

# STUDY ON FARMER PRODUCER ORGANISATIONS (FPOS) IN SIKKIM

Study conducted by

Study commissioned by



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We would like to express our heartfelt appreciation to the Farmer Producer Organisations (FPOs), their Board of Directors, Chief Executive Officers, member farmers, and other ecosystem actors who generously shared their time, experiences, and perspectives. Their participation provided invaluable insights into the opportunities, challenges, and aspirations of the FPO ecosystem in Sikkim.

We also acknowledge the support of Implementing Partner/Facilitating Organisation and local stakeholders who facilitated field visits, stakeholder consultations, focus group discussions, and interactions with FPOs and farming communities. Their assistance enabled meaningful engagement and enriched the quality of this study.

This report is the result of collective effort, collaboration, and shared commitment from all individuals and institutions involved. We deeply appreciate their contributions and support.

This report is intended to serve as a resource for policymakers, development practitioners, FPO promotion agencies, financial institutions, market actors, and researchers working to strengthen the FPO ecosystem and enhance the livelihoods of small and marginal farmers in Sikkim and across the North Eastern Region. The insights presented aim to support evidence-based decision-making and contribute to the development of resilient, inclusive, and sustainable farmer-owned enterprises.

## LIST OF ABBREVIATIONS

AGM	Annual General Meeting
BoD	Board of Directors
CBBO	Cluster Based Business Organisation
CEO	Chief Executive Officer
DPR	Detailed Project Report
FDRVC	Foundation for Development of Rural Value Chains
FIG	Farmer Interest Group
FPC	Farmer Producer Company
FPO	Farmer Producer Organisation
FSSAI	Food Safety and Standards Authority of India
GST	Goods and Services Tax
ICAR-NRC	Indian Council of Agricultural Research - National Research Center
IFFCO	Indian Farmers Fertiliser Cooperative
MoM	Minutes of meeting
MOVCD-NER	Mission Organic Value Chain Development- North East Region
NABARD	National Bank for Agriculture and Rural Development
NCDC	National Cooperative Development Corporation
NGO	Non Governmental Organisation
NoC	No Objection Certificate
PODF-ID	Producer Organisation Development Fund – Interest Differential
POPI	Producer Organisation Promoting Institution
RI	Research Institution
SBI	State Bank of India
SFAC	Small Farmers' Agri-Business Consortium
SHG	Self Help Group
SIMFED	Sikkim State Co-operative Supply and Marketing Federation Ltd.
SISCO Bank	Sikkim State Cooperative Bank Ltd
SP	Service Provider
SSRLM	Sikkim State Rural Livelihoods Mission

## EXECUTIVE SUMMARY

The study on Farmer Producer Organizations (FPOs) in Sikkim presents a promising picture of farmer collectivisation, while also recognizing the challenges that must be addressed to unlock their full potential. Undertaken with the aim of understanding the current landscape of FPOs in the state, the study draws insights from 20 FPOs across six districts through a mix of quantitative surveys, qualitative interviews, and field visits. It highlights the achievements of these farmer collectives in enhancing market access, improving input procurement, and initiating value addition activities, particularly in sectors such as agriculture and handloom. With support from government schemes like MOVCD-NER and the Central Sector Scheme for Formation and Promotion of 10,000 FPOs, these organizations have laid foundations for inclusive rural development and farmer empowerment in a state.

The study has found that the state has a rich diversity of agricultural products across districts—ranging from cardamom, turmeric, ginger, and cherry pepper to maize, pulses, and fruits like banana and orange. This rich product base offers immense opportunities for region-specific branding, value addition, and market expansion. Many FPOs have begun to explore basic processing and packaging, supported by infrastructure and machinery provided under various schemes. Capacity-building efforts have also enabled members, particularly women and small farmers, to gain knowledge in organic practices, record keeping, and business planning.

However, several critical challenges remain. Many FPOs struggle with limited financial sustainability, as 85% generate a revenue of less than ₹10 lakhs annually and most operate on very low profits. Access to credit is constrained by inadequate financial literacy, elaborate loan procedures, and challenge in support from cooperative banks, which are the only available banking option due to registration norms. Machinery for value addition remains underutilized in many FPOs, often due to irregular electricity supply, lack of skilled manpower and weak market linkages. Governance issues, such as unclear roles within Boards of Directors and need for effective participation of shareholders have led to a gap between the BoD and the members. Furthermore, logistical barriers and difficult terrain, reduce the ability of FPOs to access markets and fulfil larger orders consistently.

Despite these challenges, the study affirms that FPOs in Sikkim hold significant promise as enablers of rural growth and sustainable livelihoods. The key lies in supporting them with targeted interventions—such as leadership and financial training, working capital support, improved access to funds, strategic business planning, and integration of renewable energy solutions like solar power. Strengthening market linkages, enabling organic and FSSAI certifications will further enhance the viability of FPOs.

## **CHAPTER 1- INTRODUCTION AND METHODOLOGY**

### **1.1 Introduction**

#### **1.1.1 Context and rationale**

The study on Farmers Producer Organizations (FPOs) in Sikkim was undertaken to develop a comprehensive and evidence-based understanding of the current state of the organisations, business activities, financial health, challenges, and growth opportunities of FPOs. FPOs, including Farmer Producer Companies, and Cooperatives supported by various Cluster-Based Business Organizations (CBBOs), and Resource Institutions (RIs) have emerged as key institutional mechanisms to strengthen rural livelihoods and improve the socio-economic conditions of small and marginal farmers. In the context of the Northeast, which is characterized by remote geographies, socio-political diversity, and infrastructural gaps, the role of FPOs becomes even more significant. These organizations not only serve as platforms for collective action and market access but also hold potential for introducing climate-resilient practices and sustainable technologies.

Despite policy momentum and funding support from central and state governments as well as non-governmental actors, FPOs in the region often operate under constrained conditions. They face multiple challenges such as weak governance structures, limited access to financial services, low capacity for enterprise development, and poor integration into broader institutional ecosystems. Many of them are also grappling with the implications of evolving regulatory frameworks and minimal exposure to modern technology and renewable energy solutions.

This study seeks to understand these gaps by generating insights into the existing landscape of FPOs and understanding the varied experiences of these collectives. It aims to map and profile FPOs across the three selected states, assess their governance mechanisms, financial and business viability, operational capacities, and engagement with ecosystem stakeholders such as government departments, financial institutions and NGOs. Another focus of the study was also to explore how FPOs can better adopt sustainable livelihood practices, particularly in alignment with SELCO Foundation's thematic areas around decentralized renewable energy, livelihood resilience, and inclusive development. By drawing on both quantitative data and qualitative field insights, the study has come up with actionable knowledge that can support programmatic planning, policy formulation, and targeted interventions to strengthen FPOs in the state of Sikkim.

#### **1.1.2 Objectives of the Study**

The specific objectives of this study are to:

- Develop a database of all relevant organizations (FPOs, FPCs, CBBOs, POPIs, Cooperatives etc) in the state of Sikkim providing an overview of the existing landscape.
- Develop a nuanced understanding of the governance structures, grading mechanisms, financial health, and credit access across the three states.
- Build a knowledge base and insights from a representative sample to identify key learnings, challenges, and areas for future development
- Recommendations need to keep in mind SELCO Foundation’s core areas of work and opportunities through engagement with FPOs

### **1.1.3 Geographical and Sectoral coverage**

The study covered the state of Sikkim. Within the state, the study ensured that there is geographical representation of FPOs spread in different regions and districts. The target population for the study were primarily the representatives of livelihood sector FPOs (Governing body members, leadership & management team and members) and the ecosystem stakeholders such as- government institutions, departments, CBBOs and Non-profit Organisations. The study covered FPOs in the state based on the databases of the institutions and organisations with whom they are registered and being promoted. The livelihood sectors covered in the study include- Agriculture and allied and Handloom.

Data collection involved reaching out to FPOs at different stages of organisational maturity and operational scale. It included both emerging and few established entities to capture a range of experiences and capacities. Within each FPO, interactions were held with governing body members, leadership and management teams, and general members to gain a comprehensive perspective on internal governance, decision-making processes, and on-ground challenges. In addition to the FPO members, the study also engaged key ecosystem actors such as Cluster-Based Business Organizations (CBBOs), government departments, financial institutions, and civil society organizations. These stakeholders play a pivotal role in shaping the operational environment of FPOs, and their insights were critical in understanding the support systems, policy environments, and institutional linkages that influence the effectiveness and sustainability of FPOs in these states.

## **1.2. Methodology**

### **1.2.1 Research Approach**

The study followed an exploratory design, using a mixed-method approach combining qualitative and quantitative research methods. The mixed method of quantitative and qualitative methods for the study led to a comprehensive understanding of the current state of the FPOs, the challenges and the possible opportunities. The quantitative data helped in coming up with the database of the FPOs in the state and profiling of these FPOs based on different criteria, as well as to gain quantitative insights on aspects such as size of the FPOs, financials, business transactions etc. The qualitative data helped in getting a nuanced

understanding of the factors such as governance system, management within the FPOs, as well as the challenges and opportunities. The qualitative data also helped in understanding the existing support ecosystem for the FPOs and their effectiveness. With regard to data collection, both primary as well as secondary data were collected as a part of the study. Primary data collection was done from representatives and members of the FPOs, as well as from the ecosystem stakeholders such as government departments, POPIs, CBBOs and Non-Profit Organisations supporting FPOs. Secondary data with regard to the database of FPOs was collected from important stakeholders such as Government Departments and Institutions.

### 1.2.2. Sampling methodology and sample size

A purposive sampling method was used to ensure diversity in terms of geography, sector, size, and institutional support mechanisms. The selection criteria prioritised active FPOs with varying levels of maturity, market engagement, and operational models. A sample of 20 FPOs from different regions and 6 districts of the state were covered in the study.

Sl. No.	District	No. of FPOs covered
1	Gangtok	1
2	Pakyong	4
3	Mangan	2
4	Namchi	8
5	Soreng	2
6	Gyalshing	3
<b>TOTAL</b>		<b>20</b>

### 1.2.3 Data Collection

#### Primary Data Collection

- **Online Survey:** Structured online surveys were administered to a purposive sample of 20 FPOs in the state. The survey captured data on aspects such as registration, supporting institution, governance, business & financial practices, infrastructure and challenges faced by the FPOs.
- **Key Informant Interviews:** 20 In-depth interviews were conducted with Directors, CEOs and shareholders of FPOs. 6 in-depth interviews were conducted with POPI/CBBO representatives, financial institutions, government officials and other NGOs to gather qualitative insights on enabling factors and challenges. These KIIs were conducted both in-person and through telephone calls.

- **Field Visits:** Field visits were made to 8 FPOs in State to observe operational setups, infrastructure, and to document member perspectives.

### **Secondary Data Collection**

Secondary data was sourced from institutional records, registration databases, previous studies, and literature on FPOs in the region. These sources supported the development of a state-wise profile of livelihood-based FPOs.

#### **1.2.4 Data Analysis**

Quantitative Analysis- The quantitative component of the study relied on descriptive statistical tools to examine and interpret patterns across key operational and financial parameters of the FPOs. Variables such as membership size, annual revenues, access to formal and informal financial services, and the ownership of physical and infrastructural assets were analysed to construct a foundational understanding of the organizations' scale and economic standing. To assess financial health more specifically, indicators such as revenue, profits, working capital, utilization of credit and loans, and repayment were examined.

Qualitative Analysis- In parallel, the study employed a qualitative research design to deepen the understanding of organizational practices, stakeholder relationships, and context-specific challenges. A thematic analysis approach was used to interpret data gathered through in-depth interviews and focus group discussions with FPO members, leadership teams, and relevant ecosystem actors. Key themes explored included governance mechanisms, leadership dynamics, institutional accountability, market access, financial linkages, and infrastructural or technological constraints. Through this approach, the study was able to capture perspectives of FPO stakeholders, offering insights into how these organizations function beyond what numerical data could convey. To enhance the credibility and reliability of the findings, a process of data triangulation was employed this involved cross-verifying information obtained from different types of respondents and sources, thereby ensuring a well-rounded and validated analysis.

#### **1.2.5 Limitation of the study**

- Although database of a large number of FPO were got from Government Departments & Institutions which register and promote FPOs, it was found that many of those were not operational. As such, initially, it was a challenge to identify the 20 sample FPOs as most of the FPOs had reported that they were not operational.
- Contacting the FPOs was also a challenge as many of the contact numbers given in the database were not working and some of the individuals whose contact details were provided were not part of the respective FPOs anymore. A decision to then prioritise

the FPOs promoted by Agriculture Department and NCDC for the sample, yielded better responses from the FPOs.

- Many FPOs were not very open to be part of the study or share information related to their FPO, which delayed the data collection process. Many of the FPOs were reluctant to share internal information such as business plans, exact turnover and profit figures, loan repayment details etc. However, all of the FPOs had shared details in ranges in the quantitative online questionnaire, which was used in the study.

## CHAPTER 2: FINDINGS OF THE STUDY

The findings of the study are classified into four sections as are listed below-

- **Section 1: Formation, Governance & Support Received**

This section covers the details of incorporation and the support received by the FPO's. The findings related to the governance and systems of the FPOs have also been covered here.

- **Section 2: Business activities**

The business activity related findings have been summarised in this section, such as commodities covered, value chain activities, shareholder engagement, value addition, marketing etc.

- **Section 3: Finance**

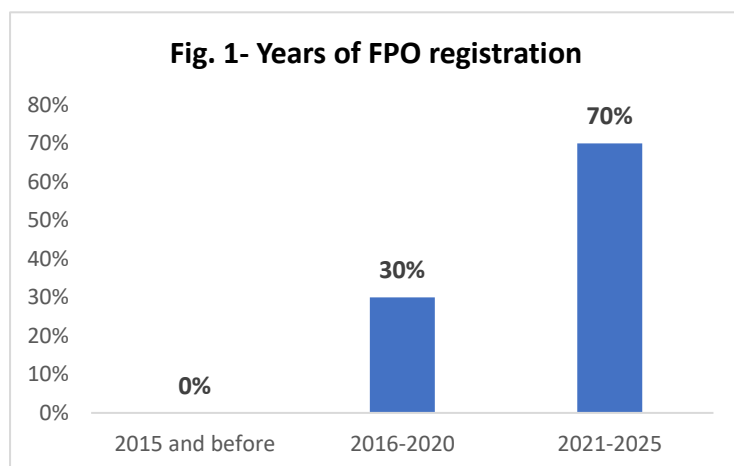
This section covers aspects of revenue, profitability, working capital, and credit access for FPO's.

- **Section 4: Infrastructure and Machinery**

The matters related to the infrastructure of the FPO and the mechanisation of the production process is being captured. In this section use of solar and other forms of renewable energy is also covered.

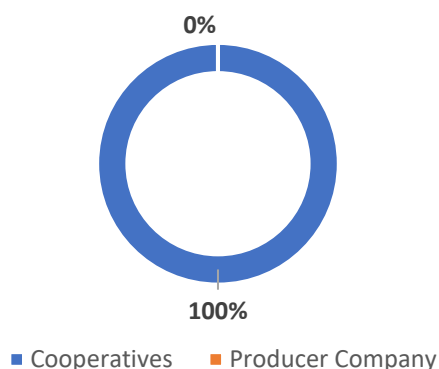
### 2.1 Section 1: Formation, Governance & Support Received

**2.1.1 Formation and overview of FPOs-** The studied FPOs (N 20) were promoted under government initiatives such as MOVCD-NER and Central Sector Scheme for Formation and



Promotion of 10,000 FPOs, with the aim of improving farmers' incomes and promoting organized agriculture. As per Figure 1, 30% of the FPOs were formed in between 2016–2020 and 70 % of the FPOs were formed between 2021-2025. The reason being that the farmers were mobilised to form FPOs under the mentioned schemes from 2016 onwards.

**Fig. 2- Legal Form of FPOs**



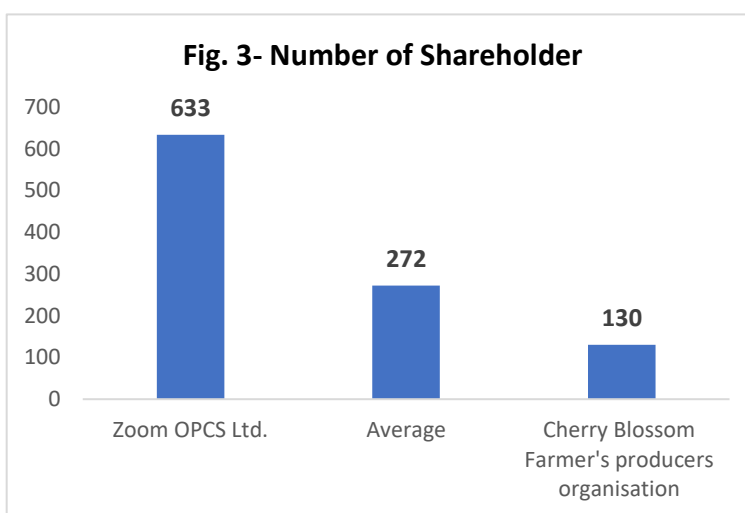
It was informed by various stakeholders that, all Farmer Producer Organizations (FPOs) are required to register under the Sikkim Cooperative Societies Act, 1978. While this statutory framework facilitates oversight by the Cooperative Department and allows for more streamlined coordination with government schemes and departments, it

also inadvertently limits the autonomy of FPOs. Being restricted to a single legal structure prevents these organizations from exploring alternative models such as Farmer Producer Companies, which may offer more flexibility in governance, private investment, and market engagement. Also, the Companies Act is non-functional in Sikkim, and as such, all FPO's are being registered under the Cooperatives Act. Additionally, the motivations behind the formation of FPOs in Sikkim have largely been seen to be scheme-driven.

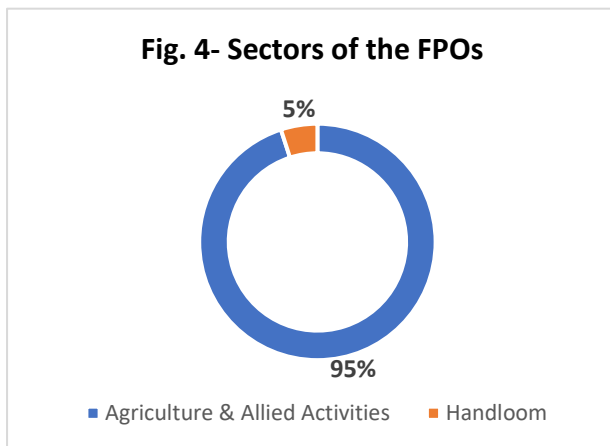
As seen in Figure 3, The FPO with highest number of shareholders is Zoom OPCS Limited with 633 shareholders and the FPO with lowest number of shareholders is Cherry Blossom FPO with 130 members. The average number of shareholders in the FPOs is 270.

As per the responses, in order to become a member of an FPO, the members have to pay a registration fee of Rs. 50-100 and have to purchase a minimum of 10 shares of Rs. 100 each across all the FPOs studied. In addition to that, FPO members have to be a small farmer and in case of landless farmers, they have to procure a NoC from the land owner. In general, all the FPOs

**Fig. 3- Number of Shareholder**



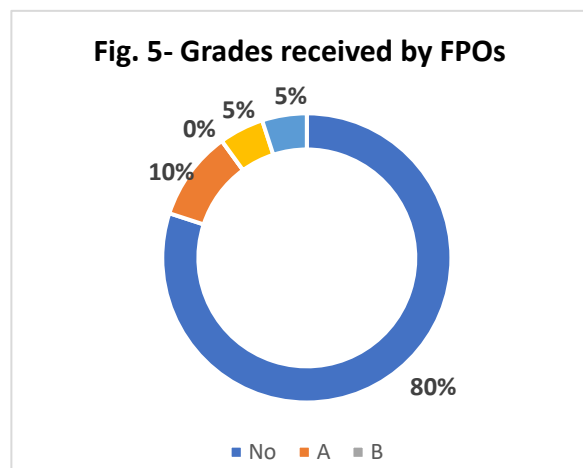
reported increase in their membership in the FPOs over the years of the FPOs sue to state-wide FPO promotion. Also, as per our stakeholder engagement, it was noted that there has been a departmental push mandated to make at least one member of the household an FPO member. Therefore, the increase in membership do not reflect the actual ownership of the FPOs at community level.



As seen in Figure 4, 95% of the FPOs studied are engaged in the agriculture and allied sectors, such as horticulture, organic farming, and livestock-related activities, while only 5% are involved in the handloom sector. This is largely due to the fact that FPOs in Sikkim have been primarily promoted by the Agriculture Department and NABARD, whose focus has been on strengthening agriculture-based livelihoods. However, there is a growing effort by the

Sikkim State Rural Livelihoods Mission (SSRLM) to diversify this focus plans are underway to register 27 women-led federations under the cooperative structure, which may include non-agricultural sectors like handloom and food processing. This indicates a shift towards broadening the scope of FPOs beyond traditional farming, potentially opening new avenues for rural enterprise and women's economic empowerment in the state.

As seen in Figure 5, 80% of the FPOs studied have not undergone any formal grading process, highlighting a significant gap in performance evaluation and institutional assessment. Among the few that have been graded, 10% received an 'A' grade, indicating strong organizational performance, while 5% were graded 'C' and another 5% received a 'D', pointing to serious operational or governance weaknesses. Interestingly, none of the FPOs received a 'B' grade, suggesting a sharp divide

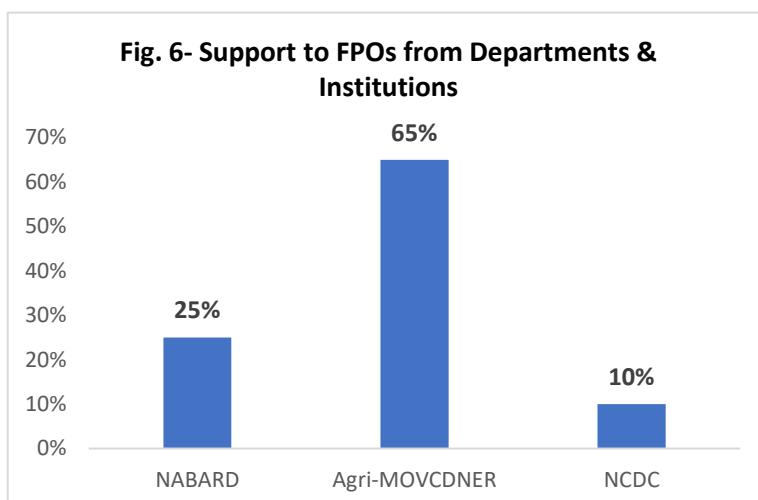


between the few performing well and those struggling. While NABARD is one of the key promoting institutions that has a structured grading system in place as per its operational guidelines, none of the FPOs promoted by NABARD in the study were graded. In contrast, three FPOs under the Agriculture Department and one under NCDC have undergone the grading process.

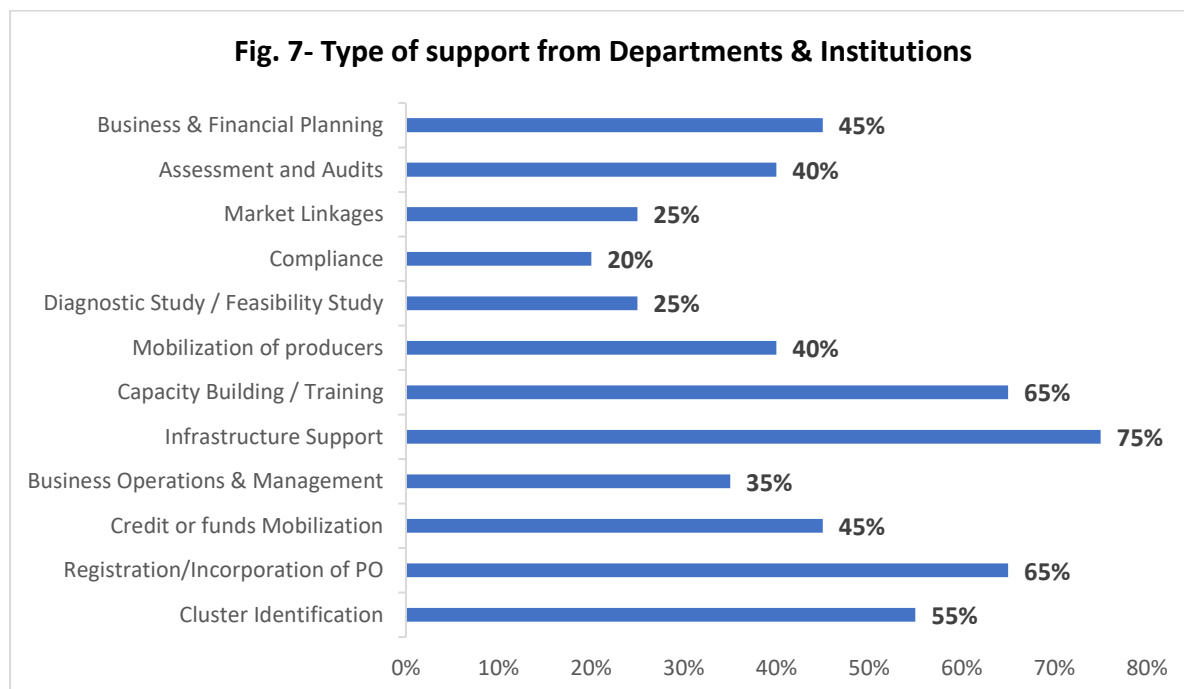
**2.1.2 Institutional support received by FPOs during early stages:** In terms of departmental support, 65% of the FPOs have received support from the Agriculture Department under MOVCD-NER Scheme, 25% of the FPOs have received support from NABARD and 10% of the FPOs have received support from NCDC under the Formation and Promotion of 10,000 FPOs Scheme (Figure 6). These departments, during the formation of FPOs in Sikkim, facilitated the process of appointing Resource Institutions (RIs) and Cluster-Based Business Organizations (CBBOs) such as MCRIL, SIMFED, Switch On Foundation, Indian Grameen Services, and ICAR-NRC as service providers. These agencies were tasked with supporting the FPOs for the initial

three years, playing a crucial role in farmer mobilization, organizational setup, and capacity building.

Under the operational guidelines of schemes like MOVCD-NER and the 10,000 FPOs Scheme, service providers mobilized farmers through village level institutions such as Gram Panchayats, and helped form Farmer Interest Groups (FIGs), each comprising 15-20 farmers. These FIGs were then sensitized on the benefits of joining an FPO, particularly for



small, marginal, and landless farmers. Highlighted benefits included enhanced collective bargaining, profit sharing, risk reduction from price fluctuations, and the potential for higher income, culminating in the formal registration of the FPO. However, during stakeholder consultations, it was noted that since most FPOs were externally initiated rather than organically grown from within the community, they often struggle to build trust and ensure sustained engagement among members.



The FPOs studied in Sikkim have received a diverse range of support from government departments and service providers, although the extent and effectiveness of this support vary across organizations. The most common form of assistance has been in the area of infrastructure, with 75% of FPOs reporting they received support for physical assets such as

processing units, buildings, storage facilities, and machinery. This is consistent with the focus of schemes like MOVCD-NER and the Formation and Promotion of 10,000 FPOs, which prioritize basic infrastructure to enable collective production and value addition.

Following infrastructure, 65% of FPOs acknowledged receiving assistance with registration processes and capacity-building programs including training for CEOs, accountants, Board of Directors (BoDs), and FIG members. These efforts were typically facilitated through Resource Institutions (RIs) and CBBOs, appointed to guide FPOs through the early years of formation. Cluster identification, a critical step in forming viable producer groups around specific crops or regions, was supported in 55% of cases. Support related to credit and funding access, as well as business and financial planning, was reported by 45% of FPOs. These areas are essential for ensuring financial sustainability, though many FPOs continue to struggle with cash flow, working capital, and financial literacy, indicating that existing interventions may need to be more targeted or intensive.

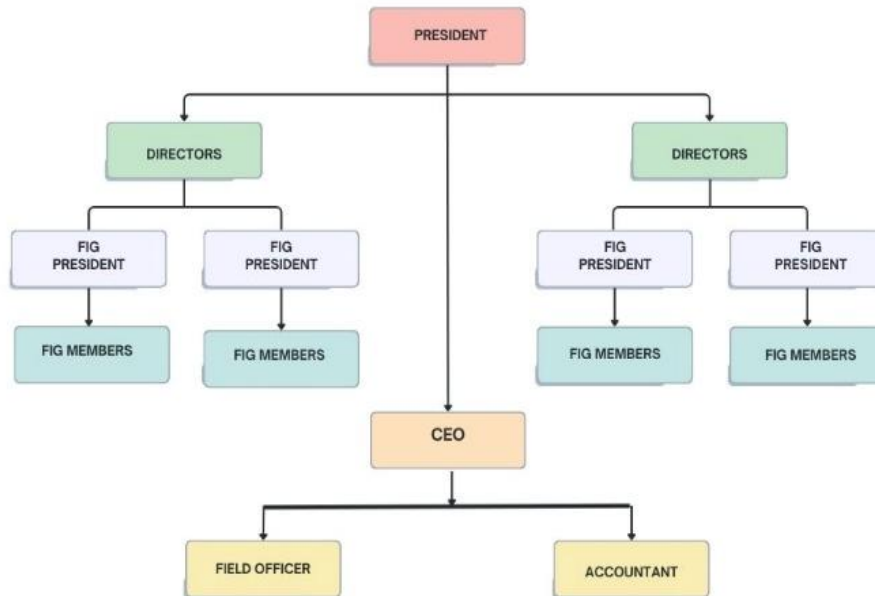
Only 40% of the FPOs said they received help with mobilizing producers, a foundational step in building strong farmer collectives and just 25% reported support in conducting diagnostic studies or accessing market linkages, both of which are essential for identifying viable value chains and securing consistent buyers. Notably, only 20% of FPOs received support with regulatory compliances, such as maintaining proper records, filing GST, or renewing licenses and certifications like FSSAI and organic status. This lack of compliance support has implications for FPO credibility and access to formal markets, where proper documentation is a prerequisite (Figure 7).

Overall, the findings indicate that while the foundational elements like infrastructure and initial training have been emphasized, critical areas like market access, compliance, and financial systems remain under-supported, potentially limiting the long-term sustainability and scalability of FPOs in the region.

**2.1.3 Governance & decision making:** At the grassroots level, farmers and SHG members are organized into Farmer Interest Groups (FIGs), each consisting of approximately 15–20 members. These FIGs form the General Body of the FPO, which serves as the base for member participation and representation. Within each FIG, members elect a President, who then represents the group in the larger organizational decision-making process. From this pool of FIG leaders, a Board of Directors (BoD) is constituted. The BoD typically includes key positions such as the President, Vice-President, general Secretary, Joint Secretary and Treasurer, and a group of Directors who are responsible for governance and overseeing day-to-day functioning. The BoD is expected to take key business and operational decisions, manage organizational finances, and ensure compliance with cooperative regulations.

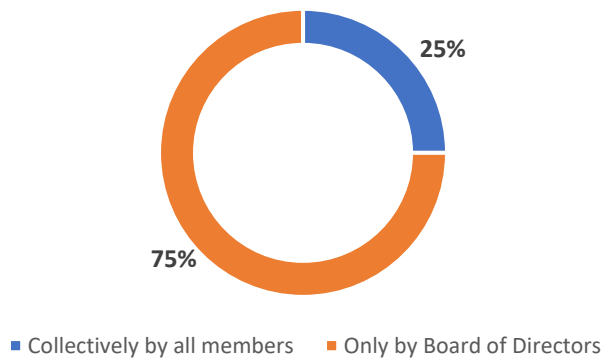
However, as per field interviews, the roles and responsibilities within this structure are not always clearly understood or actively practiced. In many FPOs, the BoD members are either inactive or unaware of their duties, and critical decisions are often centralized in the hands of the President alone. This results in limited participation, weak governance, and an over-

## FPO STRUCTURE



reliance on a few individuals, undermining the collective strength that the federated model aims to create. Strengthening this structure through capacity-building and clearer role definition remains a key area for intervention.

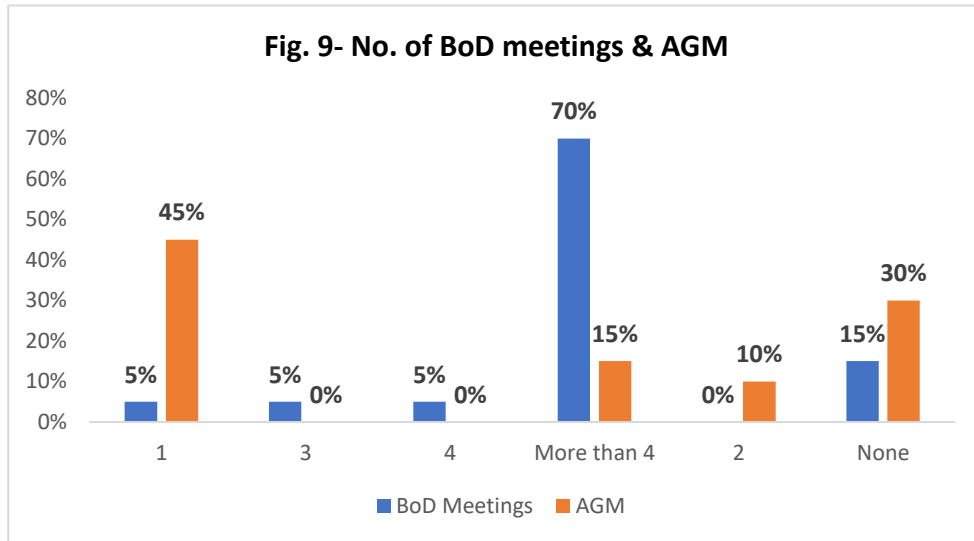
**Fig. 8- Decision making in the FPOs**



Field observations revealed that the BoD plays the most central role in decision making within the FPOs. Important decisions are often taken at the BoD level and later relayed to members via WhatsApp or during the Annual General Meeting (AGM). As per the findings, 75% of FPOs have their decisions made directly by the Board of Directors (BoD), while only 25% involve

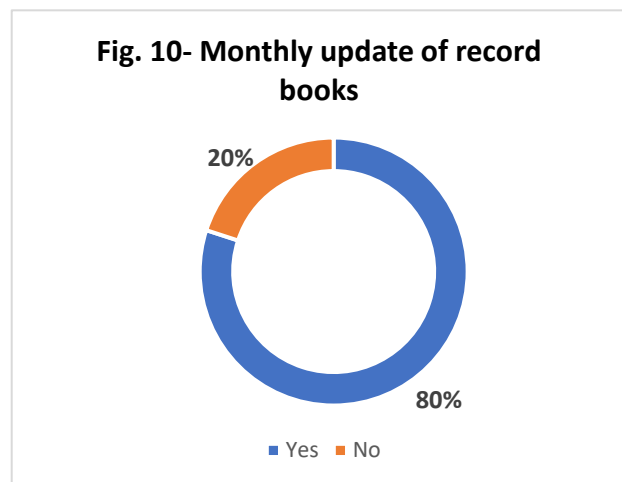
broader member participation in the decision-making process. Very limited engagement of the members by the BoD in decision making process can result in limited transparency and reduce the sense of collective ownership among shareholders, ultimately weakening member engagement and participation in the FPO activities.

In Figure 9, it can be seen that 70% of the FPOs organise more than 4 BoD meeting in a year, 5 % organised it once a year, 5 % organised it thrice a year, 5 % organised it 4 times a year, 15% didn't organise it. Thereafter, 45% of the FPO organized 1 AGM as is mandated as per the cooperative guidelines. While there are also 15 % who held it more than 4 times, 10 % twice and and 30% of the FPOs haven't organized AGM. For the FPOs who couldn't organize any



required meeting stated that given the topography and the sparse inhabitation and inadequate public transport, conducting meetings and getting a good attendance in the BOD meetings and AGM's is challenging.

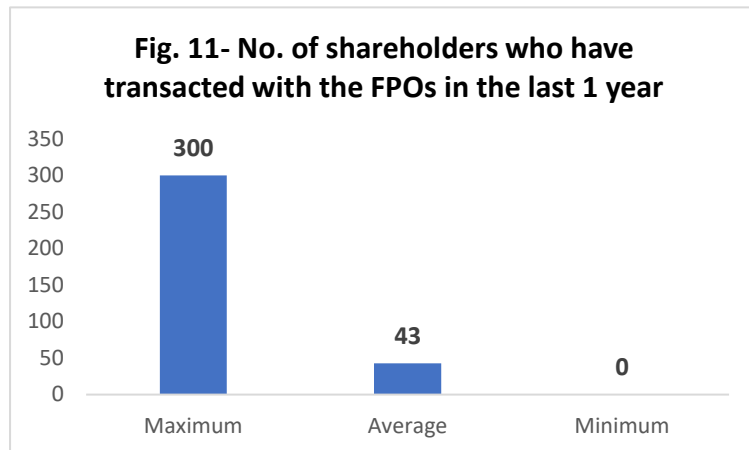
All the FPOs in Sikkim, especially the CEO/Manager and accountants have had training on book-keeping. As per our observations some of the record books such registration documents, MoM, stock book, members records, share capital register, etc are maintained regularly. Therefore, per the table, 80% of the FPOs maintain record books regularly while, 20% not maintain record books regularly. However, other records such as financial statements, books of accounts, cash book, etc are not maintained regularly or there are discrepancies in those books. The Board of Directors, in particular, often lacks awareness on their specific responsibilities towards record keeping of the FPOs that oversees financial health, ensuring statutory compliance, and strategic decision-making.



## 2.2 Section 2: Business activities of the FPOs

**2.2.1 Key commodities and shareholder engagement:** The FPOs dealt in farm commodities such as- Maize, Rice, Millets, Turmeric, Ginger, Cherry Pepper, Cardamom, Buckwheat, Lentils, Chilli pepper, Orange, Pulses, Banana, Dragon fruit, Mustard, Broom grass etc. The FPOs primarily deal in horticultural cash crops, which the growers primarily produce for sale, are not easily perishable and can be transported outside the state for sale. Also, there is

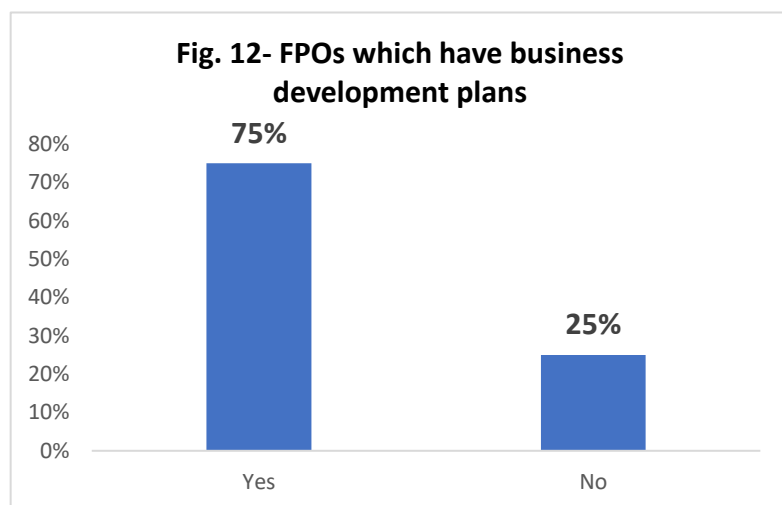
industrial demand for such produce, which some of the FPOs have been able to tap in and sell directly to companies.



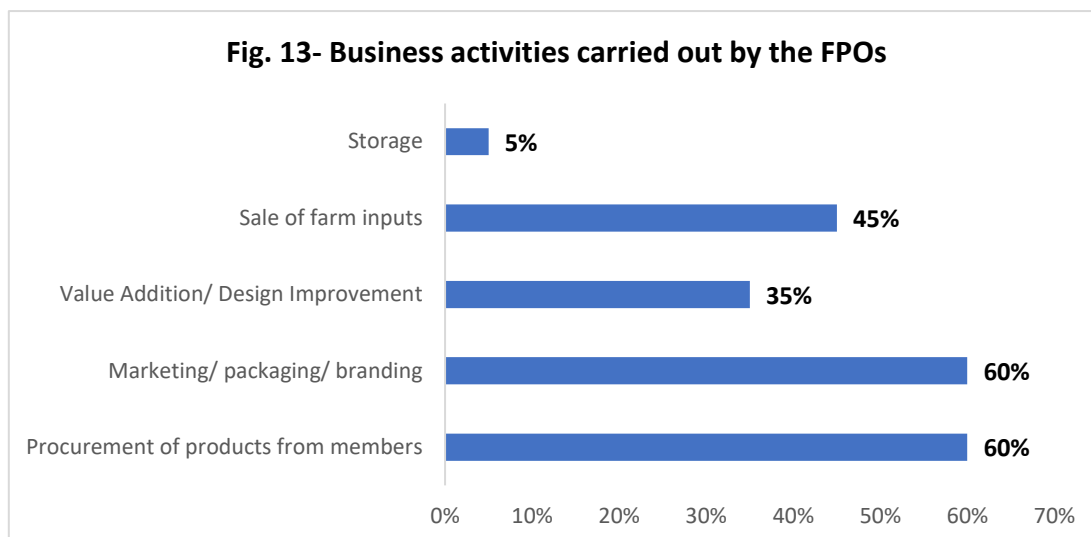
As seen in Figure 11, maximum engagement of producers for selling or purchasing in a FPO is 300 shareholders, while lowest is 0 shareholders. The average number of shareholders in FPOs who engaged in business transactions with the FPO is just 43 shareholders. Additionally, farming is no longer the main occupation for many in Sikkim,

which affects consistent participation and commitment to FPO activities. It was also mentioned by a respondent that the continued government support has rendered the farmers more dependent on welfare mechanism and therefore FPO members including BoD members do not take their responsibilities seriously.

**2.2.2 Business activities of the FPOs:** Figure 12 demonstrates that 75% of the FPOs have Business Development Plan while 25% of the FPOs have no such plans. The business plans were made by the FPOs with the support of the Service Providers/ Resource Institutions during the formation phase of the FPOs. However, most of the FPOs haven't renewed their business plans. Most of the FPOs still rely on the initial business plans that were prepared during the creation of their Detailed Project



Reports (DPRs). While these plans served as a foundation, they often become outdated as the market dynamics, member participation, and operational realities evolve over time. Despite the need for revised and more viable business strategies, most FPOs struggle to create updated plans due to a lack of human resources with the technical expertise to guide such processes. Although some FPOs may have an informal roadmap in mind, these are rarely documented. Furthermore, weak coordination and lack of consensus among the Board of Directors (BoDs) make it difficult to strategize collectively or implement a renewed direction for the FPO's growth.



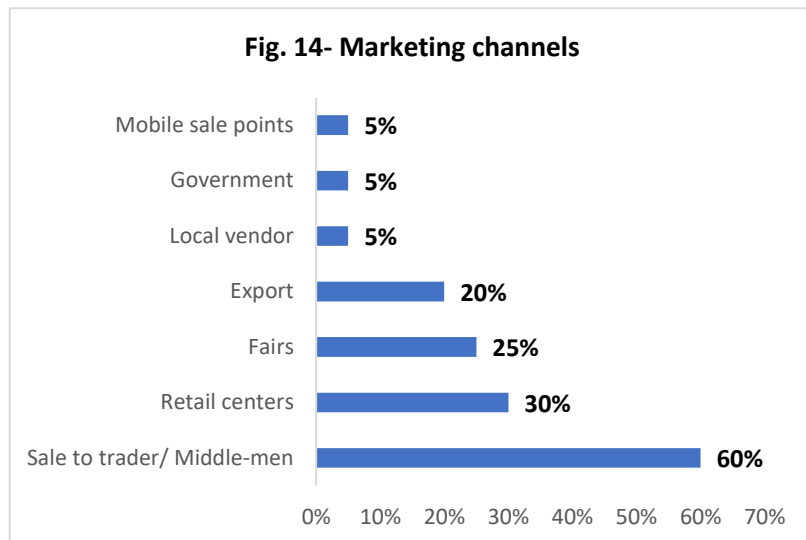
The business activities carried out by the Farmer Producer Organizations (FPOs) in Sikkim are diverse and span across different stages of the agricultural value chain. One of the core activities including the procurement of raw agricultural produce directly from member farmers are carried out by 60% of the FPOs ensuring that producers have a reliable market and receive fair prices. After procurement, 60 % of them are engaged in marketing these products to a range of vendors, including local markets, retail outlets, and institutional buyers, aiming to secure better margins for the farmers.

In addition, 35% of FPOs are involved in value addition activities, such as processing raw materials into semi-processed or finished goods to enhance shelf life, quality, and market value. This includes cleaning, sorting, slicing, drying, and packaging of produce, although the extent of these activities varies due to power and demand constraints. Furthermore, 45% of FPOs have ventured into agri-input sales, where they provide essential supplies like seeds, fertilizers, and farming equipment to their members at affordable rates. This not only supports the farming cycle but also helps FPOs generate revenue and maintain closer engagement with their farmer base. Collectively, these activities aim to create a more integrated, farmer-centric business model that strengthens rural economies. 5% of the FPOs are also engaged in providing storage to the farmers (Figure 13).

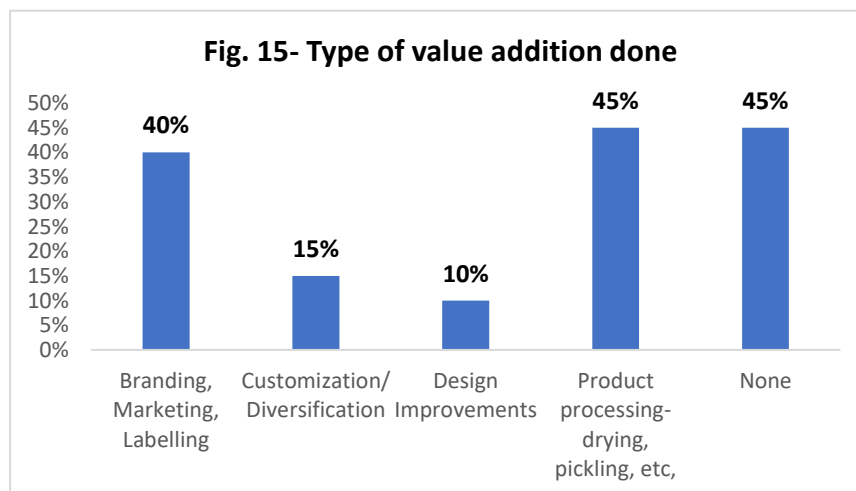
To market their produce, FPOs in Sikkim participate in buyer-seller meets organized by government departments, where they connect with institutional buyers and vendors, including IFFCO and traders from regions like Siliguri and Kolkata. While these efforts aim to boost sales, most FPOs continue to struggle with effective marketing as the traditional dependence on traders continues.

Figure 14 shows that 60% of the FPOs sell their products to traders and middlemen. This poses a challenge to the FPOs in marketing- inconsistent procurement from farmers, who often prefer selling to long-established vendors rather than through FPOs. This further weakens the FPOs to aggregate produce from the farmers. Even when bulk orders are placed by buyers like

IFFCO, FPOs frequently fail to meet the demand due to limited resources and coordination issues, leading to missed market opportunities. Nearly 1/3<sup>rd</sup> of the FPOs (30%) sell their produce through retail centers and 25% use fairs as one of the channels of marketing. It is to be noted that 20% of the FPOs are able to export their produce.



As seen in Figure 15, 40% of the FPOs does marketing, branding & packing. However, most of the FPOs are focused only on marketing as they still haven't reached the stage where they can undertake branding. 15% does customization of products; 10% does design improvement/modifications; 45% are engaged in product processing. As much as 45% of the FPO do not undertake any value addition activities. While several FPOs in Sikkim have been provided value addition machinery such as slicers, pulverisers, and dryers to enhance the quality and marketability of their produce, these machines remain underutilized. One major reason is the persistent power supply issues in many rural areas, which affect the regular functioning of high-energy-consuming machines. Additionally, there is a lack of consistent market demand,



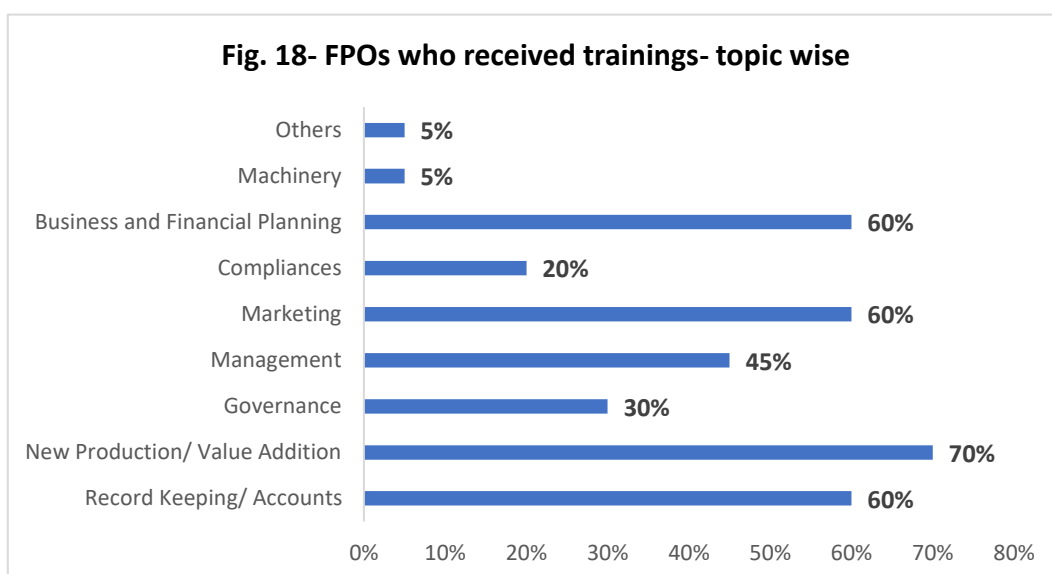
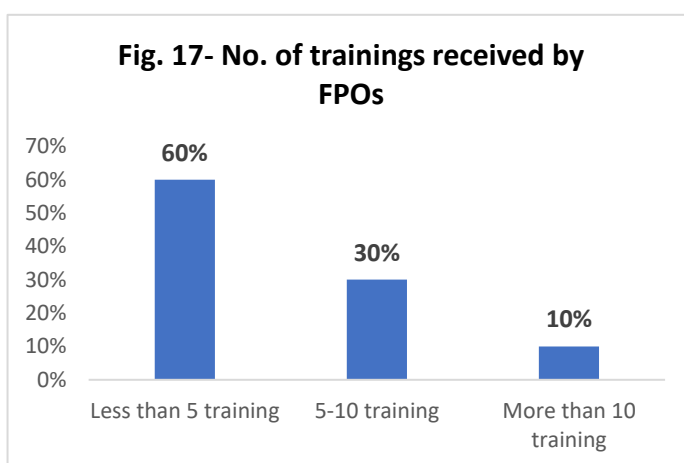
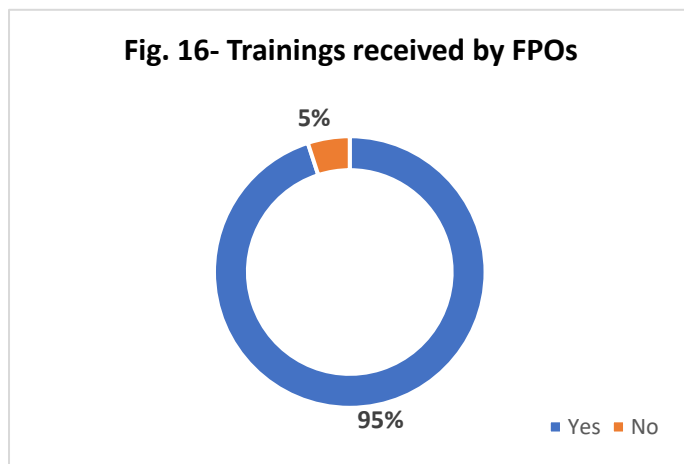
which discourages FPOs from processing large quantities of produce. As a result, despite the availability of equipment, FPOs are unable to carry out value addition at an optimal level, thereby missing out on potential income and market opportunities.

**2.2.3 Capacity building of FPOs:** The study reveals that approximately 95% of FPO members have received at least one form of training on capacity building, while a small fraction of about 5% reported no exposure to training activities. The high overall training coverage reflects the emphasis placed by schemes like MOVCD-NER and the 10,000 FPO Scheme, which mandate Service Providers (SPs) and Cluster-Based Business Organizations (CBBOs) to regularly conduct

training sessions. These sessions are meant to improve knowledge in farming techniques, financial literacy, organizational roles, and overall FPO operations. However, the depth and frequency of these trainings vary considerably across organizations and regions, affecting their long-term impact.

Although most FPO members have received some form of training, the intensity and continuity of these capacity-building efforts vary. According to the responses, 60% of FPOs reported receiving fewer than five training sessions, indicating limited engagement or one-off interventions. Meanwhile, 30% of FPOs had 5-10 trainings, showing a moderate level of follow-up and thematic engagement. Only 10% of FPOs received more than 10 training

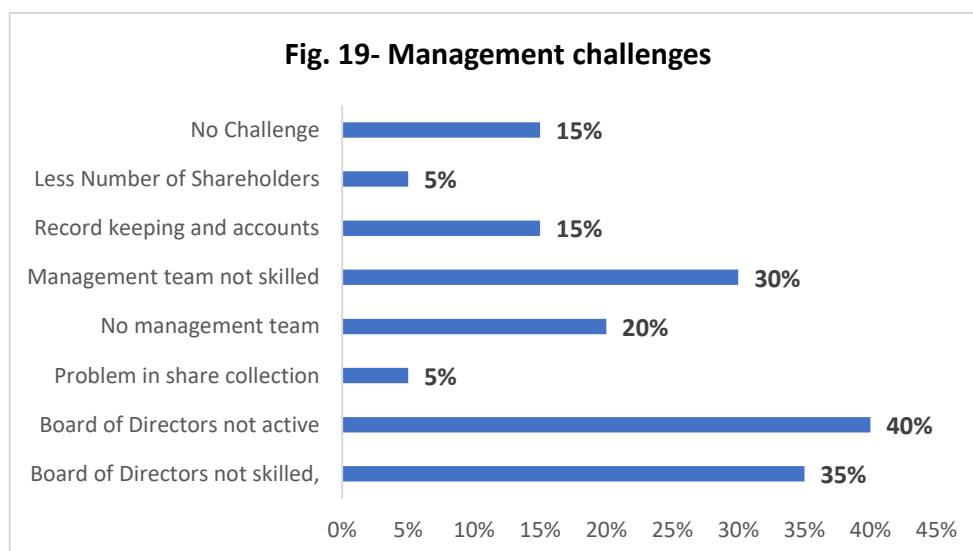
sessions, suggesting that sustained capacity-building efforts are relatively rare. The data also aligns with field observations that while training sessions are often conducted during the initial stages of FPO formation, follow-up training is inconsistent especially after the first phase of institutional support ends.



The study indicates a diverse but uneven focus on training topics among FPOs. The most common training area was new production techniques (70%), which aligns with the state’s push for organic farming and diversification. This was followed by training on record keeping and business and financial planning (60% each), which are crucial for building basic enterprise management capacity. Similarly, 60% of FPOs received training in marketing, reflecting efforts to improve product visibility and sales. However, more advanced or strategic areas received less attention as only 45% of FPOs were trained in overall management, 30% in governance, and just 20% in regulatory compliance, despite these being essential for long-term sustainability. Alarming, only 5% of FPOs received training on machinery use, even though many FPOs have been equipped with slicers, dryers, and pulverisers. This lack of technical training contributes to the underutilization of infrastructure noted in several cases. The remaining 5% of trainings fell under miscellaneous categories, such as team building or branding.

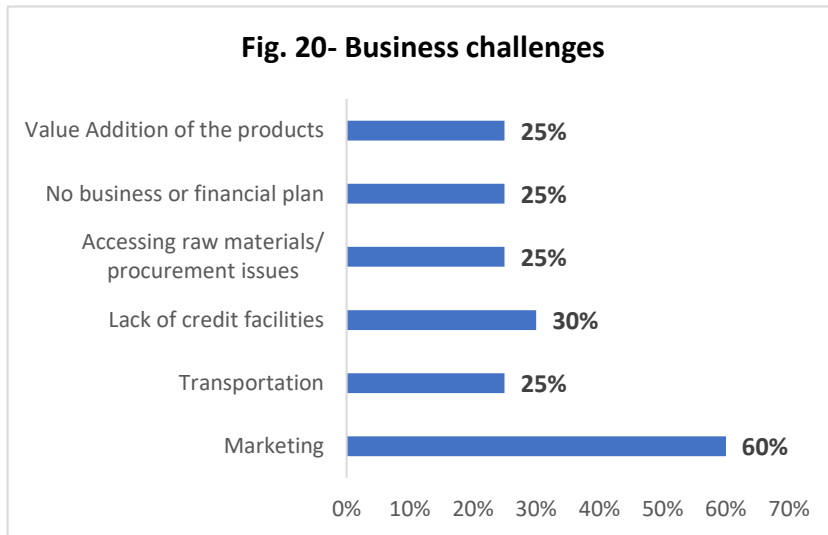
Additionally, as per a response during a stakeholder meet, FPOs initially functioned well with trained staff and BoDs. They were also trained in various aspects such as books of accounts, management, compliances, etc. However, over time, attrition has led to knowledge loss, and replacements are often not equally skilled, impacting operational efficiency. The inability to implement FPOs in phases due to weak systems and staff turnover affects business development and long-term planning.

**2.2.4 Management & Business Challenges:** The study reveals several governance and management challenges across FPOs in Sikkim. Figure 19 shows 35% of FPOs have unskilled Board of Directors, while 40% report inactive BoDs, affecting decision-making and leadership. 30% lack skilled management staff, and 20% have no formal management team at all as the



attrition rate is high once the funding from scheme stops, leading to weak operational capacity. Issues such as poor record keeping (15%), difficulty in collecting share capital (5%), and limited shareholder participation (5%) further hinder efficiency. Only 15% of FPOs reported no major challenges, highlighting the need for stronger capacity building in

governance and institutional management. Overall, these findings underscore the need for targeted interventions in governance training, leadership mentoring, and institutional strengthening, especially in the post-formation phase of FPOs. Without a capable and committed management and governance framework, the potential of FPOs to operate as viable farmer-owned enterprises remains limited.

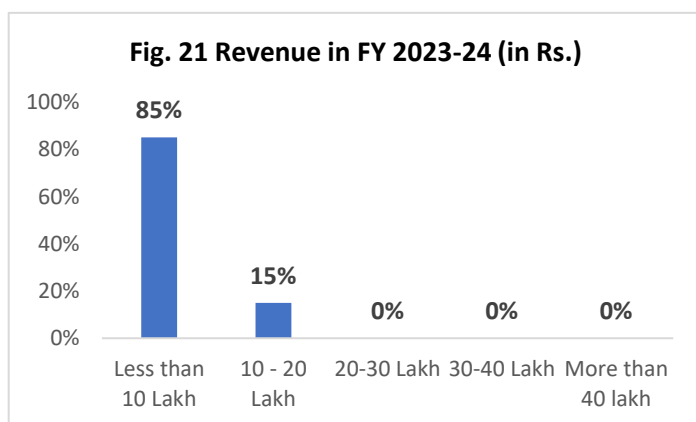


As seen in Figure 20, 60% of the FPOs reported marketing as their primary challenge, often due to limited buyer networks, over-reliance on traditional vendors, and lack of branding or packaging strategies. Additionally, 25% of FPOs face transportation issues, particularly in hilly and remote areas where poor

road connectivity disrupts procurement and delivery. 30% of FPOs struggle with inadequate access to credit, stemming from limited financial literacy, dependency on cooperative banks, and fear of formal loans. Another 25% face challenges in accessing raw materials, especially when farmer members are reluctant to supply through the FPO. Moreover, 25% of the FPOs lack a structured business or financial plan, making it difficult to operate strategically or attract support. Lastly, 25% report problems in the value addition process, largely due to lack of training, power supply issues, and underutilization of provided machinery.

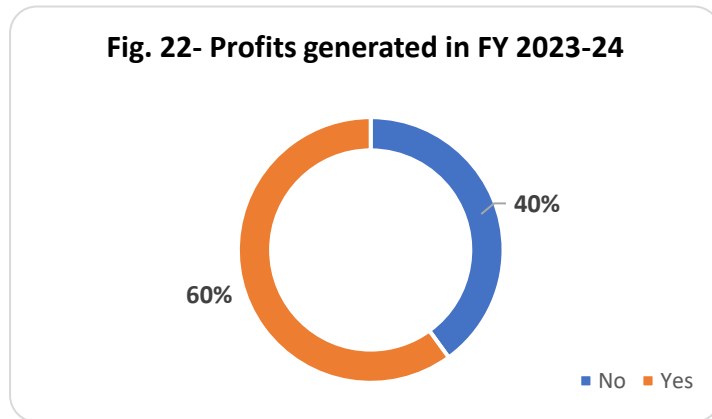
### 2.3 Section 3: Finance

**2.3.1: Revenue and Profits of the FPOs:** The findings indicate that a large majority of FPOs in Sikkim continue to operate at a small scale, with 85% generating less than ₹10 lakh in annual revenue. This limited financial performance reflects challenges such as restricted procurement capacity, localized sales, and minimal value addition, largely



due to inadequate market access, insufficient working capital, and weak business planning. Only a few FPOs (15%) fall in the ₹10-20 lakh revenue range, and none have exceeded ₹20

lakh, underscoring their struggle to scale (Figure 21). These insights are echoed in field interviews, where FPO representatives cited issues like inability to meet bulk demand, dependence on traditional vendors, and underused infrastructure. The lack of structured marketing strategies and sound financial systems further constrains their growth and long-term viability.

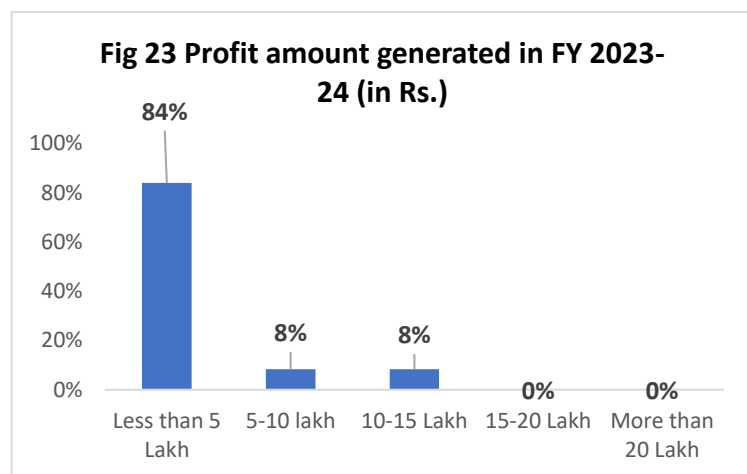


As per the study findings (Figure 22), 60% of the FPOs in Sikkim reported making some level of profit, though most of these profits were modest typically under ₹5 lakh annually. These profits were generally generated through activities such as the sale of agricultural produce, input supply (like seeds and fertilizers), and, in fewer cases,

value-added processing. However, even among profit-making FPOs, respondents indicated that earnings were not substantial enough to cover all operational expenses, such as staff salaries, office rent, and infrastructure maintenance.

On the other hand, 40% of the FPOs reported making no profit at all, which reflects the many challenges they face in sustaining their operations. According to interviews, this lack of profitability is linked to factors such as irregular supply from members, weak market linkages, low business volumes, inadequate financial planning, and underutilization of infrastructure like processing machinery. Additionally, the over-reliance on government support and lack of post-project sustainability planning were cited as contributing to financial stagnation. These findings underscore the fragile financial health of many FPOs and the need for targeted support in business development, marketing, and financial literacy to improve profitability.

Among the FPOs in Sikkim that reported profits (Figure 23), the vast majority of 84% earned less than ₹5 lakh in the last financial year, highlighting the low operational scale and limited market reach of most producer organizations. Only 8% of the profit-making FPOs earned between ₹5-10 lakh, and another 8% reached between ₹10-15 lakh, and another 8% reached between ₹10-15

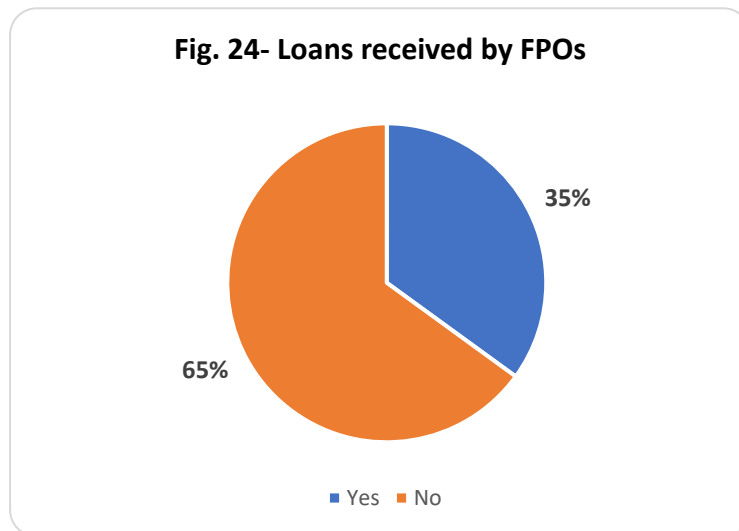


lakh, indicating that very few have successfully scaled their operations to generate substantial income. These findings reflect broader challenges documented in the study, such as limited procurement from member farmers, poor access to bulk buyers, and underutilized

infrastructure. Even among profitable FPOs, respondents mentioned difficulties in maintaining regular cash flow and covering operational costs, emphasizing the need for stronger business planning, marketing strategies, and financial support to boost profitability and ensure sustainability.

**2.3.2 Access to credit:** In terms of banking and financial access, FPOs in Sikkim are required to operate accounts exclusively through cooperative banks. While this aligns with the cooperative framework and is intended to ensure institutional oversight, it significantly limits

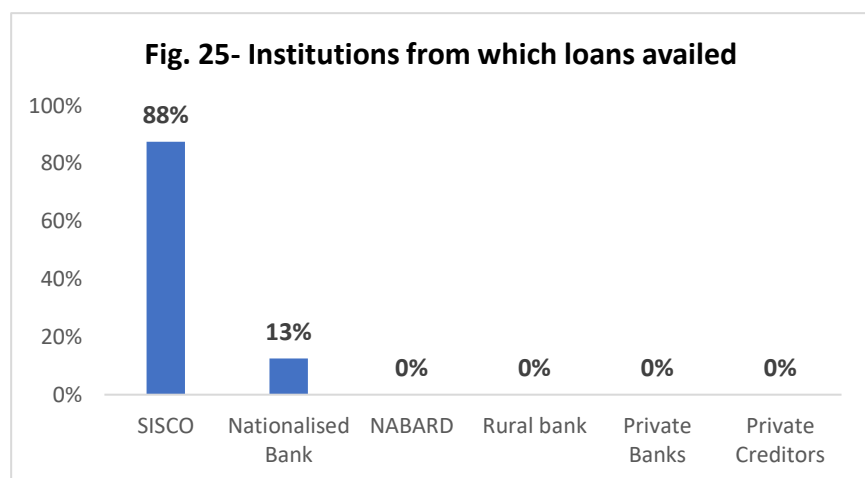
the financial options available to FPOs. Compared to nationalized or private commercial banks, cooperative banks often offer fewer credit products, slower processing, and stricter lending conditions, which restrict timely access to funds for business expansion, working capital, or technology procurement. This lack of flexibility may deter entrepreneurial risk-taking and contributes to repayment delays



or loan defaults due to mismatched credit services.

As seen in Figure 24, only 35% of FPOs have accessed loans, most commonly for the purchase of subsidized goods vehicles under the MOVCD-NER scheme. However, 65% of FPOs have not availed of formal credit, largely due to a general reluctance among producers. Interviews with FPOs suggest this hesitancy stems from low financial literacy, fear of repayment burdens, and unfamiliarity with formal banking systems. Instead, many farmers rely on short-term microloans from Self-Help Groups (SHGs), which are perceived as more accessible and flexible, often used for small-scale farming or urgent input needs. This limited access to institutional credit remains a major bottleneck in strengthening the operational and financial resilience of FPOs.

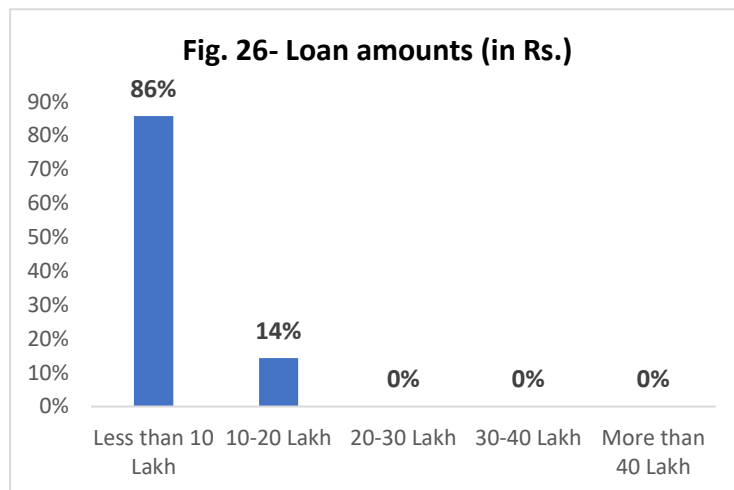
As FPOs in Sikkim are mandated to operate their bank accounts exclusively with cooperative banks, a policy that restricts their



access to the broader range of financial services typically offered by commercial banks. This

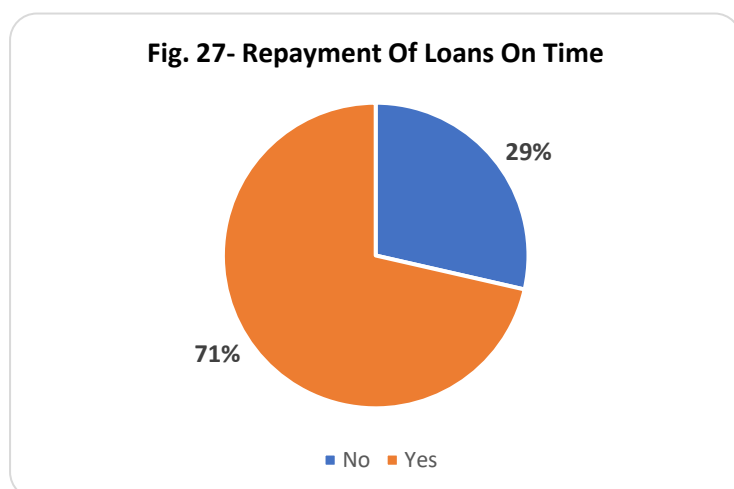
includes limited access to customized loan schemes, overdraft facilities, and flexible working capital support. As a result, FPOs are unable to explore competitive interest rates or tailored credit products that may better align with their operational cycles and business expansion plans. This lack of financial choice hampers their overall growth potential and adaptability.

According to the data, among FPOs that have availed loans, 88% received credit from SISCO Bank, the State Cooperative Bank in Sikkim, while only 13% (1 FPO) accessed a loan from SBI, a nationalized commercial bank. Notably, the FPO that borrowed from SBI operates in areas outside Sikkim as well, and thus was not bound by the cooperative banking restriction.



The study shows that among the FPOs in Sikkim that have availed institutional loans, 86% have accessed amounts less than ₹10 lakh, while only 14% received loans in the ₹10-20 lakh range. Notably, none of the FPOs studied secured loans exceeding ₹20 lakh, highlighting the limited credit appetite and borrowing capacity of these organizations (Figure 26).

As reflected in interviews and field observations, this trend is linked to a combination of factors including low financial literacy, lack of business confidence, fear of repayment, and the restrictive loan offerings of cooperative banks, which most FPOs are mandated to use. These small loan amounts are often used for short-term assets, such as the purchase of subsidized vehicles under schemes like MOVCD-NER, rather than for scaling core business operations. The absence of higher-value loans reflects the limited readiness to manage larger financial commitments due to weak planning and underdeveloped business models.

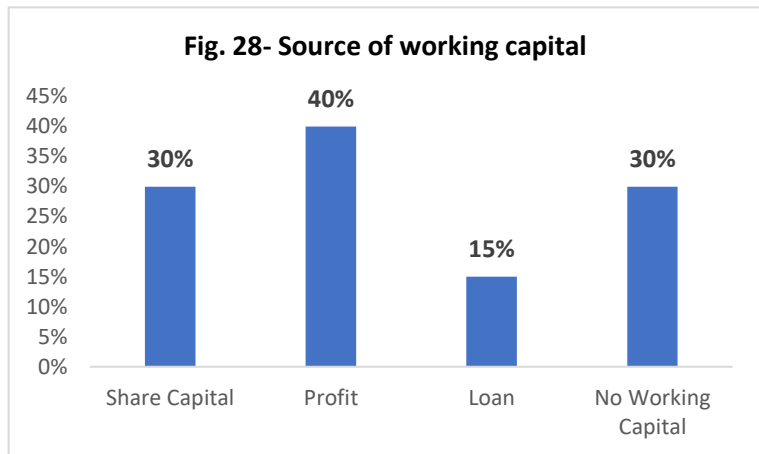


Among the FPOs that have availed loans, 71% are either repaying on time or have already completed repayment, while the remaining 29% have defaulted or are irregular in their repayments (Figure 27). Several loan defaults are linked to borrowings under schemes like MOVCD-NER, especially for the procurement of subsidized goods vehicles, which have not always translated into

sustainable income generation. During discussions with representatives from the cooperative department, concerns were raised about the high rate of loan defaults among FPOs, posing a

significant challenge for the Cooperative Department. The inability to recover these loans not only strains departmental resources but also undermines the credibility and long-term viability of institutional financial support mechanisms for farmer collectives in the state.

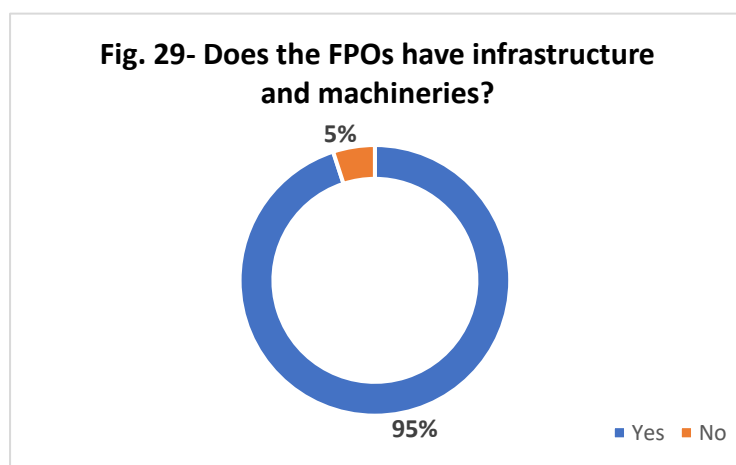
**2.3.3 Working capital:** As per the Figure 28, the FPOs generate, 35% of the working capital from profits made, 30% from the share capital, 13% from loan and 22% of the FPOs had no working capital. Most FPOs studied are not financially stable in the long term. While they receive initial financial support under schemes like ‘MOVCDNER’ and the



‘Formation and Promotion of 10,000 Farmer Producer Organisations (FPOs) Scheme’, this assistance is time-bound. Once these funds are exhausted, many FPOs struggle to maintain a steady cash flow, making it difficult to cover operational expenses such as staff salaries, office rent, and other overhead costs. As a result, there is a high rate of staff attrition, particularly among CEOs and accountants who often leave due to irregular or non-payment of salaries. Additionally, many FPOs have not been able to pay equity or dividends to their members, further undermining member confidence and the financial sustainability of the FPOs.

## 2.4 Section 4: Infrastructure & machinery

**2.4.1 Infrastructure availability and type:** As seen in Figure 29, 95% of the FPOs in Sikkim reported having access to their own infrastructure and machinery. These were largely



provided through government-supported schemes like MOVCDNER and the Formation and Promotion of 10,000 FPOs Scheme. However, despite the availability of such infrastructure, several FPOs mentioned challenges in effectively utilizing the machinery due to factors like inconsistent electricity supply, lack of technical training, or insufficient

demand for processed products. A small fraction i.e. 5% of FPOs reported having no physical infrastructure or machinery, often relying on borrowed or community spaces, which limits their ability to scale operations or engage in value addition.

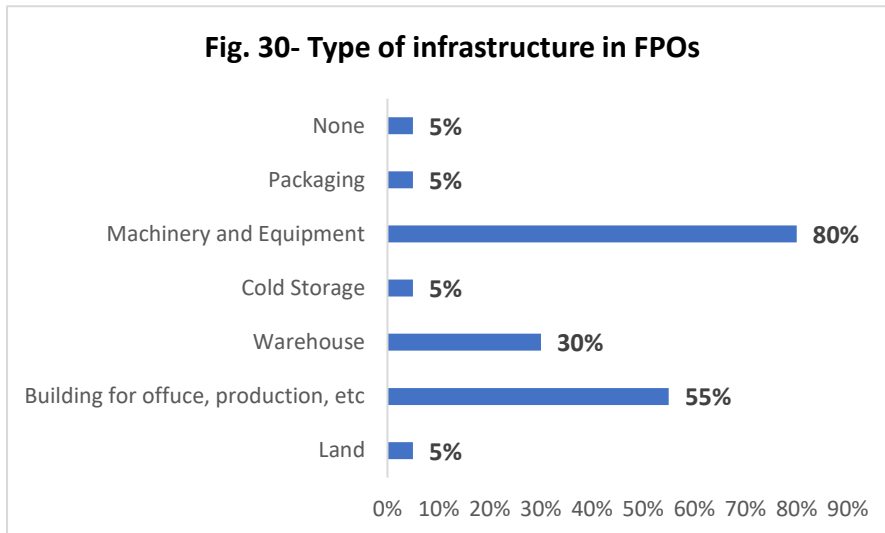
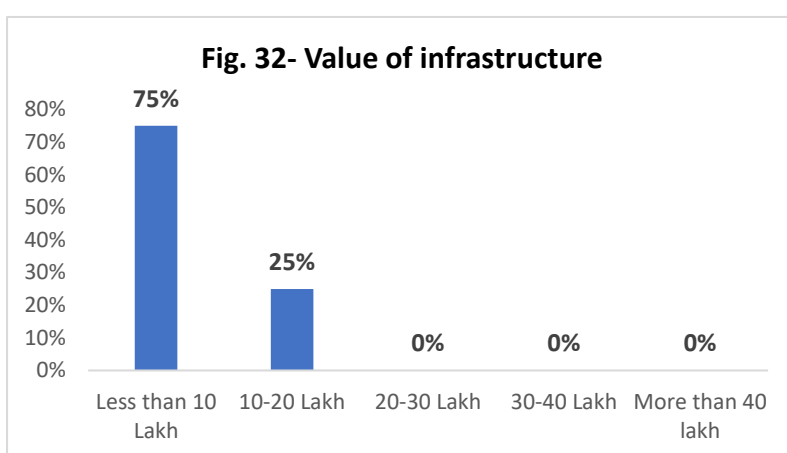
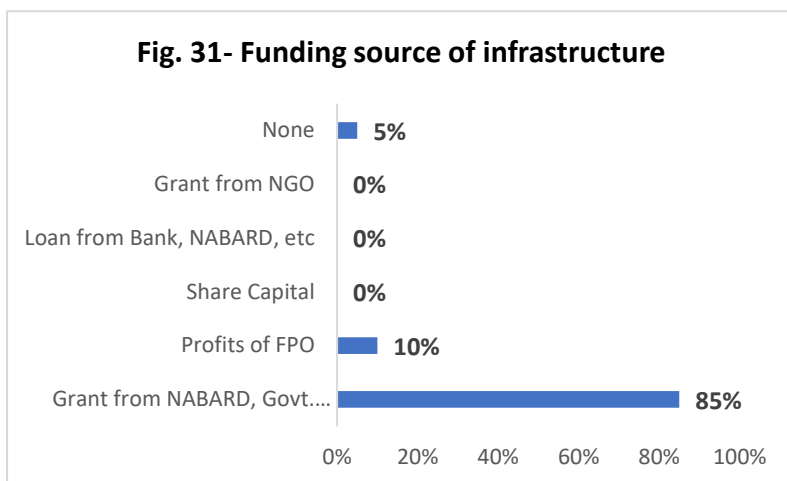


Figure 30 shows that 80% of the FPOs in Sikkim have some form of physical infrastructure, the type and quality of assets vary. Funds were received by the FPOs to set up basic infrastructure such as buildings, machinery, and storage units. To enhance productivity

and promote value addition, several FPOs in Sikkim have been provided with agricultural equipment such as power tillers, pulverisers, slicers, and dryers. While these machines are intended to streamline processing and reduce manual labour, many FPOs are unable to use them to their full potential. The primary reason is that these machines often require high electricity input, and many FPOs lack the necessary infrastructure or energy capacity to run them effectively. As a result, these assets remain underutilized or inefficiently operated, limiting their intended impact.

Only 5% of FPOs reported owning land, indicating a strong dependence on leased or community spaces. However, 55% of the FPOs have their own buildings and production units, which serve as operational hubs for storage, meetings, and processing activities. Around 30% have access to warehouses, supporting bulk procurement and storage, while only 5% have cold storage facilities, which are crucial for perishable produce but remain limited due to high installation and maintenance costs. Notably, packaging facilities are available to only 5% of FPOs, restricting their ability to improve product presentation and branding. A small portion of 5% reported having no infrastructure at all, reflecting inequities in resource allocation and the need for targeted support to bridge infrastructural gaps.

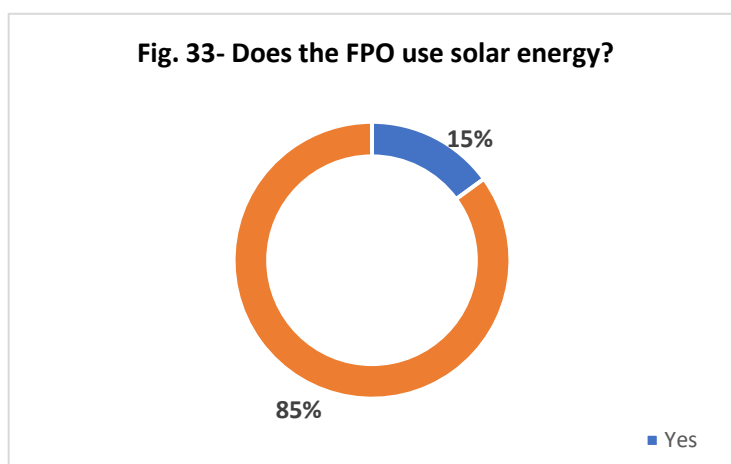
**2.4.2 Source of funding for infrastructure & machinery:** Majority of FPOs in Sikkim have been able to establish infrastructure primarily through external support, with 85% receiving grants from NABARD and various government departments, particularly under schemes like MOVCD-NER and the Formation and Promotion of 10,000 FPOs Scheme. Only 10% of FPOs reported funding infrastructure through their own profits, which reflects the generally low revenue and profit margins of most FPOs. Additionally, 5% have not received any infrastructural support, which places them at a disadvantage in terms of operational capacity and limits their ability to scale or undertake value addition. These findings underscore the critical role of public funding in building the foundational assets necessary for FPOs to function effectively in Sikkim.



The estimated value of infrastructure assets for 75% of FPOs in Sikkim is less than ₹10 lakh, indicating that most organizations operate with modest physical facilities. These infrastructures are typically sufficient for localized operations but fall short in enabling large-scale processing, value addition, or long-term storage. Meanwhile, 25% of the FPOs have infrastructure valued between ₹10-20 lakh. However, no FPO reported infrastructure exceeding ₹20 lakh, which highlights the overall constraint in capital investment and the need for greater infrastructure funding to support scaling, efficiency,

and diversification of operations (Figure 32). These figures align with field data where FPOs expressed limitations in power supply, underutilization of equipment, and inadequate facilities for packaging or cold storage.

**2.4.3: Use of Solar Energy:** The study highlights that frequent power outages and unreliable electricity supply remain a significant obstacle for FPOs in Sikkim, especially those operating in remote and hilly regions. These disruptions hamper critical activities like processing, drying, and packaging, resulting in underutilization of machinery and interruptions in business operations. While all FPOs (100%) currently rely on conventional electricity, only 15% have adopted renewable energy solutions such as solar panels, used alongside conventional electricity. This limited adoption reflects both the growing awareness and unmet potential for alternative energy solutions. Introducing solar or hybrid systems could offer a more reliable and eco-friendly power source, enabling FPOs to operate more efficiently and



reduce downtime caused by electricity fluctuations an issue repeatedly raised in interviews and field observations throughout the study.

As seen in Figure 33, 85% of FPOs in Sikkim do not currently use any form of renewable energy technology, relying solely on conventional grid electricity to power their operations. This dependence poses a challenge, especially in the context of frequent power cuts and voltage fluctuations reported across rural and hilly areas where most FPOs are located. These power issues negatively impact the functionality of processing equipment like dryers, pulverisers, and slicers, many of which remain underutilized due to irregular electricity supply. Interviews with FPO members and cooperative department officials also underscored a growing interest in sustainable and localized energy options, with several respondents suggesting that solar-powered equipment could improve efficiency and reduce operational downtime. This indicates a strong case for policy interventions and targeted investments to support renewable energy integration into FPO infrastructure.

**2.4.4 Machinery requirements of the FPOs:** To improve the functionality and productivity of Farmer Producer Organizations (FPOs) in Sikkim, several solar machinery solutions have been identified as essential.

- **Solar Dryers:** One of the most widely demanded technologies is solar dryers, especially for drying crops like large cardamom, turmeric, ginger, and chilli. These dryers help maintain product quality and reduce drying time, particularly important in regions with frequent rain and limited sunlight. However, they must be low-energy and adapted to the local climate to be effective.
- **Processing Units:** Another key requirement is solar-powered processing units such as mills, pulverisers, and slicers. These machines allow FPOs to undertake value addition—turning raw produce into products like powdered ginger, turmeric, and millet—despite recurring power outages in remote regions.
- **Portable Machinery:** FPOs also require portable and terrain-specific machinery. Given Sikkim’s hilly and scattered farmlands, standard machinery designed for plains is often unsuitable. There is a strong need for lightweight, mobile, and solar-compatible equipment that can be easily transported and used across rugged terrain.
- **Cold Storage:** Solar-powered cold storage and backup systems are another important solution for preserving perishable goods, particularly organic produce. These systems would help reduce post-harvest losses, increase shelf life, and improve the ability to participate in institutional and larger markets.
- **Region Specific Solutions:** In addition to hardware, region-specific solar solutions are crucial. Past interventions, such as multi-fan dryers, failed due to poor compatibility with local climates. Custom-designed and climate-appropriate technology, backed by on-site demonstrations and training, is essential to ensure adoption and effective use.
- **Cross Cutting Training:** Lastly, a cross-cutting need for training and capacity building has been highlighted. Training on the use, maintenance, and benefits of solar

technologies is necessary to ensure that FPOs can maximize their utility, increase productivity, and become more self-reliant and sustainable in the long term.

## CHAPTER 3 – ANALYSIS AND DISCUSSION

Based on the findings from the quantitative as well as qualitative data, the following is the analysis of the different components of the FPO ecosystem in Sikkim-

### 3.1 Section 1: Formation, Governance & Support Received

**3.1.1 Formation process of FPOs:** The mobilisation of Farmer Producer Organizations (FPOs) in Sikkim under schemes such as the 'Formation and Promotion of 10,000 FPOs' by NABARD and NCDC, and the MOVCD-NER scheme by the Agriculture Department began primarily post-2017. These schemes have played a crucial role in activating and supporting the FPO ecosystem in the state. Although older cooperatives (some over 30 years old) are listed on official records, attempts to contact them during the study revealed that many are either defunct or non-operational. As a result, the study focused on FPOs currently supported by state departments and central agencies.

The formation process across most FPOs follows a similar structure. Resource Institutions (RIs) under the Agriculture Department and Cluster-Based Business Organizations (CBBOs) under NABARD and NCDC are appointed to conduct crop potential assessments and facilitate village-level mobilization. These agencies support the formation of Farmer Interest Groups (FIGs), raise awareness, assist with registration, build business and financial plans, and provide capacity building. Support is typically extended for three years to enable FPOs to achieve operational sustainability.

**3.1.2 Legal Structure:** All FPOs in Sikkim are registered under the State Cooperative Societies Act of 1978. This legal framework enables close oversight and alignment with state-run schemes. However, it also restricts FPOs from exploring other legal models such as Producer Companies, which may offer more flexible governance structures, access to private capital, and broader market engagement. Moreover, the motivation for forming FPOs has been largely scheme-driven, often resulting in top-down implementation with limited grassroots ownership or involvement in the design phase. This has led to weaker engagement and participation at the community level.

**3.1.3 Membership Trends:** There has been a steady increase in FPO membership across most studied organizations. However, this growth is largely attributed to state-wide mandates to register at least one household member per family. While this inflates membership figures, it does not necessarily translate into active participation or ownership among the community.

**3.1.4 Governance:** Regular meetings are an essential mechanism for ensuring transparency, accountability, and participatory governance. According to the study, about 70% of FPOs conduct more than four BoD meetings annually, which aligns with cooperative norms. However, the situation is different for Annual General Meetings (AGMs), which are critical for

engaging the general membership. Only 45% of FPOs conducted even one AGM, and 30% did not conduct any. Several FPO representatives cited difficult terrain, scattered habitations, and inadequate transport infrastructure as major barriers to organizing meetings with high attendance. In practice, most strategic decisions are taken by the BoD and communicated to the larger membership via WhatsApp or periodic AGMs, indicating a largely top-down decision-making structure. This reduces transparency and limits grassroots involvement in shaping the FPO’s vision and direction.

**3.1.5 Governance and Decision-Making:** While all FPOs have formal governance structures in place, including a General Body and a Board of Directors (BoD), their effectiveness is often hindered by a lack of clarity in roles and responsibilities. The BoD typically holds central decision-making power, with limited involvement of the general membership. Decisions are usually communicated through WhatsApp or during Annual General Meetings (AGMs), but transparency remains low. This top-heavy structure, combined with poor attendance due to challenging topography and transport, limits inclusive governance. Non-clarity of roles and responsibilities and a lack of ownership lead to poor governance practices and engagement of members. Also, as the FPO’s volumes are low and no dividends are disbursed, this leads to low motivation and engagement of members. There are no written policies or Guidelines that would enable professional and standardised functioning of organisations.

### 3.2 Section 2: Business Activities of the FPOs

**3.2.1 Key commodities covered by the FPOs:** Sikkim’s agricultural landscape is marked by diverse agro-climatic zones across its districts, leading to a rich variety of crops and value chains. In the Pakyong and Gangtok regions, farmers primarily cultivate maize rice, millet powder, leafy greens like spinach and vegetables such as cabbage, cauliflower, and beans, along with spices like turmeric, ginger, cherry pepper, and cardamom. The Gyalshing and Soreng regions are similarly rich in staples like buckwheat, maize, and lentils, and also produce high-value crops such as cardamom, turmeric, and orange, alongside local delicacies like Gundruk and Sinki. Namchi is notable for a broader value chain that includes rice, millet, pulses, and a range of fruits like banana, orange, and dragon fruit, as well as spice crops and broom grass for household and commercial use. Meanwhile, Mangan stands out for its cultivation of cardamom, turmeric, and ginger, along with cool-climate vegetables like broccoli and cabbage. This district-level crop diversity presents strong potential for region-specific value addition, branding, and market linkage development.

Sl. No.	Districts / Regions	Key commodities
1	Pakyong, Gangtok	Maize rice, Millet powder, Coriander, Spinach, Saag, Cabbage, Cauliflower, Beans, Turmeric, Ginger, Cherry Pepper, Cardamom

2	Gyalshing, Soreng	Buckwheat, Maize, Lentils/Dal, Cardamom, Dalley, Turmeric, Chilli Pepper, Orange, Potato, Carror, Gundruk, Sinki
3	Namchi	Rice, Millet, Pulses, Green Vegetables, Ginger, Turmeric, Cardamom, Cherry Pepper (raw & processed), Banana, Orange, Dragon Fruit, Mustard (for oil), Broom Grass
4	Mangan	Cardamom, Turmeric, Ginger, Buckwheat, Cold Vegetables: broccoli, cabbage, beans, etc.

**3.2.2 Capacity Building:** Under schemes like MOVCD-NER, capacity building is a core component intended to strengthen the institutional and operational functioning of FPOs. Service Providers (SPs) are mandated to conduct training sessions every 15 days for key personnel such as the Board of Directors (BoD), Chief Executive Officers (CEOs), and accountants. These sessions are expected to cover areas such as record-keeping, business planning, marketing, and financial management. However, in practice, the effectiveness of these capacity-building initiatives has been uneven. While 95% of FPOs reported receiving some form of training, only a small fraction received more than 10 training sessions overall. More importantly, many BoD members still lack a clear understanding of their roles and responsibilities- from compliance and strategic decision-making to governance and long-term planning. This knowledge gap severely limits the ability of FPOs to function as professionally managed farmer enterprises. Moreover, attrition of trained personnel has led to institutional memory loss, further weakening internal capacity over time.

**3.2.3 Products and Business Activities:** The core business activities across most FPOs are centered on procurement, marketing, input supply, and basic value addition. Procurement from member farmers helps ensure collective market access and fairer pricing, while marketing efforts are largely directed toward institutional buyers, local vendors, and traders. Additionally, FPOs supply inputs such as seeds, fertilizers, and pesticides, often at subsidized rates to reduce input costs for members.

Despite this functional framework, the scope of operations remains limited, with value addition confined to primary processing activities like grading, sorting, and rudimentary packaging. This suggests that this limitation is closely linked to systemic constraints particularly a lack of working capital, inadequate business planning, and a shortage of skilled human resources. These factors collectively hinder the FPOs' ability to scale, diversify, or create higher-value market linkages, leaving many of them operating at a subsistence or semi-formal level. This underscores the need for targeted support in financial planning, training, and infrastructure to unlock their full potential.

**3.2.4 Value Addition:** Many FPOs in Sikkim have been equipped with processing machinery such as slicers, pulverisers, dryers, and packaging units to facilitate the shift from selling raw produce to offering value-added, market-ready goods. The aim of these investments is to increase profitability by enabling shelf-life extension and creating higher-value products. The actual utilization of this infrastructure remains low. Two major challenges hinder their effective use: firstly, inconsistent and poor electricity supply especially in rural and hilly areas limits the ability to operate high-power-consuming equipment. Secondly, the market demand for value-added goods is often low or unpredictable, which discourages FPOs from investing further in processing or expanding these operations. As a result, despite having the tools and infrastructure in place, value addition continues to be an underdeveloped revenue stream, highlighting a gap between infrastructure provision and sustainable business outcomes.

**3.2.5 Marketing:** Marketing remains one of the most significant challenges faced by FPOs in Sikkim. Although government departments organize buyer-seller meets to facilitate linkages, these efforts often do not translate into sustainable or long-term market connections. While many FPOs have established relationships with institutional buyers such as IFFCO and private vendors from cities like Siliguri and Kolkata, they frequently struggle to fulfil bulk orders. This is primarily due to their inability to procure sufficient quantities of produce from member farmers on time, as many farmers continue to prefer selling to traditional vendors with whom they have long-standing ties. Additionally, weak logistical systems and coordination gaps between procurement and dispatch further hinder timely deliveries. Even when there is clear demand, FPOs often fail to capitalize on these opportunities, leading to missed sales and a gradual erosion of trust among potential buyers.

**3.2.6 Overall improvement in incomes and livelihoods of farmers:** The study suggests that while there have been some improvements in the status of farmers after joining FPOs in Sikkim, these changes are modest and not yet transformative for the majority. Farmers have experienced newer forms of market access, largely due to the collective structure of FPOs which facilitates bulk selling and participation in buyer-seller meets. In certain cases, this has enabled farmers to obtain more favourable prices than they would have received by selling individually to traditional vendors. Additionally, FPOs have made it easier for farmers to access subsidized agricultural inputs such as seeds, fertilizers, and small machinery, helping reduce input costs and improve production efficiency.

Another positive change has been in the area of training and capacity building. Members of FPOs have benefited from trainings conducted under schemes like MOVCD-NER, covering topics such as- organic farming practices, book keeping, and basic business planning. Although the extent of learning varies, these sessions have helped farmers especially women and small farm holders gain confidence and awareness of agricultural best practices.

However, despite these positive developments, the overall improvement in farmers' economic and social status remains limited. Most FPOs are still in the early stages of financial sustainability, with low annual revenues and minimal profits. This makes it difficult for them

to distribute dividends or equity returns to their members. In addition, some members continue to sell their produce through existing middlemen due to familiarity rather than through the FPO's collective system, which can involve delays and logistical coordination.

### **3.3 Section 3: Finance**

**3.3.1 Revenue and Profitability:** The financial performance of most FPOs in Sikkim remains modest. According to the study, 85% of FPOs generate less than Rs. 10 lakhs in annual revenue, indicating low-scale operations and limited market penetration. While 60% of these FPOs reported making profits, the overwhelming majority earned less than Rs. 5 lakhs in net profit during the last financial year. This reflects not only restricted business volumes but also the lack of high-value product offerings or diversified income streams. In many cases, the profits made are insufficient to meet recurring operational costs such as staff salaries, office rent, or reinvestment into business development. Additionally, revenue fluctuations are common due to seasonal dependencies, limited working capital, and inconsistent procurement from member farmers. There is still very limited business planning knowledge and practice.

**3.3.2 Access to Credit:** Access to affordable and adequate credit remains a critical barrier to the growth of FPOs. While 60% of the FPOs have taken loans, most borrowed less than Rs. 10 lakhs, reflecting their cautious approach and limited borrowing capacity. There is also a general reluctance among farmers to borrow. Without timely and adequate financing, FPOs struggle to procure raw materials, invest in infrastructure, pay for processing equipment, or manage working capital needs. This financial constraint limits their ability to scale up operations, participate in market opportunities, and meet members' expectations. Over time, the lack of accessible credit can erode the confidence of farmers in the FPO model and threaten the sustainability of the collective itself. Many FPOs deliberately avoid formal financial institutions due to several reasons- low financial literacy among BoDs and members, Fear of debt and perceived risks of loan default and inaccessibility or complexity of formal credit systems.

Instead, many farmers continue to rely on Self-Help Group (SHG) microloans, which are more flexible and require fewer formalities. However, these are usually short-term and insufficient for large-scale operational needs. Furthermore, loan defaults are common, particularly in the case of subsidized vehicle loans under the MOVCD-NER scheme, adding financial stress and damaging the credit credibility of FPOs. These defaults are indicative of deeper issues such as insufficient income generation, weak business planning, and inadequate financial management. Without structured revenue models or timely returns from their agricultural activities, many FPOs find it difficult to meet their EMI obligations.

**3.3.3 Institutional Support and Financial Sustainability:** FPOs in Sikkim largely rely on initial financial support from government schemes such as the Mission Organic Value Chain Development for North Eastern Region (MOVCD-NER) and the Formation and Promotion of

10,000 FPOs Scheme. These schemes typically provide funding for infrastructure development, capacity building, training, and business planning for a limited duration, usually between three to five years. While this initial support is crucial for setting up operations, most FPOs face significant challenges in sustaining themselves once the funding period ends. Many struggle with inadequate cash flow to cover recurring expenses, including the inability to pay salaries to key personnel such as CEOs and accountants. This financial strain also limits their ability to scale operations or expand market reach. As a result, staff attrition is high, particularly among trained managerial staff who move on to more secure employment opportunities. Furthermore, most FPOs have been unable to distribute dividends or share profits with members, leading to diminished motivation and weakening the overall trust and engagement in the FPO model.

**3.3.4 Banking Constraints:** A significant structural limitation faced by FPOs in Sikkim is the mandatory requirement to operate their accounts exclusively through cooperative banks. While this policy is in line with the cooperative registration model and helps streamline regulatory oversight, it significantly restricts the financial flexibility of FPOs. Cooperative banks generally have limited credit offerings and adhere to conservative lending norms. They also lack tailored financial products that cater specifically to the needs of agribusinesses and often have slower loan processing and disbursement timelines compared to commercial banks. This constrained access to a wider range of financial institutions makes it difficult for FPOs to secure working capital, invest in value addition infrastructure, or respond promptly to emerging market opportunities. Over time, these banking limitations hinder the growth and entrepreneurial potential of FPOs, preventing them from evolving into self-sustaining and professionally managed farmer enterprises.

### **3.4 Section 4: Infrastructure & Machinery**

**3.4.1 Existing Infrastructure and Its Utilization:** Most FPOs in Sikkim have received basic infrastructure support, primarily through government schemes such as MOVCD-NER and the Formation and Promotion of 10,000 FPOs Scheme. This includes office spaces, storage facilities, and agricultural processing equipment such as dryers, pulverisers, slicers, and packaging units. These assets are intended to support value addition, improve post-harvest handling, and help FPOs function as commercially viable enterprises. However, in practice, the usage of this infrastructure remains suboptimal. Several interrelated factors contribute to this:

- Irregular and insufficient power supply in many rural areas prevents the consistent use of energy-intensive equipment.
- Lack of trained manpower means that even when the equipment is available and powered, it is not operated efficiently. In some cases, FPO members lack the confidence or technical knowledge to use the machines at all.

- Low and unpredictable market demand discourages FPOs from engaging in regular processing activities, making the investment in machinery less viable.
- Weak organizational planning and the absence of business continuity plans also mean that infrastructure often goes underutilized or is mismanaged.

These constraints prevent FPOs from fully leveraging the infrastructure provided to them, thereby limiting their ability to move up the value chain and increase revenue through processed or branded products.

**3.4.2 Renewable Energy:** In the context of frequent power outages and voltage fluctuations in rural and hilly areas of Sikkim, the integration of renewable energy solutions, particularly solar power has become increasingly important. Solar energy offers a reliable, off-grid power source that could help address the electricity bottleneck affecting infrastructure usage. Some forward-looking initiatives have already been proposed. For example, the Agriculture Department is planning to solarize larger processing units like the IFFCO plant in Rangpo, which requires over 200 MW of power. However, smaller FPOs especially those in remote locations have not yet been included in such energy transition plans. This represents a significant missed opportunity to enhance productivity and efficiency. Barriers such as high upfront costs, lack of awareness about available technologies, and limited technical support continue to hinder the widespread adoption of solar or other renewable solutions among FPOs.

### **3.5 Section 5: Major Challenges Faced by the FPOs**

**3.5.1 Market Access and Sales:** Many FPOs struggle with limited buyer linkages and face challenges in accessing reliable, high-volume markets, which constrains their sales and profitability. The lack of institutional buyers or federated marketing systems restricts their ability to scale. Farmers also report unfair or low pricing, especially for organic and value-added products, which diminishes motivation to continue producing such goods. Some FPOs are unable to fulfill bulk orders to Institutions like IFFCO or explore export opportunities due to infrastructure gaps and lack of coordination across groups. Additionally, the overdependence on single buyers, such as Sikkim Supreme, exposes FPOs to market volatility and restricts them from developing diversified marketing channels.

**3.5.2 Financial and Credit Constraints:** Access to finance remains a major barrier. Many FPOs have inadequate working capital and face difficulties securing loans due to slow processing times, high interest rates, and complex documentation. Some report delays in fund disbursement from schemes, which disrupt operations and in some cases force CEOs to cover costs out of pocket. Low financial literacy among farmer members also contributes to the reluctance to take formal loans. These financial pressures are compounded by delayed or irregular payments to staff and volunteers, undermining staff retention and overall organizational morale.

**3.5.3 Operational and Institutional Management:** FPOs face internal operational challenges, including lack of business orientation among members, resulting in infrequent meetings and weak planning. In several cases, Boards of Directors are disengaged or unclear about their roles, undermining governance. Many FPOs lack professional management, and there is high attrition of key staff such as CEOs and accountants due to low salaries or unclear responsibilities. A strong dependence on one or two individuals, particularly the President, for all decisions and external representation limits broader member engagement and institutional growth.

**3.5.4 Infrastructure and Technology:** Inadequate road and transport infrastructure, particularly in remote or disaster-affected regions, makes logistics costly and inefficient. Frequent power shortages further hinder the use of machinery like dryers or pulverisers, reducing productivity. Access to modern and appropriate technologies remains low, with many FPOs lacking exposure to energy-efficient equipment or digital tools like online banking. Most organizations also lack critical infrastructure such as cold storage, scalable processing units, or proper packaging facilities, limiting their ability to engage in higher-value activities.

**3.5.5 Value Addition:** Despite having access to machinery, underutilization remains common due to power supply issues and lack of skilled manpower to operate the equipment. Maintaining organic certification is a challenge, especially when all members are not compliant, or when external inputs (like chemical fertilizers) are used by some. Furthermore, value-added production, such as processing dried goods, is often limited by lack of coordination, skills, and facilities, reducing the potential for increased profits.

**3.5.6 Labour and Demographic Challenges:** FPOs are facing a growing labour shortage, partly due to rising rural wages and a decline in youth participation in agriculture. Many youth prefer salaried government jobs, and schemes like One-Family-One-Job have further reduced the pool of available farm labour. In some FPOs, the ageing farmer base particularly among traditional weavers and long-time members—also affects the sustainability of agricultural practices and collective action.

**3.5.7 Environmental and Climate Challenges:** Man-animal conflicts, particularly crop destruction by monkeys and peacocks, have become a significant issue in several areas, leading to crop loss and farmer frustration. In addition, climate change impacts such as erratic rainfall, pest outbreaks, and higher temperatures are affecting productivity. Crops like large cardamom, which take up to two years to yield returns, further discourage investment due to their slow revenue cycles in an already uncertain environment.

**3.5.8 Social and Motivational Barriers:** Many FPOs report low unity and collaboration among members, particularly within Farmer Interest Groups (FIGs). This weakens collective bargaining and coordination. There is also low awareness of the benefits of being part of an FPO, which limits member engagement. Cultural and generational differences within FPOs particularly between older and younger members often hinder teamwork and continuity in long-term planning.

**3.5.9 Policy and Regulatory Constraints:** The Cooperative Act, under which all FPOs in Sikkim are registered, is often seen as bureaucratic for commercial activity, making compliance time-consuming. Cooperative banks, which FPOs are required to work with, have limitations such as low transaction ceilings, no online banking, and limited credit products, which restrict financial flexibility. Finally, many FPOs cite irregular follow-up and inconsistent support from departments and schemes, resulting in gaps in implementation and accountability.

## CHAPTER 4: RECOMMENDATIONS & CONCLUSION

### 4.1 Recommendations

Based on the findings of the study, the following are the key recommendations for the strengthening and promotion of functional and sustainable FPOs in Sikkim-

**4.1.1 Capacity building and training-** To enhance the success and sustainability of Farmer Producer Organizations (FPOs), it is essential to strengthen the leadership and governance capacity of their Boards of Directors (BoD) and CEOs. This can be achieved by providing targeted training on governance, business planning, and member-centric approaches to ensure leaders understand that FPOs are owned by shareholder farmers and exist to improve their incomes. In addition to the important areas of Governance and Leadership, trainings can be provided to the FPO leadership and members on- machinery usage, value addition techniques, business management, accounting and marketing. Some FPOs emphasized the importance of on-site training programs and training designed specifically for FIGs (Farmer Interest Groups) to boost member engagement and collective functioning.

**4.1.2 Strategic Planning and Business Development:** While a few FPOs have clearly outlined goals and timelines, others are still at the conceptual stage, working on proposals for submission to government departments. A few FPOs are also aiming to secure MSME loans to support these plans and ensure financial sustainability. As most FPOs did not have a clear business plan as to how they would take their work forward, it is important to support the FPOs have a workable and simple business plans, that is created by involving the Directors, CEOs and the shareholders. Having a business plan, that can be understood by the Directors and CEO is one of the most crucial aspects of a strong FPO.

**4.1.3 Organizational Development:** A few FPOs highlighted the importance of organizational development, particularly in terms of clarifying BoD roles, improving governance, and building long-term strategic plans. Promising FPOs can be supported towards creating business development proposals and expressed the need for expert guidance in strategic planning, HR systems, and future goal-setting. Strengthening the internal structure is seen as essential for professionalizing the FPO model and ensuring sustainability.

**4.1.4 Value Addition and Product Diversification:** Several FPOs are exploring value-added product development as a core strategy for business growth. Plans include processing raw produce such as ginger, turmeric, cherry pepper, and maize rice into powdered, sliced, or pickled forms to enhance shelf life and market value. Others are looking to develop new products, including millet and wheat biscuits and incense sticks. FPOs can be supported in value addition and marketing of products which has the potential to fetch better price realisation and revenues for the FPOs. FPOs can be supported in the value addition process through trainings on value addition, packaging and by helping the FPOs acquire the required machinery.

**4.1.5 Marketing:** Many FPOs struggle with figuring out where to sell their products and how to connect with larger traders and companies. Support is required by the FPOs in developing marketing strategies, connecting to larger traders or companies and improving product branding for value added products. Access to reliable buyer networks, particularly for organic and value-added products, is seen as vital to boost profitability and ensure long-term viability.

**4.1.6 Support for working capital-** To address the critical issue of financial sustainability, there is a need to improve FPOs' access to working capital and credit. This includes helping the FPOs get equity grants through Govt. schemes, support in loan application processes, financial literacy and connecting with possible financial grant support. The FPO BoD and leadership needs to be trained in expenditure planning and financial & credit management skills, so that the financial resources of the FPO are utilised in a frugal and productive manner.

**4.1.7 Machinery support:** It is recommended that targeted support be provided to Farmer Producer Organizations (FPOs) to address critical infrastructure gaps, including the establishment of processing units, storage facilities, packaging stations, and transport solutions. A key area identified for intervention is the provision of appropriate machinery and equipment—such as dryers, mills, and slicers—to enhance productivity and enable value-added processing. In several cases, infrastructure development is essential for scaling up production, improving post-harvest handling, and meeting organic or quality standards.

**4.1.8 Support for renewable energy-** Support can be provided to FPOs to facilitate the adoption of solar-powered energy solutions, especially given the frequent disruptions caused by unreliable electricity supply and voltage fluctuations, particularly during the monsoon season.

**4.1.9 Certifications:** FPOs are also aiming for FSSAI and organic certifications to improve credibility and access higher-value organic markets. Organic certification remains a critical step, especially for those looking to sell beyond local boundaries or tap into institutional buyers. The FPOs can be supported in availing, renewing and in compliances with regard to organic certifications.

## **4.2 Conclusion**

The study of Farmer Producer Organizations (FPOs) in Sikkim reveals a landscape of both opportunity and challenge. FPOs have emerged as important institutional mechanisms to empower small and marginal farmers by providing them with collective bargaining power, improved market access, and subsidized inputs. Schemes such as MOVCD-NER and the Central Sector Scheme for Formation and Promotion of 10,000 FPOs have played a pivotal role in mobilizing farmers and building basic infrastructure. However, while these schemes have successfully initiated the formation and early-stage functioning of FPOs, the long-term sustainability and financial independence of these organizations remains a challenge.

Governance and institutional functioning are still maturing across many FPOs. While Boards of Directors and CEOs exist in formal structure, requirement for role clarity, low grassroots engagement, and poor attendance in Annual General Meetings indicated a challenge in Governance and effective engagement of shareholders. Although regular capacity-building efforts are undertaken, gaps remain in institutional strengthening, financial literacy, and implementable business planning. Targeted and follow-up trainings in governance, compliance, and business development will help the leadership in many FPOs to steer them toward long-term sustainability.

Financial viability is one of the most critical challenges faced by FPOs. Despite initial grants and infrastructure support, most FPOs are unable to generate sufficient revenue to cover recurring costs, invest in value addition, or repay loans. Limited access to credit, reliance on cooperative banks, and delays in government funding often compel leaders to bear expenses out of pocket. The need for elaborate loan documentation and low financial literacy have discouraged many FPOs from pursuing formal credit. The underutilization of machinery, low adoption of renewable energy solutions, and inadequate market linkages further inhibit growth. While some FPOs have access to dryers, slicers, and packaging units, frequent power cuts, lack of technical know-how, and uncertain demand prevent optimal use.

The road to FPO viability requires a multifaceted support ecosystem—one that includes capacity-building, financial assistance, strategic business planning, renewable energy integration, and robust market access—to truly empower these farmer collectives as self-sustaining agribusiness enterprises.

