

Guidebook on Lending to Farmer Producer Organisations

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Guidebook on

**Lending to Farmer
Producer Organisations**

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List of Abbreviations

ANBC	Adjusted Net Bank Credit	MSP	Minimum Support Price
BC	Business Correspondent	NABARD	National Bank for Agriculture and Rural Development
BCI	Better Cotton Initiative	NAM	National Agriculture Market
BOD	Board of Directors	NBFC	Non-Banking Financial Company
CCD	Centre for Collective Development	NCDEX	National Commodity and Derivatives Exchange
CEO	Chief Executive Officer	NEML	NCDEX E Markets Limited
CHC	Custom Hiring Centre	NIDA	NABARD Infrastructure Development Assistance
CII	Caspian Impact Investments	NKFL	NABKISAN Finance Limited
COAPCL	Chetna Organic Agriculture Producer Company Ltd	NPM	Non-Pesticide Management
CSO	Community Service Organisation	NSFM	National Food Security Mission
CSS	Centrally Sponsored Scheme	OD	Overdraft
DCCB	District Co-operative Central Bank	PACS	Primary Agriculture Credit Society
DDA	Deputy Director of Agriculture	PC	Producer Company
DDM	District Development Managers	PMKSY	Pradhan Mantri Kisan Sampada Yojana
EGCGF	Equity Grant and Credit Guarantee Fund Scheme	PO	Purchase Order
ERP	Enterprise Resource Planning	PO	Producer Organisation
FFID	Forum for Integrated Development	PODF	Producers Organisations Development Fund
FIFO	First In, First Out	POPI	Producer Organization Promoting Institution
FIG	Farmer Interest Group	PSL	Priority Sector Lending
FPC	Farmer Producing Company	RAFTAAR	Remunerative Approaches for Agriculture and Allied sector Rejuvenation
FPG	Farmer Producer Group	RCS	Registrar of Co-operative Societies
FPO	Farmer Producer Organisation	RF	Rabo Foundation
FWWB	Friends of Women's World Banking	RI	Resource Institutions
GCMMF	Gujarat Co-operative Milk Marketing Federation	RIDF	Rural Infrastructure Development Fund
GDP	Gross Domestic Product	RKVY	Rashtriya Krishi Vikas Yojana
GOI	Government of India	ROC	Registrar of Companies
IDF	Initiatives for Development Foundation	RRB	Regional Rural Banks
IFF	India Farm Foods	RSA	Resource Supporting Agencies
IIMF	Indur Intideepam MACS Federation	SFAC	Small Farmers' Agri-Business Consortium
JLG	Joint Liability Group	SHG	Self-Help Group
LIFO	Last In, First Out	SHPL	Safe Harvest Private Limited
LTV	Loan to Value	SLPC	State Level Producer Companies
MACS	Mutually Aided Co-operative Societies	SPV	Special Purpose Vehicle
MCA	Ministry of Corporate Affairs	TDF	Tribal Development Fund
MFI	Micro-Finance	UPNRM	Umbrella Program on Natural Resource Management
MIS	Management Information System	VCA	Venture Capital Assistance Scheme
MOFPI	Ministry of Food Processing Industries		

Executive Summary

Collectivization is the fastest way to improve farm sector productivity, enhance farmer incomes, and achieve PSL lending goals

India's agriculture sector calls for a higher efficiency that can only be achieved, given its highly fragmented state, through collectivization, which will also be a catalyst to improve socio-economic outcomes. India's agriculture sector consists majorly of smallholder farmers; about 83% of farmers are small and marginal, and constitute ~50% of operational land holdings. As India's agricultural assets undergo further fragmentation, challenges of lower productivity, and lack of access to affordable credit trap farmers in poverty. Aggregation through the medium of farmer producer organizations (FPOs¹) gives small and marginal farmers the opportunity to retain individual land rights, while leveraging economies of scale for advisory, production, procurement, credit access and most importantly, market access and value addition of members' produce.

Despite this providing an opportunity for credit dispensation, bankers remain risk averse because of historic challenges, exacerbated by information asymmetry.

The Indian government, through SFAC and NABARD, and other private sector entities, have instated several intersectional policies to reduce risk of lending to FPOs

In recognition of the opportunity and the need to intervene to improve farm sector productivity, policies have incentivized, often through the convergence of different applicable programs, the setting up of more FPOs to empower them as self-empowered, commercial and ideally, profitable entities. These policies range from one-time (commodity specific) grants for catalytic infrastructure, to affirmative action led grants, to easy access to advisory and operational support through promoting institutions.

Policies are set by central government, as well as individual state governments, and enacted by the leading government organizations – SFAC and NABARD, which coordinate grant disbursement through channeling of dedicated national / state level funds, and expedite lending through partnerships between NABKISAN or NABFINS, both under NABARD, dedicated to lending in farm and allied sectors respectively.

SFAC's key policies include venture capital assistance, equity grant and credit guarantee fund schemes for FPOs, while

NABARD has dedicated funds like Producers Organizations Development Fund (PODF), PRODUCE Fund.

Both SFAC and NABARD are instrumental in setting up and capacity building of new FPOs, through resource institutions (RIs) and producer organization promoting institutions (POPIs), respectively.

It is important to demystify key characteristics of an FPO to incentivize institutional lending, which includes mapping FPOs by origin and their ability to manage credit independently / with the help of promoting institutions

A majority (~80%) of FPOs have originated under central/state government initiatives, which involves setting up and capacity building of new FPOs. Typically, there is a lag time of 3-5 years until these FPOs become independent in operations and management and require minimal handholding from their respective promoting institutions. In this time, FPOs typically start with low cost, low margin farm input (fertilizers, seeds, pesticides, nutrients, others inputs), and gradually ascend to output selling. The level of output processing improves with the operational abilities of an FPO. The remainder of FPOs are set up by private sector entities, who leverage the various policies to reduce costs of operations and are able to sell produce in high value markets.

The FPO credit need market is large, currently largely untapped except for a few market leaders, who have significant experience in lending to FPOs

The total estimated credit requirement is in the range of ₹ ~600 crore, and is largely serviced by 3-4 NBFCs, including NABKISAN, Ananya, and Samunnati. Extensive experience in lending to FPOs have crystallized key, and customized due diligence and lending practices for FPOs. In particular, this includes the more frequent optimally timed working capital loans (which relate to the commodity type and respective working capital cycle), and also term loans for catalytic infrastructure.

Bankers' existing experience in lending to FPOs is fraught with challenges

Institutional lending would reduce the cost of borrowing for farmers than what is currently availed from these NBFCs. Despite some initiatives by a few banks (SBI, select DCCBs

¹ FPO is an umbrella term used to describe most modes of farmer collectivization, including Cooperatives, Companies (FPCs), Trust structures (under Indian Trust Act, 1882), and Societies (under Societies Registration Act, 1860). However, trusts and societies may not be ideal forms of FPOs because of restrictions on their ability to borrow funds. Throughout this report, FPOs are meant to denote the formal structures available for farmer collectivization in the market today – FPCs and Farmer Cooperatives, in this order of prevalence

and RRBs), most banks have not ventured into lending to FPOs, given a lack of clear policy directive from RBI, small and scattered market, and information asymmetry on FPOs' operations and business potential.

These gaps in funding can be better articulated from the perspective of FPOs, as challenges in institutional credit access

The challenges faced by FPOs in accessing credit stem from the lack of understanding of commodities, working capital cycles, market linkages / market access on the part of bankers. Other challenges include restrictions of quantum of loan available (due to information asymmetry and risk averseness), strict guidelines on geographical limitations for warehouse financing, and strict / non-customized intake restrictions for lending to FPOs.

Bankers must improve in customizing credit evaluation of FPOs in line with individual needs of an FPO, through preliminary and appraisal visit led analysis

Credit evaluation for a typical FPO should be customized to lend the support it needs, in line with knowledge of working capital cycles of respective commodities.

This includes preliminary evaluation/assessment of the FPO's business strategy, ability to maintain records of transactions / financial statements, digitization (and extent of digitization embraced in all operations, from accounting, to crop planning) and the level of governance in the Board of an FPO. Assessing these factors requires a physical visit to the FPO office / field operations.

Physical visits should evaluate the competence of members, board members, staff, clients, aligned promoting institutions and key market intermediaries, adherence to compliance and regulatory requirements, etc., against existing benchmarks for FPOs. To do this, there are rating tools available in the market, including an indicative weightage based FPO rating tool introduced in this guide.

Lending to an FPO should only be done with sufficient understanding of the individual FPO's business model, and key logistical factors falling into place;

Based on experience of existing NBFCs in lending to FPOs, there are a list of instances when it may be unwise to lend to FPOs. This may be in the case when the bank does not have sufficient understanding of the FPO's model, regional / corporate office of an FPO is not aligned on farm sector lending policies with its last mile branches, business case of lending to FPOs is majorly due to the SFAC guarantees, and lack of knowledge of the

right time to lend (corresponding to commodity type), among others.

There are some key good practices which will enhance the banks' understanding of an FPO model and improve confidence while reducing risks while lending to FPOs

They include, participating in the capacity building sessions arranged by POPIs, and bankers attending FPO meetings.

There are key lessons to be learnt from some key funding models practiced by FPOs (and federation of FPOs), and key market intermediaries

This includes JLG lending model for small holder (including lessee) farmers, often promoted by empowered promoting institutions², for example, the Indur Intideepam MACS Federation Model, Farm Veda Cooperative Structure. There are also state level federation models, which have the ability to leverage economies of scale and employ professional management in key areas of market linkages and branding & advertising. These include the bill discounting model, high value export market model, and output marketing through a professionally managed SPV (example: KrushakMitra Agro Services).

Identifying the need for ecosystem approaches, key market players have introduced much needed market intermediation services. This includes Arya Collateral in the space of warehouse financing, and Samunnati Agro Solutions' market facilitation model to improve FPOs' output market access.

When considering a working capital facility to an FPO, cashflow analysis may be instructional in accurately estimating working capital cycles; term loans to an FPO should ideally be leveraged converging applicable programs

In the case of seasonal agricultural produce, the output only passes through the hands of the FPO. The FPO typically does not hold the output by itself. If it does, the retention period is very short. Therefore, working capital funds can be rotated³ several times over, and thus the working capital requirement will be a fraction of the turnover. A good tool to use to get an understanding of the cycle of operations and the working capital gap is to use the Cash Flow method, which is explained with a case study.

Term loans for catalytic infrastructure calls for reducing exposure by converging support from other government programs to reduce risk.

² For example, IDF, Vrutti, among others

³ 2-4 months if commodity is sold without processing / value addition, 8-9 months in the case of seed production (Source: discussion with Ananya); 20-60 days for short duration crops like vegetables, 90 days for tomatoes, 11 months for banana cultivation (Source: discussion with Samunnati)

Sourcing of FPOs should be done through verifiable channels which allow for a sufficient evaluation of the abilities of the FPO

These channels include NABARD / SFAC websites, which list FPOs by state and commodities, directly from promoting institutions identified in a specific state/district, or from NABARD regional or district office.

Most importantly, while lending in this high opportunity and high-risk space, risk mitigation should include astute selection of FPOs, well informed analysis of operations and abilities, and the degree to which grants and guarantees have been leveraged. Some of these key grants and guarantees offered (by entities besides SFAC) include Rabobank's commodity value bank guarantee, and credit bank guarantee.

1. Indian Agriculture and FPOs

1.1. Economic Gain from Agri Value Addition and Food Processing

The Gross Value Addition from agriculture, forestry and fishing is estimated at ₹ 1.85 Lac Crore (FY18)⁴. Currently, agri value chains are highly fragmented and inefficient, especially at the production stage. So, Indian agriculture has the potential for huge growth, particularly through post-harvest value addition / food-processing. However, the majority of Indian farmers have small and fragmented land holdings, a significant challenge to growth.

Small and marginal farmers account for 50% of all land holdings

About 67% of India's, 1.3 billion population, is rural, and ~70% of rural households depend primarily on agriculture for livelihoods⁵. Over 83% of farmers (9-10 Crore farmers) are small or marginal land holders, covering ~50% of operational land holdings⁶.

Poverty combined with low productivity leads to deep food security challenges

The average land holding has declined from 2.3 hectares in 1970-71 to the current 1.37 hectares.⁷ Close to 70% of the holdings are less than 2 hectares, making it difficult to improve productivity through mechanization in irrigation and implements.

At the same time, small and marginal farmers face a poverty penalty⁸, and are unable to afford or access resources like irrigation mechanization, extension services⁹, quality seeds, fertilizers, soil nutrients, pesticides, post-harvest storage, transport and value addition / processing abilities, which would enable them to graduate out of poverty.

Input dealers often remain the one-point source for farmers to obtain inputs, knowledge and market linkages. Farmers typically have small purchase sizes and also find it difficult

to access formal credit. They remain chronically indebted to input dealers, reducing and limiting profit margins.

1.2. Increase in Yield and Profits Through Collectivization

Small and marginal farmers face decreasing land assets, and difficulty in accessing credit and timely agri-inputs like quality seeds, power, critically timed technical advice & assistance, or the benefits of mechanization. In this situation, Farmer Producer Organization (FPO)¹⁰ is a form of aggregation which offers farmers the strength of collective action. In FPOs, farmers retain individual land rights, while leveraging economies of scale for advisory, production, procurement and most importantly, market access and value addition to members' produce. This is established through pooled resources of land and labour, shared storage space, transportation and marketing facilities. In addition, FPOs also improve bargaining power of small farmers and reduce transaction costs of banks and buyers to deal with them¹¹.

Agricultural GDP growth is twice as effective in reducing poverty, as compared to growth in other sectors of the economy¹². Thus, collectivization in agriculture can reduce poverty for a large proportion of low-income population (small and marginal farmers), and also improve unit profitability and aggregate commercial outcomes for the country as a whole.

What is an FPO?

An FPO, or a Farmer Producer Organization is the phenomenon of collectivization of farmers to improve their bargaining power to access financial and non-financial inputs and services, technologies, reduce transaction costs, tap high value markets and enter into partnerships with private and public entities on more equitable terms.

A PC (producer company, distinct from a producer cooperative) is formed with the equity contribution by the members. The day to day operation is expected to be managed by the

⁴ IBEF industry insights on Indian Agriculture sector

⁵ India at a glance, FAO in India

⁶ https://www.nabkisan.org/doc/FPO%20Manual%20FINAL%20VERSION_22.02.2017.pdf

⁷ Small Farmers in India: Challenges and Opportunities, 2012

⁸ the phenomenon that poor people tend to pay more to eat, buy, and borrow than the rich, C. K. Prahalad, The Fortune at the Bottom of the Pyramid

⁹ 19% of all farmers rely on input dealers for agri-extension services, 72% of farmers have no access

¹⁰ FPO is an umbrella term used to describe most modes of farmer collectivization, including Cooperatives, Companies (FPCs), Trust structures (under Indian Trust Act, 1882), and Societies (under Societies Registration Act, 1860). However, trusts and societies may not be ideal forms of FPOs because of restrictions on their ability to borrow funds. Throughout this report, FPOs denotes the formal structures available for farmer collectivization in the market today – FPCs and Farmer Cooperatives, in this order of prevalence.

¹¹ 12th 5 year Plan, Planning Commission

¹² World Development Report, World Bank, 2008

professionals, hired from outside, under the direction of the Board of Directors (BoD) elected/selected by the General body of the PC for a specific tenure.

Figure 1: Definition of an FPO¹³

Based on the local commodity production, the level of focus on the commodity / region / demography of farmers by resource institutions, the density of FPOs and intensity of FPO operations differs across regions in India. The following heat map is indicative of the same.

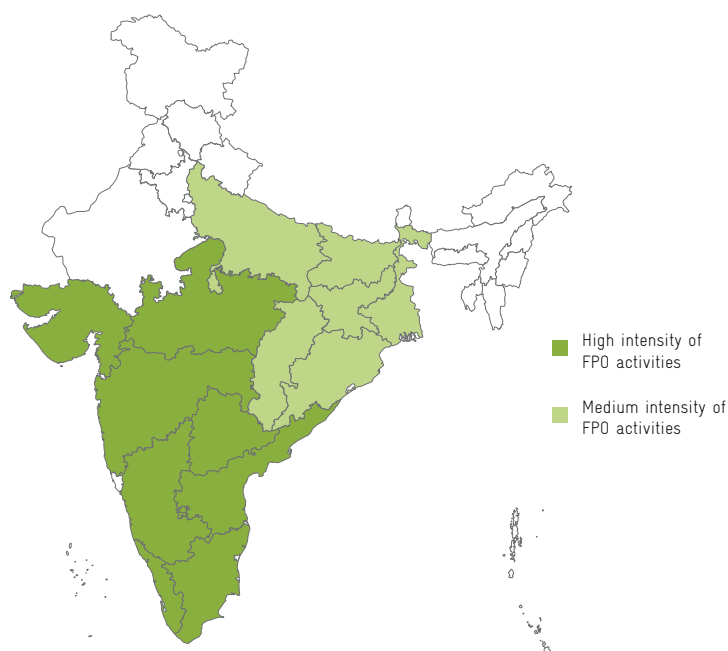


Figure 2: FPO Activity Heat Map

Analysts may want to further explore lending conditions based on the type of commodity grown, the region where it is grown, and the season when it is grown. The following table, sourced from IFFCO Kisan, gives a snapshot of the same.

Table 1: Agri Commodity Seasonality

Crop Cutting Calendar and Major Producing States in India														
Production Stage	S	Sowing Time					Growth Period			H	Harvesting Time			Major Producing States
Season	Kharif				Rabi				Zaid					
Crops / Months	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May		
Soybean	S	S		H	H								MP, MH, Raj	
Cotton (Kapas)	S	S	S		H	H							Guj, MH, AP, MP, Kar	
Turmeric	S	S	S				H	H	H	H			AP, TN, Or, WB, Kar, MH	
Castorseed		S	S				H	H	H	H			Guj, AP, Raj	
Guarseed [Cluster bean]		S	S		H	H							Raj, Har, Punj	
Chilli (Kharif)			S				H	H					AP, Kar, Or, MH, WB, Raj	
Chilli (summer)			H								S		AP, Kar, Or, MH, WB, Raj	
Maize (Kharif) (corn)	S	S	S	H									Kar, AP, MH, MP, UP	
Potato (Kharif)	S	S		H	H								Kar, AP, TN	
Potato (Rabi)				S	S	S		H	H	H			UP, WB, Punj, Bih, Or	
Wheat					S	S	S			H	H	H	UP, MP, Punj, Har	
Maize (Rabi) (corn)					S	S			H	H	H	H	Bih, AP, TN, Kar	
Rmseed					S	S				H	H		Raj, UP, Punj, Har, MP, WB, Guj	
Chana [Gram/chickpea]					S	S				H	H		MP, UP, Raj	
Barley					S	S			S	H	H		Raj	
Jeera [Cumin]					S	S			H	H			Guj, Raj	
Dhaniya [Coriander]					S	S	S		H	H	H		Raj, MP, AP	
Black pepper				S	S		H	H	H	H			Ker, Kar	
Mentha	H	H							S	S		H	UP	
Cardamom {Perennial Herb}				H	H	H	H	H					Ker, Kar, TN	
Potato (North Hills)		H	H	H	H				S	S	S		HP, Uttarakhand	
Sugarcane (summer)						H	H	H	H	H	S	S	North India	
Sugarcane (spring)						H	H	H	S	S			North India	
Sugarcane (winter)				S	S	H	H	H	H	H			North India	
Sugarcane (South India)		S			H	H	H	S	S	S			South India, MH	

13 1.2 of Nabkisan's Resource Book on Formation and Functioning of Farmer Producer Companies.

1.2.1 Collectivization of FPOs for Commercial Gain – a Priority of the Government

The Government of India has recognized the role of agriculture collectivization for effective intervention from the dawn of Planned Development (1950), (although agricultural credit cooperatives trace their origin to colonial times (1905). Until 2002, collectivization was conducted through farmer cooperative structures, registered with the

Registrar of Cooperative Societies. Cooperatives are largely state promoted and focus on accessing state programs rather than empowerment of farmer collectives to become independent business entities.

In 2002, the Producer Companies Act was added as an amendment to the Indian Companies Act of 1956. Producer Companies are incorporated with the Registrar of Companies (RoC).

When did the Company / MACS structures become relevant for producer collectives, typically organized in Cooperatives?

The Cooperative movement in India is over a hundred years old, a colonial legacy, established in its' time, to address the problem of farmers' distress, something that hasn't changed much after Independence.

The idea that farmers are intelligent enough to be able to manage their own affairs & have the ability to employ & pay for top notch professionals, on-par or better than the private sector was clearly demonstrated by institutions like Amul. However, that farmers need state patronage and be steered by the bureaucracy is a notion that persists even today, compounded by the fact of elite capture of co-operative institutions and their rampant politicisation.

This overbearing attitude of the bureaucracy came to a head in the late 1980's, when the Chairman of the Gujarat Co-operative Milk Marketing Federation (GCMMF), a Federation of the co-operative milk unions of Gujarat that handled marketing and owned the 'Amul' brand was dislodged by the Registrar of Cooperative Societies (RCS) of Gujarat. While the decision of the RCS was overturned by judicial pronouncement, the clarion call for unshackling cooperatives, especially those that do not depend on patronage and doles of the Government from the stranglehold of the RCS took root from there, and grew in intensity and spread far and wide.

This phenomenon, was the catalyst for two major reforms in co-operative landscape of India, one, the Producer Companies enactment, and the other the Mutually Aided Cooperative Societies Act.

Figure 3: Transition from Cooperative to Company Structure for FPOs

1.2.2 Government Agencies Working to Promote FPOs

The Government of India has put in place a number of policies, schemes and funds aimed at benefiting the agriculture sector, with particular focus on FPOs through Small Farmers' Agri-Business Consortium (SFAC)¹⁴, and National Bank for Agriculture and Rural Development (NABARD).

Small Farmers Agri-Business Consortium (SFAC)

Set up in January 1994, SFAC operates as a Development Institution under the aegis of Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare. SFAC's mandate is to develop agriculture in India. Its vision is to empower farmers by promoting agri-business through private sector investments and market linkages. Its mission is to link farmers to technology and markets, in association with private and cooperative sectors.

SFAC aims to provide backward and forward linkages, where necessary.

In addition to its core objectives, SFAC also helps implement various schemes and programs of the Indian government, financial institutions and banks.

SFAC also offers the following financial assistance:

- Venture Capital Assistance Scheme (VCAs)
- Farmers Producers Organizations (FPOs)
- Equity Grant and Credit Guarantee Fund Scheme (EGCGFs)

(Further details in Annexure)

There are also a number of central and state specific schemes (including one-time support grants and subsidies for capital infrastructure) which are routed through SFAC. They include; Rashtriya Krishi Vikas Yojana (RKVY), Remunerative Approaches for Agriculture and Allied Sector

¹⁴ Society promoted by Department of Agriculture, Cooperation and Farmers Welfare, Ministry of Agriculture and Farmers Welfare, Govt. of India

Rejuvenation (RAFTAAR)¹⁵, re-vamped National Food Security Mission (NFSM)¹⁶, and deployment of e-NAM¹⁷.

National Bank for Agriculture & Rural Development (NABARD) & NABKISAN

NABARD

NABARD is a Development Bank set up in 1982 by GoI to provide and regulate credit and other facilities for the promotion and development of agriculture, small scale industries, and other rural crafts and allied economic activities. Within this scope, NABARD acts as a coordinator for rural credit institutions, training and research partner for lending and capacity building organizations in rural areas, regulator for Regional Rural Banks (RRBs) and District Cooperative Central Banks (DCCBs). NABARD also provides refinance to rural lending institutions, enables institutional development, and evaluates and monitors client banks.

It sanctions credit for rural activities through rural cooperative banks and RRBs, and also invests in rural infrastructure development through its Rural Infrastructure Development Fund (RIDF) and the more recent NABARD Infrastructure Development Assistance (NIDA) scheme.

Particularly for producer organizations,

- NABARD's **Producers Organizations Development Fund (PODF)** was established in 2011, with an initial corpus of ₹ 50 Crore. Support under PODF was provided for as grant for promotion and capacity building of FPOs, and loans for market linkage.
- A follow-on NABARD **PRODUCE Fund** was set up in 2014, with an initial corpus of ₹ 200 Crores to create a network of more than 2,000 FPOs in the country

NABARD also has dedicated funds for tribal development (the Tribal Development Fund or TDF), and resource management funds (Umbrella Program on Natural Resource Management (UPNRM)). For more details, please refer to the annexure.

NABKISAN

NABKISAN Finance Limited (NKFL), registered as an NBFC, is a subsidiary of NABARD. The main objective of NABKISAN is to provide credit for promotion, expansion and commercialization of enterprises engaged in agriculture, allied and rural non-farm activities. One focus area of NABKISAN is extending term loans and working capital loans to FPOs.

1.2.3 Key Institutions Involved in Supporting Setting Up and Operations of an FPO

The majority of FPOs in existence have used external support (typically from SFAC, NABARD) to set up.

This segment explains the working of key agencies and bodies under the two national-level agriculture development organizations (NABARD, SFAC) of the Indian government¹⁸. It is important to note that the sub structures under each have been designed to enable

- Resource support
- Implementation support

Promoting Organization Support Via SFAC

SFAC is currently more active in carrying out macroeconomic policies related to facilitating grants, subsidies and other resource availability under the aegis of plans like RKVY, NFSM, and others. SFAC has empaneled a network of Resource Institutions (RIs) which provide resource support (including business development) to FPOs through a network of selected local agencies, typically NGOs. Tasks related to implementation are delegated to the local institutions. Typically, there are 5 NGOs and 10 FPOs under each RI.¹⁹

Promoting Organization Support Via NABARD

NABARD operates through a network of regional offices, which percolate down to the district level. It provides FPOs with both capacity building support through Resource Support Agencies (RSAs), and implementation support through producer organization promoting institution (POPIs).

¹⁵ Operational Guidelines RKVY-RAFTAAR, Department of Agriculture, Cooperation & Farmers welfare

¹⁶ NFSM Operational Guidelines, Department of Agriculture, Cooperation & Farmers welfare

¹⁷ NAM – National Agriculture Market Scheme: National Agriculture Market (NAM) is envisaged as a pan-India electronic trading portal which seeks to network the existing Agricultural Produce Market Committee (APMC) and other market yards to create a unified national market for agricultural commodities. NAM will create a national network of physical mandis which can be accessed online; FPOs / FPCs can register for this on the eNAM portal

¹⁸ State governments have their respective FPO promotion initiatives, for example, TNSFAC in Tamil Nadu, Andhra Pradesh Rural Inclusive Growth Project (APRIGP) & Andhra Pradesh Drought Mitigation Project – APDMP in Andhra Pradesh, NIRD, Hyderabad. Alternatively, these are also commodity based, for example, Department of Horticulture in Karnataka's FPO Cell and Centre of Excellence for FPOs, Coconut Boards, Spice Boards, etc. all channel state and central funds for FPOs

¹⁹ Discussions with key stakeholders in resource institutions



1.2.4 Key Central Policies for FP0s

- **Operation Greens: A Centrally Sponsored Scheme (CSS)** started by the Government of India. Its total budgetary allocation is ₹ 500 Crores, and is implemented by the Ministry of Food Processing Industries (MoFPI). The scheme is aimed at capacity building of FPOs through their professional development, reduction of post-harvest losses, creation of preservation & processing infrastructure, provision of agri-logistics for supply chain, price stabilisation for consumers and producers and preventing distress sale
- **PMKSY Scheme:** The MoFPI, under the Pradhan Mantri Kisan Sampada Yojana (PMKSY), has sub- components, enabling setting up of storage and processing infrastructure.
- **Tax Exemption:** As of FY 17-18, Farmer Producer Companies, registered under the Companies Act, having an annual turnover up to ₹ 100 Crore are exempt from tax on profits derived from farm-related activities for a period of 5 years²¹.

- Odisha Farmer Producer Organisations (FPOs) Policy, 2018
- Centre of Excellence for FPOs, 2017, by the Government of Karnataka²²
- Rythu Kosam, Andhra Pradesh Farmer Producer Organisations Promotion Policy 2016²³
- The Punjab FPO policy
- Agriculture – Promotion of Collective Farming by organising small/marginal farmers into Farmers Interest Group (FIG)/Farmers Producer Group (FPG) of Tamil Nadu²⁴ among others²⁵.

1.2.5 Convergence as a Mechanism to Reduce Risk and Improve Farmer Incomes

Convergence refers to combining complementary, intersectional schemes available through the government in an effective way to hedge risks, improve lendability while enhancing developmental outcomes. These may include

25 FPO Capacity Building Toolkit (Module 8), GIZ

commodity specific schemes²⁶, or those which leverage affirmative-action based support²⁷, and improved market access through the National Commodity and Derivatives Exchange (NCDEX), where commodities can be hedged, and sold at day-to-day market prices.

Case Study: How an FPO Leveraged Government's Catalytic Infrastructure Support Schemes

An FPO promoted by POPI Sabala, in Vijayanagaram district of Andhra Pradesh leveraged available SFAC, NABARD, and state government schemes to get a better risk profile and acquire improved farmer incomes. The FPO leveraged a state government scheme developed in conjunction with NABARD, which offers grant support for the purchase of catalytic physical infrastructure like storage godowns, marketing sheds, value addition processing units and custom hiring centers etc. The Cooperative Bank (DCCB) that extended the loan was able to reduce its exposure, as a significant portion of the funding for the infrastructure was provided by the government as subsidy.

Similarly, an FPO in Chittoor District, Andhra Pradesh, availed loan for a primary processing centre, wherein the outlay of ₹ 15 lacs was funded as a loan of ₹ 5 lacs, with the balance funded through existing schemes.

With the repayment risk significantly reduced, and the FPO being able to value-add utilizing the catalytic infrastructure, it could sell processed produce at a multiple of the price it would otherwise have got by sale at minimum support price, by gaining access to high value markets, and helped increase farmer incomes.

1.3. Classification of FPOs by Origin and Their Ability to Raise Debt

FPOs take on certain characteristics tied closely to their mode of origin. The following table provides information on FPOs by way of origin. FPOs are typically set up in the following formats

Table 2: Classification of FPOs by origin and ability to raise debt

Parameter	Promoting Institution based	CSOs/JLGs based	Cash Crop based
Proportion of all FPO's	~80%	~15%	~5%
Identified/set up by	Promoting institutions called and Producer Organization Promoting Institution (POPI) appointed by NABARD or Resource Institutions (RIs) appointed by SFAC.	Facilitators of pre-existing JLGs/ CSOs	Corporates/CSR division of large companies
Location	Low-middle income states	Low-middle income states	All states with cash crops
FPO Member/Farmer profile	- Low income farmer incomes - High dependence for (expensive) credit on input suppliers - Individual farmer equity ranges from ₹ 100-1000, typically ₹ 500	- Low to moderate income farmers - Low to moderate dependence on informal credit due to availability of formal channels like JLG/MFI – Individual farmer equity ranges from ₹ 100-1000, typically ₹ 500	Farmer incomes and equity levels vary by state – Formal credit availability is not a challenge because of company / CSR unit's network
FPO Business Strategy Performance	Low level of business strategy and management capabilities (unless there is dense POPI intervention and engagement) because of the following: - FPO/Board members may not know the CEO appointed - Low salary leads to high attrition, such that capacity building over initial years is ineffective	Moderate-high levels of business strategy because: - CSOs/JLGs are well acquainted with CEOs who are appointed from local catchment area - Low CEO attrition and continued capacity building leads to consistent meetings, patronage and profitability	High level of business/strategy capability because of educated entrepreneur/CSR division which has started the venture
CEO based Management traits	Moderate-high level of CEO churn because of non-competitive salaries in the initial years	Low-moderate level of CEO churn because of CSOs/JLGs recruiting CEOs from among themselves	Typically driven by market ready CEO's lower chances of attrition

26 For example, oilseeds under PDPS (Price Deficiency Payment Scheme)

27 For example, tribal welfare support for FPOs in Telangana, supported by NABARD's Tribal Development Fund (TDF)

Out of the estimated 5,000 – 6,000 FPOs in India, the majority have been set up to help empower farmers (column 1 of Table 1). So, they are in the very early stages of commercial development. Thus, FPOs are perceived as significantly high-risk clients by banks, who typically lack a thorough understanding of the FPO ecosystem.

The financing needs for FPOs, including the largest segment of FPOs – those promoted by SFAC and NABARD, largely differ by their stages in crop / commodity production cycle.

Typically, early stage / nascent FPOs start with dealing in bulk purchasing inputs and selling to members. Progressively, the FPOs build their resources, find high value market linkages, and evolve.

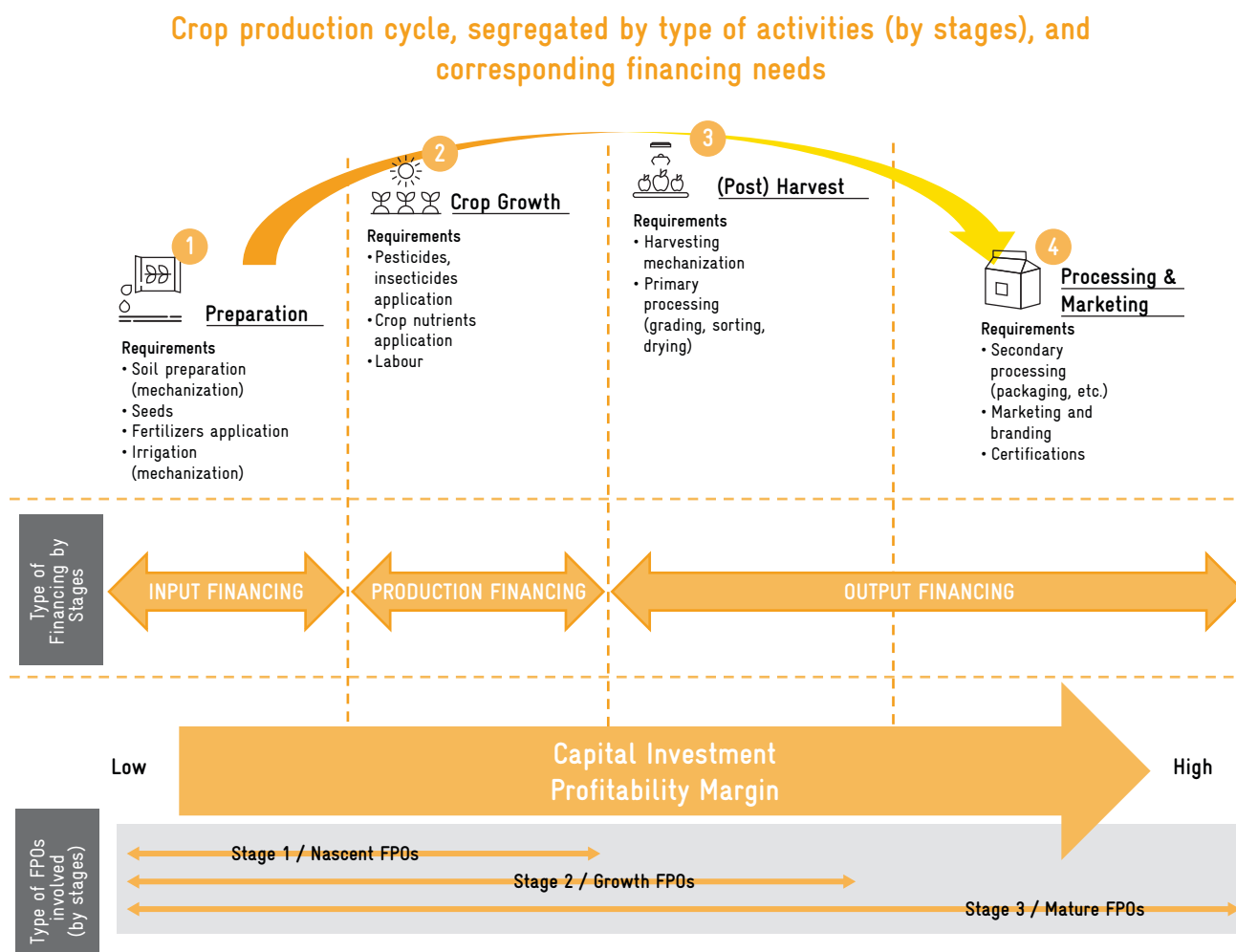


Figure 5: Crop Production Cycle

Thus, the majority of FPOs (due to being early stage) face challenges of not only accessing finance, but being able to build catalytic infrastructure and key capital assets.

In accordance with the type of legal entity, resources needed, the degree of self-governance differ. While there may be higher compliances with the structure of a producer company, there are comparable autonomy and self-governance benefits as listed above.

2. FPO Credit Market

2.1. Estimated Size of the FPO Credit Market

While the number of FPOs is estimated at between 5000 - 6000, FPOs transacting business as on date may be in the range of 2500 - 3500. On a conservative estimate of average credit absorption capacity of ₹ 10 lacs per FPO, the potential market size is ₹ 350 crore.

This apart, based on the information gleaned from the major institutions lending to FPOs, reasonable estimate can be made that there are about 200 FPOs that have credit need of the order of ₹ 50 lacs, and around 50 FPOs whose credit requirements would be over ₹ one crore each.

This estimate excludes large sized corporate FPOs such as Sahyadri, whose credit needs are larger, and should be assessed like a corporate loan rather than as a loan to an FPO.

This estimate also excludes the on-lending to farmer market, where the FPO acts as Business Correspondent (BC) to a lending institution or themselves borrow and on-lend to the members, usually in kind. The on-lending business, in our view, is fraught with risks that an FPO Balance Sheet cannot absorb. However, depending on the comfort & risk appetite of the lending institution this can be a big market in itself.

In summary, the credit absorption potential of FPOs as on date is as follows:

Table 3: Credit Absorption Capacity of FPOs 2019-20

Description of FPO	Estimated number of FPOs	Average Credit Requirement (₹ lacs)	Total Estimated Credit Requirement (₹ Crore)
FPOs into basic services like input supply	3500	10	350
Mid-range FPOs doing inputs and market linkage	300	50	150
Larger FPOs with turnover of ₹ 1 Crore+	50	200	100
Total	3,850		600

Source: Based on interaction with Key Market Players.

The size of the market is expected to grow exponentially in the years ahead, considering the thrust being given by Government & other promoting institutions and the ground work done over the last 5 years bearing fruit.

In the next 3 years, the FPO Credit Market (excluding on-lending) will be about ₹ 2000 crore, and could be larger, if warehousing and commodity management with market linkages can get better organized, and gains wider adoption.

2.2. Existing Players in the FPO Credit Market

Currently, FPO lending is majorly led by three Non-Banking Finance Companies (NBFCs) viz, NABKISAN, Samunnati and Ananya. Other NBFC lenders are Nabard Financial Services Limited (NABFINS), Maanaveeya and Caspian. In the following section, some key features of the business models of NABKISAN, Samunnati and Ananya are discussed.

Table 4: Key Lenders to FPOs

Name	NABKISAN (NABARD subsidiary)	Ananya (Pioneers in FPO Lending in private NBFC space ²⁸)	Samunnati (Innovators in FPO Lending)
Legal Form	NBFC	NBFC	NBFC
Lends to	- FPOs - Agri value chain players - FPO lending intermediaries	- FPOs - Agri value chain players	- FPOs - Agri value chain players - Individual Farmers
Typical product	- Working Capital Loans - Term Loans - Working Capital Term Loans	Working Capital Loans	- Working Capital Loans (PO financing and invoice discounting) - Term Loans
Areas of the value chain	- Pre-production (Input) - Post Production (output activities: harvest, marketing) - FPOs involved in On-lending to members - Pre-production (Input) Production - Post production (output activities: harvest, marketing)	- Pre-production (Input) - Post Production (output activities: harvest, marketing) - FPOs involved in On-lending to members	- Pre-production (Input) - Post production (output activities: harvest, marketing) - FPOs involved in On-lending to members
Operational data	- Total loans: 250+ (directly), 150+ indirectly - Total disbursed: ₹ 200 crore - Total outstanding: ₹ ~75 crores	- Total loans: 150 to 45 FPOs - Disbursed to: 80 FPOs - Total disbursed: ₹ 100 crore - Total outstanding: ₹ 30 crore	- Total loans: 250+ FPOs - Total disbursed: Over ₹ 250 crore - Total outstanding: ₹ ~50 crore
Ticket Size	₹ 3 lacs to 5 crores (Mostly limited to ₹ 1 crore)	₹ 20 lacs to 1 crore	₹ 3 lacs to 2 crore
Interest Rate	10.5%– 12.5%	13.5%–16.5%	14%–21%
Tenor	4 – 18 months	3 – 36 months	4 – 18 months
Additional Services	NABKISAN facilitates linkage to the FPOs funded by it access support from the promotional programs of NABARD.	Provides incubation support to FPOs in partnership with leading agencies. Ananya has the ability to lend even in the formative years of an FPO, provided the management team is strong.	Provides market linkages through in-house team. This results in better profits to the FPO resulting in better serviceability of the loan and reduced risk. Overdraft given on input loans to optimize interest cost on credit utilization.
Process (Onboarding, transaction)	Step 1: Seed / promote enterprises under NABARD's arm, set them up using NABARD's initial grant Step 2: Match FPO with promoting institution which helps the FPO set up operations, train board and management and buy initial round of inputs using the initial NABARD grant. Promoting institution handholds the FPO in its operation and management. The promoting institution assists the FPO in making a business plan and financial projection	Step 1: Activate rural level networks to scout for farmers / FPOs producing products which have a potential to be sold at high value markets Step 2: Where a match is found and no FPO is already existing, assist in setting up FPO, including legal compliance	Step 1: Reach out to and collaborate with known, experienced resource institutions (RIs) to build a pipeline of investable FPOs Step 2: Engage with RIs, regional NABARD office, and the state government mandated DDAs to set up workshops for 5–7 (up to 10) promising FPOs to lower resources used per visit

28 Through Ananya as well as FWWB, aligned microfinance and microenterprise apex organization active in India

Name	NABKISAN (NABARD subsidiary)	Ananya (Pioneers in FPO Lending in private NBFC space ²⁸)	Samunnati (Innovators in FPO Lending)
	Step 3: Scout promising enterprises with good output potential. Typically, an FPO with a limit of 25-30% of its revenues derived from input business is classified as investable. Scouting is enabled through regional NABARD offices, which hold the registration details of most FPOs Step 4: Conduct due diligence on shortlisted FPOs to select investable FPOs Step 5: Set up business model cycle Step 6: Negotiate terms and conditions, apply existing schemes including SFAC's matching equity, SFAC / Rabobank / Tata Trust guarantees, disburse loans.	Step 3: Arrange partnership with strong partners like corporates, food retail houses, large agricultural enterprises as a measure to reduce risk of repayment default and patronage Step 4: Set up business model cycle Step 5: Negotiate terms and conditions, apply existing schemes including SFAC's matching equity, SFAC / Rabobank / Tata Trust guarantees, disburse loans	Step 3: Samunnati model is explained to everyone, followed by an "open house", where FPOs with differing value propositions and commodities walk in to engage with Samunnati team. At this stage, FPOs which are investable are further filtered based on value proposition Step 4: Visits to shortlisted FPOs to understand base parameters in accordance with Samunnati's internal grading tool, which takes into account the quality of governance, quality of services offered to members (for example, input shop, micro-credit disbursal to members, other), core commodity, market linkages, suppliers and buyers Step 5: Set up business model cycle Step 6: Negotiate terms and conditions, apply existing schemes including SFAC's matching equity, SFAC / Rabobank / Tata Trust guarantees, disburse loans.

2.3. Caspian's Experience in Lending to Agri-Enterprises and FPOs

Caspian is a 15-year-old pioneer organization in impact investing in India, for equity and debt. It invests in multiple sectors including food and agriculture, microfinance, small business finance, education, healthcare, water & sanitation. In addition, Caspian runs market and ecosystem development initiatives in critical sectors, primarily in the food and agriculture ecosystem.

Caspian has cumulatively disbursed ₹ 320 crores in debt to Agri enterprises, with a current portfolio outstanding of ₹ 46 crores, representing 12% of Caspian's debt portfolio. Caspian has recently launched of "Rabo-Caspian Agtech Financing Fund" in partnership with Rabobank with a corpus of ₹ 15 crore, to empower viable enterprises in early and growth stage that show promising outcomes with respect to application of technology to leverage efficiencies in the agriculture sector.

The current FPO portfolio of Caspian include:

1. Chetna Organic Agriculture Producer Company

2. Samalpatti Mango Growers Association
3. Indur Intideepam Societies Federation Limited
4. Bangalore GreenKraft Producer Co Limited

In all these cases, the facility is in the nature of a Working Capital financing.

2.4. Bank Lending to FPOs

Despite incentives and policies including priority sector lending (PSL) norms²⁹ instated by RBI in 2015, only a few banks have ventured into lending to FPOs. Close to 90% of the lending to FPOs is by NBFCs.

Reasons for this include:

- Small and scattered market
- NBFCs with Agri focus and mandate taking the lead
- Lack of a clear policy directive from RBI
- No specific bank level corporate guidelines to guide the branches and field staff
- Field staff lacking adequate awareness and exposure to FPOs

²⁹ "Under priority sector lending norms, bank loans to farmers to touch R 85,000 crore: SBI", Economic Times, April 28, 2015, retrieved Oct 2019

2.4.1 Banks Currently Lending to FPOs

Banks that have lent to FPOs include, ICICI Bank, SBI, UCO Bank, Union Bank of India, Canara Bank, Vijaya Bank, Ratnakar Bank³⁰, Andhra Bank, Syndicate Bank³¹, Yes Bank, Indian Bank, and District Cooperative Central Banks (DCCBs) in AP, and some Regional Rural Banks (RRBs). Majority of them have extended working capital facilities.

In addition, in 2019, SBI rolled out a co-lending model with select NBFCs, particularly for PSL, where SBI would hold 70-80% of the exposure. This model is based on the RBI framework for co-origination of loans by banks and NBFCs in PSL.

SBI is also involved in JLG financing³² for landless, lessee farmers in collaboration with NABARD in the state of Tamil Nadu.

2.4.2 Challenges Faced by FPOs in Accessing Bank Credit

Even in cases where the banks have lent, FPOs typically face the following problems:

■ Inability to Provide Timely Funds

To provide timely funds, bankers need to understand the crops / commodities centric to client FPOs. The

processes and staff limitations and the lack of an internal process are barriers.

■ Restricted Quantum of Loan

Limited understanding about FPOs increases bankers' risk perception, so, banks limit lending to the amount that can be completely covered through collateral, or external guarantees, like the SFAC credit guarantee for FPCs³³.

For an FPO which may require a working capital higher than what is contributed as equity (₹ 5-10 lacs)³⁴, banks often refuse lending the full amount. Larger entities like FPO Federations find it difficult to raise more than ₹ 1 crore, as the SFAC credit guarantee scheme cover is capped at that level.³⁵

■ Geographical Location-Based Limitations for Warehouse Finance

In cases of warehouse financing, bank guidelines typically state that the warehouse used by the FPO must be near the bank branch. This limits the options available to FPOs operating in relatively remote locations.

■ Strict Intake Restrictions

Very often, banks mandate strict legal compliances, including audited balance sheets for 3 or more years.

³⁰ FPO Capacity Building Toolkit (Module 8), GIZ India

³¹ Discussion with APMAS

³² NABARD and SBI sign MoU for JLG financing

³³ SFAC Circular, "Maximum Guarantee Cover shall be restricted to the extent of 85% of the eligible sanctioned credit facility, or to R. 85 Lac, whichever is lower."

³⁴ Leveraging SFAC's Equity Grant Scheme is a viable option in such cases

³⁵ Guarantee for the remaining amount of ₹ 15 lacs is available through the Rabobank scheme (refer to risk mitigation section in this report)

3. Credit Evaluation of an FPO

Credit evaluation of an FPO is similar to that for a typical company, while making adjustments for the special, stage-wise needs of an FPO, concomitant stage wise risks, and risk mitigating circumstances.

3.1. Preliminary Evaluation

Good leadership is the most important factor for a bankable entity. Good leadership includes critical aspects like business strategy, legal compliances³⁶, book-keeping, and governance.

■ Business Strategy

Only the largest, or most well-networked³⁷ FPOs have the resources to create operational business plans, including detailing implementation, and business portfolio in project reports.

An astute strategy also includes FPO's ability to successfully enforce ecosystem engagement with ecosystem players like technical institutions for crop advisory, market intermediaries, suppliers and buyers.

For smaller FPOs, the business strategy and plan will be commensurate with the stage of the FPO. Typically, it is enough if the business plan describes existing and near future market linkages, for example, to the local mandi, to an institutional aggregator in the urban capital of the state, retail buyers, etc.

Another way to measure business strategy is the presence of an active, and involved management. Given the high CEO attrition, lenders must undertake customized assessments for the management team, including:

■ Book Keeping/Financial Statements

At least one audited profit and loss statement and balance sheet must be available.³⁸

However, loans to FPOs without even one audited balance sheet have been given to (1) FPOs promoted through SFAC / NABARD seeding, or (2) low risk FPOs headed by a corporate / experienced promoting organization.

■ Statutory Compliances

An indicator for good performance of an FPOs is its history of filing statutory returns, and leveraging available grants, schemes. Successful track record of filing for applicable grants & schemes, and essential FPC compliances, including monthly ROC filing, audit reports, maintenance of registers at FPO level³⁹, imply that the FPO has a baseline level of experience in handling operations.

■ Computerization of Operations and Records

Adoption of digitization by an FPO, even if majority of its trade is through handshake agreements, is a good indicator of progressiveness of an FPO and the desire of its leadership to be more transparent and market ready. Digitization means not just the use accounting software such as Tally, but also a comprehensive ERP software (either catering specifically to FPOs⁴⁰, or otherwise).

■ Governance

Governance is a good indicator of an FPO's present and future potential. The supporting promoting agency has a key role in improving quality of Governance for FPOs.

The quality of governance refers to

- ability of the elected board members to lead in business strategy and execution, in conjunction with the management and promoting institution,
- ability to involve and engage the members, through regular participation and interaction on relevant market trends and resultant strategies. Formation and successful implementation of sub-committees charged with finance, marketing, production, and other sub verticals is a good strategy towards the same end⁴¹.
- ability to serve the members by way of facilitating incentives and subsidies

Assessing governance may only be possible by a visit to the FPO.

After the preliminary review, credit evaluation should necessarily involve a visit to the FPO, and look at a list of critical factors to successful functioning of the FPO.

³⁶ This becomes a critical requirement for bankability in the case of FPOs because of the high level of central, state and private sector schemes available for FPOs

³⁷ Promoted by an experienced promoting institution, or corporate / entrepreneur

³⁸ This is a strategy currently used in creditworthiness appraisal practiced by NABARD

³⁹ For example, entries, cash books, and stock registers

⁴⁰ Samudra Network, CropIn, others

⁴¹ From Vrutti's experience with FPOs

3.2. Aspects to Examine During an Appraisal Visit to an FPO

A visit to an FPO and interacting with its members, board members, staff and clients is critical to taking a credit decision on lending to an FPO.

Critical Components / Actors of the FPO Wheel



Figure 6: Critical Components/actors of the FPO wheel⁴²

Bankers take credit decisions on daily basis, and do not require detailed coaching about credit assessment through personal interaction. However, the following points are suggested, based on practical insights in the context of FPOs:

It is best if records & documents such as the financial statements are asked for and reviewed prior to the visit, so as to ask relevant questions and use the limited time optimally.

Focus during the visit should be on aspects that cannot be assessed otherwise than through interaction. It is suggested that the interaction be a conversation mode, putting people at ease, so that they open up and share facts. The following are suggested areas of enquiry:

- The relationship between the members and the FPO:** FPOs are member-centric institution. The business comes from the participation by the members. So, it is good

⁴² SFAC's Guidelines include a detailed cycle related to the critical stages of FPO promotion

to interact with some general members, to gauge their assessment on how the FPO is relevant and useful to them and whether it is their preferred channel of transaction.

Members of an FPO may be derived from existing self-help groups, joint liability groups, and farmer interest groups, and an FPO's relationship with these structures are critical in ensuring patronage and smooth working.

2. The cohesion within and competence of the board:

This is another important factor. Are all the board members active (rarely so) or is it dominated/run by a few? A good sign is when all the board members are well informed about the happenings of the FPO, and different opinions are expressed and discussed, without some individuals dominating. In addition, in mature FPOs, formation of different sub-committees with Board members in each committee indicates a high level of competence.

3. Relationship with promoting organization: The relationship between FPO and its promoting organisation is a key metric of FPO assessment. In ideal cases, the promoting organization provides the FPC board and management with support⁴³, while allowing for the FPO to maintain its autonomy in making executive decisions.

4. Separation of the Board from Management:

The separation of the Board from management, and delegation of operational decisions to the management team with adequate oversight from the Board is an important ingredient in the smooth working of an FPO. This can be gauged by observing the day to day workings of an FPO.

5. Competence and capacity of the CEO & staff: This is another defining success factor for an FPO. These can be assessed by interaction and observation. Typically, a graduate, or an MBA available locally is hired for between ₹ 15,000 – ₹ 25,000 for the post of CEO. The CEO must be qualified to take strategic decisions, must have knowledge of the relevant commodity market, and must be supported by the Board and the promoting institution. Activities led by the management staff includes handling of cash⁴⁴, maintenance of systems, adherence to compliances / terms and conditions, signing of MoUs to access grant / policy support, etc.

6. Ability to transact in the market: There is a difference between knowing the market and transacting in the market. As farmers and FPO, the initial fear & hesitation are natural, and experience will happen only when one takes the plunge. Once in the market, the experience of the FPO in directly negotiating the market and build capability is important.

7. Cash Handling & Book keeping: It is good to check the status of books of accounts – Are the postings up-to-date, is everything in order? Have the records of transactions been filed correctly? Are all transactions routed through the bank account? Has the Bank Reconciliation Statement been prepared? A tiered score can be given on the basis of the comprehensiveness of book keeping, and the frequency / regularity of communication regarding operational and executive decisions taken by the Management / Board to the other members.

8. Adherence to compliance and regulatory & statutory requirements: The compliance to regulatory & statutory requirements is critical, especially in the current time when stiff penalties for delays can erode company net worth. Activities under this may include finding a competent auditor at the district level, as the Producer Company Act is relatively new, and most auditors may not be aware of its compliance and audit systems.

9. Stock accounting: One of the most critical off the book item is closing stock. Proper Stock accounting is essential to present a true & fair account of the business.

10. Debtor accounting: Proper debtor accounting and follow-up on collections is another aspect to be looked at.

11. Receivables from Board members & Management: Receivables by the Board (if any) and management are indicative of the level of evolution of an FPO's governance and adherence to legal and statutory compliances.

12. Irregularities / Frauds: Check if there have been any irregularities or frauds. Who has committed, the extent & the actions taken.

It must be remembered that the objective of the visit is not to make an exhaustive list of deficiencies, but to ascertain whether the FPO is bankable, and the risks, if any, are within acceptable levels.

Finally, while not an essential part of the visit, it is good share observations with the FPO in the manner of a guide or mentor and show them how they can improve the way they do their business.

3.3. FPO Rating Tool

When extending loan to a seasoned FPO with over 3-4 years in operations, and most likely, engaged in output market operations, the following rating tool provides a weightage/score-based approach to assessment. For younger/nascent FPOs, the early stage FPO rating tool developed by NABKISAN may be more appropriate⁴⁵.

⁴³ Including hand holding support in key functions, for early stage FPOs

⁴⁴ Not just the management, the FPO members should also have knowledge of handling cash and accounting / book keeping systems

⁴⁵ This is an internal tool, only available when applying with NABKISAN for a loan

The following Rating Tool has been developed after identifying critical success factors for FPOs, through discussions with key stakeholders, quantitative analyses, and study of similar tools developed by others. The model has been tested against historical data, to check the predictability of the tool. With larger number of data sets and over a larger time horizon the tool can be further refined & sharpened.

Each factor in the Rating Tool is assigned a weightage, as the significance of factors varies. The advantage of having a rating tool is that it helps reduce subjectivity and bias, ensures capturing of all critical factors, and enables comparison across enterprises in the similar space.

FPO Lendability Assessment Tool:

The assessment tool for FPOs has been grouped under four broad parameters:

1. Governance and Management
2. Business & Operations
3. Processes & Systems
4. Financial Performance

Across the four parameters, there are a total of 22 questions and each question can be scored between 1 and 4 (4 being the highest and 1 being the lowest score) depending on observation of the status on that variable in the FPO. Each of the four parameters have different weights assigned out of a total possible 100%. A score of 65% and above can be considered a good score as per the weights given below (it may vary little if weights are changed). The weights are for indicative purpose and can be modified based on internal requirement. The Rating tool in Excel version is attached as part of the annexure.

Table 5: FPO Rating Key Weightage Parameters

Rating summary		Factors	Weightages (out of 100%)	MAX	Score obtained	Score (%)
Governance & Management		8	25	120		
Business & Operations		3	25	80		
Processes and Systems		7	30	120		
Financial Performance		4	20	80		
Total		22	100	400.0		

Table 6: FPO Assessment Tool

Due diligence item		Due diligence response				Company Score
Governance and Management		1	2	3	4	
Number of Board Members	1	<=3	3 – 5	5–8	>8	
Quality of Board	1	No relevant experience of the Members of the Board	1–3 years of experience in farming	3–5 years of experience in farming, but different commodity	>5 years of experience for majority of the board in farming, particularly in farming the same commodity	
Minutes & Records	1	Not Maintained	Sketchy	Detailed with Decision taken are recorded; but not reported on MCA	Detailed with Decision taken are recorded with proper compliance	

Due diligence item		Due diligence response				Company Score
		1	2	3	4	
Governance and Management						
Quality, experience and track record of CEO	1	CEO with no previous experience / relevant Education	CEO with <3 years of previous non-relevant experience, but has relevant educational qualification	CEO with <5 years of relevant experience and educational qualification	CEO with 5+ years of relevant experience and educational qualification	
Second line of management	1	No second line. Only CEO	No second line – CEO accompanied by accounts team	CEO accompanied by accounts team and at least one divisional manager (e.g. Marketing, Sales, Procurement)	Second line of management is well defined and can take the leadership role	
No. of Members	1	Less than 300 Members	300 – 500	500 – 1000	>1000	
Participation of Members in the FPO ⁴⁶	1	<30%	30-50%	50-75%	>75%	
Role of Promoting Agency	1	No promoting agency.	Promoted by an agency, but the agency doesn't play any role	Promoted by an agency and the agency plays an active role in finance, operations and governance	Promoted by an agency, but the FPO is self-sufficient. Agency works on paid basis.	
Business & Operations						
Type of FPO	1	Dealing in inputs	Dealing in inputs and on lending to members	Dealing in inputs and/or on lending to members and market linkage of the output	Dealing in inputs and/or on lending to members and market linkage of the output with primary/secondary processing/ value addition	
Price Risk of the commodities (Not applicable to FPOs involved only in Lending / Supplying inputs only)	1	FPO dealing in highly price sensitive/ volatile commodities (oilseeds, gram etc.) and Price Risk borne by the FPO	Commodities with MSP, but price risk on FPO	Part of the commodities hedged against price risk and/or Non-volatile commodities	Price risk covered through well-defined hedging through NCDEX or other mediums OR Not Applicable – FPO only in lending / supplying inputs)	
Other lenders	1	No other external lender			At least 1 other external lender	
Process and Systems						
Accounts & MIS	1	No MIS, Accounting done manually	Accounting managed by using basic MS Office tools but not software packages	Accounting managed by Tally, no digitization ⁴⁷ of the other operational records	Software for managing accounts and digitization of the MIS	

⁴⁶ Measured by observing the operational dynamics of the FPO. A credit officer may intersperse his visits to coincide with periods of activity to observe the level of involvement of the members

⁴⁷ In this case, digitization implies a comprehensive, FPO centric Enterprise Resource Planning tool. Currently, examples for the same in the market include CropIn, Samudra Network (particularly for FPOs with smaller capacities), etc.

Due diligence item		Due diligence response				Company Score
		1	2	3	4	
Governance and Management						
Insurance of stock against fire and theft	1	No insurance cover	1. Less than 50% of stock is insured against fire and theft or 2. Insurance cover is either for fire or theft	50% or more stock is insured against fire and theft	100% stock is insured against fire and theft	
Credit Record of FPO	1	Current and past record of delays/ No credit History	Current and past record of delays.	Past record of delays or defaults.	No record of delays or defaults.	
Statutory Filings	1	Any delays in the past 12 months that are not yet filed	Multiple Delays (>5) over the past 12 months but filed as on date	Few Delays (<5) over the past 12 months but filed as on date	No delays	
Are the books & records up-to-date	1	Updated on monthly or more basis	Updated on weekly basis	Updated with a lag of 2-3 days	Current	
Reconciliation of Stocks	1	Absent / Annual	2-4 times in a year	Monthly	Regular	
Cash Dealing as % of gross revenues	1	>70%	50-70%	20-50%	<20%	
Financial Performance						
Scale & Profitability						
Total Revenue	1	<10 Lacs	10-50 Lacs	50-100 Lacs	>100 Lacs	
Gross Profit Margin	1	< 0%	0%-5%	5%-10%	>10%	
Is it Profitable?	1	Loss Making			Profitable for last 2 years	
Capital Structure						
Debt to Networth after proposed loan	1	>10x	6-10x	3-6x	0-3x	

The above tool is indicative, to give an idea of what metrics to include and how to assign scores and weights. It can be adapted suitably to the criteria set forth by each lending institution. Other institutions also have their own assessment and diagnostic tools. GIZ India in conjunction with BIRD has developed a web-based assessment tool for FPOs.

3.4. When Not to Lend to FPOs

This section lists the scenarios where lending to an FPO is to be avoided, alongside steps to take to mitigate the respective barriers to lending to FPOs.

WHEN NOT TO LEND

And what to do instead

1 As a lender, you have an insufficient understanding of FPOs

If your bank doesn't understand what an FPO is and still has questions and doubts, it is strongly recommended that you wait. If you are really interested in FPOs, reach-out to an FPO Promoting Institution or others like the local NABARD officer, to organise a visit & interact with a typical FPO. Take the hat of a lender off when you interact, and go on the visit, and to get a better understanding. Once you have done that, and your doubts are cleared you will be good to go

2 Regional / corporate office and the local branch office for your bank are not on the same plane regarding FPO activity and agenda

If the Corporate and Regional Office of the bank have a good understanding of what an FPO is, but the Branch Staff do not, don't proceed. Wait! Help your branch staff to understand & only then proceed with lending. Since the FPO portfolio of any bank in the near term is likely to remain small, training need not be extensive, and cover a large number of staff. Pick up those who have an inclination and comfort in dealing with farming community. They would be the ideal to pick up for orientation.

3 You are not sure of when to disburse funds to the FPO

If you are unable to time your lending suitably, don't lend. The process of familiarisation and due-diligence needs to happen two to three months before the time when funds are required, and not rushed through. Funds that come in late would do more harm than good for an FPO, and idle funds are a cost that the FPO may not be able to bear. Late procurement of inputs may lead to farmers not lifting the stock, and thereby a loss to the FPO. Similarly, the Marketing plan of an FPO is finalised based on the sighting of funding within a time horizon. If it does not happen, the sale is as good as lost.

4 You are not sure of when to disburse funds to the FPO

A guarantee is no substitute for weak FPO to be given money. If the only reason a bank is planning to lend is because the facility would be backed by a guarantee, stop in your tracks. Don't go ahead with lending. Guarantees are meant to cover unforeseen risks, not to slacken your due diligence process or provide cover for known deficiencies. In such a case, please convey your decision of not lending to the FPO, and the reasons therefor. Inform that if these are addressed, they stand a chance to get funded.

5 You feel inclined to apply the same stringent repayment compliance as that applied to a non-agri-enterprise

Finally, if you are unprepared for some delays in repayments, it's better you do not venture into lending to FPOs. With the impact of climate change & other local weather factors, and sometimes the buyer's preferences of delivery timings, there are challenges in precisely projecting Cash flows and in turn repayment schedule. In case the loan outstanding, is at any point is backed by adequate stocks, receivables and cash, there is no need for panic. The payment will come in in due course.

Figure 7: When not to Lend and what to do instead

3.5. Good Practices for Lenders to Consider

To enhance understanding and involvement in FPO activities at the branch or district level, two good practices are suggested by practitioners:

3.5.1. Lenders Attending FPO Meetings

Attending board meetings is a good way for bankers to assess concomitant risks periodically, while ensuring that the FPO continues with its scheduled board meetings.

3.5.2 Participating in Capacity Building Sessions Arranged by POPIs

POPIs can organize sessions for bankers to interact with FPOs in their area of operation.

These will enhance the understanding of bankers in the business and operational activities of FPOs, while adding the benefits of improved monitoring.

3.6. What Businesses FPOs Should Preferably Avoid

Aside from the list of good practices along the value chain of production to output marketing, there are two key activities which FPOs should ideally avoid, so as to minimize the risk of failure of FPOs.

3.6.1 On-Lending

FPOs are not designed as Financial Intermediaries. They are thinly capitalised and minimally staffed, and their systems and processes are not designed to undertake high-touch

operations like retail lending. FPOs would not have any significant Capital to offer as margin or First Loss Guarantee (FLDG), and the net margins an FPO may earn would not be adequate to cover even a fraction of the principal amount lent to its members. Besides this, geographical concentration of members may result in significantly impact collections in case of natural calamities like flood, drought etc.

Banks & NBFCs on the other hand are both better capitalised by statute and are designed as lending institutions, have experienced professionals, appropriate systems & processes and suitable legal framework.

Moreover, the Share Capital and accumulated surplus of an FPO belongs to the farmer members. The FPO has a fiduciary responsibility to protect and preserve the precious capital of the members, from being lost to the callous conduct of a few members or adventurism by the Board.

3.6.2. Taking Open Position on Commodities

Another mistake committed by many FPOs is purchasing and storing agricultural commodities, in anticipation of an upside. They lose significant capital in case the prices fall. Doing this with borrowed capital is a double whammy. There is adequate evidence available of how large and small FPOs have committed such mistakes and taken years to recover and repay lenders.

It is best for FPOs to facilitate market linkage with buyers, without themselves holding the stock, or alternately holding and accumulating stock only when a purchase arrangement is in place. FPOs should partner with warehousing and commodity management companies to de-risk these activities. Any significant stocks held by the FPO should be, as far as possible, covered for price risk through forward contracts and the commodity stored in an accredited warehouse to minimize storage losses.

4. Some Successfully Employed FPO Funding Models

In this section, some lending models adopted by NBFCs and FPOs to tailor-make lending arrangements as per the specific context are presented. These models use operational innovation to increase the quantum of credit, reduce risk and exposure, of a dealing where there is limited security available with the flipside of a higher risk, and may be adapted and replicated on a larger scale.

4.1. Models Leveraging Joint Liability Design for Low Income/lessee Farmers

4.1.1 Joint Liability Group (JLG) Model

Background: In a Joint Liability Group, 4 to 10 individuals form a group and collectively guarantee the credit facility given to each member of the group. All the members of a group generally hail from the same locality, and understand each other's cash flows, household requirements and repayment capacity. In the event of any member failing to pay an instalment, the other members of the group must pool in and pay the defaulting member's instalment. The JLG model replaces physical collateral with social collateral.

Features: In this model, farmers form JLG's among themselves and each JLG borrows from a financial institution. The borrowings of all the JLG's are pooled to form equity of the FPO. The FPO then borrows a higher quantum of money from the financial institution by providing their equity as a collateral.

Benefit to the Farmer: The farmers by pooling their borrowings, strengthen the corpus of the FPO, which in turn can leverage the money to raise debt

Benefit to the FPO: The FPO in this way is able to build the equity base that would otherwise not be possible considering the capacity of small farmers to invest from their personal savings. This helps the FPO to leverage debt.

4.2. Joint Liability Design for Low Income / Lessee Farmers with Promoting Organization Intermediation

This model is different from the one described above, in that the promoting institution intermediates between the lender & the FPO/JLGs.

Due to the active intermediation of promoting organizations, lenders draw comfort from increased accountability and lowered risks, and therefore the quantum of lending can be higher. IDF & Vrutti are two institutions that have this model across select FPOs.

4.2.1 Indur Intideepam MACS Federation (IIMF) Model

Background: Indur Intideepam MACS Federation (IIMF) is the apex institution of the three-tier structure starting with the Self-Help Groups at the base, and Mutually Aided Co-operative Societies (MACS) as the second tier, and the Apex Federation.

Model: IIMF is primarily engaged in three lines of activities:

1. Aggregation of Demand – This line of activity aggregates members demand for farm inputs and household groceries, thereby members gain access to quality products at below market prices.
2. Aggregation of Supply – IIMF aggregates the members produce from the farm and provides market linkages, thereby eliminating middle men in the value chain.
3. Credit Services – IIMF provides credit services to its members by leveraging members capital and business surplus with external debt funding from banks and other financial institutions.

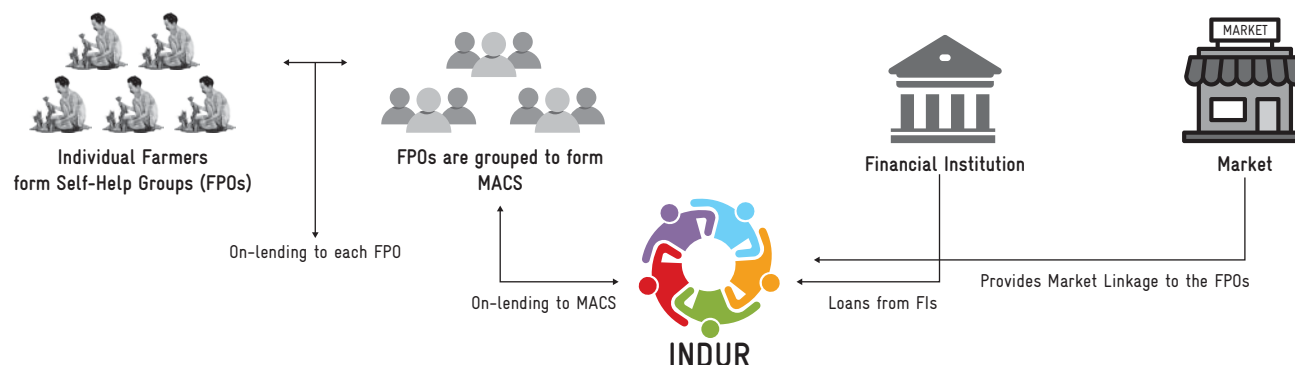


Figure 8: Indur Intideepam MACS Federation (IIMF) Model

The apex federation lends to the MACSs and SHGs based on their requirements. Some MACS under the federation also have direct access to the loans from local banks and other FI's. In 2006 the RBI had announced that federations (MACS) were allowed to act as business correspondents or facilitators. However, doubts regarding MACSs' governance, management and limited assets were constraints. But due to the credibility of the promoting NGO's, a significant number of MACS were able to garner funds.

Benefit to the Farmer: Easier access to credit for working capital requirements along with support for better price discovery, ensuring better marketing and sale access.

Benefit to the FPO: Access to loans for working capital along with market linkage.

Advantage to Lenders: Since IIMF is an apex federation, it can also receive Savings from the Members, which gives it a stronger own resources base, thus reducing the leverage.

4.2.2 Farm Veda Cooperative Structure

Background: Trilochan Shastry, ex-IIM Bangalore dean, started the NGO Centre for Collective Development (CCD) in 2005. CCD was aimed at collectivizing the small farmers in marginalized districts of Andhra Pradesh and Telangana, who grew red gram and ground nut. The farmers produced such small quantities that they were unable to access credit even from moneylenders. After CCD, India Farm Foods (IFF) was set up in 2016, also known by its brand name, Farmveda.

Challenge: One key challenge was lack of lender interest in the remote regions where farmers lived and worked. Another challenge was the low level of resource mobilization and infrastructure availability for value addition, causing farmers to sell their produce to middle men for less than MSP. Further, the Amul Cooperative model for dairy could not be easily scaled to agricultural commodities, as working cycles

were not as short in dairy, and there was a gap in terms of market research, branding and marketing.

Model: Akin to the Amul, Farmveda leveraged benefits of being a cooperative. Its structure has enabled it to leverage grants from SFAC, NABARD, and (inter)national development agencies. These grants are used to fund capacity building, setting up of infrastructure and marketing activities. All farmers benefit from shared knowledge, expertise and manpower.

Once the produce (red gram and groundnut) are sold by farmers to the cooperative, the produce is sent to outsourced value addition / processing units, to partners of for-profit entity 'Farmveda'. Through Farmveda, the farmers benefit from centralized value addition and branding. Farmveda has built knowledge of market needs in high value urban areas, branding and marketing. So, it is able to sell processed items at 10x the MSP price of the original items. For example, while ground nuts would retail for ₹ 40 / kg, groundnut podi (chutney) retails at ₹ 400 / kg. Farmveda has plans to set up its own processing units shortly.

Benefit to FPOs: The farmer cooperative has access to centralized capacity building, low cost capital assets (subsidized through development grants) via CCD. They do not have to manage challenges like talent attrition, compliance and management, as CCD handles these in a centralized manner. The cooperative is able to acquire multiple times value addition and access to high value urban retail markets. Brand 'Farmveda – owned by farmers', which now retails directly through e-commerce and other physical retail channels.

Benefit to the Lender: The FPO, despite being a cooperative, is well past the initial stages, where there is a dearth of basic resources. Lender can derive comfort from the FPO owning and leveraging catalytic infrastructure, and its centralized management, evident in CCD's management of cooperative, and Farmveda's for-profit arm which is equipped with professionals to manage processing, branding and marketing.

Other similar models include Sahaja Aharam, a federation of farmer producer cooperatives in Telangana, promoted by the Centre for Sustainable Agriculture (CSA) which specializes in organic farming. By providing small farmers in cooperatives support and training in organic production practices, CSA is able to unlock market access in high value markets.

4.3. State Level Consortium / Federation Models

For bankers, models involving federation of FPOs are lower risk because they have the advantages of centralized strategy and decision making, and sufficient size in comparison to small scale FPOs and individual farmers.

Background: SFAC has initiated the establishment of State Level Federations of FPOs, to create a State level umbrella support for the member FPOs. In the first phase, 8 such State Level Producer Companies (SLPCs)⁴⁸ are supported in the States of Madhya Pradesh, Rajasthan, Maharashtra, Gujarat, Tamil Nadu, Uttar Pradesh, Telangana and West Bengal.

Challenge: The different types of crops dealt by the member FPOs still remain a challenge in providing universal market platform for the member FPOs. Some of these FPOs are supported by the promoting agencies & corporate sponsors and the co-ordination amongst large number of stakeholders itself is a challenge.

Model: These federations are Producer Companies under the Companies Act. Each of the member FPOs in turn invest nominal amount in the equity to become a shareholder and consortium member.

Benefit to the Farmer: Due to collective power of the FPOs, value addition services like marketing & branding & better market linkages, the member FPOs can command an additional premium on prices. This in turn can help the member farmers through increase in the prices of the crops procured by FPO.

Benefit to FPOs: The FPOs with assured funding are able to enhance their business volumes. Value addition services like marketing & branding & better market linkages, the member FPOs can command an additional premium on prices leading to improved profitability and strong connect among the underlying members.

Benefit to the Lender: Economies of Scale; Better Governance, Support from SFAC and other promoting agencies, Better Management team with professional CEO.

Following are a few models illustrating the same by cases.

4.3.1 Case 1: Bill Discounting Model

Background: Safe Harvest Private Limited is a Company established by FPOs that were working with dryland farmers and promoting non-pesticide cultivation practices (NPM). It works as an aggregator of produce of about 25 Farmer Producing Organizations that are spread across 11 states and helps to market chemical pesticides free agricultural produce, that are sold at a premium of about 15-20% to market.

Challenge: The challenge faced by Safe Harvest & its partners is that most of these crops are single season crop, while Safe Harvest being into retailing requires to have supplies of the commodity available round the year. Dryland farmers being resource poor cannot afford to wait for their payment, while the FPOs do not have the ability to procure and stock and supply to safe harvest as per requirement. For Safe Harvest on the other hand, purchase in the season and carrying of inventory would be a huge burden. If Safe Harvest and the FPO are unready to bear the inventory cost, the FPO would have had no choice but to sell the NPM produce in the mandi, where it receives no premium.

Model: A tripartite agreement is entered into by the lender, the FPO and Safe Harvest. The lender funds produce held by the FPO, which Safe Harvest assures to procure. Depending on the convenience of the lender, the FPO may directly repay the loan once the produce is bought by Safe Harvest, or Safe Harvest may repay the lender on behalf of the FPO.

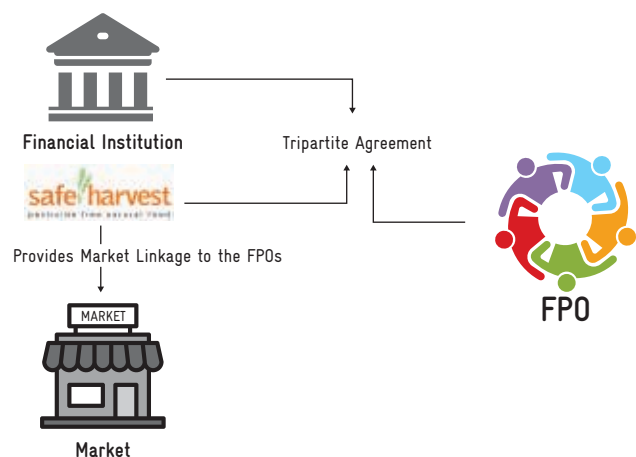


Figure 9: Bill Discounting Model

Benefit to the Farmer: Farmers receive the benefit of market-linkage, and immediate payment, while also receiving a NPM produce premium. Additionally, NPM practices lead to lower input costs while maintaining optimum yield.

48 <http://sfacindia.com/UploadFile/Statistics/SLPC.pdf?v65879241.8974568>

Benefit to FPOs: The FPOs with assured funding are able to enhance their business volumes. The Safe Harvest tie-up garners a higher quantum of loan and an assured source of repaying the loan. Price risk is also eliminated due to fixed price buy-back / assurance to procure agreements with Safe Harvest.

Benefit to Safe Harvest: Assured, safe and reliable source of NPM produce at a fixed purchase price eliminating the need for constant negotiations. Additionally, it can earn a premium by providing quality products to its consumers.

Benefit to the Lender: Lender derives comfort from the buy-back guarantee given by Safe Harvest. Additionally, since an audit is already performed by Safe Harvest, the bank can benefit from dealing with a well-established FPO. By tying-up with Safe Harvest, the lender gets to work with all their partner FPOs, providing scale and volume.

4.3.2 High Value Export Market Output Marketing

Background: Gujpro is a Gujarat-based federation of FPOs. Gujarat includes FPOs promoted by NABARD, SFAC, international organizations like Aga Khan, Ford Foundation, and through the CSR activities of for-profit organizations like Ambuja Cement, and others.

Challenge: FPOs typically do not have access to high value retail markets, and generally sell only in lower value village/regional mandis. Further, there are several gaps in value chain, particularly in procurement, secondary value addition, branding & marketing.

Model: Gujpro emerged out of the need to have a centralized body to manage key functions like procurement, secondary / high value processing, marketing, branding, and financing & credit availability. Key primary level produce includes cumin, groundnuts, etc.

- Primary / secondary processing (shelling of groundnuts) is done at the farm level
- Secondary / Tertiary processing and value addition is centralized. And managed by Gujpro. Gujpro can either outsource it to factory partners, or centralize purchase and enable low cost sharing between the federated FPOs. This may include entrenching organic production in certain farms to cater to export markets. For example, residue free cumin has a high demand in European / American countries, and Gujarat is able to fulfill the demand
- Leveraging existing network of field workers: Gujpro leverages its knowledge of the existing agricultural schemes in the geographies of its federated FPOs. It makes connections with the ground force of existing

teams, for example, the Better Cotton Initiative workforce, to disseminate knowledge, good practices and production and credit monitoring. Gujpro has access to these through its development partners who have worked in the same geographies earlier

- High value market access: Through its network of partners, Gujpro is able to locate high value domestic urban and export market opportunities.
- Centralized credit access: The federation aggregates the credit needs of the individual FPOs. This helps Gujpro access economies of scale and employ convergent national / state government schemes to raise financing.
- Centralized strategy: The federation can conduct a market need analysis and disseminate crop planning advice to FPOs under it

Benefit to Farmer: Knowledge, good practices, credit and information support, ready and existing access to high value markets, alongside professional management at the highest level.

Benefit to FPO: Access to low-cost secondary / tertiary processing sources within the region, organic food production know-how (alliance with Fairtrade, BCI, others), monitoring support, astute product planning, easier credit access to individual FPOs through comfort letters provided by Gujpro, and high value market access.

Benefit to Lender: Lender can derive comfort from centralized professional management, existing high value market access.

4.3.3 Output Marketing Through SPV

Background: About 8-12 FPCs were federated largely to increase individual farmer wealth by overcoming the crucial gaps in value chain efficiencies and most importantly, output marketing. Yuvamitra, a FPO promoting agency realized the need to have centralized secondary / tertiary processing (capital asset sharing) and marketing & branding.

Challenge: As a federation, Yuvamitra was unable to execute professional marketing so as to yield higher value for the FPOs. So, it first sought to tie up with marketing companies. This model failed because marketing companies did not have an understanding of the FPO working model, and did not have the risk appetite to invest in FPOs. In 2016, Yuvamitra set up its own marketing agency to focus more on branding and advertising. This too failed because the FPO 'mentality' carried into the marketing agency despite the federation hiring (mid-level) marketing professionals. According to Yuvamitra, the FPO leadership were unable to lead a traditional marketing company, often throwing up challenges like 'lack of funds' when critical

marketing investments had to be made. The challenge was to engage professional high-level marketers full time.

Model: With the exception of marketing, operations of the FPOs and their management are similar to other federation model. The crucial difference is in the manner YuvaMitra has accessed professional marketing services by raising private investment.

YuvaMitra contacted top-tier professional marketing firms engaged in agriculture and food processing industries. Marketing agencies require professional fees. To tackle this, YuvaMitra raised ₹ 1.3 crore of private investment from renowned food sector investors, some individuals, and YuvaMitra and FPC shareholders by effectively communicating its value proposition to investors.

Benefit to Farmer: Knowledge, good practices, credit and information support, ready and existing access to high value markets, alongside professional management at the highest level. In addition, the FPO has access not only to marginal increase in sale proceeds, but to wealth creation as the revenues and profits grow.

Benefit to FPO: Access to low-cost secondary / tertiary processing sources within the region, knowledge of good practices, monitoring support, astute product planning, centralized professional marketing, at par with leading food companies in the country.

Benefit to Lender: Seasoned promoters who have invested in the company ensure centralized and professional management of the company.

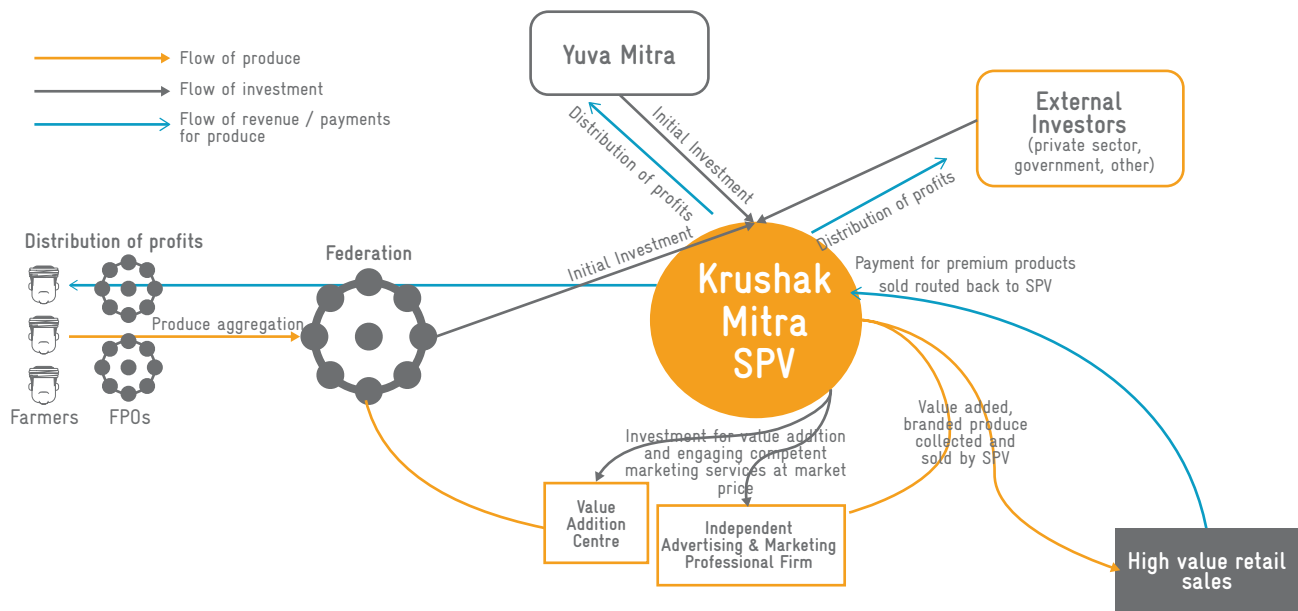


Figure 10: Model with output marketing through SPV

The key innovation in this model, increasing the investability of the company manifold, is the setting up of a special purpose vehicle (SPV), named Krushak Mitra Agro Services Private Limited, to facilitate trade and output marketing. The SPV is collectively owned by members of the FPO, YuvaMitra, and private equity investors. This capital has enabled professional management of the company and the ability to hire seasoned, professional catalytic output marketing services.

Yuva Mitra is currently contemplating models to approach the Karnataka government so as to replace the capital required from private equity with government supported grant for the next round of investment, so as to control dilution of shares and passing on wealth to the farmers.

There are similar successful examples of FPOs partnering with private institutions at specific points across their respective value chain for improved business outcomes. These include:

- Fuzhio Health and Business Services, a part of Catalyst group based out of Bangalore supports Vrutti FPOs enhance their market access by establishing market linkages in B2B, B2C, B2G.
- Access Development Service (ADS), Delhi, have on-boarded a professional, private marketing company to improve market access.
- Simply Sattvik, a brand created and promoted through a private company set up to promote FPOs produce, by Dr. Balu Athini.

4.4. Samunnati Agro Solutions' Market Facilitation Model

Background: Samunnati Agro Solutions is the trading arm of Samunnati NBFC. The entity exists to fill a critical gap in the market for 'gap financing' of producers. Producers are unable to sell due to lack of access to markets, or gaps like quality assessment & assurance, etc. making high value markets inaccessible. Similarly, buyers of quality verified produce are looking for more options to buy from.

Model: Agro Solutions purchases the produce from the FPO, and sells to the buyer. Agro Solutions is able to pay the FPO for its produce from its own capital, and is able to recoup its investment by selling to the buyer in need of the commodity. Quality assessment, etc. is outsourced to Arya Collateral at a cost.

Because Agro Solutions has access to a network of FPOs and buyers, processors, corporates and others, it is in a unique position to facilitate and mediate deals which will empower FPOs to get credit faster.

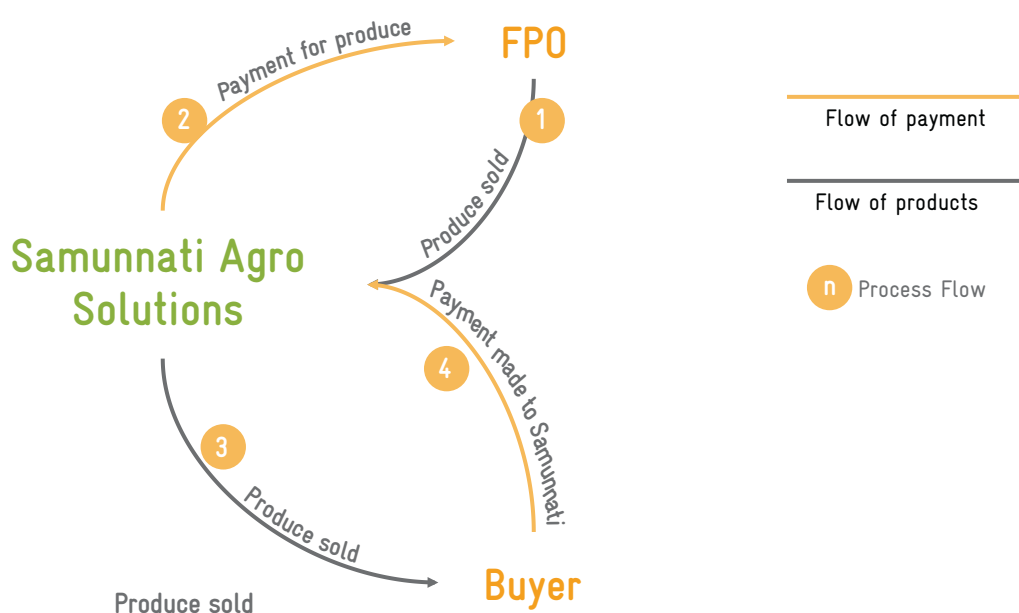


Figure 11: Samunnati Market Facilitation Model

Challenge: Crop cycles depend on commodity types, and there is a need for working capital gap financing between crop cycles for FPOs and individual farmers in this time. Because of insufficient understanding of the crop cycles of individual FPOs, farmers, and in turn, FPOs find it difficult to access loans for inputs and next cycle of crops from lenders. So, valuable growing season time gets wasted, until the payment for the produce from the last season reaches them (typically after a long gap).. This may also be a challenge if the FPO has limited access to quality checking and is unable to sell produce to higher value buyers. This limits the income potential of the FPO.

Benefit to farmer and FPO: FPO has access to working capital in the absence of credit and lack of immediate sale. Farmers in the FPO are able to increase the number of times the working capital is rotated, to generate higher incomes. The FPO / farmers also get access to transportation and quality check at a fraction of the cost, as it is facilitated by Agro Solutions.

There exist other models which benefit from agriculture consulting, as in the case of FPOs promoted by Centre for Indian Knowledge System (CIKS), a POPI based in Chennai, which leverage the advisory support from Sempulam Sustainable Solutions.

5. Catalytic Role Played by Promoting Institutions (POPIs) in Building Robust & Bankable FPOs of Smallholder Farmers

Promoting Institutions play a pivotal role in incubating, nurturing, and building FPOs into bankable institutions. Two such case studies are described below. Banks who are looking to fund FPOs can benefit from reaching-out to FPOs through their promoting Institutions, to get access to a screened & sorted list of FPOs as well as be able to lend in clusters and build a viable portfolio size.

5.1. Initiatives for Development Foundation (IDF)

Initiatives for Development Foundation acts as an intermediary between lenders and lessee / low income farmers. IDF has a long history of working with producers in rural areas, with a close understanding of crop cycles, (low income) producer ability to repay, and helping FPOs adhere to compliances.

The majority of FPOs which IDF promotes consist of lessee/ low income farmers who engage in input marketing. So, two key challenges are farmer access to credit, and management of large scale operations, including filing compliances whilst maximizing profits.

The Model:



Figure 12: IDF & Vrutti FPO Support Components

The Four Pronged, Holistic Ecosystem Approach

IDF serves as a one stop solution by facilitating on-lending to FPOs, as banks do not lend to FPOs without credit history, nor individual farmers. This, however, leads to high processing costs, which would not be incurred without IDF's intermediation.

On-Lending to FPOs

IDF on-lends to the FPOs, particularly younger FPOs which engage majorly in input business. IDF avails loans from sector-focused NBFCs like NABKISAN, Samunnati, and banks, because of their existing credit history and experience in engaging with rural, first time / younger FPOs at 9-11%. The FPOs are then able to avail loans from IDF, typically working capital, at rates between 12% and 15%.

Graduation Support

Younger FPOs often consist of a majority of poor, low income, and even landless farmers, who more often than not, find it challenging to access even micro loans. Further, such farmers particularly lack the ability to deal with climate related challenges, with no capital assets for ensuring rain-less irrigation. IDF leverages grants from local and international organizations, to subsidize loans to poorer farmers when required.

Building Capital Assets and Protection Mechanisms

IDF believes that lending to small and marginal farmers without empowering them to repay, is bad planning. Farmers need capital assets to progressively improve their income over the initial 2-3 years. The small and marginal farmers are the most vulnerable to climate change. Towards this end, IDF's uses grant and credit to set sustainable water management infrastructure at the individual farm level, like rain water harvesting, farm level value addition infrastructure like grading-sorting tables, dryers, etc.

Handholding Support to Farmers and FPOs

Most importantly, IDF has a strong and capable network of on-ground staff equipped to train the FPOs and individual farmers on crop planning, good practices for production, storage, and value addition, ability to find market linkages and better price discovery.

On the other side, IDF leverages its existing networks for discover the best available price for the FPO's produce, and helps link them with the buyers.

Benefit to the Farmer: Access to credit at reasonable rates, particularly to lessee farmers who otherwise lack access to credit, information on appropriate agricultural technologies and market linkages

Benefit to the FPO:

- Professional management trained staff & oversight of working from IDF
- Management and compliance oversight and outsourcing by IDF which has deep experience in making FPOs progressively successful. This leads to a lower degree of risk engendered by CEO attrition
- Market linkages

5.2. Vrutti

Vrutti is a development organization with over 25 years' experience of working with rural communities and farmers. The Vrutti model of engagement resembles the IDF model, with some additional innovative features. Vrutti essentially acts as a consultant for its partner FPOs, deriving a success fee from operations. This model has ensured profits for both farmers, FPOs and Vrutti.

On-Lending

Vrutti has a pilot initiative with Syndicate Bank in Bagepalli Taluk of Chikballapur District of Karnataka which involves:

- organising farmers into Joint Liability Groups (JLG) and women into Self Help Groups (SHG)
- make them bankable through financial literacy
- client education to adopt sustainable livelihoods
- provide banking services of Syndicate Bank through Vrutti appointed BCAs so that the farmers can perform banking transactions from their villages itself, including repayments. From the banks side, the product is the Kisan Credit Card (KCC) that meets the financial needs of the farm and non- farm livelihood opportunities of the farmers.

The loan amount under KCC is based on scale of finance for crops. The limit is fixed at ₹ 30,000 for the 1st Year, ₹ 40,000 for the 2nd Year, going to ₹ 70,000 for 5th year. The KCC account operates like an OD limit. Farmer are to ensure that every month at least 10% of the withdrawn amount is credited to the account. The eligible amount can be withdrawn the next day. The farmer is benefitted by the lower interest rates, which is charged based on actual utilisation.

The interest is 7% p.a with interest subvention. A further subvention of 3% is available for prompt repayment of loan, making the effective rate 4%.

Vrutti charges a fee of 5% to the farmers for facilitating the preparation and processing of loan applications for the entire period of the card limit of 5 years, financial training, systems and delivery of services at the villages. A GST of 0.9% is charged for the facilitation fee, and therefore the ultimate cost to the farmer works out to 9.9% p.a.

The model combines positive features of the MFI model, and business correspondent led disbursal method, with joint liability characteristics to result in a sustainable, graded increase in farmer income.

Handholding Support to Farmers

Leveraging its expertise in crop planning and farming, Vrutti's agents help farmers and FPOs choose commodities and plan the business, as well as provide reliable market linkages yielding sufficient profits.

Graduation Support

Vrutti's value addition in helping farmers graduate from poverty is helping them engage in high margin activities like animal husbandry and dairy.

Benefit to the Farmer: Get access to advisory services for their crops, enterprise development support, reasonable loan rates and funds, doorstep access to various financial services, information and market linkages through Vrutti. In addition, farmers benefit from access to Vrutti's network partners/ large buyers like Kamatan, Waycool, Samunnati Agro Solutions, NeML49, Future Group, BigBasket, Ninjakart.

Benefit to the FPO:

- Have access to reasonable loan rates, information and market linkages
- Ensured patronage because of the design of Vrutti's model
- Management and compliance oversight and outsourcing respectively, by Vrutti which has deep experience in making FPOs progressively successful. This leads to a lower degree of risk engendered by CEO attrition
- Low cost access to low-grade value addition, market linkages
- Going forward, Vrutti's FPOs may even have access to common branding. Vrutti plans to brand all products from the FPOs it works with to be able to position them better at retail markets to derive the highest margins.

⁴⁹ Formerly NCDEX Spot Exchange (NSPOT) is the leading Indian electronic web based, online, commodities spot market and services company

6. Partnership with Warehousing Companies & Collateral Managers

Another way of lending to FPOs without taking direct exposure on FPOs is through warehouse receipt loans.

6.1. Arya Collateral Warehousing Services Private Limited

Background: Arya is one of the first companies in India to introduce Collateral Management with primary focus on agricultural produce in 2002. It works with farmers, FPOs, financial institutions, corporates, development organizations, commodity exchanges and international players in its attempt to integrate the entire agriculture value chain.

Methodology: Usually at the time of harvest, farmers obtain lower prices due to higher supply as the entire crop is

brought to the market. To overcome this, farmers hold their goods in a warehouse and obtain a receipt against which they can get a loan from banks for the next season's crop. If a farmer wants to take his goods out of the warehouse, he pays the equivalent amount to the bank and then sell the goods. The risk here stems from:

- Post-disbursement monitoring is weak
- Farmers approach money lenders to pay the bank as the stock in the warehouse is not sufficient to pay the loan amount.
- In case of a price dip, storage cost increases and there is no reason for farmer to sell the stock

Close to ₹ 2-2.5 billion has been disbursed through this model with low default rates and high success outcomes for aligned FPOs and farmers.

Farmer Market-Bank Linkage

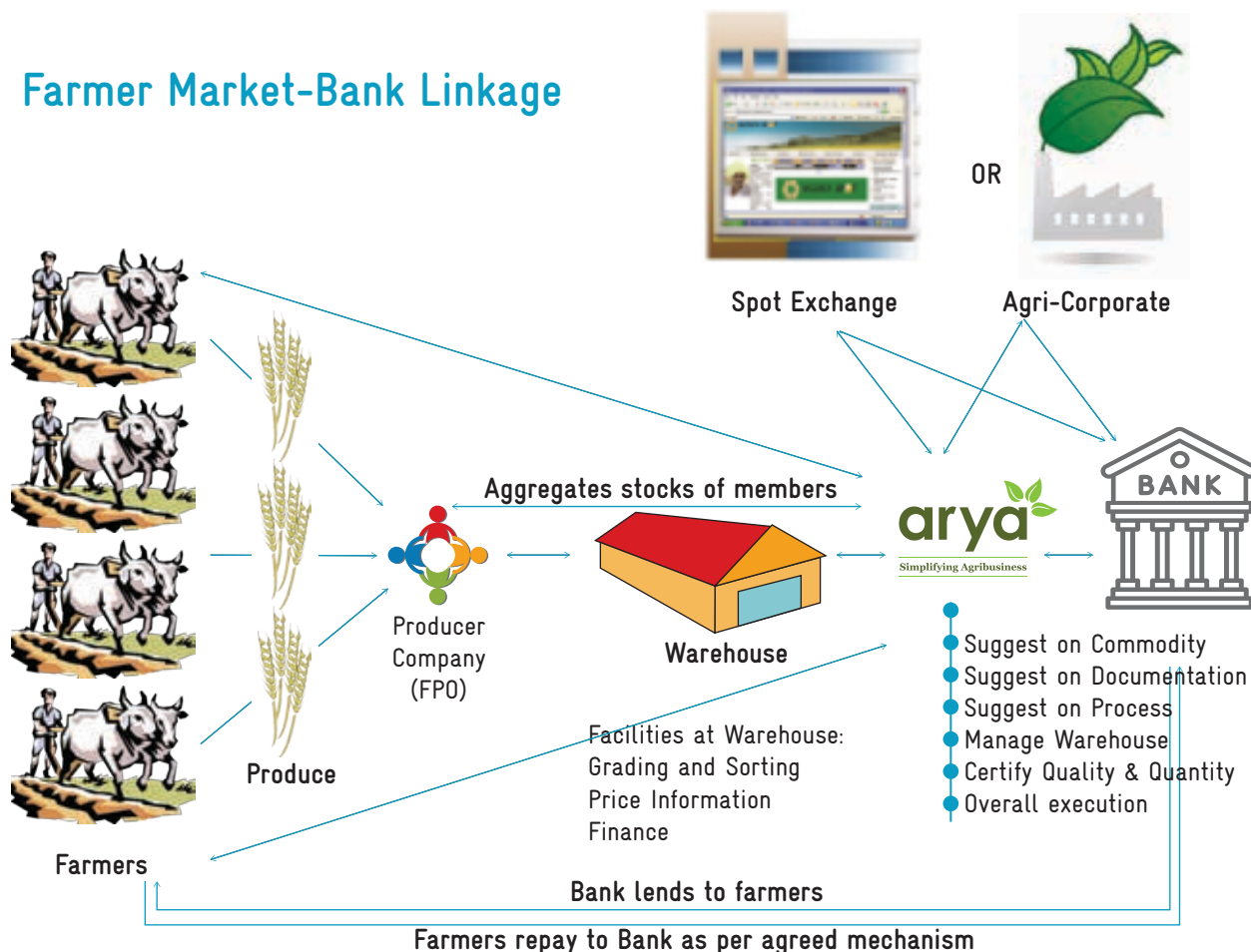


Figure 13: Arya Collateral's Warehouse Financing Model for FPOs

Innovations from Arya: Unlike other warehouse & collateral management service providers, Arya has consciously decided to focus on FPOs across the country. Arya has mapped & geo-tagged the locations of ~1,850 FPOs across the country in association with Tata Trust. Arya sees the larger opportunity and greater economies of scale by focusing on FPOs as compared to individual farmers / traders. The location of the warehouses is usually near the farms in Tier 2, 3 and 4 cities. Arya provides two options to the FPOs:

- Sell on an efficient platform to an agri business corporate or a partner spot exchange. or
- Hold the commodity in a warehouse managed by Arya until a better price is realized.

If the FPO chooses to hold the commodity in a warehouse, Arya helps arrange finance for the FPO through banks against the security of its aggregated produce. When the FPO decides to sell its produce, its loan is liquidated and the upside is available to the farmer as his gain after adjusting the costs. Arya also provides avenues for better price discovery to the FPO through its market linkages platform. This usually results in better profits to the FPO.

Product Highlights:

Tenor: Typical tenor of each Warehouse Receipt Finance loan is 6-7 months.

Leverage: Up to 3 times of network

Loan to Produce Value (LTV): Upto 70% based on the crop and its associated price risks. (The larger the price fluctuations, the lower the LTV offered).

Arya is currently working with 70 FPOs and intends to increase this number multifold in next 2 years. Arya makes business on warehouse charges (from FPOs), commission on enabling trade from the buyer, charges for quality testing and logistics.

Benefit to the FPOs:

- **Access to loans:** Arya has the resources to securitize commodities. Credit quality is ensured when Arya aligned

FPOs follow best practices⁵⁰ disseminated by Arya over the course of 3 months through continuous engagement. This saves the costs for both banks and FPOs

- **High value, lower risk market linkages:** Arya has strong market connections with suppliers, buyers, large corporations and credit providers. Arya connects FPOs to these players, so that FPOs need undertake only limited marketing. It also enables better price discovery to the farmer.
- **Access to market insights:** FPOs partnering with Arya have access to trends analysis done by Arya. ranging back ~4-5 years. Most importantly, Arya has access to actions being taken by large corporations (Cargill, others) for the same commodities. Arya passes this information on to FPOs, to help them take a decision on whether to sell the produce immediately, or to securitize it in an Arya warehouse.

Benefits to Lenders:

- **Offloading of risk:** Lenders can derive comfort from Arya being a storage and market linkage partner.
- **Securitization and quality check:** It also certifies the quality, quantity and oversees the execution of the loan.
- **Delegated Monitoring:** There is a better loan monitoring process as Arya suggests the commodity, documentation and process.

Management of lender risks:

- **Repayment risk / Monitoring:** Continuous engagement in the initial phases, and continued engagement with the FPO's management and board through the presence of 1 Arya executive in the region ensures that repayment targets are adhered.

Warehouse receipt loans however are for post-harvest period and do not fulfil the entire credit requirements of the FPOs, especially for inputs and during aggregation of the crops.

Banks can start relationship by initially lending to FPOs as warehouse receipt finance, and once the track record is established with the bank, it can extend working capital loan facilities like cash credit or overdraft.

⁵⁰ These include quality assessment (including moisture assessment / drying, as appropriate by type of commodity, grading and sorting), and other primary processing techniques for diminishing perishability

7. Key Product Features to be Considered for Loan to an FPO

7.1. Working Capital

How Much to Lend for Working Capital?

In the case of seasonal agricultural produce, the output only passes through the hands of the FPO. The FPO typically does not hold the output by itself. If it does, the retention period is very short. Therefore, working capital funds can be rotated⁵¹ several times over, and therefore, the working capital requirement will be a fraction of the turnover. For organizations which have experience in lending to FPOs, this is an important consideration. According to feedback from Ananya, Samunnati and NABKISAN, working capital cycles corresponding to commodities can be used to decide the lending period for working capital loans for output from FPOs. Working capital cycles of 2-4 months if commodity is sold without processing / value addition, or 8-9 months in the case of seed production (Source: discussion with Ananya); 20-60 days for short duration crops like vegetables, 90 days for tomatoes, 11 months for banana cultivation (Source: discussion with Samunnati) all require corresponding flexible working capital loan access models.

A good tool to use to get an understanding of the cycle of operations and the working capital gap is the Cash Flow method.

Cashflow Analysis for FPOs:

Cash flow statements provides a straightforward report of the cash available. A company can appear profitable “on paper” but may still not have enough cash to replenish its inventory or pay its immediate operating expenses. This can be avoided through proper cash flow analysis.

In a majority of the FPOs, credit requirement is for working capital. The performance of the FPO depends on various factors like weather, type of crops, crop yield, participation of the members, market linkage, credit linkage etc. Historical financial statements inform a lender about the past performance of the FPO, but it does not guarantee the same performance in the upcoming year. Importantly, past annual financial statements do not

give a true picture of seasonality within the year, or more particularly, it does not give true picture of what happens in between the year.

During the year, there may be some months when there is no economic activity and therefore no cash inflows. Lenders need to design the loan product in a way that there is no loan repayment during such period. The loan should be repaid during the months of high cash inflows. The timing, amount and structure of repayment can be effectively analyzed through a simple monthly projected cash flow statement.

It's important to give “responsible debt”—debt that has manageable interest rates and repayment terms. This is a hallmark of good cash-flow management and ultimately helps both the lender and the FPOs grow. Conversely, loans with unrealistic repayment terms erode cash flow and hinder early-stage survival and later growth. The Cash Flow method is explained below through an illustrative Case Exercise.

Illustration

Own Resources: The FPO has net worth (Equity + Retained Earnings + Grant) of ₹ 600,000. The FPO has a member base of 1000 farmers each of whom has contributed ₹ 300 towards equity share capital. The FPO had previously received a grant of ₹ 200,000 and has ₹ 100,000 of accumulated profits from operations in previous years.

Activity: The members of the FPO harvest two crops during the year – Paddy in Kharif season and Wheat in Rabi season. The FPO supplies inputs like fertilizer, seeds, nutrients, pesticides etc. to its member farmers as well as aggregates their produce. The aggregated produce is then sold to local traders and institutional buyers. The FPO enjoys margins of 5% on inputs and 15% on aggregated produce. Some inputs are sold to the members on cash basis, whereas some are sold on credit. In the same way, farmer members sell part of the produce to the FPO on cash basis, and part on one-month credit.

⁵¹ 2-4 months if commodity is sold without processing / value addition, 8-9 months in the case of seed production (Source: discussion with Ananya); 20-60 days for short duration crops like vegetables, 90 days for tomatoes, 11 months for banana cultivation (Source: discussion with Samunnati)

Table 7: Cash Flow Analysis – Case Study

Month	April	May	June	August	September	October	November	December	January	February	March	Total
Cash Inflows												-
Revenue – Cash (Total)												-
– Cash received from sale of inputs		100,000	100,000	100,000			110,000	110,000	110,000	110,000		840,000
– Cash received from sale of Output					700,000	700,000				750,000	750,000	2,900,000
Revenue – Credit Sales of Previous Months received (Total)												-
– inputs			100,000	100,000	100,000		110,000	110,000	110,000	110,000		840,000
– Outputs					700,000	700,000				750,000	750,000	2,900,000
Total Cash Inflows (A)	-	100,000	200,000	200,000	1,500,000	1,400,000	220,000	220,000	220,000	1,720,000	1,500,000	7,480,000
Cash Outflows												-
Input Cost – Cash Purchase		380,952					419,048					800,000
Input Cost – Credit Purchase of Previous Months Paid			380,952					419,048				800,000
Material Cost – Cash Purchase				608,696	608,696				652,174	652,174		2,521,739
Material Cost – Credit Purchase of Previous Months Paid			-	608,696	608,696				652,174	652,174		2,521,739
Transportation Cost	5,000	5,000	5,000	10,000	8,000		5,000	5,000	2,000	15,000	10,000	85,000
Labor Cost (Including Loading-Unloading)	5,000	5,000	5,000	10,000	3,000		5,000	5,000	5,000	15,000	10,000	83,000
Insurance Cost				2,000	2,000				2,000	2,000	2,000	12,000
Admin & Employee Costs	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	360,000

Month	April	May	June	August	September	October	November	December	January	February	March	Total
Other Costs/Payments	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	36,000
Capital Expenditure (New Machines, Land, Investments etc.)												-
Total Cash Outflows (B)	43,000	423,952	423,952	1,272,391	1,263,391	33,000	462,048	462,048	1,346,348	1,369,348	55,000	7,219,478
Cash Surplus/Deficit from Operations (C = A-B)	(43,000)	(323,952)	(223,952)	(1,072,391)	236,609	1,367,000	(242,048)	(242,048)	(1,126,348)	350,652	1,445,000	260,521
Additional share capital / Grant (D)	-											-
Cash Credit Facility (F)			1,050,000						1,100,000			2,150,000
Repayment of Cash Credit Facility (G)	-	-	-	-	200,000	850,000	-	-	-	300,000	700,000	2,050,000
- Loan 1					200,000	850,000				300,000	700,000	2,050,000
Interest on Loans (H)	-	-	10,356	10,701	10,356	8,663	-	-	11,211	10,126	8,153	80,268
- Loan 1	-	-	10,356	10,701	10,356	8,663	-	-	11,211	10,126	8,153	80,268
Net Cash Flows for the Month (I = C+D+F-G-H)	(43,000)	(323,952)	815,691	(1,083,093)	26,253	508,337	(242,048)	(242,048)	(37,559)	40,526	736,847	280,253
Opening Cash Balance (J)	600,000	557,000	233,048	1,173,038	89,945	116,198	624,535	382,487	140,439	102,881	143,407	5,211,714
Closing Cash Balance (I + J)	557,000	233,048	1,048,739	89,945	116,198	624,535	382,487	140,439	102,881	143,407	880,253	5,491,968

Assumptions made:

Loan availed at the beginning of the month and repaid at the end of the month.
Input Margin - 5%
Output Margin - 15%

Cashflow Analysis:

As can be seen from the cashflows, the FPO has periodical requirement of working capital – once in the month of June and again in January. Some of the sourcing of inputs during both the season can be done from available cash, whereas the larger requirement of working capital can be fulfilled through timely availability of cash credit facility. Once the FPO realizes the sales value, it is important to appropriately structure the repayment of the cash credit facility, and if required, tranche them. This ensures that the loan facility is utilized for the intended purpose, and interest burden on the FPO is minimized.

As can be seen from the cash flow statement, the FPO has high cash inflows from July to September in Kharif season and from February to March in Rabi season. Both these months are ideal for partial repayment of the cash credit facility. An average cash balance at the FPO of ₹ 1 Lac is also desirable to meet any unforeseen expenses.

Conclusion:

By rotation of the cash credit facility of ₹ 11 Lacs, the FPO can achieve turnover of ₹ ~75 Lacs. While limiting the leverage to 2x of equity, the FPO can generate 3.75% Net Profit Margins (cash basis). Throughout the year, the interest coverage ratio is >3x indicating a healthy loan servicing capacity.

The Five Immutable Principles of Credit:

Any lender to an FPO (or even otherwise), should check whether their loan meets the following standards while extending credit:

1. Credit should be **Timely**: Especially in the agriculture sector where there is seasonal requirement, unless provided in time, credit may not serve its intended purpose
2. Credit should be **Adequate**: If the credit provided is not adequate, the gap may be bridged by high cost borrowings to the detriment of the lender & the borrower
3. Credit should be **Appropriate**: This involves product structuring as per the business needs.
4. Credit should be **Affordable**: Credit should be reasonably and affordably priced⁵²
5. Finally, Credit should be Hassle-free: In terms of systems & processes, it must be operationally convenient for the borrower & the lender.

7.1.1 Case Study – Chetna Organic

Chetna Organic Agriculture Producer Company Ltd is an FPO working on finance, market linkages and commodity-trading. Set up in 2009 with support from its parent NGO Forum for Integrated Development (FFID), Chetna works with over 25,000 farmers spread across Andhra Pradesh, Maharashtra and Orissa. It works on developing sustainable market linkages for farmers' organic produce in national and international markets. The FPO pays its member farmers organic premium as well as Fair Trade Premium.

Chetna was established with the aim of addressing the poverty related distress of small and marginal cotton farmers. Today, it runs a multi-faceted program with 360-degree support intervention for empowering farmers and promoting community entrepreneurship. For this purpose, the farmers have been federated into 13 district level co-operatives (with more than 836 Self Help Groups working under the co-operatives). These co-operatives lead all local level initiatives of their member farmers such as local government linkages, establishment of community owned infrastructure, capacity building through Chetna Organic support, etc.

Chetna starts procuring cotton from the months of December to February, does primary processing by converting cotton into lint & separating cotton seeds and supplies it to cotton mills between February to September. Thus, Chetna requires working capital facility for a period of 9-10 months a year, with periodic repayments in between.

Below is an example of how increase in the working capital loan has helped Chetna increase its turnover by 5 times in last 5 years.

Table 8: Cashflow Analysis Outcome & Corresponding Debt Requirements

Particulars (₹ Cr)	2014-15	2015-16	2016-17	2017-18	2018-19
Revenues (in a season*)	5.88	14.79	14.15	27.42	28.93
Total Debt Availed during the season	2.50	5.0	5.0	12.0	12.0

* December to September is defined as a season for Chetna.

⁵² In this sense, a loan from a bank would generally be less costly than that offered by an NBFC

Due to efficient use of capital, Chetna has been able to achieve turnover of 2.5 – 3.5 times the debt facilities availed by it during the year. The lenders of Chetna (NABKISAN and Caspian) increased the limit from ₹ 2.5 Cr in 2014-15 to ₹ 12 Cr in 2017-18. Chetna had faced problems in procuring cotton from the farmers in 2018-19 since the Government had increased the Minimum Support Price (MSP) by 25%. Hence, the debt limit was maintained at ₹ 12 Cr in 2018-19 by the lenders. Chetna has also availed warehouse financing facility of ₹ 2 Cr from Yes Bank (with guarantee from Rabo Foundation) post harvesting season in March for last couple of years.

However, it is important to note that the debt limits to Chetna are finalized only after the procurement plans are finalized, and after analyzing projected monthly cashflows during each season. The strong and experienced leadership team at Chetna has also been one of the comfort factors to the lenders.

7.2. Term Loans

Growth / mature stage FPOs have need for term loans to ascend to the next level, by improving backward / forward integration. Term loans help create catalytic infrastructure like processing units (dal mills, dairy chilling plants, packaging units, etc.), custom hiring centres, storage units, purchasing vehicles or extending road infrastructure for transporting produce.

Term loans are typically available with a tenure of 2-5 years, depending on the risk appetite of the lending institution.

FPOs are unique in that they can grow fast and create wealth for farmers by leveraging policies and schemes of the Government to avail term loans for catalytic output marketing and infrastructure. Numerous FPOs have leveraged infrastructure schemes (one-time grants, guarantee for loans, subsidies) to subsidize costs of accessing term loans. For example, an FPO consisting of tribal farmers looking to set up a custom hiring centre (CHC) could leverage grants not only under RKVY and NFSM, but also other specific tribal-based grants. In this manner, the FPO only had to contribute 10% of the total cost of setting up the CHC, with 60% covered by government subsidies and grants (via SFAC), and 30% through NABKISAN grants.

To read more about banks which have lent to FPOs, and various challenges related to acquiring term loans for an FPO, refer to sections

- 1.2.4 “How to use Convergence to reduce risk and improve farmer income”, and
- 2.4 “Bank lending to FPOs”

7.3. Interest Rates: How Price Sensitive are FPOs to Interest Rate? Does Interest Rate Matter?

From a lender's perspective, FPO loans are generally of smaller ticket size, require case to case structuring, need detailed due diligence visits (in the first two rounds at least), and intensive monitoring. Shouldn't the loan pricing be higher, factoring in these costs?

On the other hand, from an FPO's perspective, their activity is more than just a business. Considering the government's thrust for FPOs, banks should extend concessional finance at affordable rates.

Both these positions carry merit as a starting point for negotiation. Lenders today may also approach the loan pricing more scientifically. This is because we now have data about the performance of a pool of reasonably-sized FPO loan assets over a significant time period, and across various lending institutions. The pricing negotiation therefore gets more nuanced, and loan price discovery is relatively easier than in the past, when this segment was nascent.

The benchmark for any new lender entering this space will be the rates presently charged by current lenders to FPOs (10 to 19% pa interest, plus other charges like processing fee).

Banks, having the advantage of CASA deposits (that NBFCs do not), can offer FPOs more competitive rates than NBFC, particularly for larger sized FPOs with a good track record and credit history. The ability of banks to extend Allfinanz (Loan, Current/Overdraft account to route transaction, remittances and insurance through its own or as corporate agent), will give it an edge over an NBFC.

FPOs are farmer-member-centric organizations. Any saving in interest rate through availing of loan from a bank instead of an NBFC will strengthen the balance sheet of the FPO through reduction in interest cost, and corresponding increase in profit, helping the FPO to pay higher price/patronage bonus to its members, as well as increase its borrowing capacity (leverage) in subsequent years.

However, the attractiveness or decision by an FPO of where and from whom to borrow is determined not only by pricing, but also factors like cumbersomeness in procedures, timeliness and more importantly, the confidence of whether the loan will actually materialise.

Over time, FPOs have matured in their understanding of the difference between card rates and the actual cost of borrowing. There are many cases of FPOs going back & forth between NBFCs. Also, they now have an understanding of how to simultaneously utilise a low-cost facility (for core working capital) and a high cost facility (for shorter cycles).

The key to negotiating rate could be the benchmark of a PSB loan rate, but FPOs are beginning to recognise that comparisons will have to be between possible options rather than a hypothetical benchmark.

FPOs are realising that refusing to avail loan merely on the basis of price is not good business. They operate in a seasonal

market and business opportunities may be lost for a full year, till the next season.

Thus, a short-term working capital loan of 3 to 6 months at 15% per annum (for illustration) would still be beneficial, even if a bank loan could have been obtained at 10 or 12% pa (if available).

Illustratively, in a transaction where the FPO has a margin of 12% and the transaction can be completed in 2 months, the effective cost of interest on a loan taken at 15% pa will be 2.5%, giving a net margin of 9.5% to the FPO. If the FPO can rotate the money twice over, the returns would double.

8. Where to Find FPOs

FPOs listed on NABARD / SFAC websites

The first place to go to is the NABARD & SFAC websites. They have a list of FPOs promoted with their support. The data may be not up-to-date & not qualitative but still is a good starting point, particularly if the bank is clear on geographies in which to operate.

FPOs sourced from promoting institutions

Apart from the data on FPOs, the list of FPO promoting institutions is also available on the SFAC, NABARD and associated websites. The POPIs listed here may be a good place to start in the search for good FPOs.

From NABARD Regional Office

A visit to the local NABARD Regional Office to meet the officers working in FPO support activities will give good insights about who, where & what of FPOs. They may shed light on the type of investable FPOs available in the region, or even in other states, depending on the risk appetite and particular preferences of the bankers.

From NABARD District Officer

NABARD DDMs (District Development Managers) are a wealth of quantitative & qualitative information, and a meeting & discussion with them can help source district / regional level FPOs.

From POPIs

POPIs can be met once a basic background check of the institution and its suitability for partnership is done. They will be able to give specific details of the FPOs promoted/ supported by them.

From POPIs

Participation in meetings & seminars helps connect with the players in the FPO space, and get an idea what others are doing. It will give insights that otherwise would not be available in one go.

Figure 14: How to find FPOs for lending

9. Risks & Risk Mitigation

Lending to FPOs by its very nature, will continue to be an activity with relatively higher risk. Although in absolute size the portfolio may be small, it would in the initial stages, if taken as priority by the bank, require investment of time and effort disproportionate to its expected returns.

However, the selection process through detailed due diligence and proper credit underwriting has the ability to offset the high risks of 'Adverse Selection'.

As a matter of further care & caution, banks could consider FPOs that have been through loan cycles with NBFCs and have a good track record. CIBIL score could be one standard metric. The option of looking at FPOs that need loans beyond what the NBFCs are providing is another way. If the business is sound & well managed, has a strong leadership team and has a borrowing history, there is opportunity to take an exposure.

Lenders often obtain some kind of guarantee or quasi-guarantee from the FPO Promoting Institutions. While this may be seen as a moral pressure, it is rather difficult to enforce, as most of the promoting institutions are not-for-profit. Even for-profit promoting institutions have limited tangible assets to acquire in case of default. Further, grants and other monetary support that the promoting institutions receive, even if unspent and in the bank account, will be beyond the scope of attachment for recovery of dues.

One of the most effective ways of oversight and risk mitigation, is through periodic monitoring of the FPO, off-site & on-site, during the business season. For effective monitoring, it is best to assign the portfolio to the nearest bank branch and when the individual loans are small, to use a cluster approach. Another method of credit assessment and risk monitoring could be setting up specialized central teams who only look at FPOs with the help of local branch officers. The NBFCs who have been successful in lending to FPOs have taken this approach.

During the monitoring field visit, it is essential to look at crop yield, weather as well as participation from the member farmers in the economic activities of the FPO. Post harvesting, storage risk is at the peak and the banker should insist on taking insurance cover for the same.

On-lending per se is not what an FPO is designed for, and therefore is preferably avoidable. It can be considered

in case the Promoting Institution is strong and has good community connect. Hoping that the FPO can do a better job than a bank is a myth and expecting them to absorb the downsides like in the MFI first loss structure may not work as their own net worth would generally be small.

The guarantee provided by SEAC would be a good way to secure the loan. The eligibility criteria are available here:

To mitigate price risk, RABO has formulated a scheme - Commodity Value Bank Guarantee. The key feature of which are as follows:

Stage 1: Commodity Value Bank Guarantee

- Rabo Bank provides portfolio guarantee to banks, to provide credit enhancement against loss in commodity value.
- This guarantee would be used to cover FPOs from price risk, and is akin to an insurance cover against price risk.
- The guarantee gets triggered if:
 - i) The price of the commodity falls below an agreed threshold (that of the margin call) during the tenor of the loan facility and the FPO is unable to top-up the collateral required under the margin call.
 - ii) The price of the commodity is below the threshold price at the end of the tenor of the facility and the Bank issues notice for liquidation of the collateral, and the borrower is unable to repay the loan from other cash flows.
- The maximum cover under this would be capped at 15-20% of the commodity value. This would ensure that FPOs do not lose value due to price risk and would comprehensively address the risk perception of FPOs.
- The product ensures that any loss to the bank due to fall in commodity value would be honored through guarantee claim (up to the pre-agreed amount), if not paid by the FPO.
- After the Commodity Value Guarantee is claimed by the bank, the Warehouse Finance Facility for the relevant FPO will continue as per existing terms and conditions. It will achieve two of the main objectives- (a) The loan continuation in spite of calling the guarantee, allows the FPO not to become a defaulter (b) the loan continuation also enables options of enjoying the commodity upside (if any happens during the facility tenor).

Stage 2: Credit Bank Guarantee

- A portfolio guarantee to banks to cover repayment and default risk originating from FPOs.
- It's a 50% pari-passu guarantee for loan losses to the bank;
- The guarantee amount would be up to 10% of the loan amount, pari-passu with the Bank. The pay-out would be the lower of (i) the guarantee amount and (ii) 50% of the actual loss suffered by the Bank.
- This would operate more like a credit guarantee for Banks should there be any loss to the Bank on account of the WRF loan extended to FPOs.
- For the purpose of Credit Guarantee, only outstanding Principal and Interest amounts are admissible to calculate the shortfall amount.

End-use: The funds will be deployed exclusively for the purpose of issuance of credit guarantees in favor of bank credit to FPOs and other similar farm aggregation models (as may be approved by RF). The product will be valid for use for financing designated commodities.

Other conditions:

1. This guarantee is available only to FPOs and Farmer collectives
2. It would cover FPOs up to a maximum commodity value of ₹ 50 lacs
3. This is a financial inclusion tool and shall be available only in case there exists a bundled credit linkage on Warehouse Receipt Finance through a Bank / FI.

10. Through the Looking Glass - Future Outlook

Though India is urbanizing and moving towards a knowledge economy, a significant part of the population will continue to depend on agriculture as a livelihood in the near future. Further fragmentation of the already small holdings is a reality around which any future policy interventions & programs will have to be devised. FPOs will thus play an important role in the days ahead.

One constraining factor limiting FPOs' ability to raise debt is the low equity base, and the restriction placed on raising equity outside of their members.

In the view of this, we have spoken to a few lenders to FPOs about new work-in-progress initiatives, that could increase the access to finance for FPOs.

1. **Providing Subordinate Debt:** FPO's are asset-light organizations and cannot provide substantial security or collateral. However, it has been observed that equity of the FPO is being provided as a collateral to procure loans. If FPO's can succeed in raising subordinate debt, it can be counted as net-worth, thus raising the ability of the FPO to garner a higher quantum of loan.
2. **Offering Structured Products:** Procedures like securitization can be adopted to convert the loans to each

FPO into tradeable and standardized securities which can be sold to investors. For this to succeed, the FPO portfolios needs to have regular repayments, good asset quality, low prepayment risk and be diversified with other asset classes.

3. **Co-lending:** Financial institutions in tandem with public finance institutions can explore opportunities in co-lending, for priority sector lending. This can help to share the risk and enhance the credit flow to the agricultural sector.

Conclusion

With the increasing importance & thrust being given to FPOs in terms of policy & support, there is going to be an upsurge in the number of FPOs, and demand for credit.

It is therefore the opportune time for banks to capitalize on the emerging opportunity and be in readiness to benefit from it.

It goes without saying that, if FPOs are going to be the engines for transformation of the status of smallholder farmers, Capital will have to be the fuel required to drive this vehicle, and Bank credit is best suited to make it happen.

Annexures

1. Available resources

- FPO Guidelines, SFAC
- SFAC List of FPOs Statewise
- NABARD Portal on Farmer Producers Organizations
- SFAC - Particulars of Organization and its duties
- NABARD - Particulars of Organization and its duties
- Equity Grant and Credit Guarantee Fund Scheme for Farmer Producer Companies - Operational Guidelines
- NABKISAN, FPO products
- RKVY RAFTAAR
- Re-vamped National Food Security Mission (NFSM) - Operational Guidelines
- NABARD and SBI sign MoU for JLG financing
- Tribal Development Fund Outline

2. Organizations with tools for assessing FPOs

- a) NABARD
- b) NABKISAN (primary assessment tool)
- c) RaboBank
- d) Ananya
- e) SFAC
- f) M-Cril Tool53
- g) Vrutti's Self-Assessment Tool- PICAT (Producer Institution Capacity Assessment Tool)

3. Applicable schemes under MSP, PM-AASHA, from Vrutti's Business Acceleration Unit (BAU) Manual

- **MSP (Minimum Support Price) Operations:** MSP procurement of commodities is the central govt. mandate to purchase the farmers produces when the prices of commodities fall below the MSP level. Under the MSP policy, the government fixes the rates for 23 notified crops grown in kharif and rabi seasons

Under the new umbrella policy PM-AASHA 'Pradhan Mantri Annadata Aay SanraksHan Abhiyan' (PM-AASHA), states would be allowed to choose from three schemes -- existing Price Support Scheme (PSS), newly designed Price Deficiency Payment Scheme (PDPS) and Pilot of Private Procurement Stockist Scheme (PPSS)

- **Price Support Scheme (PSS):** In Price Support Scheme (PSS), physical procurement of pulses, oilseeds and Copra will be done by Central Nodal Agencies with proactive role of State governments. It is also decided that in addition to NAFED, Food Corporation of India (FCI) will take up PSS operations in states /districts. The procurement expenditure and losses due to procurement will be borne by Central Government as per norms.

The central and state govt. also recognised FPOs registered under producer companies act for PSS operations and many of FPCs and federations of state FPCs are part of this operations. The following are the opportunities and advantages:

- Generates good amount of revenues and profits
- Builds the working capital of the FPOs business operations in short span of time
- Coverage and benefits large number of BAU / FPO farmers
- Position and recognition of FPO at local and districts
- Built competencies and confidence of BAU/FPO team to operate larger procurement operations

Whom to approach: The NAFED, FCI and SFAC are the nodal agencies of central govt. to take up PSS operations. The NAFED and FCI does the procurement process through state MARKFED departments. BAU should approach the district level units of MARKFED i.e., Dist. Marketing Department and get approve the procurement centre operations. The SFAC is exclusively procures through the FPCs and BAU should regularly contact and avail the procurement centre whenever they are part of PSS.

- **Price Deficiency Payment Scheme (PDPS):** Under Price Deficiency Payment Scheme (PDPS), it is proposed to cover all oilseeds for which MSP is notified. In this direct payment of the difference between the MSP and the selling/model price will be made to pre-registered farmers selling his produce in the notified market yard through a transparent auction process. All payment will be done directly into registered bank account of the farmer. This scheme does not involve any physical procurement of crops as farmers are paid the difference between the MSP price and Sale/model price on disposal in notified market. The support of central government for PDPS will be given as per norms.

The PDPS is on the lines of Madhya Pradesh government's Bhavantar Bhugtan Yojana (BBY), but will protect oilseeds farmers only. In similar line the Karnataka govt. announced PDPS for onion, under this farmer will be compensated difference between market rate and MSP, up to. 200/- per quintal.

- **Pilot of Private Procurement Stockist Scheme (PPSS):** In this participation of private sector in procurement operation needs to be piloted so that on the basis of learnings the ambit of private participation in procurement operations may be increased.

“The selected private agency shall procure the commodity at MSP in the notified markets during the notified period from the registered farmers, in consonance with the PPSS guidelines, whenever the prices in the market fall below the notified MSP and whenever authorised by the state/ UT government to enter the market, and maximum service charges up to 15 percent of the notified MSP will be payable”.

This will mark the first time private players are going to be involved in the government procurement process.

4. Definition of and institutional mandates related to Small and Marginal Farmers

a) Definition

- i) **Marginal farmer:** A farmer cultivating (as owner or tenant or share cropper) agricultural land up to 1 hectare (2.5 acres)
- ii) **Small farmer:** A farmer cultivating (as owner or tenant or share cropper) agricultural land of more than 1 hectare and up to 2 hectares (5 acres)

b) Institutional Mandates⁵⁴

- i) Small Finance Banks will have a target of 75 per cent for priority sector lending of their Adjusted Net Bank Credit (ANBC). While 40 per cent of ANBC should be allocated to different sub-sectors under PSL as mentioned below, the balance 35 per cent can be allocated to any one or more sub-sectors under the PSL, where the banks have competitive advantage.

Categories	Target
Total Priority Sector	75 per cent of Adjusted Net Bank Credit
Agriculture	18 per cent of ANBC. Within the 18 per cent target for agriculture, a target of 8 percent of ANBC is prescribed for Small and Marginal Farmers
Micro Enterprises	7.5 per cent of ANBC
Advances to Weaker Sections	10 per cent of ANBC

5. Glossary

Table 9: Glossary

Poverty penalty	describes the phenomenon that poor people tend to pay more to eat, buy, and borrow than the rich. ⁵⁵
Transaction cost	costs incurred that don't accrue to any participant of the transaction. It is a sunk cost resulting from economic trade in a market. In economics, the theory of transaction costs is based on the assumption that people are influenced by competitive self-interest.
Collectivization	to organize (a people, industry, economy, etc.) according to the principles of collectivism
Mutually Aided Co-operative Societies	voluntary formation of cooperative societies as accountable, competitive, self-reliant business enterprises, based on thrift, self-help and mutual aid and owned, managed and controlled by members for their economic and social betterment and for the matters connected therewith or incidental thereto ⁵⁶
Consortium	an association, typically of several companies.
NABARAD Refinance	way for banks to get funding in respect of term loan for both Farm Sector and Non – Farm Sector activities. It helps to lower the cost of finance and manage the ALM risk for the bank and enhance credit flow to multiple sectors.

⁵⁴ Master Direction – Priority Sector Lending – Small Finance Banks – Targets and Classification, July 2019

⁵⁵ Prahalad, C. K. (2004). The fortune at the bottom of the pyramid

⁵⁶ Andhra Pradesh Mutually Aided Cooperative Societies Act 1995

Term Loan	loan from a bank for a specific amount that has a specified repayment schedule and either a fixed or floating interest rate.
Working Capital	the capital of a business which is used in its day-to-day trading operations, calculated as the current assets minus the current liabilities.
Capacity Building	establishment or strengthening of formal (government) and informal (NGOs, community groups, etc.) institutions, the private sector and individuals
Convergence	refers to two or more things coming together, joining together or evolving into one
Catalytic Infrastructure	infrastructure that would make possible, processing at the village level and thereby facilitate value addition that would benefit producers
Custom Hiring Centres	units comprising a set of farm machinery, implements and equipment meant for custom hiring by primary producers for a fee
Resource Institutions	institutions which provide various inputs of training and capacity-building, and help in linking FPO's to input suppliers, technology providers and market players.
Producer Organisation Promoting Institution ⁵⁷	A legal institution that builds the capabilities of the Staff and Management of the PO through training and continuous hand-holding.
Credit Absorption	Ability to take and utilize funds in a business.
Market Linkages ⁵⁸	when one or more organizations that facilitate end to end integration of the entire supply chain –mobilize the women, train them, provide necessary infrastructure, supply inputs, provide capacity building training, and buy-back the finished product.
PO financing ⁵⁹	short-term commercial finance option that provides capital to pay suppliers upfront for verified purchase orders.
Invoice Discounting ⁶⁰	practice of using a company's unpaid accounts receivable as collateral for a loan, which is issued by a finance company.
Promotional Programs	a series of marketing promotions that make up a larger marketing effort designed to create company, product, or service awareness and to generate leads in the form of prospect responses.
Open Door Session	freedom of access
Investable	refers to an asset in which an investment can be made.
Moratorium	time during the loan term when the borrower is not required to make any repayment
Joint Liability Group	a group of 4-10 people of same village/locality of homogenous nature and of same socio-economic background who mutually come together to form a group for the purpose of availing loan from a bank without any collateral.
Self-Help Group	also known as mutual help, mutual aid, or support groups, are groups of people who provide mutual support for each other. In a self-help group, the members share a common problem, often a common disease or addiction
Warehouse financing	a form of inventory financing. It is a loan made by a financial institution to a company, manufacturer, or processor. Existing inventory, goods or commodities are used as collateral for the loan.
Price Risk	possibility that commodity price changes will cause financial losses for the buyers or producers of a commodity
Corpus	amount of money that is invested
Cross-subsidization	practice of charging higher prices to one type of consumers to artificially lower prices for another group.
NPM Practice	describes various pest-control techniques which do not rely on pesticides
Value Chain	the process or activities by which a company adds value to an article, including production, marketing, and the provision of after-sales service.
Special Purpose Vehicle	is a subsidiary created by a parent company to isolate financial risk
Geo-tagging	process of adding geographical identification metadata to various media such as a geotagged photograph or video, websites, SMS messages, QR Codes or RSS feeds and is a form of geospatial metadata.
Responsible debt	debt that has manageable interest rates and repayment terms

⁵⁷ NABKISAN, FAQ's

⁵⁸ Market Linkages: The Achilles' Heel of Livelihoods, Next Billion

⁵⁹ Purchase Order Financing.com

⁶⁰ Accounting tools.com

Acknowledgement

We express our gratitude to the following for imparting critical information which was used to strengthen the report.

Table 10: Primary Interviewees

Name	Organization	Designation
Rishabh Sood	RaboBank India	Sr. Manager
Srinivas Chekuri	Gramodaya Trust	Founder & CEO
Sunil Pote	Yuva Mitra	Founder & Executive Director
Ismail Shariff	NABARD	GM
Ramalakshmi Penugonda	NABARD	Assistant General Manager
KS Mahesh	NABKISAN	CFO
B. Naga Siva Prasad	NABKISAN	Business Development Manager
Dr K Palaniswamy	NABARD Karnataka RO	General Manager
Ms. Padmapriya	NABKISAN	Business Development Manager
Sridhar Easwaran	Samunnati Financial Intermediation & Services	Founding Member
Hari Rajagopal	Samunnati Financial Intermediation & Services	Vice President – Capital Markets & Strategic Initiatives
Gaurav Gupta	Ananya Finance	COO
Nagendra Rajawat	Ananya Finance	VP, Agri-Business Finance
Madhu Murthy	Mahila Abhivruddhi Society (APMAS)	Executive Director
Nanda Kumar Rajagopalan	Chetna Organic	CEO
Gouri Krishna	BASIX Consulting & Technology Services	MD & CEO
Raghuram Bhallamudi	BASIX Consulting & Technology Services	Vice President
Radheshyam Solanki	BASIX Consulting & Technology Services	Vice President, Head – Finance & Administration
Balakrishnan N	Vrutti – Livelihood Impact Partners	CEO, Vrutti
Muralidharan Thykat	Vrutti – Livelihood Impact Partners	Director- Livelihood Impact Finance, Vrutti
M S Govind Rajan	Initaitives for Development Foundation	Project Executive, FPC Promotion
Vivekanand Salimath	Initaitives for Development Foundation	Managing Trustee & Charmain Director
Srikanth SP	Initaitives for Development Foundation	Head Farm – Livelihoods
Kamal Khurana	Indigram Labs Foundation	CEO, Federation of Indian FPO's and Aggregators
Sudarshan Suryawanshi	Indigram Labs Foundation	CEO, Indian Society of Agribusiness Professionals
Prasanna Rao	Arya Collateral Warehousing Services	Managing Director
Chritudas KV	ESAF Small Finance Bank	Lead Advisor, Sustainable Banking
Rajiv Bhatia	Samudra Network	Co-Founder
Kuldeep Solanki	GujPro Agribusiness Consortium Producer Company Pvt Ltd.	CEO
Lohit Mohan	Safe Harvest	Manager
Kurian Uthuppu	Stellapps Technologies Private Limited	Strategic Management Associate

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