent interest subvention for loans up to ₹20 lakh to construct godowns.
- Loan facility up to ₹7 lakh to be provided at 4% interest to the farmers in Coastal and Malnad regions to purchase pick-up vans.

**5.4.3.2. Yeshasvini Scheme**

Yeshasvini scheme is a health care scheme launched by the State Government for the members of Co-operative Societies in the State. The scheme was reintroduced in FY 2022-23.

**5.4.3.3. PACS and Primary Agriculture Marketing Co-operative Societies** provide loans at 7% interest rate for the agriculture produce of farmers stored at Cooperative Societies' Warehouses. Government provides 4% of this as interest subvention to the cooperative institutions.

**5.4.3.4 PACS computerization Project:** Under the Centrally Sponsored project, 5491 eligible PACS in the State are in different stages of computerization at present. The project is being implemented through NABARD with a budget of ₹175.26 Crore wherein GOI share is ₹105.16 Cr and share of the State Government is ₹70.10 Cr.

**5.4.3.5 Computerization of SCARDBs:** Under this Centrally Sponsored project, 207 units of KSCARDB have been identified by the State Govt for computerization with a total budget of ₹11.70 Crore to be borne by the GoI, State Govt and KSCARDB. This project is still in its initial stages and implementation is yet to commence.

**5.4.3.6 Action plan for establishing new Multi-purpose PACS (mPACS):** In line with the target of Ministry of Cooperation, GoI, Government of Karnataka has constituted State Cooperative Development Committee (SCDC) and District Cooperative Development Committee (DCDC). As per available potential, new MPACS are already being formed including Dairy societies and Fisheries societies. Further, the State Govt is also making efforts to onboard PACS onto CSC, Jan Aushadhi Kendras, LPG distributorship, Petrol/Diesel retail outlets and other such business avenues/platforms

**5.4.3.7 Implementation of pilot project under the World's largest food grain storage scheme for cooperatives** is also underway at Ekamba PACS in Aurad Taluk of Bidar district of Karnataka. The construction of godown is going on and as second phase of the project, the process of identifying 5 PACS in each district in the State is also being carried out.

**5.4.4 Special Refinance Facility for transformation of PACS as MSC (Multi-Service Centre) from NABARD:** Under this scheme, special long term refinance facility and grant assistance is extended to PACS through StCB to create quality infrastructure (capital assets) and increase business portfolio as well as meet the credit requirements of members of the PACS.

#### **5.4.5 Waiver of Interest on Overdue MT and LT loans**

In the background of 223 taluks of the State of Karnataka being declared as drought affected, the Government of Karnataka has announced waiver of interest on Medium Term and Long Term agriculture and allied agriculture loans from cooperative institutions viz. PACS, LAMPS, DCCBs, PCARDBs which have become overdue as on 31.12.2023 and subject to the principal instalments being repaid in full before 29.02.2024 and certain other conditions.

### **5.5 Way forward**

The essence of cooperatives lies in their member-centric and democratic nature and their objective of equitable economic development of their members. Thus, with the support of all stakeholders, effective implementation of the interventions planned in the State will strengthen the cooperatives and make them vibrant grassroots institutions with the potential to intensify the pace of rural development and realise the vision of 'Sahkar se Samriddhi'.

## CHAPTER 6

### INFRASTRUCTURE SUPPORT

#### 6.1 Background and importance:

Creation of infrastructure and improving its accessibility is a pre-requisite for economic development. It is estimated that India would need to spend \$4.50 trillion on infrastructure by 2040 to realize the vision of being a developed economy. Improved infrastructure capacities also create efficiency gains through improved logistics and networks, which would help a virtuous cycle of higher investments, growth and employment generation in the economy. Lack of access to basic services and infrastructure in rural areas points to a need for intervention by the State and other stake holders.

Rural infrastructure refers to the basic facilities, services and installations, needed for the rural community or society. It includes rural roads, bridges, irrigation structures, warehouses, veterinary clinics, market yards, agri extension centre for agriculture and allied activities, water supply, sanitation, rural energy, education, health and communication systems. Strengthening of rural infrastructure leads to expansion of markets, improvement in economies of scale, creation of storage capacities and better movement of factors of production. As such, rural infrastructure has a direct bearing on production, productivity and livelihoods in rural areas.

The Infrastructure Policy of Government of Karnataka (GoK) was formulated in the year 1997 and amended in 2015. The major objective of the Policy is to provide a fair and transparent policy framework to help facilitate infrastructure development and encourage Public-Private Partnerships (PPP) in upgrading, expanding and development of infrastructure in the State.

#### 6.2 Rural Infrastructure Development Fund (RIDF) Interventions

The GoI created the Rural Infrastructure Development Fund in 1995-96 under the aegis of NABARD with the objective of giving low cost fund support to State Governments and State Owned Corporations for quick completion of ongoing projects relating to medium and minor irrigation, soil conservation, watershed management and other forms of rural infrastructure. During its 28-year journey, RIDF has been extended to cover 39 eligible activities under Agriculture, Social and Rural connectivity sectors and has evolved into a dependable, affordable and timely source of funding for rural infrastructure projects for state governments. As on 31 March 2023, NABARD has sanctioned over 7.7 lakh projects involving loan assistance of ₹5,02,034.6 crore to State Governments, of which, an amount of ₹3,94,876.9 crore (78.65 %) has already been disbursed. NABARD has been partnering with the State Government in the developmental efforts by identification of critical requirements for infrastructure development presented in district-wise Potential Linked Credit Plans (PLPs) and in extending concessional financial support through “Rural Infrastructure Development Fund.

##### 6.2.1 Support to Karnataka under RIDF

In Karnataka, projects have been sanctioned to the Govt. of Karnataka under various RIDF tranches covering varied activities viz., Irrigation projects, Flood Protection Works, Ground Water Recharge Structures, Roads, Bridges, Godowns, Rural Markets, Primary Schools, Secondary Schools, First Grade colleges, ITIs, Polytechnic Colleges, Backward Classes Hostels, Morarji Desai Residential Schools, Anganwadi Centers, Primary Health Centers, Watershed Development, Village Knowledge Centers, Rural Service Centers, Sericulture, Fish Jetties and Drinking Water projects.

Under RIDF tranches I to XXVIII, as on 31 March 2023, 43879 projects have been sanctioned to Karnataka State with RIDF loan of ₹19010.52 crore. Against the sanctioned amount, GoK has drawn ₹15080.46 crore. The sector wise sanction and disbursements details are as given below

**Table 6.1: Sector-wise Sanction and Disbursements under RIDF (₹ crore)**

S. No.	Name of the Sector	No. of projects	Total Financial Outlay	Loan Sanctioned	Amount Disbursed
1	Agriculture and allied projects	4994	2224.60	2071.96	1384.07
2	Social sector projects	21015	8064.30	5218.86	3600.59
3	Irrigation projects	5229	5794.09	4914.62	4047.50
4	Rural roads and bridges	12641	8354.13	6805.09	6048.30
	<b>Total</b>	<b>43879</b>	<b>24437.12</b>	<b>19010.52</b>	<b>15080.46</b>

### 6.2.2 Impact of RIDF

The sanctioned projects on completion will provide the following benefits:

- Enabling Irrigation and recharge of ground water benefitting 5.84 lakh ha.
- Agriculture & Allied - 1730 Veterinary Institutions, 853 Infrastructure projects in Rural Markets, 258 Raita Samparka Kendras, 33 Fish Jetties, 10 Cocoon Quality Testing Labs and 2 Pesticide Residue Labs.
- Social Sector - 13392 Rural Education Infrastructure projects (Primary & Secondary schools, PU colleges, Polytechnic, ITI, GTTC, agriculture & horticulture colleges etc), 6472 Anganwadis, 338 Health Infrastructure Projects (PHC, CHC, MCH).
- Connectivity- 45674 km of Rural Roads and 58637 m of Rural Bridges.

**6.2.3 Sector-wise support by NABARD** - 34% of RIDF loan has been sanctioned to Rural Connectivity sector. The share of Agri and allied and social sector were of the order of 33% each.

**6.3 Status of Different Sectors under various infrastructure Projects** – Various infrastructural Projects have been classified under three broad sectors and their status in the State has been furnished below:

#### a. Agriculture

##### (i) Agriculture / Allied Sector

The Government through its various departments like Agriculture, Horticulture, Animal Husbandry & Fisheries, Cooperation Department, etc., has created necessary infrastructure required for regular agricultural, allied and horticultural operations. They cover different infrastructure needs such as Seed Processing and Certifying facilities, Krishi Vigyan Kendras (KVK), Raitha Sampark Kendras (RSK), Fertilizer and Pesticide Laboratories, Veterinary Hospitals, Dispensaries and Artificial Insemination Centres. Under RIDF, as on 31.03.2023, NABARD has extended support for setting up of 476 Raitha Sampark Kendras with a loan of ₹105.99 crore, 853 Rural Markets with RIDF loan of ₹285.30 crore and 426 Rural Service Centres with RIDF loan of ₹61.80 crore Further, to strengthen the infrastructure in Agriculture & Horticulture Universities, NABARD has extended a loan of ₹236.58 crore for 37 projects and for improving infrastructure in Animal Husbandry sector, ₹532.38 crore has been sanctioned for 1730 projects. RIDF assistance of ₹145.38 crore has also been sanctioned for projects in Fisheries sector and an assistance of ₹269.59 crore extended for ground water recharge and watershed activities.

Innovative and impactful projects such as establishment of Fertilizer and Seed Laboratory, Cold storages, Centres of Excellence to promote Integrated Farming System, District Agriculture Training Centre, Artificial Intelligence for Agriculture Centres have been



sanctioned with RIDF loan assistance of ₹233.87 crore to facilitate better agri inputs, storage and agriculture extension services in the state.

### **(ii) Storage and Marketing**

The State produces approximately 130.13 lakh MT of food grains and requires storage and marketing infrastructure. NABARD has been supporting the creation of Storage and Marketing Infrastructure under RIDF, NABARD Infrastructure Development Assistance (NIDA) and Warehouse Infrastructure Fund. As on 31.03.2022, an amount of ₹437.92 crore has been sanctioned to the State Govt. under RIDF towards 1094 storage and marketing projects. Under NIDA, NABARD has sanctioned ₹42.12 crore to Karnataka State Warehousing Corporation (KSWC), towards construction of godowns in 10 districts of Karnataka.

Besides, 528 projects with a loan assistance of ₹1700.547 crore have been sanctioned under WIF 2013-14 and WIF 2014-15 for construction of warehouses and other related infrastructure to Department of Agricultural Marketing (DAM), Government of Karnataka and Karnataka State Warehousing Corporation (KSWC). These projects are expected to help the State create 14,00,426 MT of storage capacity.

### **b. Irrigation**

Major source of irrigation in the State are the river systems of Krishna, Tungabhadra, Malaprabha, Ghataprabha and Cauvery basin and divided into 234 watersheds. As against a gross cultivated area of 119.94 lakh ha, only 40.78 lakh ha is irrigated (gross area). The percentage of gross irrigated area to gross cultivated area has doubled from 16% in 1980-81 to 34% by 2018-19. GOK has established various corporations to accelerate the completion of irrigation projects. The Krishna Bhagya Jala Nigam Limited (KBJNL) was established to expedite the works of Upper Krishna Project. The Karnataka Neeravari Nigama Limited (KNNL) was established as a special purpose vehicle to accelerate the implementation of Krishna Basin Projects except Upper Krishna Project and the Cauvery Neeravari Nigama Limited (CNNL) was established as a special purpose vehicle to accelerate the implementation of Cauvery Basin Projects in Karnataka. M/S Visvesvaraya Jala Nigam Limited, has been established for implementation of Upper Bhadra Project, Yettinahole projects, Gayathri and Vani Vilasa Sagar projects. NABARD has sanctioned ₹2629 Cr for Rural drinking water projects in 4 districts of the state under NIDA. The same is under implementation phase.

#### **b (i) Micro Irrigation**

To promote efficient use of water in the agriculture production, micro irrigation programme is being implemented since 2003-04. Under this programme subsidy/assistance is provided for installation of drip and sprinkler irrigation units to all categories of farmers.

As per the 2020 Ground water assessment, the stage of development of ground water for the State is 64.85%. During 2020-21, the micro irrigation programme was implemented under Prime Minister's Krishi Sinchayee Yojana (PMKSY) and Rural Infrastructure Development Fund (RIDF).

#### **b (ii) Long Term Irrigation Fund (LTIF)**

In terms of the Union Budget announcement (FY 2016-17), LTIF was set up in NABARD for fast tracking and completion of 99 major and medium irrigation projects in 18 states. Subsequently, 4 more projects were included under LTIF. NABARD has extended support under the fund towards Central Share as well as State Share. Loan towards Central share has been extended to National Water Development Agency (NWDA), a SPV of GoI, whereas the State share has been extended to participating State Governments. From 2021-22 onwards, LTIF funding arrangement is in operation towards State Share only and has since been continued upto 2025-26.

Five projects in Karnataka viz., (i) Upper Tunga Irrigation Project, (ii) Bhima LIS, (iii) Karanja Project, (iv) Sri Rameswar Irrigation Project and (v) NLBC System Project are covered under

Long Term Irrigation Fund (LTIF) with a total loan of ₹1837.34 Crore sanctioned towards Central share, of which three projects viz. Bhima LIS, Karanja Project and Sri Rameshwar Irrigation Project are completed.

### **c. Rural Connectivity**

Karnataka has a total road length of 3,61,041 km, which works out to 142.48 km of road length per 100 sq.km as against the national average of 181.42 km. The total length of rural roads is 198500.80 km.

### **d. Power Sector**

Karnataka State has been experiencing conditions of power shortage because of the growing demand for power with rapid economic progress. To improve distribution of power, two Central Sector Schemes are being implemented, viz., Integrated Power Development Scheme and Deen Dayal Upadhyaya Gram Jyoti Yojana. In the year 2019-20, agricultural sector (water pumping through irrigation pumpsets) accounted for the highest share of electricity consumed with a share of 36.76% and domestic sector occupied second position with a share of 23.06%. All the villages in the State have been electrified.

To meet the existing energy deficit levels, solar energy plays a critical role as the State records 240 to 300 sunny days and has 24.70 GW of solar power generation capacity. The State's Solar Policy 2014-2021 had set a target of installing 6000 MW solar power by 2021. In addition to the existing project models, this policy also proposed the creation of projects of 1-3MW capacity by land owning farmers and solar power bundled with thermal power projects by PSUs.

### **e. Rural Education**

Strengthening of infrastructure for 10610 Govt. Primary & Secondary schools with RIDF loan of ₹1041.97 cr. has been supported in Karnataka. As on 31.03.2023, 2266 projects with RIDF loan of ₹594.41 crore have been sanctioned towards infrastructure creation in Pre- University Colleges.

### **f. Social Sector - Rural Health / Child Care**

#### **Health Infrastructure:**

Karnataka State is one of the pioneering states in the country to provide comprehensive public health services to its people. As on 31.03.2023, 338 projects with RIDF loan of ₹447.49 crore have been sanctioned towards creation of Health Infrastructure in Karnataka.

#### **ii. Drinking Water**

In Karnataka, more than 90% of habitations, especially rural, depend upon groundwater and are facing major risks of depletion of the ground water resources. The groundwater resources cater to the irrigation, industrial and other domestic water requirements in the region and availability of ground water is largely dependent on the rainfall pattern in that region.

As on 31 March 2021, the drinking water infrastructure of the State comprises 35024 bore wells fitted with hand pumps, 28483 piped water supply schemes and 28657 mini water supply schemes. Under Rural water scenario in Karnataka there are 59,774 rural habitations in the State.

In line with the Central and state Governments' priority, 8 Rural Drinking Water Supply Projects under Jal Jeevan Mission involving RIDF loan of ₹1374.8 Cr have been sanctioned for Belagavi, Chikamagalur, Chitradurga, Davanagere and Udupi districts.

#### **Child Care / Anganwadi Buildings**

Construction of Anganwadi Buildings is an offshoot of the Integrated Child Development Services (ICDS). At present, under the ICDS projects, 62580 AWCs and 3331 mini AWCs have been functioning. Out of 62580 them, only 41508 anganwadi centres have their own buildings.

The remaining are functioning in panchayat buildings, community halls, yuvak mandals, mahila mandals, schools and rented buildings. The existing Anganwadis are in dire need of basic facilities like drinking water supply, electrification, and essential furniture.

As on 30.09.2023, NABARD has sanctioned RIDF loan amounting to ₹363.45 crore for infrastructure development of anganwadis in the State.

#### **g. Micro Irrigation Fund**

Government of India is implementing the PMKSY since July 2015 with the vision of extending the coverage of irrigation (‘Har Khet Ko Pani’) and improving water use efficiency - ‘Per Drop-More Crop’ in a focused manner with end to end solution on source creation, distribution, management, field application and extension activities. In the Union Budget for 2017-18, Hon’ble Finance Minister announced setting up of a dedicated Micro Irrigation Fund (MIF) in NABARD with an initial corpus of ₹5000 crore to achieve the goal, ‘per drop more crop’. As on 31 March 2023, the cumulative sanction and release under MIF stands at ₹4711.0 and ₹2516.0 crore, respectively for facilitating the expansion of micro irrigation coverage to an area of 17.1 lakh ha. An amount of ₹290.33 Cr has been sanctioned to the State Government under Micro Irrigation Fund during 2023-24.

#### **h. Agri Marketing Infrastructure Fund (AMIF)**

As per announcement made during Budget 2018-19, a dedicated fund - AMIF has been established in NABARD with market borrowings. The lending under the fund will be subvented by GoI in order to provide low cost resources to the State. The scheme envisages convergence of various GoI schemes for development of physical infrastructure in APMCs/ Rural Haats. The basic and supporting infrastructure in the rural haats will be strengthened using MGNREGA, other Government Schemes and for the marketing infrastructure requirements, State/UTs can seek assistance under AMIF. In respect of APMCs both the basic infrastructure and marketing infrastructure can be covered under AMIF.

Infrastructure development in Karnataka compares favourably with National Infrastructure Index. However, there are a few sectors where concerted efforts need to be taken up to bridge the last mile gaps in outreach. Some of the areas to be focused are increasing net area under irrigation, improving the coverage of habitations with drinking water facility, interventions to improve accessibility to education and health infrastructure.

A list of infrastructure projects deemed critical for overall development of the districts of the State is indicated in Annexure III.

#### **6.4 Suggested action Points:**

- Keeping in view the National Infrastructure Indices, State Government may identify focus areas for creation and strengthening of infrastructure in the State which can be formulated into feasible projects and posed to NABARD for assistance under RIDF, NIDA, or other suitable products.
- The critical infrastructure identified by NABARD may be accorded priority for implementation.
- Considering the need to address the problems on account of frequent droughts experienced in the State, coverage under micro irrigation programme may be expanded and implemented in a time bound manner, particularly in the arid and semi-arid areas.

## CHAPTER 7

### DETAILS OF POLICY INITIATIVES OF GOVERNMENT OF INDIA, RBI, NABARD AND THE STATE GOVERNMENT

#### 7.1 Policy Initiatives

##### 7.1.1. Government of India Vision for *Amrit Kaal* – an empowered and inclusive economy

- Facilitating ample opportunities for citizens, especially the youth, to fulfil their aspirations
- Providing strong impetus to growth and job creation
- Strengthening macro-economic stability

#### Priorities of the Budget: Saptarishi

##### 1. Inclusive Development

- Building an accessible, inclusive and informative solutions for farmers
- Setting up Agri Accelerator Fund for encouraging innovative start-ups in rural areas
- Launching of Atmanirbhar Horticulture Clean Plant Program to boost production of high value horticultural crops
- Target of ₹20 lakh crore for agriculture credit with focus on animal husbandry, dairy and fisheries
- Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana (PM-MKSSY), as a Central Sector Sub-scheme under PMMSY with targeted investment of ₹6,000 crore
- Making India Global Hub for Millets: 'Sree Anna'
- Setting up of massive decentralised storage capacity for enhancing remuneration of farmers

##### 2. Reaching the Last Mile

- Saturation of essential government services across multiple domains in 500 aspirational blocks
- Launching of Pradhan Mantra Development Mission to saturate Particularly Vulnerable Tribal Groups (PVTG) families and habitations

##### 3. Infrastructure and Investment

- Continuance of the 50-year interest free loan to state governments for one more year to spur investment in infrastructure

##### 4. Unleashing the Potential

- National Data Governance Policy to be brought out to enable access to anonymized data for start-ups and academia
- Vivad se Vishwas I for providing relief to MSMEs affected during COVID
- Entity DigiLocker to be set up for use by MSMEs, large business and charitable trusts for storing and sharing documents online securely

##### 5. Green Growth

- Green Credit Programme to be notified under the Environment (Protection) Act to incentivize environmentally sustainable and responsive actions
- PM Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth (PM-PRANAM) to be launched to incentivize States/UTs to promote alternative fertilizers
- 500 new 'waste to wealth' plants under GOBARDhan (Galvanizing Organic Bio-Agro Resources Dhan) scheme to be established for promoting circular economy
- Mangrove Initiative for Shoreline Habitats & Tangible Incomes (MISHTI) to be taken up for mangrove plantation along the coastline and on salt pan lands

- Amrit Dharohar to be implemented for optimal use of wetlands
- Setting up 10,000 bio-inputs resource centre to facilitate farmers adopt natural farming

## 6. Youth Power

- Pradhan Mantri Kaushal Vikas Yojana 4.0 to be launched to skill lakhs of youth within the next three years
- Digital ecosystem for skilling to be further expanded with the launch of a unified Skill India Digital platform

## 7. Financial Sector

- National Financial Information Registry (NFIR) to be set up to serve as the central repository of financial and ancillary information
- Expanded corpus under Credit Guarantee for MSMEs to enable additional collateral-free guaranteed credit of ₹2 lakh crore

**7.1.2 PACS Computerisation** - The GoI has initiated computerisation of 63,000 Primary Agricultural Credit Societies (PACS) with an investment of ₹2,516 crore. NABARD, apart from financial contributions, has taken the initiative of ground level implementation of the project.

**7.1.3 National Cooperative Policy** - The National Cooperative Policy envisions increasing contribution of cooperative sector in GDP from present level of ₹21 lakh crore to ₹90 lakh crore by year 2030 and reaching around ₹900 lakh crore by 2047, thereby aiming to achieve the target of around 40% share in the GDP of the nation. The Policy Framework is under finalisation.

**7.1.4 World's Largest Grain Storage** - Ministry of Cooperation, GoI had conceived the idea of creating the World's largest grain storage in the Cooperative sector by establishing Godowns /Warehouses of varying capacities at the grassroots cooperatives. NABARD is involved with the MoC in implementing the pilot project. NABARD has awarded the assignment on preparation of Detailed Project Report (DPR) and Project Management Consultancy (PMC) to NABCONS.

**7.1.5 Formation of 2 lakh more PACS** - Union Cabinet, in its meeting held on 15.02.2023, has approved the plan for Strengthening Cooperative Movement in the country by formation of 2 lakh PACS in next five years. NABARD, NDDDB and NFDB are required to prepare national level action plans for strengthening of primary cooperative societies and establishment of new multipurpose PACS or primary Dairy/ Fishery cooperative societies, as per requirement.

**7.1.6 Formation of Multi State Cooperative Societies** – GoI is envisaging formation of three Multi State Cooperative Societies at national level, one each for Exports, Certified Seeds and Organic Farming to give special focus on the produce of the cooperatives.

**7.1.7 JanSamarth Portal** – GoI has launched JanSamarth Portal, a unique digital portal linking twelve Credit Linked Govt. Schemes on a single platform, for ease of access to all the beneficiaries and related stakeholders. The Portal uses cutting-edge technology and smart analytics to provide intuitive guidance to beneficiaries for checking subsidy eligibility and auto recommendation system offers best suitable scheme as per beneficiary's requirements and credentials. Advanced technologies automate entire lending process based on digital verifications making the entire process simple, speedy and hassle free.

**7.1.8 Account Aggregator Framework** - Account Aggregator (AA) network is a financial data-sharing system that gives consumers, greater access and control over their financial records and expands the potential pool of customers for lenders and fintech companies. GoI has directed that all banks, including the Cooperative Banks and RRBs should on-board the AA framework. NABARD has come forward to set up a Common Infrastructure at its level and on-board the cooperative banks on the AA ecosystem as a service to the banks.

**7.1.9 Aspirational Block Programme (ABP)** - The Hon'ble Prime Minister has launched the Aspirational Block Program throughout India with a special emphasis on the "India-First Approach" in January 2023. The programme aims at developing the most backward blocks of the country identified based on a variety of factors as recognized by NITI Aayog. The program will cover 500 districts across 31 states and UTs initially with over half of these blocks are in 6 states - Uttar Pradesh (68 blocks), Bihar (61), Madhya Pradesh (42), Jharkhand (34), Odisha (29) and West Bengal (29). ABP will concentrate on tracking 15 important socio-economic indicators covering Health and nutrition, education, agriculture and water resources, basic infrastructure, skill development, financial inclusion and social development. These socio-economic indicators will be monitored in real-time, and periodic rankings in important subject areas will be made public in order to promote healthy competition among the blocks and data-driven government.

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

Item	Credit Guarantee Scheme for FPOs	Credit Guarantee Scheme for Animal Husbandry and Dairying
Guarantee Cover	85% of the sanctioned amount max. ₹1.5 crore	25% of the Credit Facility
Annual Guarantee Fee	Up to 0.85% of sanctioned amount	0.50% of the sanctioned amount
Eligible Lending Institutions	Scheduled Commercial Banks, Co-operative Banks, NEDFI, NABKISAN, etc.	Scheduled Banks
Eligible Borrower	FPOs (Agri based)	FPO, Pvt. Company, Sec. 8 Company, Individual Entrepreneur, MSME, etc.

## 7.2 Policy Initiatives – Reserve Bank of India

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

- Master Circular on Lead Bank Scheme (FIDD.CO.LBS.BC.No.04/02.01.001/2023-24 dated 03 April 2023) issued by RBI has inter alia included revised agenda for SLBC meetings, activities under annual calendar, mechanism of data flow for LBS fora meetings, alternative framework of Due Diligence in place of No Dues Certificate, etc.
- As per Master Circular on SHG - Bank Linkage Programme (FIDD.CO.FID.BC.No.1/12.01.033/2023-24 dated 01 April 2023) issued by RBI, a simple system requiring minimum procedures and documentation is a precondition for augmenting flow of credit to SHGs.
- Master Circular on Deendayal Antyodaya Yojana - National Rural Livelihoods Mission (DAY-NRLM) SHG-Bank Linkage Programme consolidating all the instructions/guidelines issued on the subject issued till date was issued by RBI vide circular FIDD.GSSD.CO.BC.No.07/09.01.003/2023-24 dated 26 April 2023.

## 7.3 Policy Initiatives – NABARD

### 7.3.1 Long-Term Refinance

To ensure increased and uninterrupted credit flow to farmers, as also to give a boost to capital formation in agriculture sector, NABARD provides refinance to the cooperative banks and RRBs out of Long Term Rural Credit Fund, at a reasonable rate of interest. An amount of ₹1,07,015 crore was disbursed during the year 2022-23.

### **7.3.2 Short-Term Refinance**

NABARD provides Short Term refinance to Cooperatives, RRBs and SFBs for their crop loan lending. Disbursement for the year 2022-23 was ₹1,58,905 crore.

### **7.3.3 Special Refinance Scheme**

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

### **7.3.4 Government Sponsored Programmes with Bank Credit**

- Government of India 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.
- KCC-ISS portal developed by MoA & FW, GoI went live in 26 December 2022. Presently, the data entry is going on in the portal. As on 30 March 2023, 174 Cooperative Banks and 29 RRBs have started data entry in the portal. NABARD is monitoring the progress in respect of Cooperative Banks and RRBs.
- NABARD has been playing an important role in channelling subsidy to eligible banks under various credit-linked subsidy schemes of Government of India, primarily for agriculture projects and priority sector activities. Implementation of these schemes has also enabled enhancement of flow of Ground Level Credit (GLC) to agriculture and allied sector and priority sector activities.

### **7.3.5 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 sector, viz; (i) Agriculture and related sector (ii) Social Sector and (iii) Rural Connectivity. RIDF is estimated to create/restore irrigation potential of 376 lakh ha, 5.35 lakh km of rural roads and 13.34 lakh meters of bridges and also generate non-recurring employment of 3029 crore man-days as on 31 March 2023.

### **7.3.6 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 stakeholders, besides initiating special programmes for backward regions.

### **7.3.7 Financial Inclusion**

NABARD supports the creation of the financial inclusion infrastructure of banks and various financial inclusion awareness activities under the aegis of the Financial Inclusion Fund (FIF) placed in NABARD. Apart from extending assistance to RFIs for on boarding to technology platform, NABARD has on boarded the Account Aggregator platform as Financial Information User (FIU), which will facilitate structured financial data sharing from Financial Information Providers (FIPs).

### 7.3.8 Institutional Development

#### Cooperative Development Fund (CDF):

The Cooperative Development Fund was constituted in 1993 under section 45 of NABARD Act 1981, with an initial corpus of ₹10 crore. The fund is replenished every year through Contribution from NABARD's surplus. Assistance from the CDF is available to co-operatives in the form of soft loans/grants for infrastructure development of PACS for resource mobilisation, human resource development, capacity building and operational streamlining, setting up of PACS Development Cells in CCBs etc., which in turn contribute to their functional efficiency.

As on 31 March 2023, the total utilization from CDF was ₹3,363.30 lakh against the budget allocation of ₹11,368.50 lakh (Allocation includes ₹7,000.00 lakh towards GoI's PACS Computerization project).

### 7.3.9 Farm Sector Development

- **Central Sector Scheme on Formation and Promotion of 10,000 FPOs:** NABARD, as one of the Implementing Agencies under the scheme, has empanelled 110 Agencies to work as CBBOs across the country. As on 31 March 2023, NABARD has sanctioned 1,751 FPOs wherein a total of 3.04 lakh farmers have taken the membership.
- **Climate Change:** NABARD has facilitated sanction of 40 projects with a total financial outlay of ₹1,852.61 crore under various funding mechanisms viz., Adaptation Fund (AF), National Adaptation Fund for Climate Change (NAFCC) and Green Climate Fund (GCF).

### 7.3.10 Off Farm Sector Development

**Capacity Building Fund - Social Stock Exchange (CBF-SSE):** A Capacity Building Fund of Social Stock Exchange (CBF-SSE) is proposed to be created in NABARD with a corpus of ₹100 crore funded by NABARD, SIDBI, BSE, NSE and Others for awareness creation and capacity building of the different stakeholders.

### 7.3.11 Agriculture Credit target for 2023-24

For the FY 2022-23, agriculture credit achievement was ₹21.67 lakh crore, as against the target of ₹18.50 lakh crore. Agriculture credit target for the year 2023-24 has been fixed at ₹20 lakh crore. In order to provide special focus to allied activities, separate sub targets of ₹1.40 lakh crore for working capital and ₹1.53 lakh crore for term loan towards allied activities under GLC targets have been fixed.

## 7.4 Policy Initiatives – State Government 2023-24

The state has allocated 6.7% of its total expenditure towards agriculture and allied activities for 2023-24. Total Budget estimate (Consolidated Fund) for 2023-24 is ₹3,27,747 crore, and allocation for Agriculture and Allied Activities is ₹ 22,158 crore.

### 7.4.1 New Schemes for the year in Budget 2023-24:

#### 7.4.1.1 Priority for increasing Farmers' income:

- To revitalize agriculture, government is relaunching Krishi Bhagya Scheme in convergence with Mahatma Gandhi National Rural Employment Guarantee Scheme. With an allocation of ₹100 crore, the initiative aims to support farmers with various agriculture interventions to enhance productivity and sustainability.
- The budget emphasizes upon the branding and promotion of indigenous agricultural products such as Coffee, Mysuru Mallige (Jasmine), Nanjangudu Rasabale (Banana), and Mysuru Veelyadele (Betel Leaves). These branding efforts will not only enhance the visibility and marketability of these products but also contribute to the preservation of traditional agricultural practices and the cultural heritage of the region.



- Mini cold storages will be established in collaboration with KAPPEC in 50 select vegetable markets of the State to prevent distress sale of perishable commodities like fruits, flowers and vegetables and help farmers secure a fair price for the produce
- Eight cold storage units and processing units to be set up for processing and storing horticultural produce.
- ₹50 crore to establish 100 Hi-tech Harvester hubs in Custom Hiring Centres to promote Farm Mechanisation.
- To encourage innovation in agro-industries, the government has introduced the 'Navodyama' scheme with an allocation of ₹10 crore.
- To boost agricultural exports, ₹5 crore has been allocated to promote the export of agricultural and horticultural produce from the state.
- To strengthen FPOs, an allocation of ₹10 crore will be used for branding and marketing FPO products, facilitating better market access for farmers. Additionally, 100 FPOs in backward talukas will receive a four percent interest subsidy for loans up to ₹20 lakh. Seed capital up to 20%, not exceeding ₹100 lakh to FPOs for investing in infrastructure such as cold storages and godowns will also be provided.
- Under Navodyama' scheme, ₹10 crore will be allocated to encourage innovation in agro industries. This investment aims to foster research and development, technological advancement and value addition in the agricultural sector.

#### **7.4.1.2 Incentive to Animal Husbandry, Dairy farming and Fishing**

- The government is committed to promoting the dairy sector and expanding the popular Nandini brand of dairy products. This will provide opportunities for dairy farmers and contribute to the growth of the dairy industry in the state.
- Anugraha scheme to redress the problems faced by the farmers due to livestock fatalities will be reintroduced to provide compensation of ₹5,000 for sheep and goats and ₹10,000 for cow, buffalo and bulls.
- In a significant move to support the fishing community, interest-free bank loans for fisherwomen will be enhanced from ₹50,000 to ₹3 lakh. Additionally, the quantum of subsidised diesel for fishing boats will be increased to 2 lakh kilo litres with an allocation of ₹250 crore. This will help improve the livelihoods of fishermen and boost the fishing industry in the state.

#### **7.4.1.3 Irrigation**

- Emphasis on completion of ongoing irrigation projects, prioritising lift irrigation schemes, and filling tanks to enhance water availability for agricultural activities.
- Under Pradhan Mantri Krishi Sinchayee Yojana – Accelerated Irrigation Benefits Programme (PMKSY-AIBP), two projects of the State, i.e., extension of Phase 1 and Phase 2 Upper Krishna Project and Sannati lift irrigation project have been earmarked for Central assistance for the period from 2021 to 2026.
- Action will be taken to implement the project to construct a Balancing Reservoir near Navale in Koppala District to address the problem of contraction in water storage capacity of Tungabhadra Dam due to silt accumulation.
- Action will be taken to utilize 130 TMC water awarded by the Krishna Tribunal to Upper Krishna Project Phase-3, by speedy implementation of the project, prioritizing land acquisition, resettlement and rehabilitation as well as the project works.
- In the second phase of Lift Irrigation Scheme, the project will be implemented to fill 296 tanks of Kolar and Chikkaballapura districts at a cost of ₹529 crore.

#### **7.4.1.4 MSME Sector**

- New industrial estates will be established under the aegis of Karnataka State Small Scale Industries Development Corporation (KSSIDC) in a phased manner at seven places, namely, Hubballi, Chittapura in Kalaburagi, Kodkani in Uttara Kannada, Kanagala in Belagavi, Badanaguppe in Chamarajnaraga, Indi in Vijayapura and Shahapura in Yadagiri,

to promote small scale industries in the state.

- A special cell called ‘Mahatma Gandhi Vastrodyama’ will be set up in the textiles department to bring together designers, weavers, yarn producers and allied workers on a common platform. This cell will liaison between the market and various stakeholders and make appropriate interventions for reviving the declining handloom industry in the state.

#### **7.4.1.5 Comprehensive Development of Aspirational Taluks**

Grant of ₹3,000 crore allocated for education, health, nutrition, gender equality, eradication of poverty and to reform multi-dimensional development indices for the aspirational talukas of the state which are performing below average.

#### **7.4.1.6 Empowerment of Women**

- In the year 2023-24, ₹70,427 crore grant is allocated for the women-oriented schemes.
- To encourage women entrepreneurs in sectors such as hospitality and tourism, subsidized loans are being offered at the rate of 4% by Karnataka State Finance Corporation. The loan limit will be now increased from ₹2 crore to ₹5 crore.
- Gruha Lakshmi scheme will play a prominent role in easing the daily financial pressures and ensuring the economic empowerment of women. ₹30,000 crore is estimated as the approximate annual expenditure under the scheme.

#### **7.4.2 Existing State specific schemes**

**1. Krushi Bhagya Scheme:** Introduced in the year 2014-15, covering 132 taluks of 25 districts in the state, it mainly focuses on the dry land areas with an average rainfall less than 850 mm during the past 25 years. Thrust is on water conservation and promoting dry land horticulture. From the year 2014-15 to 30.11.2020, about 3.17 lakh (Krishi Bhagya-Farm ponds-288404 and convergence with Watershed Department, 26801 farm ponds and 2460 polyhouse/shade net) farmers have been benefitted under the scheme by utilizing ₹2877.08 crore (Krishi Bhagya-2683.82 crore + convergence with other schemes ₹193.26 crore).

**2. Krishi Yantra Dhare Yojane:** Establishment of Farm Machinery Custom Hire and Service Centres at hobli level through registered Charitable Trusts/NGOs to help farmers to provide agricultural equipment for timely agricultural operations.

**3. Raitha Siri:** Announced in 2019-20, to increase the area under cultivation of minor millets in different seasons, assistance of ₹10000/- per hectare is provided under this scheme to farmers directly in their bank accounts for growing six Nutri Cereals.

#### **4. Rashtriya e-Market Services Limited (ReMSL)**

Rashtriya e-Market Services Limited (ReMSL) has been established to facilitate online trading system to sell the agricultural produce of the farmers in the markets through electronic trading system. So far, 156 markets are brought under Unified Market Platform. The Unified Market Platform has transacted 9.12 Cr. MTs of agricultural commodities worth ₹2,63,715.82 crore. To extend the benefit of e-platform among the FPOs, NABARD has collaborated with ReMSL for on-boarding FPOs on trading platform. Till date 170 FPOs have been on-boarded on the ReMSL platform.

#### **7.4.3 State and crop-specific policies**

**1. Crop Survey:** A unique project of Government of Karnataka is taken up by e-Governance department implemented by Agriculture department for enumeration of crops of all farm lands/ owners in Karnataka. The geo-referenced mosaic cadastral map available with KRSAC is used for validation of geo-fencing and ground data collection of all plots. Around 2.5 crore records are captured with validation. The data is being used by SSLR, Revenue department to update the RTC, used for Crop Insurance, loan, Crop Cutting experiments, MSP and other subsidy programs of Government.

**2. Minimum floor price scheme** Minimum Floor Price Scheme is operated in Karnataka for perishable agriculture commodities like onion, potato, tomato and green chillies. The agricultural Marketing Department arranges the procurement of these commodities through HOPCOMS in districts/taluku after the sanction of cabinet subcommittee. During 22-23, action has been taken to procure green gram & black gram under this scheme. 1,57,308.80 quintals of green gram have been procured from 22,181 farmers.

#### 7.4.4 Digital Technological Innovations in Agriculture

- **Centre for Internet of Ethical Things (CIET)** : The GoK's Department of Electronics Information Technology, Biotechnology and Science & Technology (IT, BT & ST) has granted approval for establishment of the CIET in collaboration with IIIT-Bangalore and World Economic Forum (WEF). The proposed Centre, envisioned by the Karnataka Government, is expected to contribute to a policy framework which explicitly engages with ethical and moral aspects of technologies and also nurtures a thriving innovation ecosystem in the state. The CIET will focus on agriculture, health, education, manufacturing and mobility.
- The other digital initiatives taken by the State Govt in previous years, such as Farmer Registration and Unified Beneficiary Information System (**FRUITS**) for digital data on agriculture land records integrated with banking system, '**Bhoomi**' for digitization of all land records, '**Kaveri**' for interface to the citizens for document registration and land encumbrance certificates, etc. are also being successfully implemented across the State.

#### 7.4.5 State Government Sponsored Programmes with Bank Credit

S. No	Program me	Objectives	Implementin g Department	Target Group	Quantum of subsidy
1	Udyogini	To create self-employment opportunities to women in Trade & Service Sector	Women & Child Development Department of Govt. of Karnataka	Women with Income-ceiling ₹2 Lakh p.a. & ₹1.50 Lakh p.a. for SC/ST & General respectively. Eligible age limit: 18-55 years	<ul style="list-style-type: none"> <li>• Subsidy up to 50 per cent for the Scheduled Castes and Scheduled Tribes and 30 per cent for others.</li> </ul>
2	Chaitanya Scheme	To provide self-employment opportunities for persons from backward class BPL families	Karnataka State – D. Devraj Urs Backward Classes Development Corporation	Persons from backward class BPL families within specified income norms	<ul style="list-style-type: none"> <li>• Loan to Backward Classes up to ₹5.00 lakh unit cost</li> <li>• 30% or maximum of ₹10,000/- subsidy-for projects with TFO up to-₹25,000</li> <li>• TFO ₹25,001 to ₹1.00 lakh-20% margin money and subsidy of ₹10,000/- per beneficiary.</li> <li>• TFO above ₹1.00 lakh- 20% Margin Money.</li> </ul>

S. No	Program me	Objectives	Implementin g Department	Target Group	Quantum of subsidy
3	Krishi Bhagya	To have sustainable growth in agriculture	Department of Agriculture, GoK	Eligible farmers in all districts excluding command area.	Subsidy ranging from 50-90% for undertaking activities viz. pumpsets, horticultural crops with and without polyhouse etc.
4	Raitha Siri	To promote millet farming	Department of Agriculture	millet growers	₹10,000 per hectare to all the millet growers (06 nutri Cereals).
5	CM Kaushalya Karnataka Yojane	Enhancing the skill through industry ready skill development programs	Skill Development, Entrepreneursh ip and Livelihood Department (SDEL), GoK	unemployed youth 18-35 years	Skill Development training is provided.
6	Organic Farming adoption and certification	To promote organic farming	Department of Horticulture, GoK	Farmers & Entrepreneur s	75% subsidy for construction of Vermicompost units, Bio-digesters etc.
7	Assistance for Inland fisheries Development	To promote inland Fishery	Department of Fisheries, GoK	Fish farmers	<ul style="list-style-type: none"> <li>50% of the cost of fish seed, subject to a maximum of ₹5000/₹20000 for an individual/institution</li> <li>50% subsidy subject to a maximum of ₹25,000 for purchase of 50 lakhs prawn or 10 lakh fish</li> </ul>

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

## Annexure I – District-wise, Sector-wise PLP Projections (₹ lakh)

S. No.	Districts	Crop Production, Maintenance and Marketing	Water Resources	Farm Mechanisation	Plantation and Horticulture (including Sericulture)	Forestry and Wasteland Development	Animal Husbandry – Dairy	Animal Husbandry – Poultry	Animal Husbandry – Sheep, Goat, Piggery, etc.	Fisheries	Others- Bullock, Bullock-cart, etc.	Total Farm Credit	Storage Godowns/Market Yards	Land Development, Soil Conservation and Watershed Development	Others-Tissue Culture, Agri-Bio-technology, Seed production, Bio-pesticides/ fertilizers, Vermiculture	Total Agri Infra
1	Bagalkote	630211.61	9272.10	17831.00	28336.00	1136.00	19483.25	2338.65	8423.00	2908.00	2660.00	722599.61	8045.00	777.50	3304.00	12126.50
2	Ballari	255157.73	5692.98	17536.88	16406.75	2381.00	19637.94	14849.09	16987.66	1945.63	8441.31	359036.97	2572.50	4042.28	964.10	7578.88
3	Belagavi	1165084.81	19069.84	12020.83	100172.76	1155.07	41080.59	15190.95	10709.92	936.75	16710.97	1382132.49	17520.58	29257.83	11533.78	58312.19
4	Bengaluru (Rural)	73054.24	6591.92	15650.32	41784.83	213.76	48019.57	17137.88	5277.60	427.06	5394.85	213552.03	13515.00	8922.84	2600.00	25037.84
5	Bengaluru (Urban + Metro)	76358.28	7136.40	137645.62	28466.48	74.56	22326.70	10076.77	2371.51	396.96	11991.71	296844.99	10302.00	5535.96	1230.89	17068.85
6	Bidar	221197.00	14731.00	4980.00	10572.00	501.00	20254.00	2524.00	1338.00	630.00	1611.00	278338.00	5056.00	1089.00	813.00	6958.00
7	Chamarajagar	195013.57	4437.96	3314.00	31603.88	318.62	20305.21	1016.21	8632.62	99.07	5314.84	270055.98	1706.13	959.94	21.36	2687.43
8	Chickaballapur	160974.28	5595.12	18000.20	31625.20	456.00	24784.59	16098.37	6983.48	892.40	2715.70	268125.34	2141.25	8312.00	1940.40	12393.65
9	Chickmagalur	431312.63	18839.58	7696.87	116388.33	2007.76	10814.04	11273.42	11694.50	594.73	834.30	611456.16	6225.00	29630.98	2518.89	38374.87
10	Chitradurga	296769.51	12338.55	17775.04	37663.83	5584.14	21344.96	11436.18	22333.91	727.96	14346.27	440320.35	2740.23	3030.35	729.04	6499.62
11	Dakshina Kannada	369005.08	29198.48	21423.02	52131.60	596.98	81685.97	5667.67	3828.55	34219.79	999.76	598756.90	7222.94	36698.88	18425.92	62347.74
12	Davanagere	382896.22	4851.73	25444.67	18544.26	526.40	21042.52	9706.30	17950.20	664.99	3009.74	484637.03	17480.27	12855.20	1736.16	32071.63
13	Dharwad	361320.25	11964.09	24579.22	8011.36	452.40	57791.26	12720.03	8013.30	121.04	6793.61	491766.56	12720.00	8355.04	4302.88	25377.92
14	Gadag	293608.62	3392.91	1553.66	8542.41	576.51	10658.49	4758.86	7012.60	262.48	2426.34	332792.88	9691.91	2500.40	4238.50	16430.81
15	Hassan	622053.96	33506.40	50730.38	177175.87	409.60	43336.80	9633.38	9871.56	529.11	7980.16	955227.22	16950.00	32318.40	2792.53	52060.93
16	Haveri	296855.55	1579.84	9865.53	48044.06	3267.56	70005.85	8398.06	15050.47	2364.08	6356.25	461787.25	6596.25	6785.20	1504.68	14886.13
17	Kalburgi	486000.00	31604.00	29100.00	15280.12	1177.20	24982.20	1095.90	7360.20	302.76	1600.00	598502.38	24450.00	17160.00	2296.00	43906.00
18	Kodagu	332622.07	11506.86	28891.07	61912.64	629.76	12875.07	2359.46	3141.27	4635.68	984.84	459558.72	9885.00	7712.77	542.06	18139.83
19	Kolar	183544.44	1223.63	7255.47	21639.65	189.10	15310.95	15579.20	4054.25	914.17	844.62	250555.48	3618.75	1625.00	64953.60	70197.35
20	Koppal	284651.35	7106.75	2943.72	21681.71	2032.52	17471.16	9921.48	9181.86	468.66	2778.40	358237.61	15045.92	6049.77	2621.35	23717.04
21	Mandya	391885.25	38441.30	22548.46	38150.76	736.18	58090.82	24192.45	16749.40	982.94	2403.02	594180.58	4448.26	6982.60	1828.95	13259.81
22	Mysuru	564765.57	45095.23	28276.39	23854.81	6628.09	58641.75	5664.55	8870.30	3936.36	7356.48	753089.53	2024.07	29859.28	1318.00	33201.35
23	Raichur	409971.60	9881.04	29407.75	4258.81	796.64	34003.80	2009.88	15415.74	1102.10	5244.75	512092.11	5546.25	1445.20	651.20	7642.65
24	Ramanagar	196478.93	6432.46	15296.85	48653.86	142.37	28910.61	6147.81	1521.36	188.86	2099.12	311572.23	2089.52	6624.64	3255.81	11969.97
25	Shivamogga	346254.41	18714.55	25008.75	117002.36	893.60	23816.89	8754.45	2613.86	1954.40	9371.09	554384.36	15120.00	33189.57	1474.34	49783.91
26	Tumakuru	446561.04	23735.44	11416.40	51217.22	6445.48	150764.50	18006.27	17591.68	1692.18	10530.45	737960.66	20917.52	26089.62	10603.46	57610.60
27	Udupi	149448.63	12889.42	6826.89	32847.67	791.12	35303.90	9299.09	1971.00	47787.44	1934.85	299100.01	8985.53	22159.80	14202.00	45347.33
28	Uttara Kannada	196640.81	8289.16	9237.70	8744.28	477.45	28451.07	8659.56	1009.13	8455.79	6687.50	276652.45	963.75	10857.28	531.20	12352.23
29	Vijayanagara	253997.19	7020.56	16432.29	12567.87	1996.20	18868.70	14972.80	13589.09	1203.56	4210.73	344858.99	2941.89	3344.68	288.67	6575.24
30	Vijayapura	836417.29	24507.76	18602.21	20894.17	194.49	36722.35	1521.01	45977.86	770.44	678.15	986285.73	20525.45	10749.04	1442.43	32716.92
31	Yadgir	175500.00	9368.53	8707.50	5336.45	162.80	4776.35	385.95	1450.88	1026.30	563.00	207277.76	4545.00	4989.00	450.00	9984.00
	<b>Total</b>	<b>11085611.92</b>	<b>444015.59</b>	<b>645998.69</b>	<b>1239512.00</b>	<b>42950.36</b>	<b>1081561.86</b>	<b>281395.68</b>	<b>312676.76</b>	<b>123141.69</b>	<b>154873.81</b>	<b>15411738.36</b>	<b>281591.97</b>	<b>379910.05</b>	<b>16515.20</b>	<b>826617.22</b>

S. No.	Districts	Food and Agro processing	Others	Total Ancillary Activities	Total Agricultural Credit	MSME	Export Credit	Education	Housing	Social Infrastructure	Renewable Energy	Priority Sector - Others	Total PLP Projections
1	Bagalkote	19183.00	7021.00	26204.00	760930.11	148890.00	960.00	3960.00	18225.00	14512.00	304.00	15290.00	963071.11
2	Ballari	9141.60	15876.00	25017.60	391633.45	266138.75	2560.00	5670.00	11960.00	1347.30	302.76	9570.00	689182.26
3	Belagavi	8911.21	76124.88	85036.09	1525480.77	381150.00	7200.00	11880.00	43200.00	23528.00	274.12	7560.00	2000272.89
4	Bengaluru (Rural)	9867.00	5068.00	14935.00	253524.95	216590.00	11200.00	18800.00	21000.00	5180.00	1685.88	38312.70	566293.53
5	Bengaluru (Urban + Metro)	531861.60	116399.50	648261.10	962174.93	9697000.00	142460.00	159907.50	1602123.75	10612.80	21855.92	78675.15	12674810.05
6	Bidar	3781.00	14114.00	17895.00	303191.00	125375.00	4000.00	5850.00	23004.00	6780.00	926.00	59475.00	528601.00
7	Chamarajinagar	951.04	51908.00	52859.04	325602.45	49250.00	320.00	1329.75	7020.00	3352.50	27.65	15134.50	402036.85
8	Chickkabalapur	6141.20	10400.00	16541.20	297060.19	76650.00	184.00	6696.00	12663.00	1280.00	1277.28	6160.00	401970.47
9	Chickmagalur	7733.45	21676.80	29410.25	679241.28	40000.00	5440.00	17100.00	20000.00	3160.00	5314.95	16102.00	786358.23
10	Chitradurga	5633.48	18660.25	24293.73	471113.70	104062.50	300.00	2380.00	15840.00	1233.75	980.08	35000.00	630910.03
11	Dakshina Kannada	93410.00	127216.00	220626.00	881730.64	607104.00	104080.00	16830.00	105300.00	10800.00	10268.55	111295.00	1847408.19
12	Davanagere	34209.20	16360.40	50569.60	567278.26	95695.00	30432.00	19755.00	48375.00	9893.00	22935.04	18510.00	812873.30
13	Dharwad	9528.00	82558.00	92086.00	609230.48	632625.00	52000.00	16200.00	60750.00	7920.00	8284.50	68750.00	1455759.98
14	Gadag	11466.15	7664.00	19130.15	368353.84	98500.00	2400.00	15750.00	24000.00	12311.25	1278.84	41890.00	564483.93
15	Hassan	13284.80	8464.00	21748.80	1029036.95	296250.00	1440.00	8550.00	26910.00	1896.00	1614.16	37650.00	1403347.11
16	Haveri	11644.85	19420.00	31064.85	507738.23	81100.00	480.00	7140.00	21375.00	3880.13	4373.64	6640.00	632727.00
17	Kalburgi	6720.00	1920.00	8640.00	651048.38	155100.00	660.00	27000.00	27000.00	8800.00	1752.53	19000.00	890360.91
18	Kodagu	7423.73	870.00	8293.73	485992.28	78200.00	42240.00	14175.00	68580.00	3114.01	928.28	12756.00	705985.57
19	Kolar	2146.50	1016.00	3162.50	323915.33	149643.75	4560.00	4860.00	61875.00	832.00	691.79	12466.00	558843.87
20	Koppal	13250.00	5680.00	18930.00	400884.65	116400.00	3200.00	14850.00	31000.00	357.63	6995.00	25555.00	599242.28
21	Mandya	25218.75	58372.00	83590.75	691031.13	91582.00	1680.00	19080.00	28125.00	1724.00	3083.74	117654.10	953959.97
22	Mysuru	37672.00	265820.00	303492.00	1089782.88	622504.00	54080.00	26589.60	49837.50	3805.80	1387.21	110270.00	1958256.99
23	Raichur	23950.00	50688.00	74638.00	594372.76	201750.00	200.00	4050.00	10125.00	364.76	366.66	56500.00	867729.18
24	Ramanagar	4370.40	31377.00	35747.40	359289.60	75300.00	2400.00	8775.00	32320.00	3300.00	303.36	36850.00	518537.96
25	Shivamogga	2304.00	39939.20	42243.20	646411.47	300000.00	13440.00	39618.00	143262.00	4955.73	3183.48	49038.00	1199908.68
26	Tumakuru	11106.60	40578.88	51685.48	847256.74	174368.75	10800.00	9000.00	111375.00	2913.20	3232.38	92678.25	1251624.32
27	Udupi	133330.00	56267.20	189597.20	534044.54	368256.00	30400.00	13770.00	83250.00	8800.00	3605.31	63635.00	1105760.85
28	Uttara Kannada	6370.00	47216.00	53586.00	342590.68	313500.00	800.00	16200.00	14040.00	802.50	121.14	13688.00	701742.32
29	Vijayanagara	6657.40	14553.50	21210.90	372645.13	128553.44	2080.00	2340.00	11587.50	2852.80	1038.30	9180.00	530277.17
30	Vijayapura	11094.30	4122.00	15216.30	1034218.95	133000.00	496.00	2178.00	11925.00	4250.05	1646.84	12448.00	1200162.84
31	Yadgir	4700.00	8044.00	12744.00	230005.76	35000.00	700.00	10800.00	13500.00	4000.00	1100.00	6000.00	301105.76
	<b>Total</b>	<b>1073061.26</b>	<b>1225394.61</b>	<b>2298455.87</b>	<b>18536811.45</b>	<b>15859538.19</b>	<b>533192.00</b>	<b>531083.85</b>	<b>2759547.75</b>	<b>168559.21</b>	<b>111139.39</b>	<b>1203732.70</b>	<b>39703604.54</b>

## Annexure II

## Agency – Wise Broad Sector – Wise Flow Of Ground Level Credit (₹ lakh)

S. No.	Agency/ category	2020-21			2021-22			2022-23			2023-24
		Target	Ach	% Ach	Target	Ach	% Ach	Target	Ach	% Ach	Target
1	<b>Crop Loan</b>										
	CBs	4284158.00	4507873.94	105.22	4373604.99	2795033.03	63.91	5316085.00	3971142.00	74.70	6237897.00
	SCB	1144147.00	1636669.75	143.05	1457588.16	1829661.60	125.53	1286313.00	2068358.00	160.80	1872417.00
	SCARDB	27929.00	0.00	0.00	36361.93	0.00	0.00	24645.00	0.00	0.00	22419.00
	RRB	1143217.00	803866.75	70.32	1313546.21	1506147.34	114.66	1554881.00	1872613.00	120.43	1877376.00
	Others	2349.00	42565.97	1812.09	11229.82	144.60	1.29	7700.00	761.00	9.88	14042.00
	<b>Sub-Total (A)</b>	<b>6601800.00</b>	<b>6990976.41</b>	<b>105.90</b>	<b>7192331.11</b>	<b>6130986.63</b>	<b>85.24</b>	<b>8189624.00</b>	<b>7912874.00</b>	<b>96.62</b>	<b>10024151.00</b>
2	<b>Term Loan (MT+ LT)</b>										
	CBs	3638478.00	4937130.89	135.69	4292741.53	5394495.98	125.67	4865173.00	7498319.00	154.12	6020201.00
	SCB	312155.00	73962.49	23.69	327767.39	85557.00	26.10	272727.00	111427.00	40.86	502242.00
	SCARDB	52335.00	40862.23	78.08	87806.54	44320.05	50.47	124368.00	29560.00	23.77	90128.00
	RRB	608003.00	575058.44	94.58	688712.42	115690.90	16.80	616983.00	119634.00	19.39	642286.00
	Others	7129.00	27677.32	388.24	9858.28	107661.00	1092.09	18586.00	288752.00	1553.60	95669.00
	<b>Sub-Total (B)</b>	<b>4618100.00</b>	<b>5654691.37</b>	<b>122.45</b>	<b>5406886.16</b>	<b>5747725.00</b>	<b>106.30</b>	<b>5897837.00</b>	<b>8047692.00</b>	<b>136.45</b>	<b>7350526.00</b>
3	<b>Total Agri Credit (A+B)</b>										
	CBs	7922636.00	9445004.83	119.22	8666346.52	8189529.01	94.50	10181258	11469461.00	112.65	12258098.00
	SCB	1456302.00	1710632.24	117.46	1785355.55	1915218.52	107.27	1559040	2179785.00	139.82	2374659.00
	SCARDB	80264.00	40862.23	50.91	124168.47	44320.05	35.69	149013	29560.00	19.84	112547.00
	RRB	1751220.00	1378925.19	78.74	2002258.63	1621838.19	81.00	2171864	1992247.00	91.73	2519662.00
	Others	9478.00	70243.29	741.12	21088.10	107805.60	511.22	26286.00	289513.00	1101.40	109711.00
	<b>Sub-Total (C)</b>	<b>11219900.00</b>	<b>12645667.78</b>	<b>112.71</b>	<b>12599217.27</b>	<b>11878711.37</b>	<b>94.28</b>	<b>14087461.00</b>	<b>15960566.00</b>	<b>113.30</b>	<b>17374677.00</b>
4	<b>Non-Farm Sector</b>										
	CBs	12330831.00	9625404.47	78.06	14482564.40	8487522.00	58.61	16778363.00	11958141.00	71.27	17045183.00
	SCB	303823.00	0.00	0.00	352543.02	217380.20	61.66	180071.00	251426.00	139.63	241363.00
	SCARDB	18630.00	0.00	0.00	24556.68	0.00	0.00	8000.00	0.00	0.00	6347.00
	RRB	522235.00	163837.56	31.37	667198.03	198872.90	29.81	690683.00	170215.00	24.64	625587.00
	Others	123181.00	73402.11	59.59	163162.85	153131.90	93.85	222732.00	243138.00	109.16	247511.00
	<b>Sub-Total (D)</b>	<b>13298700.00</b>	<b>9862644.14</b>	<b>74.16</b>	<b>15690186.70</b>	<b>8789686.00</b>	<b>56.02</b>	<b>17879849.00</b>	<b>12622920.00</b>	<b>70.60</b>	<b>18165991.00</b>
5	<b>Other Priority Sector</b>										
	CBs	861124.00	1916289.61	222.53	703794.66	368311.56	52.33	856040.00	259599.00	30.33	748832.00
	SCB	61186.00	0.00	0.00	81620.50	295502.61	362.04	55192.00	471585.00	854.44	138166.00
	SCARDB	4974.00	0.00	0.00	5230.50	0.00	0.00	6269.00	0.00	0.00	7392.00
	RRB	136978.00	40444.42	29.53	154018.45	25594.70	16.62	113504.00	29670.00	26.14	76462.00
	Others	11138.00	103050.24	925.21	5158.05	118770.42	2302.62	24358.00	161775.00	664.16	103138.00
	<b>Sub-Total (E)</b>	<b>1075400.00</b>	<b>2059784.27</b>	<b>191.54</b>	<b>949822.16</b>	<b>1075400.00</b>	<b>113.22</b>	<b>1055363.00</b>	<b>922629.00</b>	<b>87.42</b>	<b>1073990.00</b>
6	<b>Grand Total (C+D+E)</b>										
	CBs	21114591.00	20986698.91	99.39	23852705.54	17045362.59	71.46	27815661.00	23687201.00	85.16	30052113.00
	SCB	1821311.00	1710632.24	93.92	2219519.07	2428101.31	109.40	1794303.00	2902796.00	161.78	2754188.00
	SCARDB	103868.00	40862.23	39.34	153955.65	44320.05	28.79	163282.00	29560.00	18.10	126286.00
	RRB	2410433.00	1583207.17	65.68	2823475.11	1846305.80	65.39	2976051.00	2192132.00	73.66	3221711.00
	Others	143797.00	246695.64	171.56	189409.00	379707.90	200.47	273376.00	694426.00	254.02	460360.00
	<b>Grand Total</b>	<b>25594000.00</b>	<b>24568096.19</b>	<b>95.99</b>	<b>29239226.13</b>	<b>21743797.65</b>	<b>74.37</b>	<b>33022673.00</b>	<b>29506115.00</b>	<b>89.35</b>	<b>36614658.00</b>

**Annexure III: Critical infrastructural support to be provided****Projects suggested for inclusion in the State Plan**

(₹ Lakh)

**1. Agri & Allied Activities**

S. No	District	Name of the project	Total Financial Outlay	Likely Impact
1	15 Districts of Northern Karnataka	Construction of 1 lakh Farm Ponds	250000	Assured irrigation, crop diversification and increasing farmers' income
2	All Districts	Solar Powered Cold storages at 1500 GPs	30000	Reduction of post-harvest losses and improvement in farm income
3	Ballari	Construction of Chilly Agro processing cluster at Ballari-siruguppa belt	1500	This will result in better price realisation for the farmers, as a result of taking up processing activities and creates employment
4	Bagalkote	Construcion of 2 Warehouses at Hunugund, Bilagi APMCs	180	Post-harvest infra, Credit facilities under Negotiable Warehouse Receipts, prevents distress sale by farmers
5	Bagalkote	Halagali-Malligeri LIS in Bilagi and Mudhol Taluks	19700	Around 3500 acres to be irrigated (new potential)
6	Belagavi	Construction of Veterinary Hospitals in 9 talukas	468	Providing veterinary services for farmers
7	Belagavi	Establishment of Cold storages-31 nos.	3410	Benefitting approx. 20000 farmers
8	Bidar	Warehouse facility in all talukas	150	This facility will help the farmers / FPOs to store the grains/millet/soyabean and sell them at remunerative price
9	Chamarajanagar	Construction of one cold storage facility in 4 blocks, having capacity of 1000 MT	1200	Improvement in storage capacity and reduce post harvest losses
10	Davangere	Construction of protection wall, sopana, cattle trap to sulekere halla in Jadaganahalli village in Davanagere Tq	750	Increase in groundwater table
11	Davangere	Construction of Check dam cum bridge across Bidarahalla near Guddahatti thanda in Naraganahalli village in Davanagere Tq	750	Increase in groundwater table
12	Davangere	Construction of protection wall to the halla near B Kalpanahalli village in Davanagere Tq	750	Increase in groundwater table



S. No	District	Name of the project	Total Financial Outlay	Likely Impact
13	Davangere	Construction of check dam across Haridravathi halla near Digeenahalli at Chennagiri Tq	750	Increase in groundwater table
14	Davangere	Construction of check dam across hall near Thuppadahalli village in Jagalur Tq	750	Increase in groundwater table
15	Hassan	Canal improvements in Bagur Navile Tunnel (BNT) approach and Exit LIS schemes in Channarayapatna taluk.	1000	Increase in crop production and cropping intensity. Will benefit 52 villages
16	Hassan	Construction of cold storage for storing potato seeds	1000	Improving quality of produce and yield
17	Hassan	Fish Marketing facilities	3000	Will help in formal and hygienic marketing
18	Hassan	Construction of additional wing in Veterinary Hospital for Small Animal Outpatient unit in Hassan block	5000	Dairy being a major allied activity in the district, health care facility for daiy animals is required.
19	Hassan	Establishment of Operation Theatre as an additional facility in the existing District Veterinary Hospital in Hassan block	25	Dairy being a major allied activity in the district, health care facility for daiy animals is required.
20	Hassan	Construction of 7 veterinary dispensaries for improving health care of dairy animals	350	Dairy being a major allied activity in the district, health care facility for daiy animals is required.
21	Kalaburagi	Construction of Barrage Structures across Bhima River	5000	Bhima is the major river flowing through Kalaburagi district. Due to lack of storage structures, most of the water flows into sea resulting in wastage.
22	Kodagu	Construction of Large warehouse to primarily store the coffee before export at Sampaje	90	Double the farmers income
23	Mandya	Raitha Samparka Kendra-19 nos.	760	Increase in transfer of technology and government benefits to farmers
24	Mandya	Construction of CoE on coconut in Mallasandra Kaval, Nagamanagala	200	Increase in transfer of technology and government benefits to farmers
25	Mandya	Construction of farmers training institute in Nagamangala	850	Increase in transfer of technology and government benefits to farmers
26	Mandya	Construction of sheep rearing sheds in government sheep breeding farm, Dhanaguru	500	Availability of good quality lambs at affordable price to the farmers enhance the income generation capacity and self-sustainability

<b>S. No</b>	<b>District</b>	<b>Name of the project</b>	<b>Total Financial Outlay</b>	<b>Likely Impact</b>
27	Mysuru	Establishing Chawki Rearing Centre (CRC) in Thandavapura where Sericulture department owns old building which can be converted as CRC.	50	Improvement in silk production
28	Mysuru	Sheep and Goat breeding farm in HD Kote/Hunsur/Nanjangudu (1000 lambs per year)	50	Improvement in meat production
29	Ramanagara	Strengthening of 8 Raitha Samparka Kendras	320	Increase in transfer of technology and government benefits to farmers
30	Ramanagara	Scientific storage godowns and cold storages at all 18 Hoblis	1800	Better returns to the farmer
31	Ramanagara	HOPCOMS in all 18 hoblis	360	Better returns to the farmer by direct marketing
32	Udupi	Prevention of Sea Water Intrusion and Coastal Errosion in Mattu Village, Kapu Taluk, Udupi	500	Increase in production and productivity of GI tagged 'Mattu Gulla'
33	Yadgir	Rural godowns in Shahapur, Wadagera, Gurumitkal, Shorapur	300	Increase in storage capacity for farm produce at Block-level
34	Yadgir	Cold storage facilities in Shahapur and Shorapur	440	Perishability of vegetables and fruits is considerably reduced and also shelf life is increased

## 2. Rural Connectivity

S. No	District	Name of the project	Total Financial Outlay	Likely Impact
1	Bagalkote	Rail Over Bridge near Badami Railway Station Badami-Bagalkote MDR	1500	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
2	Bagalkote	Rural Road: Aihole-Asangi via Kalliguda road connecting Guledgudda handloom cluster	500	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
3	Belagavi	Construction of bridge across Ghataprabha river at Daddi village in Hukkeri taluk	6500	15000 villagers will be benefitted to transport sugar cane, vegetables, rice, green peas and other products to nearby markets
4	Chamarajanagar	Construction of Bridge at Kollegal ,Yalanduru- Gundlupete	1220	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
5	Chamarajanagar	Improvements to Road at Heggotara,Bandipura Gundlupet Baragi Road	4975	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
6	Dakshina Kannada	Connectivity - Charmady Village, Belthangady Taluk	300	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
7	Kodagu	Siddapura to Maldare elevated road at Elephant corridor	100	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
8	Mandya	Construction of road from Chikka Mandya to Nagamanagala	1500	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
9	Mysuru	Improvements to Tenkanakoppalu - Bolanahally Road from ch.0.00 to 3.92 k.m	500	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
10	Mysuru	Improvements to Hanagodu - Konanahosahally Road Via Dodda Hejjuru from ch.6.00 to10.00 k.m	500	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
11	Mysuru	Improvements to Hulyalu - Shirenahally Road Via Gavadagere from ch.0.00 to 5.10 k.m	700	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
12	Mysuru	Improvements to Road from Hunsur - Hosaramenahally Road to Bagalakote - Biligiriranganabetta Road via Rayanahally, Hejjodlu from ch.3.00 to 6.60 k.m	700	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs
13	Yadgir	Improvement of rural roads	500	Better connectivity leads to enhanced transportation and increase in mobility of agriculture produce and related inputs

### 3. Social Infrastructure

S. No	District	Name of the project	Total Financial Outlay	Likely Impact
1	Ballari	Construction of Jeans Textile Park	50000	Will help in export of good quality Jeans and employment creation
2	Belagavi	Establishment of 14 Hospitals	14000	Benefitting approx.1.5 lakh rural people.
3	Belagavi	Construction of additional training centre at Jamboti, Khanapur taluk	500	Benefiting 500 students
4	Kodagu	Upgradation of Primary Health Centre at Thithimati	60	The upgraded health centre can serve the tribal population in the vicinity
5	Yadgir	Establishment of Hospitals/dispensaries in Yadgir	600	Availability of health facilities in the rural areas and leading to improvement in health indicators

**Annexure IV**  
**Critical Intervention Required in Various Sectors/Sub-Sectors**

<b>S. No</b>	<b>Name of the Sector</b>	<b>Critical Interventions Required</b>	<b>Likely outcome/impact</b>	<b>Name of Districts</b>
1	Crop production, Maintenance and Marketing	Setting up of soil-testing laboratories in each of the taluks	Helps in scientific agriculture practice and better yield.	Bagalkote
		Setting up of Chilly processing unit at Ballari and Siruguppa blocks.	Establishment of Chilly processing units will help farmers realise better income.	Ballari
		PACS need to review and enhance Individual Maximum Borrowing Power (IMBP) to ensure that the farmer is not under-financed.	These interventions would ensure timely and adequate availability of inputs and credit to farmers.	Bengaluru Rural
		Banks may encourage pledge financing to enable farmers to avoid distress sale as also meet their short-term credit requirements.		
		Karnataka State Seeds Corporation does not have a seed processing unit in the district. There is no seed certifying agency in the district.	Establishment of seed production centre in the district would solve the problem of timely and adequate supply, reduce transport cost, etc. Crop procurement and processing facilities are not available in the district and most of the produce is being sent outside. Farmers Producer Organisations, formed in the district will be greatly benefitted due to availability of quality seeds which can be procured timely and adequately.	Chamarajanagar
		Crop assessment using AI and ML technology can reduce the number of days for settling claims for crop loss significantly. This assessment can also be made use of by banks for extending loan for marketing of crops, by verifying the yields.	This will help to prevent the exclusion of eligible beneficiaries and timely transfer of the money.	Chikkaballapura
Karnataka State Seeds Corporation does not have a seed processing unit in the district. There is no seed certifying agency in the district.	Establishment of seed production centre in the district would solve the problem of timely and adequate supply, reduce transport cost, etc. Crop procurement and processing facilities are not available in the district and most of the produce is	Gadag		

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
			being sent outside. Farmers Producer Organisations, formed in the district will be greatly benefitted due to availability of quality seeds which can be procured timely and adequately.	
		Taluk level soil and water testing labs to be established. Agri graduates could be motivated by banks to set up Soil & Water Testing labs under ACABC scheme.	Will ease the efforts of farmers in getting the soil and water tested when required. Will motivate more farmers to adopt the soil and water testing practices regularly	Hassan
		Construction of onion godowns especially in Bagewadi and Sindagi blocks, grape processing in Tikota, Bableshwar and Indi blocks.	Wastage in onion & raisins will be reduced & better storage will fetch remunerative prices avoiding distress sell.	Raichur
		The KSWC warehouses to be registered early with WDRA to avail credit facility at concessional rates against pledge of NWR.	Issue of Negotiable Warehouse Receipts will be possible.	
		Setting up of Maize and Groundnut processing unit in HB Halli and Kudligi respectively.	Establishment of Maize and Ground nut processing units will help farmers realise better income.	Vijayanagara
2	Water Resources	Comprehensive program to harvest the rainwater through existing building rooftops and check dams, surface tanks and bunds	Augment the groundwater resources in terms of quality and quantity.	Bagalkote
		Need to educate farmers about Sprinkler and Drip irrigation and its adoption, specifically in water scarce areas	Promotes scientific agriculture practice and better yield.	
		Desiltation of Tungabadra Dam and Canal system.	Desiltation will lead to increased storage capacity of the Dams and Canals.	Ballari
		Capacity building of Water User Cooperative Societies (WUCS) with women representation for improved operation, maintenance and water management including fee collection and accounting within the command area.	These interventions would aid in reducing the excessive dependence of agriculture on ground water and promote judicious use of water resources.	Bengaluru Rural
		Agricultural Extension Services may be strengthened to provide cost effective & location specific designs to farmers for micro-	Extent of area under micro irrigation will be enhanced. Increase in Water use efficiency and	Bengaluru Urban

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		irrigation & rainwater harvesting/ recharge structures and awareness on conservation of water through good agricultural practices and water efficient cropping systems.	water availability for cultivation for additional crops can be generated.	
		Modernisation of irrigation infrastructure, installation of telemetry equipment for hydrological measurements within the sub-basin, implementation of civil works for canal modernisation	Optimal usage of water	Chamarajanagar
		Rejuvenation of existing MI tanks by de-silting to enhance their storage and percolation capacities. Committee may be set up at Village Level to supervise the use of water by the farmers.	-	Kalaburgi
		All the structures planned should be geo-tagged and marked on map.	Social monitoring of the projects can be conducted for the public funded projects.	Kodagu
		Sugarcane is a water guzzling crop. Drip irrigation in sugarcane cultivation can lead not only to saving of water but also increase in productivity. Banks may explore tie-ups with sugar factories in financing drip irrigation projects for sugarcane farmers. Similar tie-ups can also be made for drilling borewells and pumpsets which can go a long way in addressing the sugarcane crisis and water crisis in the district	Extent of area under micro irrigation will be enhanced. Increase in Water use efficiency and water availability for cultivation for additional crops can be generated.	Mandya
		Upper Krishna Project stage III has to be completed.	A total area of 7,87,273 ha (88.4% of NSA) will come under irrigation in the district.	Raichur
		Augmenting the dikes and repair of sluice gates / drainage systems for controlling the water during high tides and floods, in the Gajni lands in Kumta taluk	Tidal wet lands in the Aghanashini estuary measuring about 3000 acres, (where the brackish water paddy variety called 'Kagga' is cultivated) could be put to use.	Uttar Kannada
3	Farm Mechanization	Promoting use of drones	Efficient and effective utilization of agricultural inputs.	Bagalkote

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		There is a need to establish a greater number of custom hiring centres in the district.	CHCs will increase productivity.	Ballari
		There is scope for using drones in applying fertilizers and pesticides for crops such as Chilly, Paddy, Cotton etc.	Drone technology will reduce cost of Fertilizer and pesticides application.	
		Training may be provided to Agri entrepreneurs on repair and maintenance of Farm machinery.	-	Bengaluru Rural
		The inadequacy in custom hiring centers could be managed by promoting FPOs and availing funds under AIF, PACS as MSCs etc.	FPOs can utilize the services of custom hiring centers	Bengaluru Urban
		Purchase of Combined Harvesters by PKPS through DCC Bank for providing to farmers on custom hiring basis (Belagavi DCCB)	-	Belagavi
		Farm Machinery Dealers may set up mobile service units for providing after sales services / hiring services and skill development programme / maintenance of farm machinery/ Farming as A Service (FAAS) programme to be conducted by RSETIs	Availability of services at village level will increase farm mechanization The training will create employment opportunities for skilled labour in farming.	Bidar
		High cost of DRONES and lack of skill to use is preventing its penetration. Skilling youth on DRONE usage, repairs and maintenance.	More familiarization with DRONE technology can improve confidence level of farmers to use and thus demand will be created. The skilled youth can be hired by CHSC, which may help the sector grow.	Chitradurga
		Imparting engineering knowledge/skill to more farmers is required to spur innovation & to go for innovation in farm mechanization.	Can address challenges faced by farmers in hill agriculture & horticulture, particularly for operations like irrigation, plant growth & post harvesting.	
		Use of improved agricultural implements for sowing, weeding, harvesting activities such as seed-cum-fertiliser drill. Use of advanced spraying equipment for pesticides, plant nutrients eg. Battery operated sprays. Use of	Efficient and effective utilization of agricultural inputs helps augment production.	Davangere



<b>S. No</b>	<b>Name of the Sector</b>	<b>Critical Interventions Required</b>	<b>Likely outcome/impact</b>	<b>Name of Districts</b>
		improved farm mechanics for post-harvest activities such as threshing, straw bailing machines.		
		PACS in Somwarpet can be roped in as CHCs for Farm Mechanisation where paddy & maize is cultivated and also can act as a facilitator for after sales service centre for farm equipments	This will have positive impact on the farmers reducing the cost of cultivation.	Kodagu
		Identification of FPOs with maximum Ragi growers and support from department of agriculture and Bank to procure combine harvesters is the need of the hour.	The district has extensive area under paddy, yet the availability of harvesters is limited. The harvesters are rented from the neighboring state and thus increases cost of harvesting to the farmers. FPOs with the help of farm mechanization scheme of departments can utilize the credit facility and overcome this issue.	Ramnagara
		The district is one of the leading producers of horticulture crops and the implements/machineries required in production/ post-production activities of these crops is major area which can be financed. The implements/ machineries like arecanut, dehuskers, coconut dehuskers, sprayers (power, rocking, tycoon, etc), weeders, etc. can be considered for extending credit.	Off take of credit in the sector and promotion of farm mechanisation.	Shivamogga
4	Plantation and Horticulture	Establishment of horticulture processing clusters	Promotion of horticulture crops	Bagalkote
		Post-harvest facilities for cleaning, sorting, grading, packing units has to be promoted in vegetables, spices and horticulture crops.	Remunerative price to farmers and promote value addition.	
		Like milk route, vegetable routes may be set up by the horticulture department/ HOPCOMS. UAS/ KVK may provide necessary technical assistance to overcome this and help the farmers.	It will help farmers get better price realization and assured market through aggregation.	Ballari

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		Efforts shall be made for value addition to the horticulture crops. Drying figs may be taken up by private entrepreneurs / FPOs in Kurgodu and Ballari taluks as income realization for dried figs is around 40 times of fresh figs.	Agri processing will give better shelf life and income to farmers.	
		Establishment of an Industrial area for Coffee & Pepper processing close to Madikeri which can be exported through Mangalore airport.	This will add filip to the export market of Coffee and Pepper.	Kodagu
		Centre of excellence on Coconut may be established	Coconut is extensively grown in rainfed areas of Mandya district and covers 23% of NSA. The CoE establishment in Nagamangala block can facilitate technology transfer to Mandya, Mysuru, Tumakuru and Hassan districts.	Mandya
		Upgrading Cocoon market in Bandipalya APMC from current capacity of 1.5-2 Tonnes per day to 5-6 Tonnes per day.	The current inflow of cocoon is 3-4 Tonnes per day. From past 3 years cocoon prices have been stabilized and more farmers are coming forward to take up sericulture. Upgradation of capacity would help in boosting sericulture sector in the district.	Mysuru
		Establishing Chawki Rearing Centre (CRC) in Thandavapura where Sericulture department owns old building which can be converted as CRC.	This will provide fillip to sericulture activities in the district.	
		Establishment of International Food Park in Ittangihala as early under RIDF sanctioned project.	Wineries can be started breaking only raisins trend.	Raichur
		Need for encouraging pledge finance/marketing credit by cocoon markets/silk exchanges with tie up arrangement in order to help sericulture farmers and reelers face market fluctuations.	Pledge financing can give sufficient buffer time to market the produce and also to gain better returns.	Ramnagara
		Cultivation of wine varieties of grapes under contract farming.	Additional income to farmers through Aloe Vera, Coleus Forskoli, Ashawagandha and Patchouli cultivation.	Vijayapura

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
5	Forestry	Agroforestry could be strengthened by promoting high value forest species like Raktachandana, Sandal wood, Teak, Rose wood, etc along with agricultural crops on farmlands.	This will result in alternate source of income to the farmers besides adding to district canopy.	Bagalkote, Vijayanagara, Davangere
		Need to promote nurseries for clonal propagation, promotion of bio-diesel plants. There is a need to synchronise with the Central Govt.'s policy on Biofuels.	Awareness creation among bankers would facilitate improved credit flow to the sector in the district. Replicable agro-forestry models in revenue wasteland and cultivation of high value species would encourage more farmers to adopt agro-forestry in the district. Further, propagation of bio-diesel plants will enable the farmers in the district to leverage the renewed thrust of the Central Govt. in promoting Biofuels	Bengaluru Rural
		Private nurseries for raising forest plant species may be financed by the Banks.	-	Chikkamagaluru
		Unchecked growth of Prosopis juliflora (Ballari jali) which is making land uncultivable is a big threat to food security, necessitating a program to clear the same and replacing it with protected vegetation	To prevent further spread of Prosopis juliflora (Ballari jali)	Chitradurga
		Bankers to finance for centrally sponsored schemes such as National Bamboo Mission, Biofuel etc., which aim at covering more area under green vegetation.	-	Kalaburgi
		Private Sector companies may also be encouraged to take up bio-diesel cultivation with farmers in wasteland through contract farming.	Provide additional income to Farmers.	Tumkuru
6	Animal Husbandry-Dairy	Banks to diversify their portfolio through financing Milk Parlor, Khoa making units, Dairy machineries transportation etc.	More credit flow to the sector and hence promotion of the sector	Bagalkote
		Agriculture department, ATMA officials may sensitise the farmers about azolla cultivation in	Awareness creation	

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		small patch of land, which is nutritious fodder for the farm animals.		
		Fodder banks may be set up at taluk level for green /dry fodder supply to dairy farmers.	Good quality and quantity of fodder will increase the animal productivity.	Ballari
		Disease Diagnostic labs, community fodder plots may be established.	This will facilitate timely detection and remedial measures for communicable diseases and ensure adequate availability of quality fodder to the sector.	Bengaluru Rural
		Revival of defunct Dairy Cooperative Societies. KMF-Bamul may initiate specific action plan to rejuvenate the defunct dairy co-operative societies to help the dairy farmers in the area. (KMF)	Drudgery on the dairy farmers to travel miles together to other dairy cooperatives will be reduced and helps promoting more number of farmers to take up dairy activity.	Bengaluru Urban
		Strengthening of infrastructure of veterinary institutions for providing breeding, disease management and health services to farmers at their doorstep (GoK).	-	Belagavi
		Establishment of milk marketing infrastructure viz. BMCs, Insulated/Refrigerated milk tankers, etc. (KMF)		
		Deoni breeds semen to be conserved in its breeding tract may be ensured.	This will protect the Deoni breed;	Bidar
		Setting up of milk processing plant within the Bidar district and encouragement of milk parlors by the Animal Husbandry Deptt / KMF.	This will ensure availability of milk in the district and create employment to local people	
		Installation of Bulk Milk Coolers at more places	Would result in faster processing of milk ensuring hygiene	Chamarajanagar
		The Hassan Milk Union has only one Milk Chilling unit in Chikmagalur district located at Birur with a capacity of 20 TLPD. The Union may take steps to set up 02 number of Milk Chilling Units with 02 TLPD capacity in the district.	-	Chikkamagaluru

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		Establishment of veterinary disease diagnostic centres for diagnosis of animal diseases and to prevent zoonotic diseases like TB, Brucella, Salmonella and Rabies etc. One such centre should be there in every taluk.	Currently, there is only one such centre located in Mysuru. Having one such centre in each taluka will help in effective diagnosis and prevention of zoonotic diseases.	Mysuru
		Breeding farm for indigenous breeds of cattle and buffalo viz. Malnadgidda, Krishna valley, Deoni, Amrith Mahal and Pandarpuri.	Indigenous cattle farms will be developed & the local milk will be available for district population.	Raichur
7	Animal Husbandry- Poultry	Banks generally hesitate to give loans as poultry birds are not insured, and in the eventuality of any outbreak of disease, the loans may become NPA. Insurance companies to consider insuring poultry birds.	Helps in formalization of the sector	Bagalkote
		SHGs may be encouraged to rear brooding units / mother of commercial Giriraja chicks. Such units may be credit linked. Assistance from Backyard Poultry Scheme can be sought for. Backyard poultry birds like Cauvery, Chabro may also be encouraged.	Increased offtake of credit in the sector and hence promotion of the sector.	
		Contract farming for maize and soya: As maize is the major ingredients of poultry feed, contract farming for the same needs to be encouraged to enable the supply of these feed ingredients at affordable price. Also, maize FPOs can be formed in the area for taking up marketing of maize and also poultry feed production.	This will result in assured and better income for farmers.	Ballari
		Need to set up a new disease diagnostic laboratory at taluks level (AH Dept).	-	Belagavi
		To ensure effective biosecurity, use of incinerators may be encouraged and infrastructure for common incinerator facilities may be established at major poultry production centres.	-	Chikkamagaluru

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		SHGs may be encouraged to rear low technology inputs birds / poultry activity based JLGs may be promoted.	Low technology birds / poultry can be easily promoted through SHGs/JLGs with credit. Also, they have good market demand.	Dakshin Kannada
		Establishment of fodder nurseries, silage-making units, animal feed manufacturing units and processing units	for value addition of milk, meat, etc	Hassan
		FPOs of poultry growers may be encouraged to enable value addition and better price realisation.	Organising poultry growers in to FPOs will enable them to achieve economies of scale in access markets for inputs as well as sale of outputs, hence improving incomes	Udupi
		State Govt and Banks in the district may encourage upgrade backyard poultry to commercial economic projects by extending interest subvention schemes/ subsidy/timely bank finance.	-	Yadgir
		Under the Animal Husbandry Infrastructure Development Fund (AHIDF) scheme, the scheduled banks may provide financial assistance to individuals/ FPOs for establishment of infrastructure for meat processing and value addition infrastructure and establishment of animal feed plant (poultry feed) in the private sector. Banks may also provide working capital for poultry farmers, as approved in SLTC.		
8	Animal Husbandry - sheep, goat and Piggery	Revival of Sheep and Wool Producers Co-operative Societies which have become defunct to assist farmers in production and marketing of produce.	Helps in formalization of the sector; hygienic meat production; better utilization of by products and better returns from meat production	Bagalkote
		Improved market linkages for live animals as well as meat may be provided to ensure fair and remunerative prices, especially to SF/MF.	This will facilitate improved price realization by SF/MF by controlling the influence of middlemen in determining the price of live animals on arbitrary basis.	Bengaluru Rural

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		Goat milk production and processing along with meat processing can be explored for enhancing income flow to farmers	Goat milk and milk products are being exported for better price which is yielding multiple times higher margin than the conservative goat meat production. Yield on investment in the sector can be increased, if this possibility is explored.	Bengaluru Urban
		Establishment of modern abattoirs and slaughter houses cum meat processing centers by State Govt. / private entrepreneurs with bank credit.	This will improve environmental sanitation, maintaining hygiene, health and prevents diseases. Offal can be converted into fertilisers.	Bidar
		Regularised market for live animals monitored by Sheep and Wool Producers Cooperative Societies and construction of registered slaughterhouse, establishment of infrastructure for meat processing and value additions	Marketing of live animals as well as meat is controlled by traders/ middlemen who decide the live weight of animals on an approximate basis/ arbitrarily fix the rate of animals after considering an average dressing percentage at 60% of live body weight. Sheep and Wool Producers Cooperative Societies could be encouraged to assist farmers in production and marketing of produce, improvement in market linkages for live animals as well as meat may be addressed so as to ensure fair and remunerative prices, especially to small farmers/ shepherds.	Chamarajanagar
		Nari Suvarna Rams may be supplied for breeding in the district. These rams have Fec B gene which enables twinning in sheep from F2 generation onwards thereby increasing the productivity of sheep	-	Chikkamagaluru
	Support may be provided under training cum breeding to piggery farm located at Kalasa in the district.			
	In case of Rabbit rearing, State support is required for extension services. There are no breeding centres for goat in the district.			

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		Improvement in market linkages for live animals to ensure fair and remunerative prices to small farmers / shepherds.	Improvement in market access will enable removal of middlemen and hence better remunerative prices for small farmers engaged in goat rearing/ piggery	Dakshin Kannada
		Sheds should be modernised with air/water quality control including feeding system. Due to the increasing demand for sheep and goat meat, registered slaughter houses in the State should be modernized on a priority basis for hygienic meat production, better utilization of by products and better returns from meat production.	Helps in hygienic meat production; better utilization of by products and better returns.	Davangere
		Awareness campaign by department regarding AHIDF schemes in the district and facilitating beneficiaries to avail the financial support under the scheme.	-	Haveri
		There are 2 registered slaughterhouses in the district. Establishment of modern abattoirs and slaughterhouses cum meat processing centres by private entrepreneurs with bank credit may be encouraged.	-	Kalaburgi
		Establishing pig breeding farm other than one at Kushalnagar	Currently, the needs of the district are met by breeding centre located in Kushalnagar. There is good demand for pig meat in areas of across all taluks. Establishing more such farms shall lead to meeting the demand of the district.	Kodagu
		Osmanabadi & Daccani Breeding Farm may be established.	Quality meat will be made available for consumers.	Raichur
		Breeding-cum-fattening or fattening units for lambs, kids, piglets and rabbits and may encourage rural meat processing centres, wool processing and carpet weaving units.	Will ensure better price remuneration.	Tumkuru
		Banks may support the farmers by providing necessary credit support while educating	Credit support will ensure development of the sector.	



S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		famers on credit discipline, as this would support many SF/MF in the District.		
		Silage & animal feed manufacturing plant establishment.	Livelihood development from allied activities to large SF & MF of district.	Raichur
9	Fisheries Development	There is a need to increase fish production in the reservoirs through scientific and sustainable stocking with improved varieties of fish. Bringing more waterlogged areas unfit for agriculture under Freshwater Prawn Culture / Poly culture of prawns and carps.	Promotes fishing sector; Increased credit offtake in the sector; Improved livelihood of the farmers through promotion of FPOs, JLGs etc	Bagalkote
		Banks may encourage fishery activities especially fish culture in ponds/tanks by financing SHGs / JLGs. Awareness creation among the fishermen community on extension of working capital along with terms loans and issuance of KCC and also formation of JLGs / FPOs by Fisheries Department / Banks /NGOs		
		Inland marketing of fishes is an important area which is still developing. The infrastructures like cold storages and marketing complexes are required to be promoted under PPP model to ensure hygienic sale of fishes.	Promotes interests of consumers by ensuring hygienic sale of fishes and also promotes fishing sector	
		Cold storage for fisheries is currently not available. However, district has 3 ice plants. Efforts to be made by the department for construction of cold storage infrastructure.	There is increase in demand for fish consumption. Increasing necessary infrastructure will help famers tap the market potential	Ballari
		Fish Market constructed at Siruguppa under RIDF assistance is yet to be operationalised.		
		Popularization of bio floc fisheries and RAS of fish culture is the need of the hour to have definite impact in quality of fish culture.	The demand for fresh fish is high in the district, however, the availability is limited to certain areas only. Popularization of the latest technologies can help the farmers to adopt and earn better income.	Bengaluru Urban
		Modernisation of fish seed farm at Saundatti & Hidkal needs to be taken up by the Fisheries	-	Belagavi

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		Department for augmenting seed production, for which RIDF assistance could be sought		
		Establishment of "Aqua Park", Ornamental fisheries need to be promoted in a big way as adequate potential exists in the district due to geographical advantage and is an activity which can be taken up by women / SHGs.	Due to proximity to Bangalore, there is a huge market for ornamental fisheries which will augment the income of women.	Chikkaballapura
		Cluster financing approach may be adopted by bank branches located nearby water surface area (WSA) in Malnad blocks and waterlogged areas of Hemavathi River.	-	Chikkamagaluru
		Development of fisheries sector through providing HACCP compliant conditions, cold chains, promotion of cage culture, establishment of fish seed hatcheries etc.	HACCP compliant conditions will ensure better market access for fisheries sector. Promotion of cage culture will improve utilization of water bodies. Establishment of fish seed hatcheries provide a reliable supply of stock replenishment for water bodies which are over-farmed.	Dakshin Kannada
		Production of quality fish seed using good quality brood stock and development of fish seed rearing facilities (fry to fingerling) and stocking of fingerlings in the pond/tank are required. Fish transportation schemes to made more bankable and affordable. High tech fish production units like RAS (Re-circulatory Aqua System) is expected to contribute high production in small area and with low water usage.	Increased credit offtake for fish production, good quality fishlets helps augment fish production. RAS and bio floc helps in increased production at smaller areas	Davangere
		Construction of District Fish Market with facilities such as ice plant, cold storage, open market, closed market may be considered. Small fish markets at Taluk place and hobli level may also be considered.	-	Kalaburgi

<b>S. No</b>	<b>Name of the Sector</b>	<b>Critical Interventions Required</b>	<b>Likely outcome/impact</b>	<b>Name of Districts</b>
		Establishing 2 cold storage units of 10MT capacity each and 2 ice plants of 10MT each in Mysuru	This will help reducing post-harvest losses.	Mysuru
		Construction of a Barge and Vessel Landing Facility at Honnavar	Amenities for increasing the fishing activity in the region.	Uttar Kannada
		Extension of fishing jetty in Karwar Taluk.	Amenities for increasing the fishing activity in the region.	
		Wharfs / Ramps for riverine fish landing centres at Nandangadda, Aghanashini and Venkatapur	Amenities for increasing the fishing activity in the region.	
		Ice plants at Karwar, Ankola, Kumta, Honnavara and Bhatkala of 30 tonnes per day capacity	Preservation of marine produce	
		There are no fish seed farms in the district. Seeds are procured from Narayanapura dam and Munirabad dam. Fisheries department may establish fish seed farms in the district.	-	Yadgir
10	Sustainable Agricultural Practices	Initiation of Mission on Integrated Farming Systems in the district by converging various schemes of crop husbandry, horticulture, livestock, and fisheries can give impetus to integrated farming systems approach.	This will increase the productivity as well as production	Bengaluru Urban
		Banks to Finance for various components of IFS	-	Belagavi
		NABARD has successfully implemented IFS in Sringeri block under TDF project involving Wadi and Animal Husbandry activities. Similar models can be implemented by concerned departments in other blocks of the district.	-	Chikkamagaluru
		SHGs may be provided trainings in making of Fermented Organic Manure (FoM)/Liquid Fermented Organic Manure (LFOM)/Phosphate Enriched Organic Manure	Promotion of natural farming	Chitradurga

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		(PROM), which can be marketed through FPOs.		
		Mission mode training & awareness programs on natural farming are required to reverse degradation of soil and water resources.	Saving our soils will improve food and nutrition security.	
11	Farm Credit Others–Bullocks, carts, two wheelers etc.	Proper vaccination for the infectious diseases may be carried out for all the bullocks traded in the local cattle markets. Vaccination certificates may be made compulsory while trading of the animals.	Improves health of the cattle and protects the interest of the buyer.	Bagalkote
		Credit to two wheelers and trolley is the need of the hour.	Being a prominent district in milk production, majority of the dairy farmers produce fodder in the fields which will be away from their cattle sheds. Transportation of fodder on the two wheelers with a trolley attached to it is gaining popularity. Bankers can explore lending to this trending possibility.	Bengaluru Urban
		DICs may train artisans to develop workmanship in manufacturing pneumatic tyre/rubber bound iron wheel carts.	-	Belagavi
		Purchase of two wheelers to be brought into Priority Sector Norms.	This will definitely impact on the lives of farmers which could be utilised for various purposes with low cost in the villages including farming;	Bidar
		Schemes for 'Special breeding programmes' for rearing of male calves and for improving the availability of good quality of bullocks may be implemented by the department	-	Chikkamagaluru
		Rubber bound iron wheel cart developed by CARTMAN may be considered by banks because of advantages in terms of tonnage and easiness to the bullocks.		
		Organised cattle markets need to be setup in all taluks.	-	Kalaburgi

<b>S. No</b>	<b>Name of the Sector</b>	<b>Critical Interventions Required</b>	<b>Likely outcome/impact</b>	<b>Name of Districts</b>
12	Storage Infrastructure	Propagation of Scheme of Agriculture Infrastructure Fund (AIF) /AMI among all eligible beneficiaries like PACS, Marketing Cooperative Societies, FPOs, SHGs, JLGs, Multipurpose Cooperative Societies, agri entrepreneurs and startups	Helps to create post-harvest infrastructure with investments in cold storages, godowns, supply chain services including e-marketing platform, silos, pack houses, assaying units, sorting and grading units, cold chains, logistics facilities, primary processing centers and ripening chambers.	Bagalkote
		Department of Agricultural Marketing, GoK needs to promote 'Ag-mark' grading of agricultural produce and introduce e-tendering system in all APMCs.	Ag-mark' grading will ensure better price and e-tendering will ensure transparency	
		Banks in the district may extend pledge loans to farmers against Negotiable Warehouse Receipts (NWRs).	Increased offtake of credit in the sector and hence promotion of the sector.	
		Creation of storage infrastructure and ReMS facility at all APMCs / CWC / SWC level	This will facilitate price discovery and competitive price for the produce in the market for farmers	Bidar
		Construction of drying yards to overcome shortage	Farmers are forced to use the State Highways and other roads for drying the grains after harvest. Drying Yards in every Gram Panchayat would overcome shortage for drying Ragi, Jowar, Maize, Turmeric, etc	Chamarajanagar
		Increase in procurement and post-harvest storage facilities, creation of pack houses, develop cold chains/ cold chambers, etc	Would result in superior quality of processed fruit and vegetables	
		There is a need for construction of godowns for preservation/storage of food grains /onion near the production sites.	-	Chikkamagaluru
		Requirement of an approach road for Akshaya Food Park. Development of roads in main market yard (APMC), Chitradurga.	Better movement of goods and services.	Chitradurga
Producer Organizations, co-operative societies and voluntary agencies can play a vital role in aggregation of farmers produce for safe storage and transport with the intention of reducing the	-	Kalaburgi		

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		costs. The agencies can also facilitate primary processing of commodities for increasing the shelf life. Some of the emerging activities are development of cold chains, refrigerator vans, private wholesale markets, low energy cold chambers for on-farm storage, onion godowns, silos etc. This would also help in increasing farmers' income.		
		Increase in procurement and post-harvest storage facilities, creation of pack houses, develop cold chains/ cold chambers, etc	Would result in superior quality of processed fruit and vegetables	Koppal
		Banks have to finance pledge loans to farmers against eNWR. None of the godowns in Mandya are accredited under NWR. Threshing yards are very much needed in the district as farmers are using roads for the same, which is unhygienic and also results in losses.	Use of eNWR can reduce distress sale of produce and yield better returns to the farmers. Threshing yards provide space for hygienic and safe processing of the agriculture produce and doesn't deteriorate the quality of produce unlike threshing on road.	Mandya
		Creation of new agri. markets, certification/standardization centres and other post-harvest facilities near the major production centres.	Increase in storage capacity of district avoiding outflow of produce for storage.	Raichur
13	Land Development	Conducting regular awareness/capacity building programmes for farmers as well as bankers on soil conservation measures required to protect the fertility of the soil.	Promotion of sustainable agriculture.	Bagalkote
		Awareness for cultivation of Neem trees to be promoted	As quality neem oil is not available for mandatory neem coating of Urea to be sold to farmers in India. There is a huge demand for good quality neem fruits/neem oil, neem products	
		Set up soil testing laboratories in each taluk or encourage PACS/Agri graduates to set up soil testing laboratories and help them avail of incentives under the ACABC scheme of GoI.	Promotes scientific agriculture practice and better yield.	
		Banks may extend institutional credit in the developed watersheds for taking up of income	-	Chikkamagaluru

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		generating activities by the families in the watershed areas.		
		Area based measures like terraces, bunding, growing vegetative cover etc. could be taken up by farmers on community basis.	Area based measures help improve production and productivity and could be taken up on community basis to reduce costs	Dakshin Kannada
		The district has cultivable wasteland to the tune of 10% of the total geographical area. Efforts to cover this area under cultivation by suitable land development and soil & water conservation methods.	Bringing about cultivable wastelands under food cultivation will bring about overall improvement in production hence improving availability	
		Establishment of more soil testing labs and increase the current coverage of soil health cards at Hobli level. Promotion of organic farming as a means of soil health improvement, incentivising green manure practices, enriched compost, vermicomposting, bio-fertilisers, bio-control agents	STL promotes scientific agriculture practice and better yield. The type of manure, pesticide, if needed be	Davangere
		Climate Smart Technologies, suitable adaptation measures as envisaged in State Action Plan on Climate Change may be taken up through regular funding or National/International Climate Funding options	This will result in sustainable climate smart methods in retaining the soil nutrients by enhancing the soil quality for better sustainable productivity.	Kodagu
14	Agri Infra Others	There is a need to encourage the activities like seed production, production of bio-pesticides, fertilizers and vermicomposting.	Promotes sustainable agriculture	Bagalkote
		Tissue culture labs in the district are limited and hence the cost of input is higher for the farmers	There is a need to promote tissue culture, agrobiotechnology, own seed production, bio-pesticides/fertilisers, vermi composting etc. to enhance soil fertility, crop productivity and farmer's income.	Bengaluru Urban
		As farmers have started moving towards less-chemical cum organic farming methods, the activities like production of bio-fertilizers, bio-	-	Chikkamagaluru

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		pesticides, and vermi compost may need to be given more thrust and attention.		
		Common covered drying yards for cashew growing clusters and arecanut growers	Common drying sheds in clusters will enable SF/MF to avail use of such facility, undertake primary processing and help improve value of produce	Dakshin Kannada, Udupi
		Dairy farmers establish vermi-compost units depending upon the unit size of their dairy units.	Establishment of vermi-compost units will enable farmers to generate additional income and also aid in organic cultivation efforts, bringing about overall improvement in incomes	
		Establishing Tissue Culture Units - In Mysuru district, the farmers need yearly around 3 crore tissue culture plants of Banana (Source: KVK). However, there is only one certified tissue culture lab and production unit viz. Mysuru Organics which is not able to meet the demand. So, the farmers are purchasing the tissue culture plants from unauthorized dealers/vendors which is costing more and not everyone is able afford.	Establishing banana tissue culture plants production units will help arrest spread of Fusarium wilt disease and provide better yields.	Mysuru
		Establishment of new Seed Production Units - Currently, seed demand in the district is 3500 Tonnes and supply is 1800 Tonnes (Source: Dept. of Agriculture). Hence, 5 more plants are needed with 400-500 Tonnes per year. As there is growing demand for organic seeds, ORFS can setup organic seed production unit.	This will help in providing access to quality seeds.	
		At present the commercial chemical fertilizers are still the main source of plant nutrients. Therefore, organic resources should be used in integration with chemical fertilizers to narrow down the gap, as well as sustain the quality of the soil. Traditional seed varieties from good sources and improved and high yielding	Will ensure better soil health and yield.	Tumkuru



S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		varieties from different resource institutions such as agricultural universities, Krishi Vigyan Kendras and reputed Agro companies.		
		Dairy farmers establish vermi-compost units depending upon the unit size of their dairy units.	Establishment of vermi-compost units will enable farmers to generate additional income and also aid in organic cultivation efforts, bringing about overall improvement in incomes	Udupi
15	Food and Agro Processing	Hassle free and timely issue of various permissions / factory, trade licenses to entrepreneurs on a single window mode need to be ensured, for development of the sector.	Simplifies the process of obtaining necessary clearances in the sector and promotes the sector	Bagalkote
		Agriculture and food processing sector have a long and fragmented supply chain, which is a critical bottleneck in the growth of the sector. There is a need to organize the sectors into activity specific cluster		
		Encouraging setting up of pre-processing centres and pre-cooling facilities and quality measurement / control infrastructure near farm gate and mandis.		
		Small sized processing units for vegetables, fruits, meat, flour mills, dal mills may be set up at hobli / block level.	Food processing will provide assured market for farmers besides creating employment opportunities.	Ballari
		Banks are insisting on conversion of land for establishment of food processing units. Government and SLBC may explore possibility of finance without DC conversion.	-	Belagavi
		As the district has vast potential for development of agro-processing sector, there is a need to establish a Food Park to provide infrastructure facilities like power and water. Cold chain needs to be developed in the district.		
		Shortage in procurement and post-harvest storage facilities have led to inferior quality of		

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		processed fruit and vegetables. Horticulture department to set up processing units and cold storages in all taluks		
		Profile of agro/ food-based units in the district is dominated by tiny/ household units. PMFME scheme to be propagated so as to reach the true workers.	Availability of cheap labour, large number of SHGs offer the required workforce for food and agro processing units, thus providing them steady income.	Chamarajanagar
		Most of the processing units belong to the unorganised sector, where application of food-based laws for hygiene are not followed strictly. Training of micro, small and medium enterprises in the unorganised sector on food safety and quality standards is required.	Will provide impetus to the sector	
		SHGs may be assisted in making traditional foods as per standardized norms, with proper training and financial assistance. Technologies developed by CFTRI & DFRL, Mysuru can be transferred to these groups / women entrepreneurs for production of quality products.	The district has predominantly high horticulture production, through food processing farmers can harness the full value of it.	Chikkaballapura
		Wherever the raw material availability is highly seasonal in nature, the unit should be in a position to process multiple commodities whose availability spreads over the entire year.	-	Chikkamagaluru
		To ensure better marketing of products made by mini food processing units, the district requires one nutritional testing lab.	Supports many micro food processing units who otherwise have to depend on CFTRI, Mysore.	Chitradurga
		Training of micro, small and medium enterprises in the unorganised sector on food safety and quality standards.	Food safety standards are considered important from a marketability, price realization, avoiding health hazards, etc., standpoint and hence creation of awareness needs to be accorded priority.	Dakshin Kannada
		Fostering strong linkages between industries, developers of new technologies, academic	Fostering strong linkages between various stakeholders in food sector can help in enabling	

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		institutions, R & D agencies, banks, etc. can help in enabling access to best practices, technology, capital and marketing opportunities by entrepreneurs in food processing sector and needs to be encouraged.	access to best practices, technology, capital and marketing opportunities.	
		Minimizing wastage at all stages in the food processing chain by developing infrastructure for storage, transportation and processing of agro-food produce. Ensuring a hassle free and timely issue of various permissions, trade licenses to entrepreneurs on a single window mode helps simplify the process	By reducing food waste, businesses can save money, reduce their environmental impact, and help ensure that the global population has access to safe and nutritious food.	Davangere
		A food park in Dharwad district will hugely boost the sector.	Boost to post harvest management and MSME sector expected.	Dharwad
		Agriculture and food sector have a long and fragmented supply chain, which is a critical bottleneck in the growth of the sector. There is a need to organize the sectors into activity specific cluster	Simplifies the process of obtaining necessary clearances in the sector and promotes the sector	Haveri
		Encouraging setting up of pre-processing centres and pre-cooling facilities and quality measurement / control infrastructure near farm gate and mandis.		
		There is an urgent need to accelerate setting-up of units in remaining area of the food park at K R Pete.	Post Covid -19 the number of units established in the food park have drastically come down and availability of MSME arcade is yet to be utilized by the entrepreneurs. There exists potential of establishment of at least 25 units in the food park, which can boost the agriculture value chain in the district.	Mandya
		Tumakuru district is known for growing tamarind & jack fruit, potential exists for setting up of processing units in Madhugiri, Sira, Gubbi and Pavagada taluks.	Will provide additional income generation activities.	Tumkuru

<b>S. No</b>	<b>Name of the Sector</b>	<b>Critical Interventions Required</b>	<b>Likely outcome/impact</b>	<b>Name of Districts</b>
16	Agri Ancilliary - Others	Banks may finance ACABCs and Cooperative Marketing Societies so as to ensure technical support and better forward linkages for agriculture and allied activities in the district	Promotion of Agriculture ancillary activities in the district	Bagalkote
		The LAMPs in Koppa Taluk and Mudigere Taluk have to increase their sourcing of honey, provide value addition to the forest produce like shikakai, vatehuli, cinnamon and cloves for which they have to put up a plant for extraction of oils from spices, which requires capital support.	-	Chikkamagaluru
		Good rated GP Level SHG Federations may be strengthened to offer more need based loan to SHG women to meet their farm and non-farm requirements.	Hassle free loan to SHG women with minimum documentation, so that banks can focus on mid ticket sized loans	Chitradurga
		Bankers should increase financing through various modes and providing consumption loan/small loans to small/petty business. MFIs to approach companies for onlending.	Influx of capital to various lending business helps its growth	Davangere
		With a large number of Farmers Producers Cooperatives being formed with support from NABARD and Horticulture Department/ SFAC in the district, banks may actively engage with these societies to meet their credit requirements, especially as these societies are start-ups and do not have adequate resources and may not be able to provide adequate collateral security for these activities.	Farmers cooperatives and FPO financing will lead to creation of agriculture infrastructure necessary for income generation.	Dharwad
		SHGs may be assisted in making traditional foods as per standardized norms, with proper training and financial assistance. Technologies developed by CFTRI &DFRL; Mysore can be transferred to these groups / women	-	Yadgir

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		<p>entrepreneurs for production of quality products.</p> <p>Encouraging setting up of pre-processing centres and pre-cooling facilities and quality measurement / control infrastructure near farm gate and mandis.</p> <p>SHG financing is based on the concept that poor are economically active. Bankers need to promote more intervention to upscale income generating activities to increase the credit flow to SHGs and consider providing higher quantum of loans to matured SHGs so that the loan averages around ₹3.50 lakh per SHG in tune with the SLBC instructions.</p>		
17	Micro Small Medium Entreprises	<p>Assured and reliable power supply</p> <p>Bank may provide adequate and timely working capital for micro enterprises. The working capital requirements may be met by issuing SCC.</p> <p>Currently, almost all of the industrial areas are located in and around Ballari. DIC has to devise a policy for encouraging the setting up of industrial parks in different blocks.</p> <p>Any new unit establishment needs approval from multiple agencies such as municipality, ESCOM, Labour department, Pollution control board etc. At present there is no single portal for all necessary clearances causing difficulty/inconvenience to entrepreneurs. DIC may think of establishing Single Window Clearance portal, which can enhance ease of doing business.</p>	<p>Promote industries in a sustained manner in the district</p> <p>Availability of WC to entrepreneurs and promotion of the sector.</p> <p>This will lead to improvement in Ease of Doing Business in the district which will attract more investments and create more job opportunities.</p>	<p>Bagalkote</p> <p>Ballari</p>

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		A structured marketing arrangement may be put in place for retail sales of goods produced by SHGs and other craftsmen.	These interventions would ensure adequate liquidity with the MSMEs to carry out their regular operations. Presence of robust marketing channels would facilitate better price realization for SHGs and rural artisans.	Bengaluru Rural
		Development of Handloom Sector through effective linkages, extension of credit and training needs to be addressed (Handloom Dept.)	-	Belagavi
		Create awareness among the beneficiaries on PMEGP by DIC and bankers should fast-track clearing the proposals under this scheme	This will be helpful for the Entrepreneurs to take of the new activities and create self-employment	Bidar
		Development of appropriate technologies for various manufacturing processes	Would lead to substantial reduction in cost of manufacturing, enhanced labour productivity, reducing material, wastage and minimising energy consumption.	Chamarajanagar
		Industrial scenario of Chikmagalur district is dominated by micro units. Most of these units do not approach the banks for investment / capital needs. There is a need to bring such units under banking fold.	-	Chikkamagaluru
		Assistance for organized marketing of products of SHGs, JLGs	Assistance for organized marketing of products of SHGs, JLGs, craftsmen, micro entrepreneurs etc. will enable handholding of these units and ensure long term sustainability of these ventures.	Dakshin Kannada
		More centres for providing incubation support to entrepreneurs may be set up in technical and management institutions.	Incubation centres handhold capabilities and build capacities of individual entrepreneurs. Such enterprises have better chances of success and hence need to be promoted	
		An industrial area in Somwarpet may be setup which is gateway to other districts like Chikmagalur and Hassan	This shall improve in Ease of Doing Business in the district which will attract more investments and create more job opportunities.	Kodagu
		Improve institutional structures at field level and to evolve better coordination among the	Promotional interventions such as training/ skill development, organising artisans into SHGs,	Koppal

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		various organisations, expand outreach of existing schemes/ programmes, facilitate start-ups and evolve a time bound exit mechanism	design development, exposure visits, marketing support/ tie-up are being taken up by State Govt./ NABARD/ TECSOK/ NGOs, etc., to provide necessary skills to start own ventures.	
		As on March 2023, Mandya reportedly has 20996 MSME enterprises. Sachetizations of loans is a boon for such enterprises, however, the concept is yet to be popularised in the district.	As such the benefits of sachetizations of loans is availed by limited progressive industrialists in the district. Whereas with the use of the concept, more than 20000 micro enterprises can progress and convert themselves from micro to small enterprises in a limited period.	Mandya
		Currently, almost all of the industrial areas are located in Mysuru and Nanjangudu. More focus should be given to setup industrial areas in other talukas especially Hunsur and Periyapattana as they are on Mysuru-Kodagu Road where new ring road is expected.	This will help in decentralized development, reduce migration from different blocks to Mysuru block and reduce chances of agglomeration diseconomies.	Mysuru
		Single portal for all approvals - Any new unit establishment needs approval from multiple agencies such as municipality, ESCOM, Labour department, Pollution control board etc. At present there is no single portal for all necessary clearances causing difficulty /inconvenience to the entrepreneurs. DIC may think of establishing Single Window Clearance portal.	This will lead to improvement in Ease of Doing Business in the district which will attract more investments and create more job opportunities.	
		Banks can take advantage of financing clusters in the district viz., weavers cluster in Y N Hoskote of Pavagada taluk and Gubbi, Carpentry cluster in Turvekere town, Bamboo cluster in Kythsandra of Tumakuru taluk, beside coir and wool clusters in Gubbi and C N Halli taluks etc.	Will support the sector and provide additional income to farmers.	Tumkuru

<b>S. No</b>	<b>Name of the Sector</b>	<b>Critical Interventions Required</b>	<b>Likely outcome/impact</b>	<b>Name of Districts</b>
		Vijayanagara has a significant area under Maize and groundnuts. However, the majority of the produce has been sold to the local agents. There is a need to set up Agro processing clusters for the crops.	This will ensure assured and better income to farmers in addition to generating employment in the region.	Vijayanagara
		Currently, almost all of the industrial areas are located in and around Hosapete. DIC has to devise a policy for encouraging the setting up of industrial parks in different blocks.	Will help in inclusive development of all the blocks.	
18	Export Credit	Focused attention on strengthening export infrastructure like establishment/enhancement/modernization of inland container depots, container freight stations, hassle-free clearance, product specific cold storages, warehouses etc.	Provides suitable environment for promotion of the sector	Bagalkote
		GoI has identified Ballari to be promoted as Export hub for Granite, Jeans Pant, Apparels Jute products, Engineering, products, Electrical Machinery and Transport Equipment, Engineering/ Iron-ore based value added products, Pomegranate, Chilies. DIC may create requisite infrastructure for making Ballari as export hub.	Better infrastructure will attract more investments, thereby increasing employment opportunities to local population.	Ballari
		Exports of agriculture produce like pulses / soyabean / oil seeds /fruits etc and handicrafts – Bidriware to be encouraged by Agri Deptt /Horticulture Deptt /DIC	Farmers may get remunerative price for the produce. This will reduce the balance of payment deficit;	Bidar
		Cold chain to nearest port/airport may be established to facilitate export of perishable export products.	-	Chikkamagaluru
		To encourage farmers to raise millets. Promotion of millet based infant formula food through SHGs. Aggregation through FPOs and tie up with APEDA for exports. A targeted	The global Infant Formula Market is projected to grow at a CAGR of 9.9% from 2023 to 2032. SHG women/entrepreneurs can grab this opportunity. This will promote usage of nutriceals.	Chitradurga



S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		scheme from sowing to marketing in this regard is required.		
		Exporters may be encouraged to avail the export credit insurance facilities of ECGC.	Risk mitigation measures like export credit insurance, will enable more participation in export sector, thereby creating additional employment and income generating opportunities	Dakshin Kannada
		Encourage MNCs, GCCs and Start-ups to contribute to innovation-driven products and services while laying emphasis on social development.	Promotion of Export sector development in the district.	Haveri
		Evolve Suitable export-oriented strategies focusing on specific products sectors with inputs from the Export Associations/ Exporters. This will include taking part in international trade fairs/ exhibitions, providing inputs on technology upgradation, packaging, quality, etc.	-	Kalaburgi
		Convergence of Promotion schemes of Government of Karnataka, Ministry of MSME, Government of India and SIDBI will lead to greater access to credit.	Greater convergence helps boost the efficiency, total business production in the district were there only 7562 industries registered with DIC as on 31 March 2023.	Kodagu
		Export House & branch in the district for pre-shipment credit within the stipulated time after the dispatch of goods or converting them into post-shipment credit.	Promotion of export from district & better development of value chains.	Raichur
		Credit facility extended remains low. Sericulture sector and toys of Channapatna can be concentrated for increasing the credit flow.	The Channapatna toys are GI tagged products which will enhance the returns to the artisans if sold overseas. Further, support from bankers for export of sericulture products can enhance the employment generation under the sector.	Ramnagara
19	Education	Banks to conduct awareness/sensitization programme at the start of the academic season to enable students to avail of the facility. Camps	Credit offtake in the sector and promotion of the sector.	Bagalkote

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		may also be organised at regular intervals. The students should be made aware of the facilities available in terms of education loans, subsidies, scholarships, etc. The services of FLCs can be utilised for the same.		
		A specific loan fair for the graduating students should be held on annual basis to promote the education loans for the needy. Lack of information on the available schemes and knowledge on the banking among the students hinders the credit flow in the sector.	Loan fairs give platform for the students to interact with the bankers and avail the benefit of the credit facility to pursue advanced studies.	Bengaluru Urban
		There is a need to spread awareness on the Central Sector Interest Subsidy scheme for studies in India by students from the economically weaker sections with parental income of up to ₹4.50 lakh during the moratorium period through the colleges.	-	Chikkamagaluru
20	Housing	In addition to sanctioning housing loans, banks need to develop a Housing Loan Guarantee Fund by leveraging and linking the loan a/c with insurance	In the event of the untimely demise of the loanee, the loan can be adjusted against the claim proceeds from out of the guarantee fund	Bengaluru Urban
		There is a need to create awareness of the various government schemes under which subsidies are available to eligible beneficiaries. The district administration should take necessary steps to create such awareness.	Creating awareness on various government schemes / subsidies will enable more people to take up house construction / repairs, providing beneficiaries will shelters and overall improving the quality of life	Dakshin Kannada
		Need for awareness creation among people by banks and district authorities by organizing awareness camps, housing loan mela, participating in property fairs etc., Also, sensitizing among bankers & borrowers inturn on the documentation required for housing loan & swift follow-up thereof to avoid delay in sanction of loan	Credit offtake in the sector and promotion of the sector.	Haveri

<b>S. No</b>	<b>Name of the Sector</b>	<b>Critical Interventions Required</b>	<b>Likely outcome/impact</b>	<b>Name of Districts</b>
		Housing loans under PMAY-R/U requires additional funds which can be explored in coordination with implementing department by the bankers	Extent of housing loans issued will increase with the target based approach of the PMAY scheme.	Mandya
		Promote affordable housing for needy people through PMAY, Devraj Urs Housing Scheme, Dr. B.R. Ambedkar Nivasa Yojane, Rural Ashraya/Basava Vasathi Yojane.	Housing for all will be ensured providing pacca houses to rural sector of district.	Raichur
21	Renewable Energy	Conduct exclusive training of rural youth on maintenance and servicing of solar transmission and creating more awareness about solar lighting, solar pump sets, solar cookers, wind pumps etc.	Increased knowledge about the sector and promotion of renewable energy	Bagalkote
		As the district has a sizeable number of industries, they may be incentivized to adopt renewable sources of energy for their industrial needs.	Use of Renewable energy for industry purposes will reduce their carbon footprint.	Ballari
		Extension support by the implementing departments, imparting training to farmers and rural youth about skills for installation and maintenance of bio-gas plants are needed to revive the bio-gas programme. Involvement of NGOs, SHGs and FPOs to disseminate the knowledge about the use of plants and also benefits derived to the rural people are needed to popularize the scheme	With sufficient availability of cattle in the district harnessing biogas can give multiple benefits to the dairy farmers.	Bengaluru Urban
		The State Government/Karnataka Renewable Energy Development Ltd. may undertake policy initiatives to bring awareness amongst the farmers and the rural community as well as bankers about the benefits of solar energy and other renewable sources of energy through setting up an office at Belagavi district and also on setting up of units on waste being collected	-	Belagavi

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		in Belagavi district, especially in cities and towns.		
		The constraints in biogas sector include good trained masons, poor installation / quality of plant construction, negligence on periodic repair and maintenance, poor post installation services, lack of ownership/ poor group dynamics for community bio-gas plants, etc. Bankers need to finance individuals for setting up Biogas units.	-	Chikkamagaluru
		Deep sea fishing vessels may be encouraged to install solar panels to take care of energy needs for cooking and lighting during their deep-sea fishing trips. This will reduce dependence on fossil fuels.	Encouraging deep sea vessels to partly solarize will enable reduction in dependence on fossil fuels while improving their overall returns from the activity by reducing costs	Dakshin Kannada
		Establishment of solar grid one in each taluk as planned under CDAP.	Green initiatives will help reduce load on conventional pollution bound Kudagi thermal power plant of NTPC.	Raichur
		Extension support by the implementing departments, imparting training to farmers and rural youth about skills for installation and maintenance of bio-gas plants are needed to revive the bio-gas programme. Involvement of NGOs, SHGs and FPOs to disseminate the knowledge about the use of plants and also benefits derived to the rural people are needed to popularize the scheme.	With sufficient availability of cattle in the district harnessing bio-gas can give multiple benefits to the dairy farmers.	Ramnagara
22	Social Infra	Tie-up with corporates for using CSR funds for improving infrastructure in schools/ colleges and health Centres as well as creating sanitary facilities.	Augment development of social infrastructure	Bagalkote
		Primary Health Centres should tie-up with quality hospitals in urban Centres/metros for	Resolve the issue of non-availability of quality doctors in local health Centres	

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		getting advice on treatment over tele-medicine infrastructure.		
		Rejuvenation of existing MI tanks by de-silting would enhance their storage and percolation capacities.	Water conservation measures would reduce the pressure on the over-exploited ground water reserves of the district.	Bengaluru Rural
		FHTC in all the households with pucca house and RCC roof can be explored with bank credit	With raising awareness on health and increasing nuclear family structure, FHTC are a highly viable option for the households for enhancing standard and ease of living.	Bengaluru Urban
		Primary Health Centers should tie-up with quality hospitals in urban centers/metros for getting advice on treatment over tele-medicine infrastructure. This would resolve the issue of non-availability of quality doctors in local health centers.	-	Chikkamagaluru
		Building underground drainage system in the residential areas of Bandravi & other villages of Santhegudda GP area, Molakalmur taluk.	Promotes sanitation	Chitradurga
		NABL certified laboratory for testing water and wastewater at district level.	Self-reliance for water quality testing	
		Desilting Tanks - There are 973 tanks in different taluks which needs to be desilted on a periodic basis	This will lead to increase in the rain-water storage capacity for ground water recharge of the concerned areas. Fishery activity can be promoted in these tanks.	Mysuru
		Power Infrastructure - Chamundeshwari Electricity Supply Corporation (CESC) needs to improve provision of infrastructure facility through setting up of grids at all the hoblis and ensure adequate power for irrigation and agro processing/ small scale sector units with unrestricted supply.	This will help in boosting agro, agro-allied, agro-processing and other industrial activities in the district.	
		There are 678 APMC godowns in the district with a capacity of 3,71,665 MT with capacity utilisation to the extent of 70%. Further, more	Better price remuneration.	Tumkuru

S. No	Name of the Sector	Critical Interventions Required	Likely outcome/impact	Name of Districts
		potential in storage of dry coconuts (copra) in Turvekere, Tiptur, C N Halli and Gubbi Taluks can be utilised to leverage bank credit which would also ensure Asset creation in the Rural Areas.		
		Extension of Heble Venkatapur Fisheries Link road in Bhatkal Taluk	The construction of this road would connect Fisheries villages, viz., Heble and Venkatapur, giving boost to the fishing activities.	Uttar Kannada
		Construction of Super speciality Hospital , Ankola	People will avail best services within the district instead of moving to Udupi and Mangalore.	
23	Informal credit delivery system	The focus may be placed on identification/ re-activating dormant/ inactive groups by providing various capacity building initiatives both to bankers and SHG members. Further, issues pertaining to multiple membership and multiple financing need to be addressed.	This will facilitate financial inclusion of members of the dormant SHGs. Further, focus on quality of SHGs would enable them to eventually graduate from thrift to income generation activities.	Bengaluru Rural
		Thrust on sustenance of existing groups with focus on quality of SHGs, which is key to sustenance may be focussed up on. SHPIs/Banks may introduce regular grading of SHGs. The SHGs need to be provided refresher trainings, reiterating the basic tenets, group dynamics and proper book keeping.		
		Banks are reluctant to finance JLGs due to earlier defaults. This has resulted in landless and small businessmen, vegetable vendors taking loan from MFIs at higher rates. Banks should increase JLG loans under priority sector lending.	-	Belagavi
		Banks can also explore funding/refinancing GP Level SHG Federations as the system adopted by them for identification of borrowers, release and recovery of loans is quite good, with a loan recovery rate of 98%.	Better recovery of SHG loans & bank can focus on medium ticket loans	Chitradurga

<b>S. No</b>	<b>Name of the Sector</b>	<b>Critical Interventions Required</b>	<b>Likely outcome/impact</b>	<b>Name of Districts</b>
		SHG-BLP needs to address issues such as dormancy / disintegration of SHGs, convergence of SHG-BLP with the developmental programmes of government / development agencies, reduction of NPA levels, etc.	Will improve credit discipline and encourage bankers to increase credit support.	Tumkuru

### List of Abbreviations

AA	Account Aggregator	BCM	Billion Cubic Meters
ABP	Aspirational Block Programme	BDA	Business Development Assistance
ACP	Annual Credit Plan	BF	Business Facilitator
ACABC	Agri Clinic and Agri Business Centre	BIRD	Bankers Institute of Rural Development
ADB	Asian Development Bank	BLBC	Block Level Banker's Committee
ADS	Area Development Scheme	BPL	Below Poverty Line
ADI	Agricultural Digital Infrastructure	BESCOM	Bangalore Electricity Supply Company Limited
AEZ	Agri. Export Zone	BSBDA	Basic Savings Bank Deposit Account
AF	Adaptation Fund	CAD	Command Area Development
AH	Animal Husbandry	CAGR	Compounded Annual Growth Rate
AH&VS	Animal Husbandry and Veterinary Services	CASA	Current Account and Savings Account
AF	Adaptation Fund	CAT	Capacity Building for Adoption of Technology
AI	Artificial Insemination	CBBO	Cluster Based Business Organizations
A.I.	Artificial Intelligence	CBF-SSE	Capacity Building Fund - Social Stock Exchange
AIBP	Accelerated Irrigation Benefits Programme	CBs	Commercial Banks
AIC-SRS-ICAR-NDRI	Atal Incubation Centre – Southern Regional Station – Indian Council of Agricultural Research - National Dairy Research Institute	CBS	Core Banking Solution
AIF	Agriculture Infrastructure Fund	CCF	Climate Change Fund
AHIDF	Animal Husbandry Infrastructure Development Fund	CDP	Cluster Development Programme
AMC	Arka Microbial Consortium	CDR	Credit Deposit Ratio
AMI	Agriculture Marketing Infrastructure	CEDOK	Centre for Entrepreneurship Development of Karnataka
AMIF	Agriculture Market Infrastructure Fund	CGC	Credit Guarantee Scheme
AMRUT	Atal Mission for Rejuvenation and Urban Transformation	CGSSI	Credit Guarantee Scheme for Stand up India
APMC	Agricultural Produce Market Committee	CGTMSE	Credit Guarantee Fund Trust for Micro and Small Enterprises
APY	Atal Pension Yojana	CGWB	Central Ground Water Board
APEDA	Agricultural and Processed Food Products Export Development Authority	CHC	Community Health Centres
AR5	Assessment Report-5	CHSCs	Custom Hire and Service Centres
ARDB	Agriculture and Rural Development Bank	CIBA	Central Institute of Brackishwater Aquaculture
ASIDE	Assistance to States for Developing Export Infrastructure and Allied Activities	CICs	Credit Information Companies
ATMA	Agricultural Technology Management Agency	CIFRI	Central Inland Fisheries Research Institute
AUA	Authentication User Agency	CISS	Capital Investment Subsidy Scheme



AVISH KAR	Association for Village Institutions Social Health, Agriculture and Rural Development	CIPHET	CIPHET Study
AWC	Anganwadi Centre	CKYC	Central Know Your Customer
B&M	Brick and Mortar	CIET	Centre for Internet of Ethical Things
BC	Business Correspondent	CMFRI	Central Marine Fisheries Research Institute
BCA	Banking Correspondent Agent	CNNL	Cauvery Neeravari Nigama Limited
CPSE	Central Public Sector Enterprises	FDI	Foreign Direct Investment
CoE	Centre of Excellence	FHTC	Functional Household Tap Connections
CPCRI	Central Plantation Crop Research Institute	FIEO	Federation of Indian Export Organisations
CRAR	Capital to Risk weighted Asset Ratio	FIF	Financial Inclusion Fund
CRISIL	Credit Rating Information Services of India Limited	FIP	Financial Inclusion Plan
CSC	Common Service Centres	FIP	Financial Information Providers
CSS- GoI	Central sector Scheme – Government of India	FISHCOF ED	National Federation of Fishers Co-operative Ltd.
CWC	Central Ware Housing Corporation	FIU	Financial Information User
CWC	Community Water Centres	FLC	Financial Literacy Centre
DAC&F W	Department of Agriculture, Cooperation & Farmers Welfare	FLCC	Financial Literacy and Credit Counselling Centres
DAE	Direct Access Entity	FM	Farm Mechanization
DAK&V S	Department of Animal Husbandry and Veterinary Services	FPF	Food Processing Fund
DAM	Department of Agricultural Marketing	FPO	Farmer Producers' Organization
DAP	Development Action Plan	FRUITS	Farmer Registration and Unified Beneficiary Information System
DBT	Direct Benefit Transfer	FSPF	Farm Sector Promotion Fund
DDD- GKY	Deen Dayal Upadhyaya-Grameen Kaushal Yojana	FSS	Farmers' Service Societies
DCCB	District Central Cooperative Bank	FSSAI	Food Safety and Standards Authority of India
DCC	District Consultative Committee	F2C	Farm to Consumer
DCDC	District Cooperative Development Committee	GAP	Good Agricultural Practices
DCP	District Credit Plan	GCA	Gross Cropped Area
DDM	District Development Manager	GCF	Green Climate Fund
DIDF	Dairy Processing and Infrastructure Development Fund	GDP	Gross Domestic Product
DLCC	District Level Consultative Committee	GIA	Gross Irrigated Area
DLRC	District Level Review Committee	GKVK	Gandhi Krishi Vigyana Kendra
DLTC	District Level Technical Committee	GIS	Geographic information system
DMAs	Deposit Mobilising Agents	GLC	Ground Level Credit
DOC	Day Old Chicks	GOBAR- Dhan	Galvanising Organic Bio-Agro Resources Dhan
DRDA	District Rural Development Agency	GoI	Government of India
DTPC	District Tourism Promotion Council	GoK	Government of Karnataka
ECGC	Export Credit Guarantee Corporation	GSA	Gross Sown Area
EESL	Energy Efficiency Services Limited	GRAM	Gramin Agri Market

EDP	Entrepreneurship Development Programme	GSDP	Gross State Domestic Product
EMPRI	Environmental Management & Policy Research Institute	GSVA	Gross State Value Added
e-NAM	e-National Agriculture Market	GTTC	Government Tool Room & Training Centre
EE	Executing Entity	GWRA	Ground Water Resource Assessment
EESL	Energy Efficiency Services Limited	HESCOM	Hubballi Electricity Supply Company Limited
ENVIS	Environmental Information System	HOPCOM S	Horticultural Producer's Co-operative Marketing and Processing Society Ltd.
FAIDF	Fisheries and Aquaculture Infrastructure Development Fund	HYV	High Yielding Variety
FAR	Floor Area Ratio	IBA	Indian Banks' Association
FCI	Food Corporation of India	KNNL	Karnataka Neeravari Nigama Limited
ICD	Investment Credit Department	KREDL	Karnataka Renewable Energy Development Limited
ICDS	Integrated Child Development Services	KSAMB	Karnataka State Agriculture and Marketing Board
ICMR	Indian Council of Medical Research	KSBDB	Karnataka State Biofuel Development Board
ICT	Information and Communications Technology	KSCAB	Karnataka State Cooperative Apex Bank
IFS	Integrated Farming System	KSFC	Karnataka State Finance Corporation
IIBF	Indian Institute of Banking & Finance	KSFCF	Karnataka State Fish Cooperative Federation
IIHR	Indian institute of Horticulture Research	KSNDMC	Karnataka State Natural Disaster Monitoring Centre
IIIT	Indian Institute of Information Technology	KSOCA	Karnataka State Organic Certification Agency
IIM	Indian Institute of Management	KRSRAC	Karnataka State Remote Sensing Applications Centre
IISc	Indian Institute of Science	KSRTC	Karnataka State Road Transport Corporation
IoAT	Internet of Agriculture Technology	KSSIDC	Karnataka State Small Industrial Development Corporation Ltd
IPCC	Intergovernmental Panel on Climate Change	KVI	Khadi and Village Industries
IPM	Integrated Pest Management	KVIB/KVIC	Khadi and Village Industries Board/ Khadi and Village Industries Commission
ISAM	Integrated Scheme for Agriculture Marketing	KSWC	Karnataka State Warehousing Corporation
ISEC	Institute of Social and Economic Change	KYC	Know Your Customer
IT	Information Technology	KUA	KYC User Agency
ITEs	Information Technology enabled Services	KVK	Krishi Vigyan Kendra
ITI	Industrial Training Institute	LAMPS	Large Sized Adivasi Multi-Purpose Societies
ITPO	India Trade Promotion Organisation	LBR	Lead Bank Return

IUCN	International Union for Conservation of Nature	LDM	Lead District Manager
IWMS	Integrated Watershed Management Scheme	LEDP	Livelihood and Enterprise Development Programmes
IWMP	Integrated Watershed Management Programme	LMS	Learning Management System
IWRM	Integrated Water Resources Management	LPCD	Litres per capital per day
JAM	Jandhan Aadhar Mobile	LPS	Lower Primary Schools
JJM	Jal Jeevan Mission	LTIF	Long Term Irrigation Fund
JLG	Joint Liability Group	LTRC	Long Term Rural Credit
JNNSM	Jawaharlal Nehru National Solar Mission	LWE	Left Wing Extremism
JSYS	Jala Samvardhane Yojana Sangha	MATU	Marketing Assistance and Technology Upgradation
KAPPEC	Karnataka State Agricultural Produce Processing & Export Corporation Limited	MDF	Moderately Dense Forest
KBJNL	Krishna Bhagya Jala Nigam Limited	MEDP	Micro Enterprise Development Programme
KIADB	Karnataka Industrial Area Development Board	MFE	Micro Food Enterprises
KLDA	Karnataka Livestock Development Agency	MFI	Micro Finance Institution
MFO	Micro Finance Organisations	NEFT	National Electronic Fund Transfer
MGIRI	Mahatma Gandhi Institute for Rural Industrialisation	NeML	NCDEX e-Markets Limited
MIDH	Mission for Integrated Development of Horticulture	NDDB	National Dairy Development Board
MI	Minor Irrigation	NE	North East
MIF	Micro Irrigation Fund	NFDB	National Fisheries Development Board
MIS	Management Information System	NFHS	National Family Health Survey
MISHTI	Mangrove Initiative for Shoreline Habitats & Tangible Incomes	NFIR	National Financial Information Registry
ML	Machine Learning	NFSM	National Food Security Mission
MNRE	Ministry of New and Renewable Energy	NGVCT	Navodaya Grama Vikas Charitable Trust
MNREGA	Mahatma Gandhi National Rural Employment Guarantee Act	NHB/NHM	National Horticulture Board/ National Horticulture Mission
MoEFCC	Ministry of Environment, Forest and Climate Change	NHP	National Hydrology Project
MoFPI	Ministry of Food Processing Industries	NIDA	NABARD Infrastructure Development Assistance
MOM	Management, Operation and Maintenance	NIA	Net Irrigated Area
MoRD	Ministry of Rural Development	NIE	National Implementing Entity
MOWR	Ministry of Water Resources	NIMHANS	National Institute of Mental Health and Neuro Science
MSC	Multi Service Centre	NIT	National Institute of Technology
MSE	Micro and Small Enterprises	NITI	National Institution for Transforming India
MSME	Micro, Small and Medium Enterprises	NLBC	Narayanpur Left Bank Canal

MSP	Minimum Support Price	NMAET	National Mission on Agricultural Extension and Technology
MUDRA	Micro Units Development and Refinance Agency Limited	NMBA	National Mission on Bamboo Application
NABARD	National Bank for Agriculture and Rural Development	NMFP	National Mission on Food Processing
NABCONS	NABARD Consultancy Services	NPA	Non-Performing Asset
NABFINS	Nabard Financial Services Ltd.	NRLM	National Rural Livelihood Mission
NACH	National Automated Clearing House	NRM	National Resource Management
NADEP Compositing	Narayan Deotao Pandharipande Compositing	NSA	Net Sown Area
NARI	Nimbkar Agricultural Research Institute	NSQF	National Skills Qualification Framework
NDDDB	National Dairy Development Board	NSSO	National Sample Survey Organisation
NAFCC	National Adaptation Fund on Climate Change	NWDA	National Water Development Agency
NAP-FDA	National Afforestation Programme through Forest Development Agency	NWR	Negotiable Warehouse Receipt
NBFC	Non-Banking Financial Company	NCDEX	National Commodity & Derivatives Exchange Limited
NCDC	National Cooperative Development Corporation	PMSBY	Pradhan Mantri Suraksha Bima Yojana
OD	Overdraft	PM PRANAM	PM Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth
OF	Open Forest	PMRY	Prime Minister's Rozgar Yojana
OFWM	On Farm Water Management	PODF	Producer Organisation Development Fund
OFFP	Off-Farm Promotion Fund	POPI	Producer Organisation Promoting Institution
ONDC	Open Network for Digital Commerce	POS	Point of Sale
OPS	Other Priority Sector	PPP	Public Private Partnership
PACS	Primary Agricultural Cooperative Society	RRB	Regional Rural Bank
PBs	Payment Banks	RSETI	Rural Self Employment Training Institute
PCARD B	Primary Cooperative Agriculture & Rural Development Bank	RSK	Raitha Samparka Kendras
P & H	Plantation & Horticulture	RTC	Rights, Tenancy and Crops
PDMC	Per Drop More Crop	RTGS	Real Time Gross Settlement
PDS	Public Distribution System	RUDSETI	Rural Development & Self Employment Training Institute
PFMS	Public Financial Management System	SAO	Seasonal Agriculture Operation
PHC	Primary Health Centre	SCARDB	State Cooperative Agriculture & Rural Development Bank
PIA	Project Implementing Agency	SCBs	Scheduled Commercial Banks
PIM	Participatory Irrigation Management	SCDC	State Cooperative Development Committee

PKGB	Pragathi Krishna Gramin Bank	SDI	Skill Development Initiative
PKVY	Paramparagat Krishi Vikas Yojana	SDP	Skill Development Programmes
PLISFP I	Production Linked Incentive Scheme for Food Processing Industry	SDEL	Skill Development, Entrepreneurship and Livelihood
PMEG P	Prime Minister's Employment Generation Programme	SDG	Sustainable Development Goals
PMFBY	Pradhan Mantri Fasal Bima Yojana	SEZ	Special Economic Zone
PMFM E	PM Formalisation of Micro Food processing Enterprises	SF/MF	Small Farmer / Marginal Farmer
PMJDY	Pradhan Mantri Jan Dhan Yojana	SFAC	Small Farmers' Agri-Business Consortium
PMJJB Y	Pradhan Mantri Jeevan Jyoti Bima Yojana	SHG-BLP	Self Help Group - Bank Linkage Programme
PMKSY	Prime Mantri Krishi Sinchayee Yojana	SHPI	Self Help Group Promotion Institution
PMKV Y	Pradhan Mantri Kaushal Vikas Yojana	SIDBI	Small Industries Development Bank of India
PM- KISAN	Pradhan Mantri Kisan Samman Nidhi	SILKS	Sericulture Information Linkages and Knowledge System
PM- MKSSY	Pradhan Mantri Matsya Kisan Samridhi Sah-Yojana	SKDRDP	Shri Kshetra Dharmasthala Rural Development Programme
PM- KUSU M	Pradhan Mantri Kisan Urja Suraksha evam Utthan Mahabhiyan	SLBC	State level Banker's Committee
PMMY	Pradhan Mantri Mudra Yojana	SLC	Sanitation Literacy Campaign
PMMS Y	Pradhan Mantri Matsya Sampada Yojana	SLNA	State Level Nodal Agency
PRI	Panchayati Raj Institution	SLSC	State Level Steering Committee
PROD UCE	Producers Development and Upliftment Corpus	SMAM	Sub Mission on Agricultural Mechanization
PSL	Priority Sector Lending	SMS	Short Message Service
PUS	Public Utility Services	SoF	Scale of Finance
PVTG	Particularly Vulnerable Tribal Groups	SPV	Special Purpose Vehicle
PWCS	Primary Weavers Cooperative Society	SRI	System of Rice Intensification
R&D	Research and Development	SRLM	State Rural Livelihood Mission
RAG	Regional Advisory Group	SRTO	Small Road Transport Operator
RBI	Reserve Bank of India	SAMIS	Service Area Monitoring and Information System
RDWS	Rural Drinking Water and Sanitation Department	SAPCC	State Action Plan on Climate Change
RE	Renewable Energy	SSA	Sub Service Area
REDP	Rural Entrepreneurship Development Programme	SSA	Sarva Shiksha Abhiyan
ReMSL	Rashtriya e-Market Services Private Limited	SSLR	Survey Settlement and Land Records
RFI	Rural Financial Insitutions	StCB	State Cooperative Bank
RIDF	Rural Infrastructure Development Fund	SWC	State Warehousing Corporation
RKBY	Rashtriya Krishi Bima Yojana	TDF	Tribal Development Fund
RKVY	Rashtriya Krishi Vikas Yojana	TIFR	Tata Institute of Fundamental Research
RMSA	Rashtriya Madhyamik Shiksha Abhiyan	RNFS	Rural Non-Farm Sector

TMC	Thousand Million Cubic Feet	VTPC	Visvesvaraya Trade Promotion Centre
TREAD	Trade Related Entrepreneurship Assistance and Development	WDF	Watershed Development Fund
TSP	Tribal Sub Plan	WEF	World Economic Forum
UAS	University of Agricultural Sciences	WDRA	Warehousing Development and Regulatory Authority
UMP	Unified Market Platform	WIF	Warehouse Infrastructure Fund
UNFCCC	United Nations Framework Convention on Climate Change	WSHG	Women Self Help Group
UPI	Unified Payments Interface	WUA	Water Users' Association
UPNR M	Umbrella Programme for National Resource Management	VDF	Very Dense Forest
USB	Ultra Small Branch	ZBNF	Zero Budget Natural Farming
UT	Union Territory		