BANKERS INSTITUTE OF RURAL DEVELOPMENT, LUCKNOW
(Designated Nodal Training Institution at Central Level by GoI under the Central Sector Scheme on Formation & Promotion of 10000 FPOs)

Resource Material

Capacity Building of Officials of Implementing Agencies, State Governments & Other Stakeholders

under

Central Sector Scheme on Promotion & formation of 10000 FPOs

NABARD

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Contents

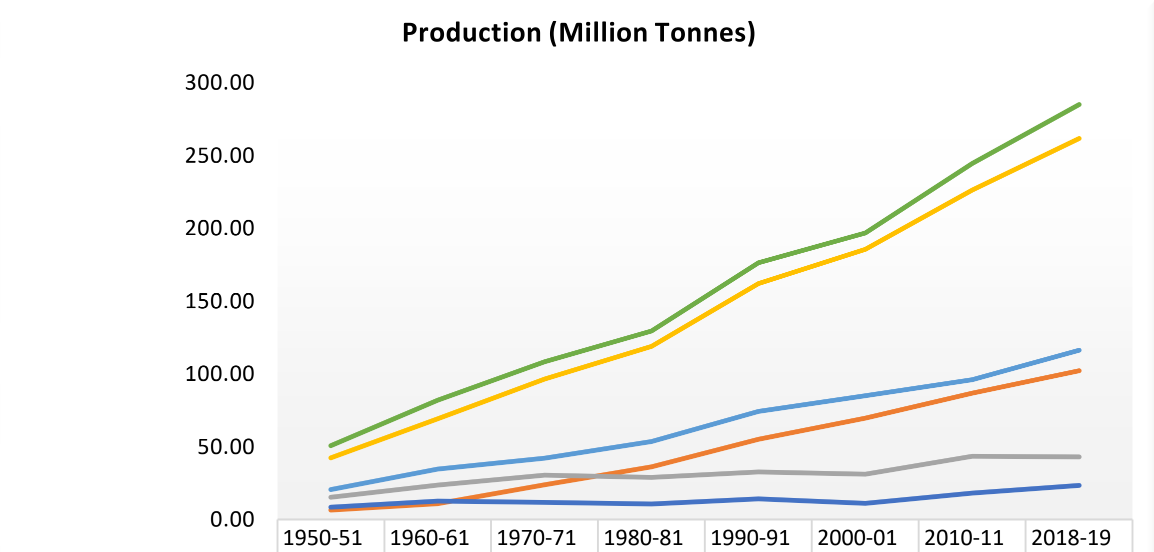
Session	Making small holder farming viable in India through FPOs
I	

A. Status of Land-use in India

- Only 23 percent of reported area for land utilization is under forests which is well below the prescribed levels under National Forest Policy, 1988. The policy states that a minimum of 1/3rd of the total land area of the country i.e. 33 percent should be brought under forest or tree cover.
- Area not available for cultivation is about 14 percent & area under this category is increasing with time.
- Other uncultivated area accounts for about 8 percent and fallow lands occupy about 9 percent of the reported area for land utilization.
- Net Sown Area is about 45 percent of reported area for land utilizations which has almost reached stagnation thereby indicating practically very limited scope for horizontal area expansion under agriculture.
- In spite of huge public sector investment in irrigation sector, the Net Irrigated Area is only 48 percent of Net Sown Area highlighting the fact that assured irrigation facilitates are limited to only about half of the cultivated area. Therefore, about 52 percent area is still depend on monsoons for cultivation.
- The average cropping intensity is about 141 percent. Thus, on an average, only 1.41 crops are being cultivated per unit area annually despite the country being bestowed with diversified agro-climatic conditions where at least three good crop seasons exists for cultivation viz. kharif, rabi & zaid.

B. Agriculture – Historical perspective

After gaining Independence, in 1947, agriculture in India was characterised by low productivity issues on account of use of primitive technologies with almost 3/4th of the population dependent on agriculture for employment. Thus, one of the biggest challenge for the country, then, was to ensure nation's food security for which multipronged strategies were drawn for enhancing the food crop production like focus on intensive agriculture through use of improved technology aiming at increase in production and productivity, investment in irrigation sector and various institutional reforms like Minimum Support Price (MSP), land reforms, priority sector lending, etc. As a resultant, we as a nation not only attained self-sufficiency in food grains & become food secure but also transited from net importer to net exporter of agriculture products. During this period (1950-51 to 2018-19), the total food grain production increased by about 4.61 times, cereal production increased by about 5.17 times, wheat production increased by 14.72 times and the rice production increased by almost 4.65 times. The increase in production was in contrast to increase in acreage under the crops which only increased by about 27 percent under total food grains, 25 percent under total cereals, 197 percent under wheat and about 42 percent under rice cultivation.



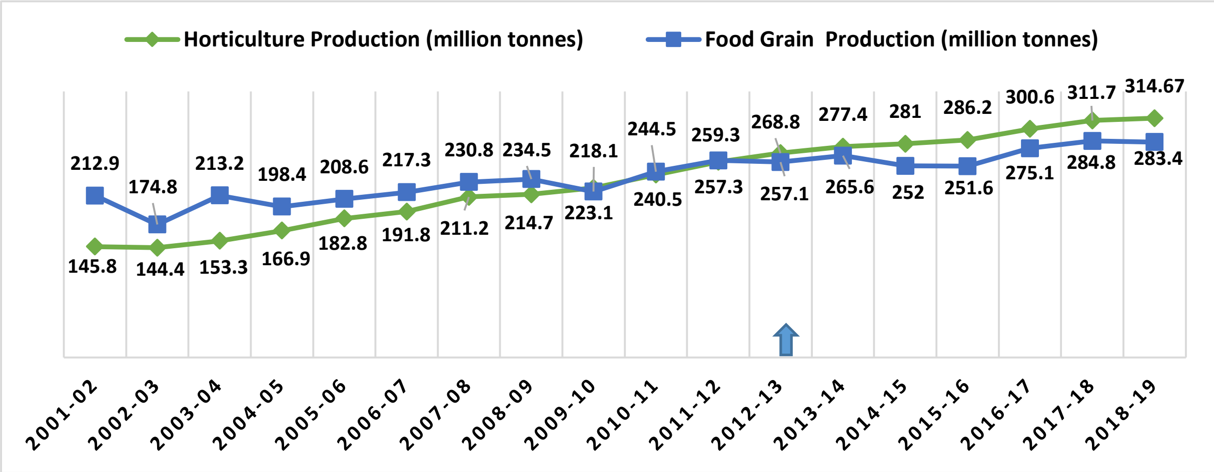
	1950-51	1960-61	1970-71	1980-81	1990-91	2000-01	2010-11	2018-19
Rice	20.60	34.60	42.20	53.60	74.30	85.00	96.00	116.40
Wheat	6.50	11.00	23.80	36.30	55.10	69.70	86.90	102.20
Coarse Cereals	15.40	23.70	30.60	29.00	32.70	31.10	43.40	43.00
Total Cereals	42.40	69.30	96.60	119.00	162.10	185.70	226.30	261.60
Pulses	8.40	12.70	11.80	10.60	14.30	11.10	18.20	23.40
Total Foodgrains	50.80	82.00	108.40	129.60	176.40	196.80	244.50	285.00

Rice Wheat Coarse Cereals Total Cereals Pulses Total Foodgrains

The enhancement in food grain production was not in linear correlation with acreage, thereby, indicating that adoption of latest technologies complemented by increase in assured irrigation facilities played an important role in productivity enhancement. This resulted in almost 297 percent increase in production per unit area in rice (668 Kg/ha in 1950-51 to 2659 Kg/ha in 2018-19) and about 430 percent increase in wheat (from 663 Kg/ha in 1950-51 to 3507 Kg/ha in 2018-19).

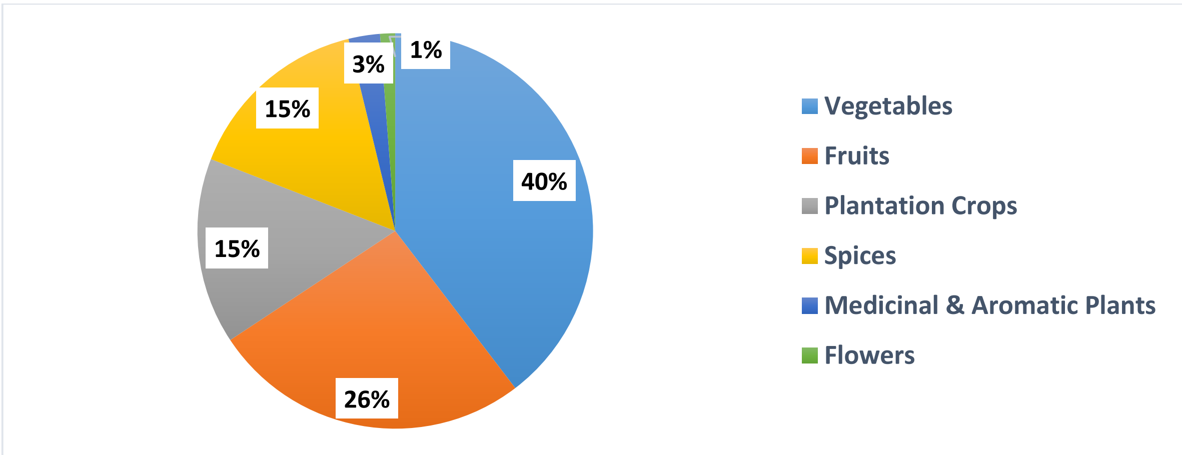
Horticulture: With time, gradual diversification in the cropping patterns was also observed especially in last few decades with horticulture coming up in a big way as cash crops.

Year-wise comparison of food grain & horticulture production



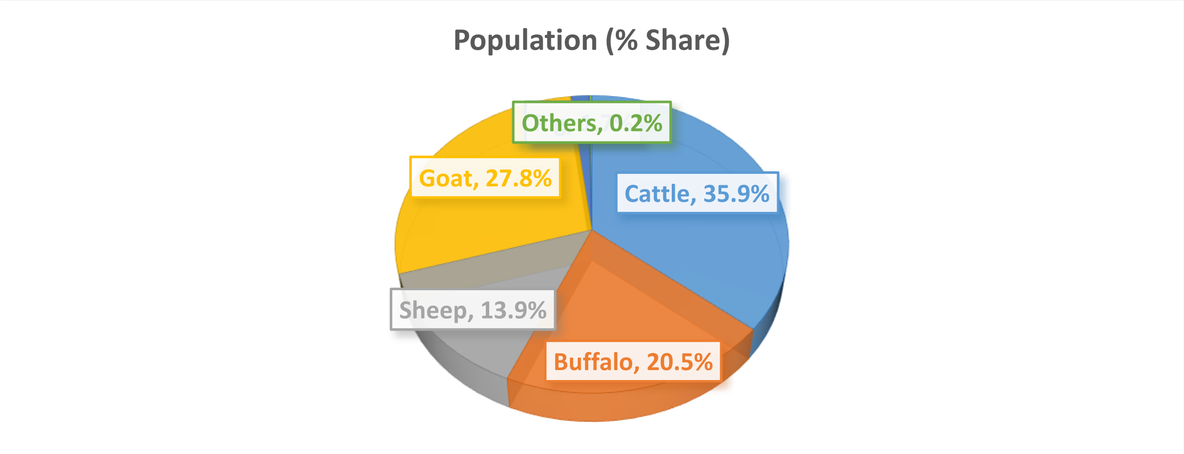
It was for the first time in the year 2012-13 that the horticulture production surpassed food grain production and the production gap between the two is widening since then. Within horticulture sector, the maximum share in terms of acreage is occupied by vegetables followed by fruit trees, plantation crops, spices, medicinal & aromatic plants and floriculture respectively.

Acreage under different horticulture sub-component (2018-19)



<u>Agriculture Allied Sector</u>: This sector comprises of allied activities undertaken by farmers along with production of food grains and horticulture crops like livestock farming *(dairying, poultry, fisheries, piggery, goat & sheep rearing)*, sericulture, apiculture, mushroom farming, etc. As per Livestock Census (2019), the total Livestock population in our country is 535.78 million, an increase of 4.6 percent over Livestock Census (2012). The share of major species is presented below.

Share of Major species as per Livestock Census (2019)

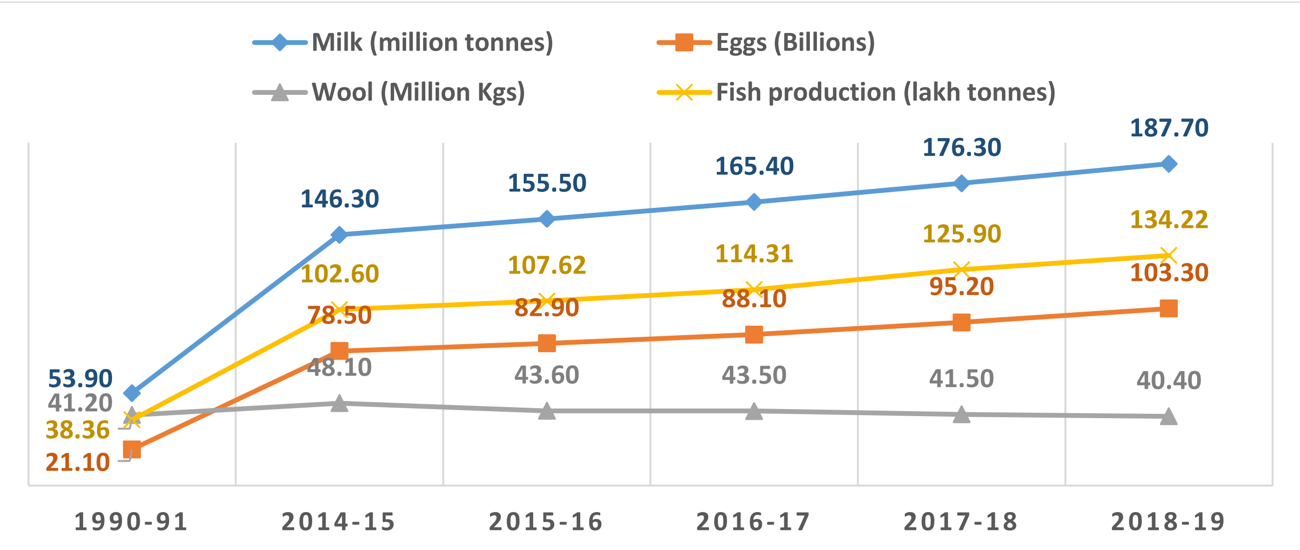


⇒ **Few emerging facts from Livestock Census (2019)**

- The female cattle (cows population) is 145.12 million and the total buffaloes in the country is 109.85 million showing an increase of 18 percent & 1 percent over the previous census (2012) respectively.
- The total sheep & goat population was 74.26 million & 148.88 million showing an increase of 14.1 percent & 10.1 percent over previous census. The total pigs in the country were 9.06 million in 2019.
- Poultry in the country comprised of 851.81 million birds (increase of 16.8 percent over previous census). The total Backyard Poultry in the country is 317.07 million (growth of 45.8 percent) and commercial poultry was 534.74 million (growth of 4.5 percent)

Trends in All-India Production – Allied Sector

Share of Major Species as per Livestock Census (2019)



- **3.5 times increase in milk & fish production since 1990-91**
- **4.9 times increase in egg production since 1990-91**
- **Status quo as far as wool production is concerned**

Position of India in World Agriculture: In terms of geographical area, India ranks 7th in the world whereas in terms of population, we are ranked 2nd i.e. next to China which is the most populated country in the world. As on 2018, FAOSTAT, Food and Agriculture Organization of the United Nations, India's global production rankings are as under:

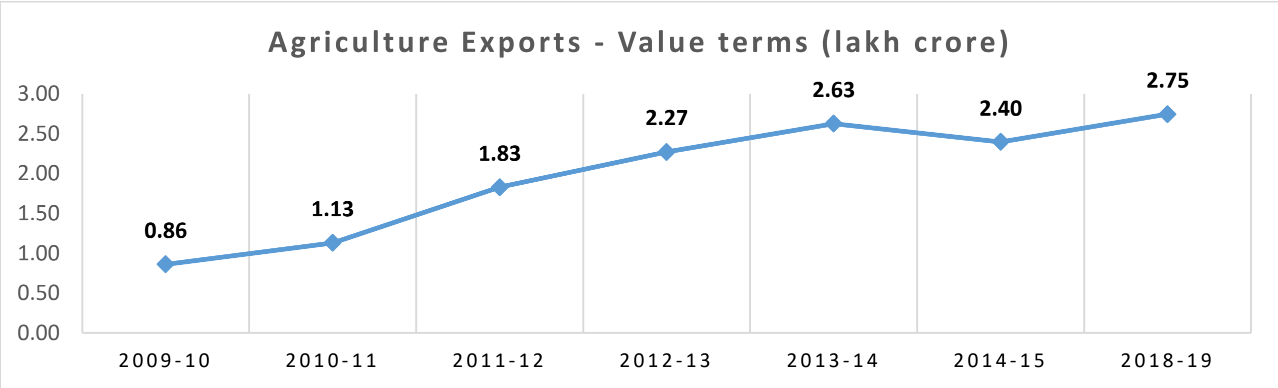
India's position in World Agriculture

Category	Largest Producer	2nd Largest Producer	3rd Largest Producer
Cereals, Pulses & oilseeds	Millets, Pulses	Rice, Wheat, Lentil	Rapeseed, Sesame
Vegetables	Dry Beans, Chick Pea, Okra	Lettuce & Chicory, Onion (dry), Cabbage, Cauliflower & Broccoli, Eggplant, Potato, Pumpkin, Squash & Gourd, Tomato	Green bean
Sugarcane	--	Sugarcane	--
Fruits	Banana, Mango, Guava, Lemons & Lime	Papaya	Oranges
Dairy	Buffalo Milk, Goat Milk	--	--
Spices	Chili pepper, ginger	Garlic	Nutmeg, Cardamoms
Fibres	Jute	Cotton, Silk	
Others	--	Cashew, Tea	Eggs

(Source: Wikipedia based on FAOSTAT-2018, FAO)

Agriculture Exports: Despite leading position in production of various agri-commodities as stated above, agri-exports accounts for only a little over 2 percent of world agricultural trade. During 2018-19, the total agri-exports were valued at Rs. 2.75 lakh crore which constituted about 11.9 percent of the total country's exports and thus, there exists a huge scope to tap this market. Though, an increasing trend is observed as far as agri-exports are concerned (2009-10 to 2018-19), the pace was slow.

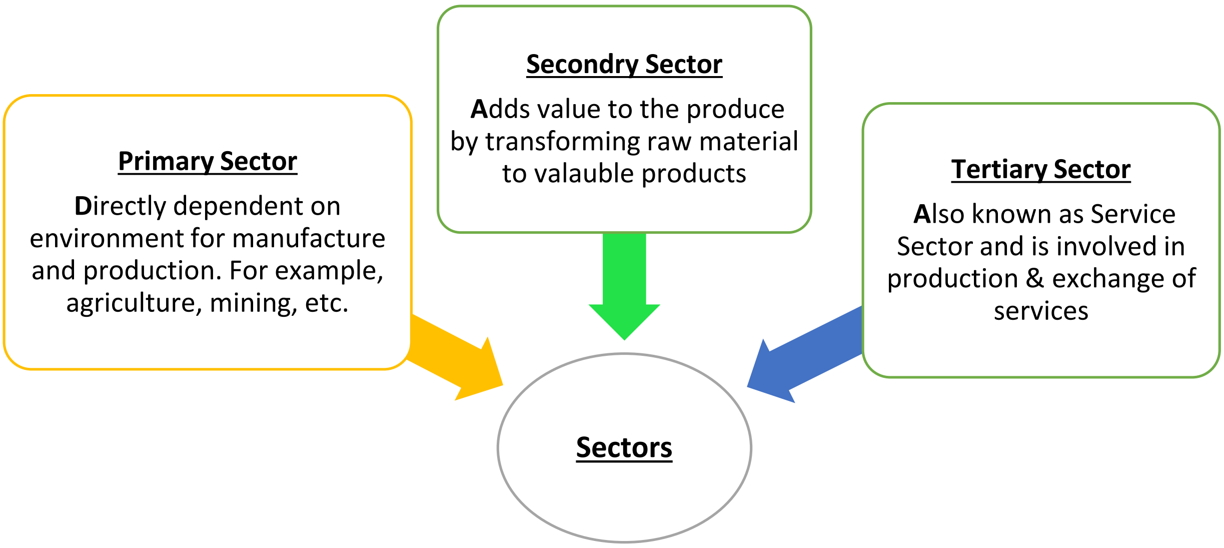
Agriculture Exports in value terms



(Source: Agricultural Statistics at a Glance, 2019)

Role of Agriculture & Allied Sector in Indian Economy

An economy is best understood through study of its components or sectors which can be defined as a large segment of the economy in which businesses share the same or a related product or service. Generally, economy is categorized into three sectors viz. Primary, Secondary & Tertiary Sector.



Further, the economy is measured in terms of Gross Domestic Product (GDP) which is the value of all goods and services produced in it (all the three sectors) over a period of time. After following Gross Domestic Product (GDP) concept for many years in India, we have now switched over to the concept of Gross Value Added (GVA) to analyse the growth. While the GDP gives the picture from the consumers' side or demand perspective, the GVA gives a picture of the state of economic activity from the producers' side or supply side.

Performance of different sector in India

The performance of different sectors in Indian economic growth are given below:

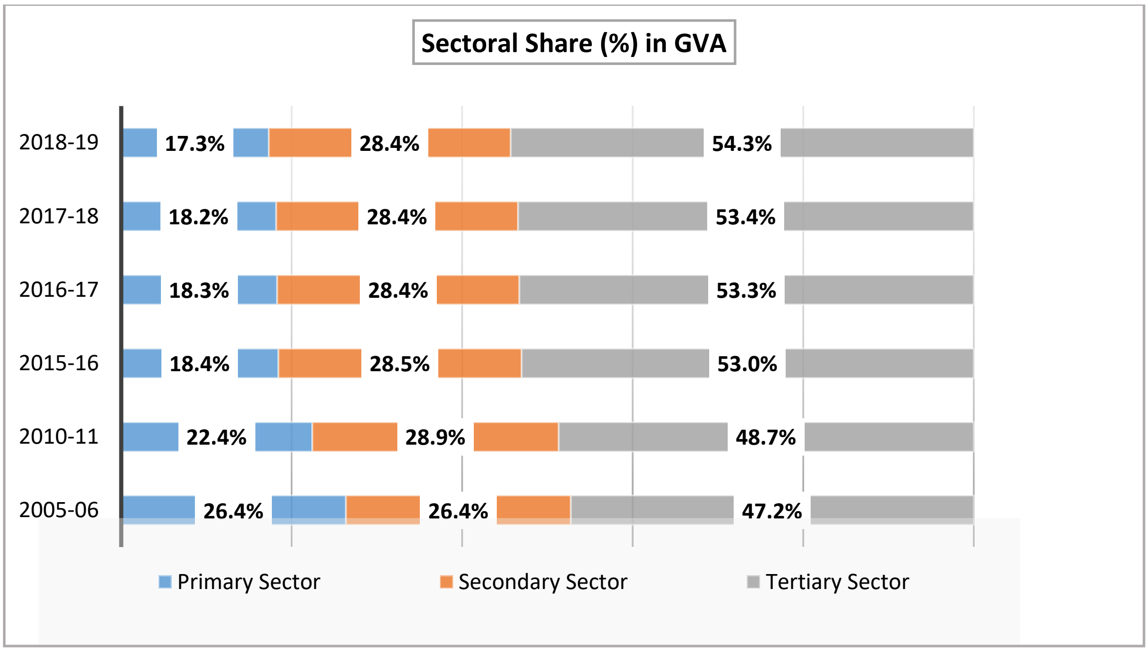
GVA by Economic Activity at Constant (2011-12) basic prices

(₹ lakh crore)

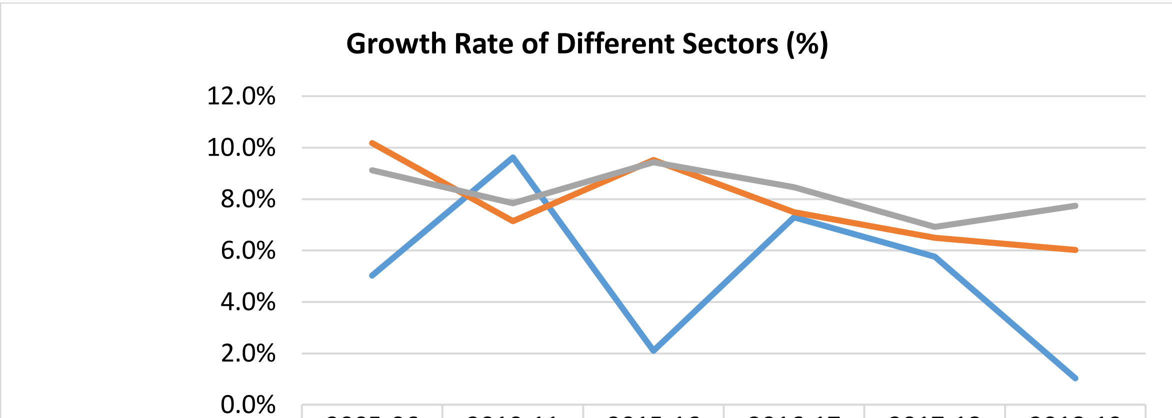
Sectors	2005-06	2010-11	2015-16	2016-17	2017-18	2018-19
Agri (Crops)	7.97	9.16	9.69	10.20	10.65	10.54
Agri Allied (Livestock)	2.24	3.04	4.20	4.62	4.96	5.36
Agri Alled (Forestry & logging)	1.37	1.26	1.37	1.45	1.53	1.54
Agri Allied (Fishing & Aquaculture)	0.50	0.65	0.90	1.00	1.14	1.28
Subtotal - Agri & Allied	12.08	14.12	16.16	17.26	18.28	18.72
Mining & Quarrying	2.46	3.17	3.18	3.49	3.66	3.45
Total - Primary Sector	**14.55**	**17.28**	**19.34**	**20.75**	**21.95**	**22.17**
Manufacturing	8.67	13.67	19.04	20.55	21.91	23.17
Electricity, Gas, Water Supply & Other Utility Services	1.23	1.72	2.24	2.46	2.74	2.97
Construction	4.65	6.87	8.65	9.16	9.62	10.20
Total - Secondary Sector	**14.56**	**22.26**	**29.93**	**32.18**	**34.27**	**36.34**
Trade, repair, hotels & restaurants	5.93	8.35	12.61	13.89	15.28	16.57
Transport, Storage communication & services related to Broad casting	3.40	4.94	7.31	7.57	7.82	8.31
Financial, Real State & professional Services	10.80	14.65	22.95	24.93	26.09	27.87
Public Administration, Defence & Other services	5.91	9.56	12.77	13.96	15.34	16.77
Total - Tertiary Sector	**26.04**	**37.50**	**55.64**	**60.35**	**64.53**	**69.52**
GVA at Basic Prices	**55.14**	**77.05**	**104.92**	**113.28**	**120.74**	**128.03**

(Source: Agricultural Statistics at a Glance, 2019)

⇒ We observe that in absolute terms, the GVA shows an increasing trend and also the fact that all sectors including agriculture & allied activities exhibits a positive trend. However, it may be interesting to study the share of each sector and its growth pattern on a time series to get a more granular picture.



⇒ From above, it is observed that only the share of primary sector in the GVA is showing a declining trend. This is in line with the normal course on the development path adopted during the movement from developing to developed stage of economy wherein with development, the secondary & tertiary sectors overtakes the primary sector with the progression.



	2005-06	2010-11	2015-16	2016-17	2017-18	2018-19
Primary Sector	5.0%	9.6%	2.1%	7.3%	5.8%	1.0%
Secondry Sector	10.2%	7.1%	9.5%	7.5%	6.5%	6.0%
Tertiary Sector	9.1%	7.8%	9.4%	8.5%	6.9%	7.7%

⇒ As regards growth rates among different sectors are concerned, a high variability in the growth rate of primary sector is observed which primarily comprises of Agriculture & Allied Sector.

Share of Agriculture & Allied Sector in Indian Economy

GVA by Economic Activity at Constant (2011-12) basic prices

(₹ lakh crore)

Sectors	2005-06	2010-11	2015-16	2016-17	2017-18	2018-19
Agriculture	12.08	14.12	16.16	17.26	18.28	18.72
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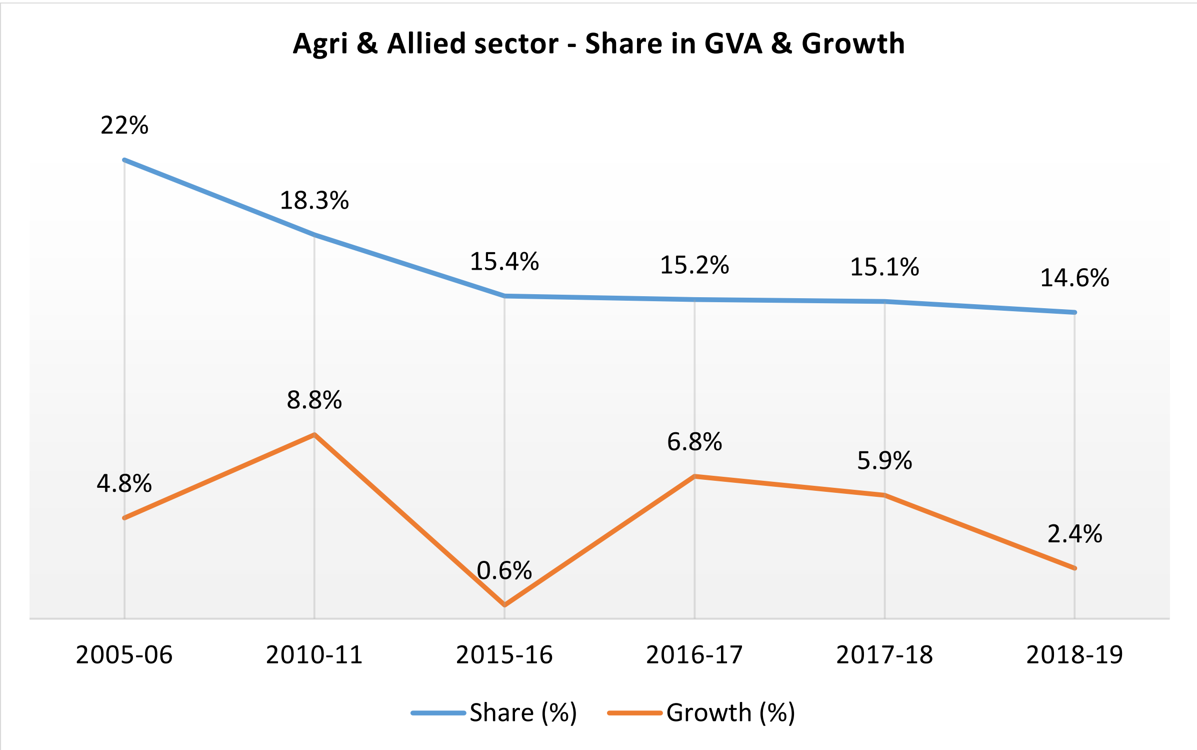
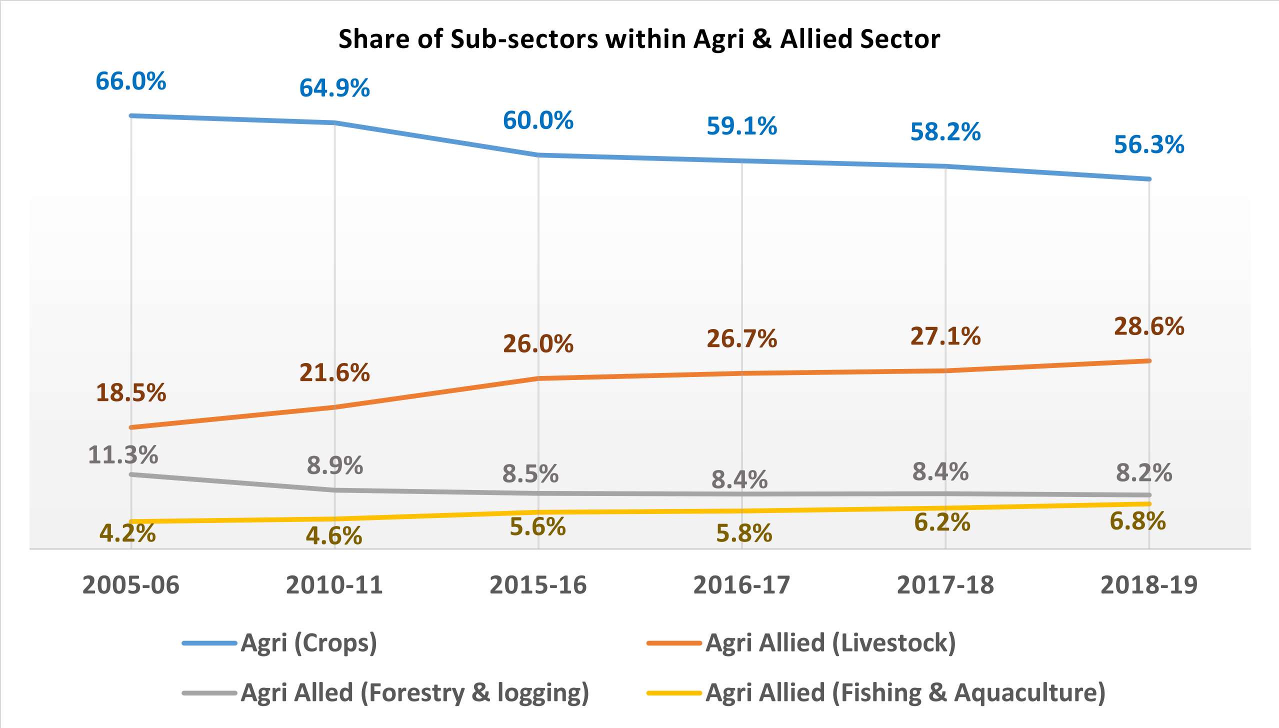
Agri Allied (Fishing & Aquaculture)	0.50	0.65	0.90	1.00	1.14	1.28
Industry	**17.02**	**25.43**	**33.11**	**35.67**	**37.93**	**39.79**
Services	**26.04**	**37.50**	**55.64**	**60.35**	**64.53**	**69.52**
GVA at Basic Prices	**55.14**	**77.05**	**104.92**	**113.28**	**120.74**	**128.03**



⇒ In absolute terms, though the share of Agriculture & Allied Activities in total GVA is increasing, however, in percentage terms, it is showing a gradual decline (declined from more than 50 percent in 1950-51 to 14.6 percent in 2018-19.



⇒ Within overall contribution to GVA by Agriculture & Allied Sector, the share of agriculture crops and forestry & logging is declining whereas the share of livestock and fishing & aquaculture is increasing

Challenges at Farmers' Level

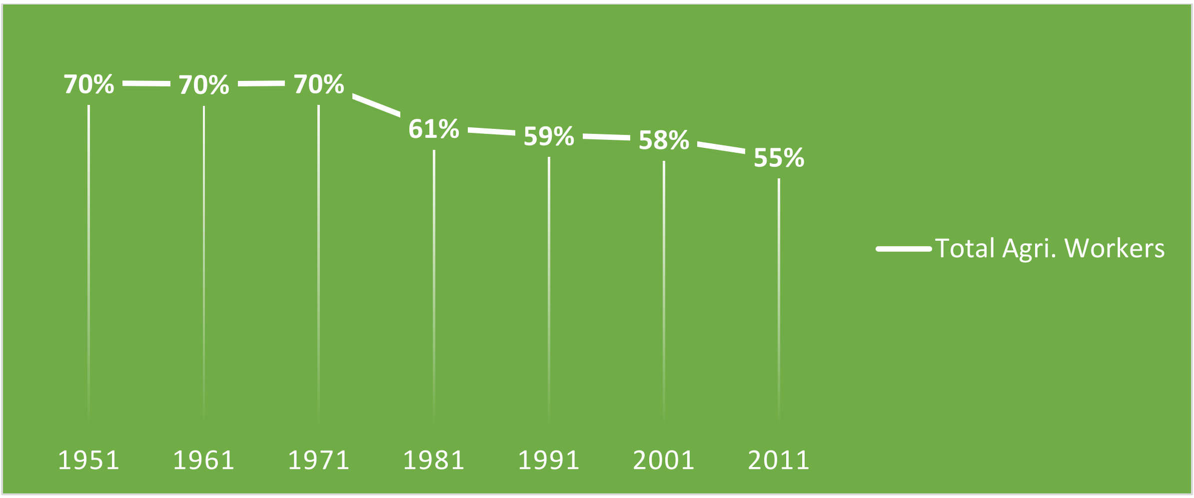
The challenges faced by farmers specially the farmers in marginal & small category are discussed below:

a) High dependency for livelihood on Agri & Allied Sector

Population & Agriculture Workers

(Units in millions)

Year	*1951*	*1961*	*1971*	*1981*	*1991*	*2001*	*2011*
Total Workforce	139.5	188.4	180.4	244.6	314.1	402.2	481.9
Cultivators	69.9	99.5	78.2	92.5	110.7	127.3	118.8
Agri. Labours	27.3	31.5	47.5	55.5	74.6	106.8	144.3
Total Agri. Workers	97.2	131	125.7	148.0	185.3	234.1	263.1



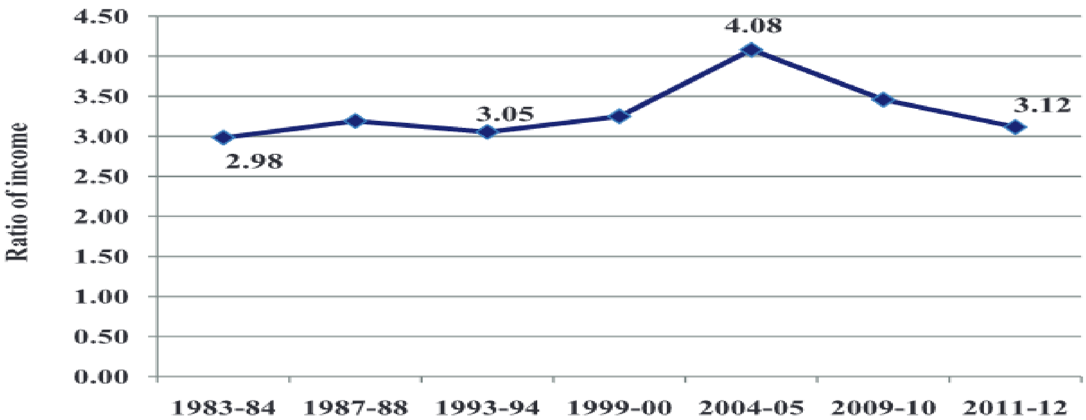
⇒ The scenario prevailing in 1950s suggests that about 70 percent of the total workforce was dependent on agriculture and allied sector for their livelihood which now has reduced to about 55 percent.

⇒ The share of Agri & Allied sector in GVA in 1950 was more than 50 percent which has now reduced to about 15 percent.

⇒ Logically, with increasing share of manufacturing & service sector in GVA, there should have been a proportionate shift of workforce to these sector as they being employment generating sectors but that has not taken place which has resulted in more dependency on this sector having an adverse bearing on per capita income from this sector.

b) **<u>Income – Issue related to disparity in income as compared to Non-Agri-Worker</u>**

Ratio of income per non-agriculture worker to income per cultivator



(Source: Doubling farmers' Income – Rationale, Strategy, Prospects & Action Plan, Niti Ayog, 2017)

⇒ Past strategies for development of agriculture sector in India focussed primarily on raising agriculture output and improving food security by strategizing production and productivity enhancement through better technologies & varieties (increased use of quality seeds, fertilizers, irrigation & agrochemicals) and providing incentives in the form of remunerative prices on some crops and subsidies on farm inputs. Thus, the advocated policies in the past supported production orienting systems with focus on produce rather than the producer which created a disparity in the income of the farmers as compared to income of a non-agriculture worker.

⇒ There was a more than 3-fold increase in the income of a non-agriculture worker as compared to a cultivator.

⇒ This is causing an adverse impact on the interest in farming & farm investment particularly in the minds of rural youth.

c) Technology – Issues related to Transfer & Adoption of Technology

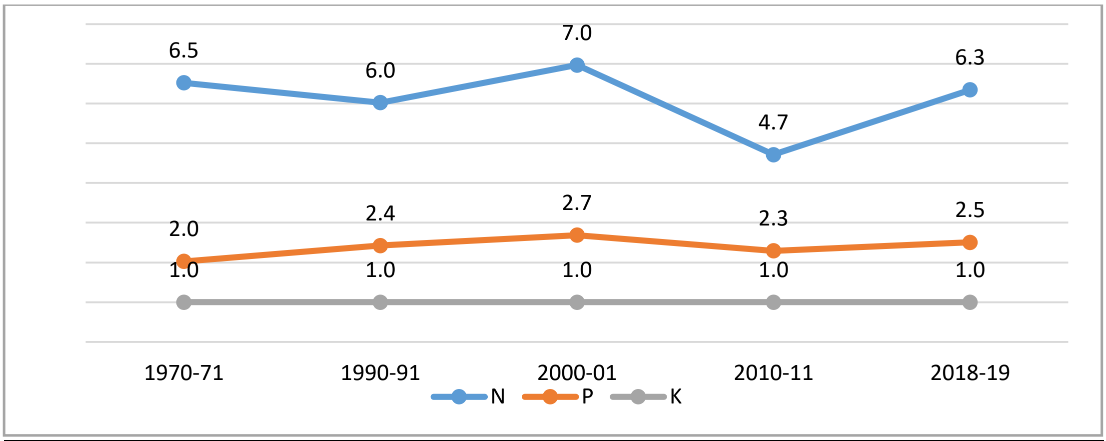
⇒ Given that farmers are moving from subsistence to market-oriented farming, there is increased requirement of information not only on production practices like new crop varieties & associated technology, but also on market-oriented information like trends in harvest season prices, quality of produce and export markets. Several government schemes like crop insurance, subsidy on farm implements and electronic agricultural markets are knowledge-intensive, which needs to be catered to through widespread dissemination of information. Thus, right information at right time through appropriate channels is crucial for farmers to take informed decisions about what crops to grow, what quantity of fertilisers and pesticides to use and when, where and at what price to sell.

⇒ The ratio of extension workers to farmers is low at 1:1162 at national level (one agricultural officer serving 1162 farmers) as against recommended ratio of 1:750. In spite of efforts by both public and private agencies, it has been found that the outreach of the agricultural officers as also extension agents from private agencies is limited *(Source: www.thehansindia.com - Reform-agri-extension-to-boost-ryots-income, 2018).*

⇒ As a resultant of gap in technology transfer, the technological recommendations could not be adopted properly resulting in issues like:

Indiscriminate use of fertilizers: Not only spoiling human health but also soil degradation and income loss to the farmers by impacting the production efficiency on account of higher cost of inputs.

NPK ratios related to fertilizer usage in agriculture



⇒ The ideal ratio of NPK is 4:2:1 but average usage is more (6.3:2.5:1), resulting in not only wastage of fertilizer on account of atmospheric & leaching losses but also contamination of water aquifers, spoilage of soils and loss of income to the farmers as fertilizer constitute about 10-15 percent of the cost of production.

d) Access to Inputs – Issues related to quality, timely availability & adequacy

⇒ *'A smallholder farmer purchased maize seeds from a local inputs shop. The dealers' terms were that, with a receipt the seed would cost Rs.1500/-, but without a receipt the cost would fall to Rs.1400/-. Thinking that the receipt would be of no use to him, the farmer chose to pay Rs.1400/-. To his utter dismay, only around 20 percent of the seeds germinated. Upon reading the cover of the seed pocket, to his shock, he noticed that the seeds were for demonstration purposes and had expired three months ago. He took the empty pack back to the input shop and demanded compensation for loss of crop for that season. But without a receipt as proof of purchase, the farmer was powerless to obtain compensation.'* Farmers told us that every cropping season there is a dilemma in the village over whether they should buy inputs from a local shop or the nearby town or city. Most farmers, particularly small and marginal farmers, buy the inputs they need (seeds, fertilizers or pesticides) using credit. The majority of the farmers we spoke with, emphasized that close to fifty percent of their total crop production cost goes for inputs. So, the quality of these inputs is very important. To ensure quality inputs, farmers can opt to buy from a retailer in the nearby town. However, they may not be able to obtain inputs on credit without a reference from the market intermediary. Those retailers who do provide inputs on credit to farmers then charge 2-3 percent interest rate per month till the harvest. There is also a requirement to sell the produce through the same trader (though there is no formal agreement). These restrictions and higher costs on purchases in the city, coupled with a one-day wage loss and transport costs for travel to the city (and delivery in the case of fertilizers), force most of the farmers to buy inputs from local (un) authorized village shops. In the absence of insurance, if the crops fail, perhaps due to poor quality inputs, or for any other reason, farmers then get into a vicious circle of debt *(Source: Does the small farmers have access to quality inputs?, ICRISAT, 2020).*

⇒ Further, apart from quality, the inputs are required at a particular time and in adequate quantities considering the seasonality concept which many a times is not the case.

e) Marketing Issues

⇒ Based on recommendations of Commission for Agricultural Costs and Prices (CACP), GoI declares MSP for 22 commodities and FRP (Fair and Remunerative Price) for sugarcane. The 23 crops include 7 cereals (paddy, wheat, maize, sorghum, pearl millet, barley & ragi), 5 pulses (gram, tur, moong, urad & lentil), 7 oilseeds (groundnut, rapeseed-mustard, soyabean, seasmum, sunflower, safflower & nigerseed) and 4 commercial crops (copra, sugarcane, cotton & raw jute). During 2018-19, acreage under the crops for which MSP was declared was about 164.74 million hectares. With Gross Cropped Area (GCA) of around 198.36 million hectares, roughly these crops covered about 83 percent of the total GCA. Effectively, the coverage gets further extended, considering the fact that 4-5 percent of the total cropped area is under forage cultivation. Thus, the system has been devised in such a manner that theoretically, it leaves only a very small segment of producers outside the production and price mitigating mechanism. However, though the MSP is declared for 23 crops as on date, but effectively ensured through procurement only for few crops like wheat & paddy and thus, the effectiveness of the system at the ground level has been questioned from time to time.

⇒ A comparison of the production and procurement data of rice and wheat for last 10 years (2009-10 to 2018-19) is given below.

All India Production & Procurement (Rice & Wheat) at MSP (2009-10 to 2018-19)

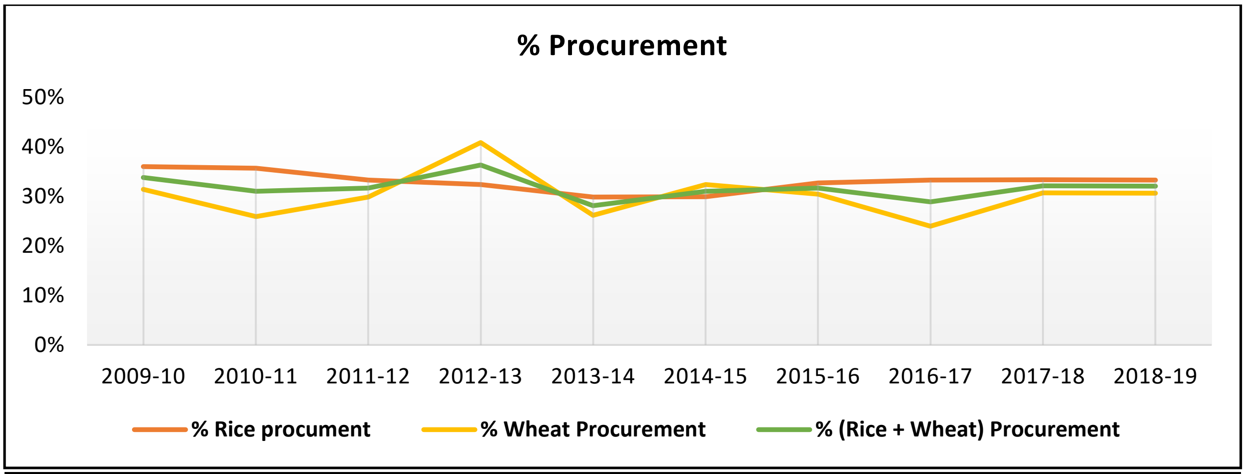
(million tonnes)

Year	Production			Procurement		
	Rice	Wheat	Total	Rice	Wheat	Total
2009-10	89.09	80.80	169.89	32.03	25.38	57.42
2010-11	95.98	86.87	182.85	34.20	22.51	56.71
2011-12	105.30	94.88	200.18	35.04	28.34	63.38
2012-13	105.24	93.51	198.75	34.04	38.15	72.19
2013-14	106.65	95.85	202.50	31.85	25.09	56.94
2014-15	105.48	86.53	192.01	31.55	28.02	59.57
2015-16	104.41	92.29	196.70	34.14	28.09	62.23
2016-17	109.70	98.51	208.21	36.48	23.63	60.11
2017-18	112.91	99.70	212.61	37.60	30.60	68.20
2018-19	116.40	102.20	218.60	42.70	35.00	77.70
Avg.	**105.12**	**93.11**	**198.23**	**34.96**	**28.48**	**63.45**

(Source: Statistics on Indian Economy 2018-19, RBI)

On an average basis, only 63.45 million tonnes of rice and wheat was procured against the average production of 198.23 million tonnes. In percentage terms, the average overall procurement was about 32 percent of the rice + wheat production put together. The procurement under rice was about 33 percent and in wheat was about 30 percent of total production.

Procurement (Rice & Wheat) to production under MSP (2009-10 to 2018-19)



⇒ Spatial disparity in terms of procurement being concentrated only in few states also exists. The highest producer of rice is West Bengal and that of wheat is Uttar Pradesh whereas the average procurement during last 5 years (2014-15 to 2018-19) for these states were only 11.9 percent and 8.9 percent respectively.

⇒ While it is true that now the MSP offered by the Government is 50% more than the A2+FL Cost as determined by the CACP, various farmer organizations are demanding 50% increase over the 'C2' cost and not over the 'A2+FL' cost.

I	A2	Actual paid out cost
II	A2+FL	Actual paid out cost plus imputed value of family labour
III	C2	Comprehensive cost i.e. including rental value of own land (Net of land revenue) and interest on value of own fixed capital assets (excluding land)

⇒ In this scenario, as a way forward, for income enhancement, farmers would be required to undertake crop rotation planning based on demand & supply with active participation on different marketing platforms including the institutional setup like e-NAM, commodity exchanges & contract farming for risk hedging, participation in global markets through exports, contract farming, use of direct marketing channels to capture intermediaries' margins in supply & value chains, etc.

f) <u>Less share of Producer in Consumer Price (Limited participation in supply & value chains)</u>

The average share of farmers in the consumers' rupee is found to be in a range of 28 percent and 78 percent for different food items (RBI Bulletin, 2019). The majority of the studies have reported that the producers associated with emerging marketing channels (organised retail chains) have been experiencing more advantage than the traditional supply chain.

Tradional Supply Chain	Modern Supply Chain
Producer → Commission agent cum-wholesaler → Retailer → Consumer	Producers → Retail Outlets → Consumers

The producers contracted by modern retail chains receive higher prices, higher net profits and incur lower transaction costs. Several studies have been conducted in different parts of India to compare the efficiency of the traditional as well as modern supply chain of vegetables and fruits. The net price received by the producers and producer's share in consumer's rupee was higher in supermarket channel than in traditional channels. The direct market models were found to be the best because it eliminated middlemen completely. Thus, the length of the supply chain has a negative impact on the efficiency of the marketing channel. **But the issue is that the marginal & small farmers are not able to participate and take advantage of it in individual capacities due to time constraint, not in a position for undertaking primary processing and requirement of quantities in bulk.**

…… study was undertaken in Hisar & Karnal district of Haryana to compare the marketing efficiency of fruits and vegetables supply chain. The findings of the study revealed that the modern supply chain (MSC) for fruits and vegetables was more efficient than the traditional supply chain (TSC) for both the fruits and vegetables. The percentage of physical losses at TSC was found to be 20.6% while in the MSC, it was only 6.66 %. The share of the producer in consumer's rupee was found to be 52% and 43% in MSC and TSC respectively for vegetables. However, producers share in consumer's rupee was found to be 70% & 66% in MSC and TSC of fruits. The major factors contributing to the efficiency of MSC were found to be a short length of the supply chain, packaging and less physical loss in the MSC

Source: Marketing Efficiency between Traditional and Modern Supply Chains of Fruits & Vegetables by Jaiprakash Bisen, R. K. Patel, K.K. Kundu and Sanjay in Economic Affairs, Vol. 63, No. 2, pp. 441-447, June 2018

g) **<u>Reducing landholding size</u>** <u>(Issue of economies of scale)</u>

As at the end of 2015-16, the total operational land holdings in the country were 14.65 crores. Based on the size of land holdings, they can be divided into 5 categories viz. Marginal, Small, Semi-Medium, Medium and Large. The details of number of land holdings category wise are presented below.

Number of Operational Landholding by Size group

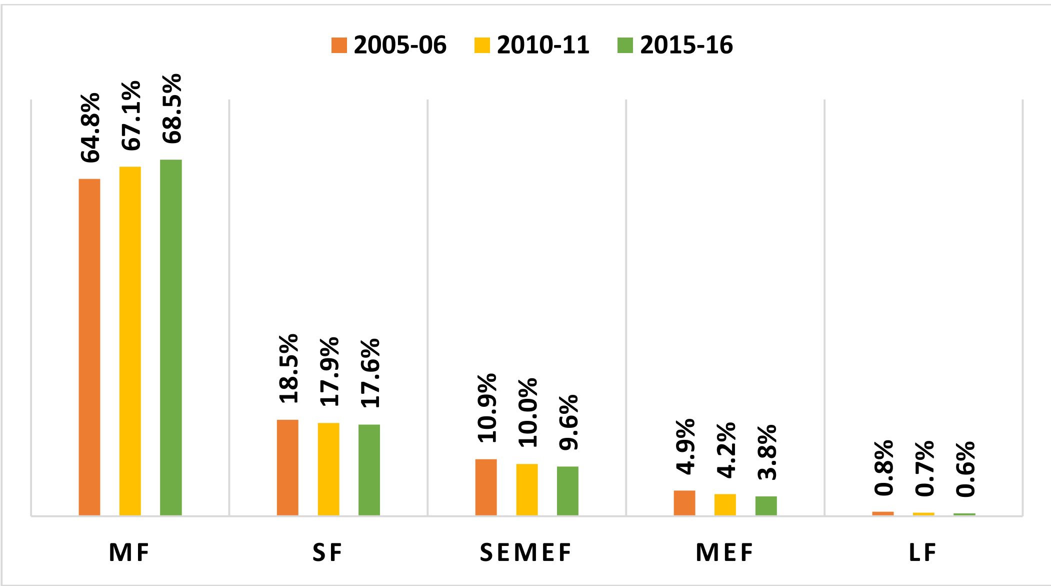
S. No.	Categories	Land Holding	Number of Holdings (crore)		
		(Area in Hectares)	2005-06	2010-11	2015-16
1	Marginal Farmers (MF)	< 1	8.37	9.28	10.03
2	Small Farmers (SF)	1 - 2	2.39	2.48	2.58
3	Semi-Medium Farmers (SEMEF)	2.1 - 4.0	1.41	1.39	1.40
4	Medium Farmers (MEF)	4.1 - 10	0.64	0.59	0.56
5	Large Farmers (LF)	> 10	0.11	0.10	0.08
Total Land Holdings			**12.92**	**13.83**	**14.65**

⇒ The number of holdings in the marginal land category were about 68.5 percent (2015-16) and an increasing trend is observed with time most probably on account of division of land within the family.

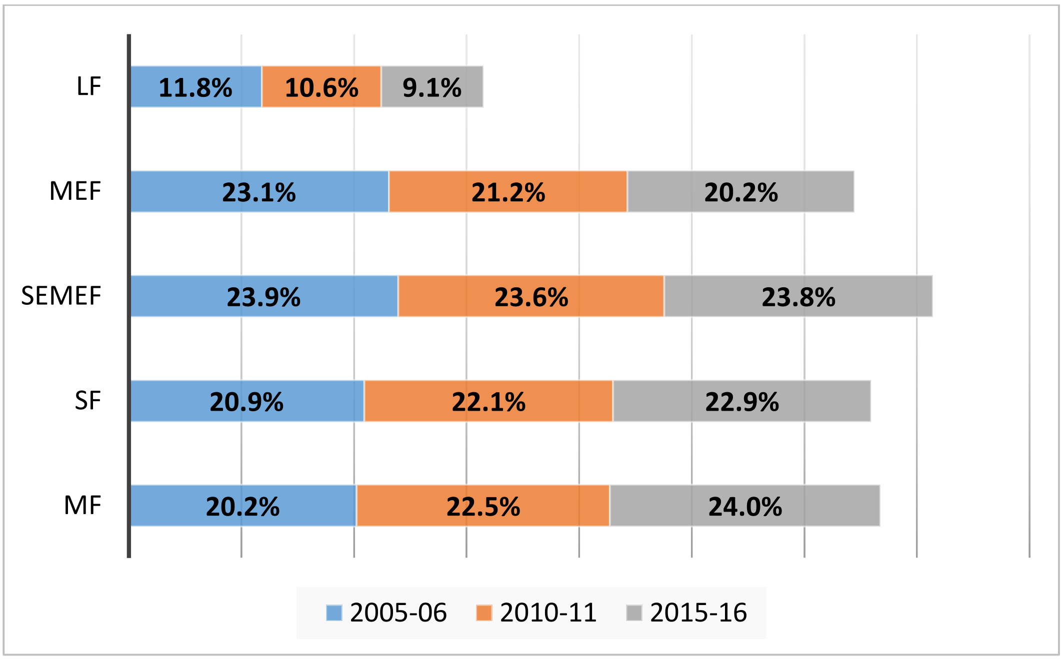
⇒ Similarly, the landholdings in other categories are showing a declining trend over a period of time.

⇒ About 86.1 percent farmers (2015-16) belong to the category of small & marginal farmers i.e. have land holding of less than 2.0 hectares

Category-wise change in number of landholdings with time



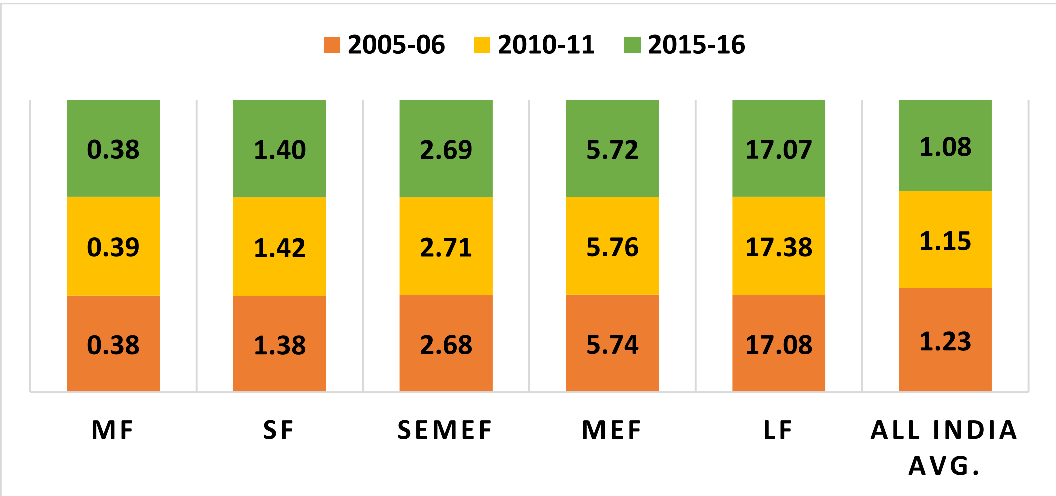
Area of Operational Landholdings by Category



⇒ The area cultivated by farmers having marginal and small land holdings is increasing with time and the area being cultivated by medium & large farmers is declining with time.

⇒ As on 2015-16, the area cultivated by Small & marginal farmers constituted 46.9% of the total cultivated area.

Average land Holding Size (Ha)



⇒ The All India Average land holding is 1.08 hectares (2015-16) and showing a declining trend with time

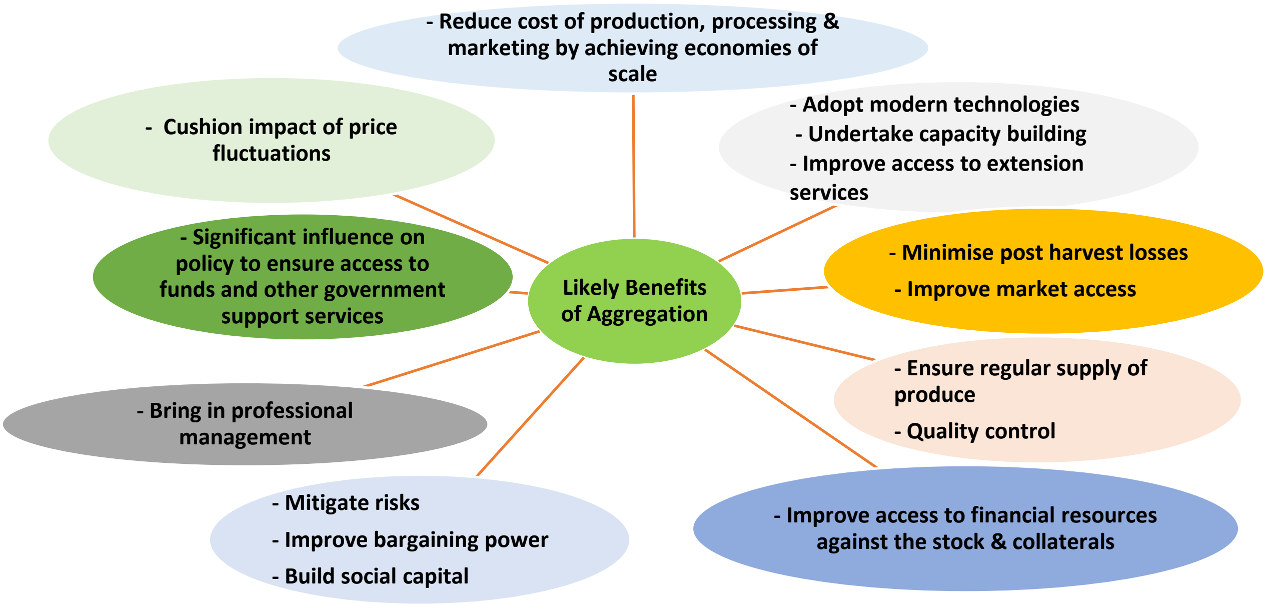
⇒ The average land holding of marginal farmer being just 0.38 hectares (2015-16) and that of a small farmers just 1.40 hectares.

Let us look at these issues and try to find a way forward:

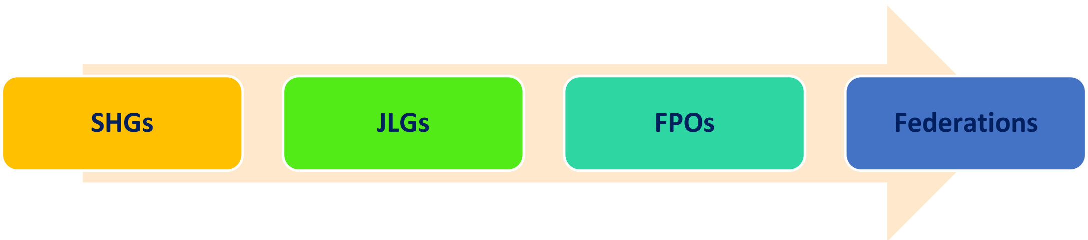
Let us start with the basic issue of average land holding size being only 1.08 hectare and the fact that with future family divisions, this trend is likely to continue. As per the data available almost 86 percent of the land holding are with farmers under the category of small and marginal land holdings i.e. with less than 2.0 hectares of land. Within this category, almost 69 percent farmers are cultivating on an average about 0.38 hectare of land and about 17.6 percent farmers in India cultivating on an average about 1.40 hectare of land which means they are producing agriculture commodities on a very limited scale on individual basis. As a result, they are likely to come across some of the following constraints:

• **May not be able to take advantage of economies of scale both on input side as well as output side**
• **Have very limited bargaining power on account of low scale of production**
• **Viability may be an issue for higher order mechanisation**
• **May not be viable to create farm level storage infrastructure which can facilitate them in taking advantage of price movement of commodities with time**
• **May not be in a position to participate at advanced level of supply chain including global markets through exports**
• **Would not be in a position to participate in value chain (processing) for increasing their share in the consumer price**
• **Appropriate & timely technical assistance and access to modern technology limited on account of distorted ratio of extension workers & farmers**
• **Access to markets specially the modern marketing channels & contract farming for better price realisation will be challenge as they deal in bulk quantities**
• **Difficulty in participating in government programs on account of awareness and time constraint**

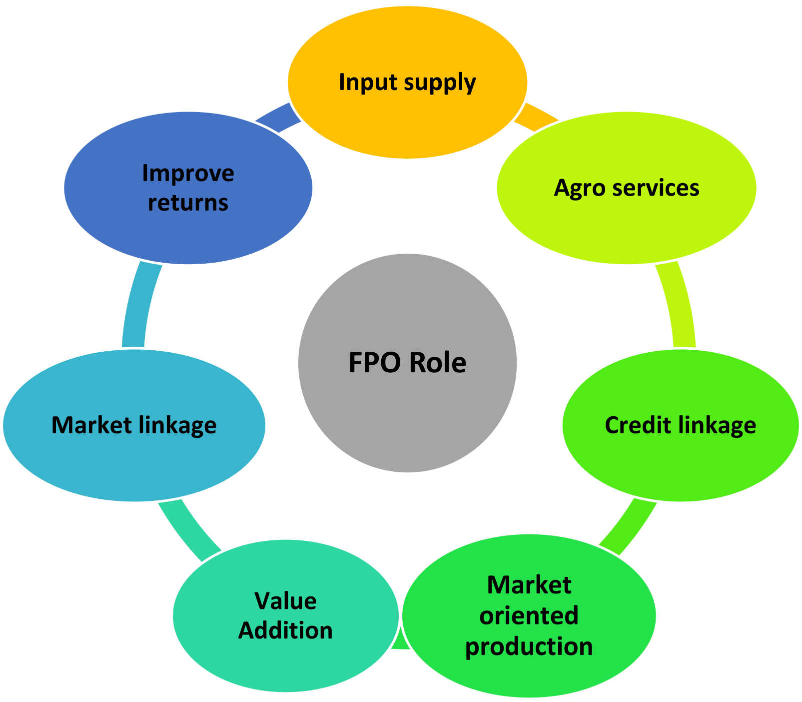
Could aggregation of these small and marginal farmers be a probable solutions?



Mode of Aggregation



Role which a Farmers' Producer Organsiation (FPO)



Advantages of FPOs: Numerous reports and studies have clearly captured and established the positive role of FPOs. Some of the important benefits ascribed to FPOs are as under:

a) Cost of production or cultivation may be reduced by procuring all necessary inputs in bulk at wholesale rates, as well as use of custom hiring services of farm equipment.

b) Aggregation of produce and bulk transport reduce marketing cost, therefore, enhancing the net value accruals to the producer.

c) Building scale through aggregation of commodities lends advantage of economies of scale and attracts traders, processors, and retailers to the farm gate.

d) Easy access to modern technology, extension services and joint training on Good Agricultural Practices (GAP) and ensuring traceability of agriculture produce.

e) Post-harvest losses can be minimised through joint storage and value addition facilities.

f) Adverse price fluctuations and distress sale can be managed or avoided; if good practices are imbibed. These include contract farming agreements, stocking in own common facilities or leased storage facilities with credit support, etc.

g) Ease in communication for dissemination of information about prices and volumes in different locations and other farming-related advisories thereby reducing in formation asymmetries.

h) Access to institutional credit against stock, without collateral by virtue of joint liability implicit in the FPO framework.

i) Movement up the value chain and graduation into primary and secondary processing will be possible as minimum scale economies are reaped.

j) Greater bargaining power to farmers and greater quality orientation in production and processing activities.

Note: *As a result of the above initiatives, farmer members of the FPOs saves on cost of production, reduction in post-harvest losses and participation in value chains. Thus, the institution of FPO shall generally lead to augmentation in income levels of the member farmers and this must be highlighted by the Trainer*

FPO - The Concept

A Farmer Producer Organisation entails the spirit of a cooperative society which has been there on the ground for last more than 100 years. However, for inculcating the principles of cooperation along with professional management, the Government of India (Ministry of Law, Justice and Company Affairs by its order No. 11/12/99-CL-V dated 01 November 1999) constituted a High Powered Committee to:

1) *Examine and make recommendations with regard to framing legislation which would enable incorporation of cooperatives as companies and conversion of existing cooperatives into companies*

2) *Ensure that the proposed legislation accommodates the unique elements of cooperative business within a regulatory framework similar to that of a private limited company*

The Committee constituted under the chairmanship of Dr. Y K Alagh recommended that the GoI enact legislation to enable the registration and operation of producer companies, wholly owned and self-regulated by users, managed by professionals in the user's interest and in a manner consistent with the principles of mutual assistance. The committee evolved the legislation for the above purpose on the experience of producer organisations all over the country. The committee was of the opinion that keeping in view the importance to the survival of the producer organisations in a market economy, GoI should take up the matter of adoption of the legislation as early as possible. The legislation will provide rural producers with an effective alternate organisational form which will both encourage professionalization and a modern corporate culture while retaining and supporting the principles of mutual assistance.

The Ministry of Company Affairs introduced a Bill for amendment in the Companies Act, 1956 by inserting Part IX A, paving a way for the incorporation of Producer Companies. The Act has allowed primary producers to organize themselves to gain a maximum profit.

FPO - Legal Forms

Producer organisations is a general concept and FPOs can be formed and registered under different prevailing Acts as under:

- State Cooperative Societies Act
- Producer Company under Section 581(C) of Indian Companies Act, 1956, as amended in 2013
- Section 25 Company of Indian Companies Act, 1956, amended as Section 8 in 2013
- Multi-State Cooperative Society Act, 2002
- Public Trusts registered under Indian Trusts Act, 1882

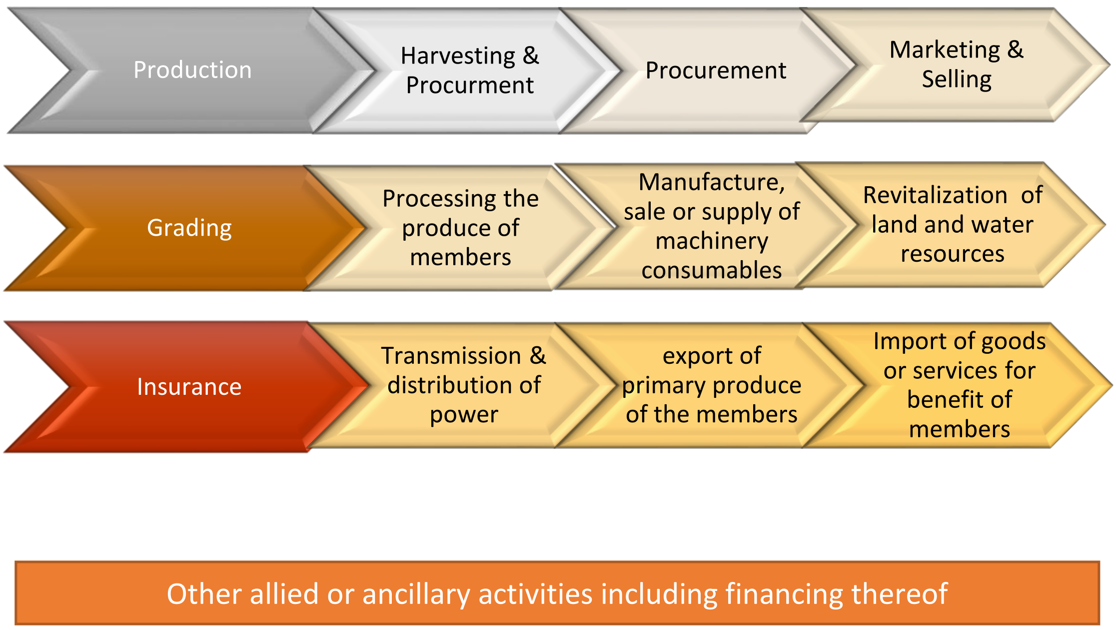
However, as per the Central Sector Scheme on Formation and Promotion of 10000 FPOs, the focus is on FPOs registered under Cooperative Societies Act and Companies Act

Differences between FPO's registered under Cooperative Act verses Producer Company

Particulars	Cooperative Societies Act	Companies Act
Objectives	Single Object	Multi-object
Area of Operation	Restricted, Discretionary	Entire Union of India
Membership	Individuals & cooperatives	Any individual, Group, Association, Producer of the goods or services

Particulars	Cooperative Societies Act	Companies Act
Share	Non-tradable	Not tradable but transferable limited to members on par value
Profit sharing	Limited dividends on share	Commensurate with volume of business
Voting rights	One member one vote but Govt. and Registrar of Cooperatives hold veto power	One member one vote. Members not having transaction with the company cannot vote
Government. Control	Highly patronised to the extent of interference	Minimal, limited to statutory requirements
Extent of Autonomy	Limited in real world scenario	Fully autonomous within the provisions of the Act
Reserves	Created, if there are profits	Mandatory to create every year
Borrowing Power	Restricted	More freedom and alternatives
Relationship with other corporates/business houses/NGOs etc.	Transaction based	PCs may subscribe to the share capital of, or enter into any agreement or other arrangements, whether by way of formation of its subsidiary company, joint venture, or in any other manner with any body corporate for the purpose of promoting the objects of the PC by special resolution in this behalf

<u>Activities of a Producer Organisation</u>



Session II	Salient features of Central Sector Scheme on Formation & Promotion of 10000 FPOs - Deliverables under the Scheme

A. Background

Realising the indispensable role of collectivisation of farmers' particularly small and marginal farmers into their groups for leveraging the economies of scale in production and marketing, Department of Agriculture, Cooperation & Farmers' Welfare (DAC&FW), Ministry of Agriculture & Farmers' Welfare (MoA&FW), Government of India, launched a pilot programme for promotion of Farmers Producer Organisations (FPOs) during 2011-12 under two sub-schemes of Rashtriya Krishi Vikas Yojna (RKVY) viz. National Vegetable Initiative for Urban Clusters and Programme for Pulses Development for 60,000 rainfed villages. The initiative got a real momentum in 2013 with formulation of National Policy and Process Guidelines for FPOs and with introduction two schemes viz. Equity and Credit Guarantee Scheme for Farmer Producer Organizations (FPOs). This was followed by setting up of a dedicated 'Producers Organization Development and Upliftment Corpus' (PRODUCE) Fund with NABARD in 2014 for formation of 2000 FPOs. Presently more than 6500 FPOs are operating on the ground. With an objective of bringing more number of farmers particularly the marginal & small farmers under the FPO fold for addressing the challenges being faced by them viz. lack of market access, credit linkages, inadequate financial support, lack of managerial skill, etc., the DAC&FW has launched a dedicated Central Sector Scheme on **'Formation and Promotion of 10,000 Farmer Producer Organisations (FPOs)**.

B. Aims & Objectives of the Scheme

i. To provide holistic and broad based supportive ecosystem to form new 10,000 FPOs to facilitate development of vibrant and sustainable income oriented farming and for overall socio-economic development and wellbeing of agrarian communities.

ii. To enhance productivity through efficient, cost-effective and sustainable resource use and realize higher returns through better liquidity and market linkages for their produce and become sustainable through collective action.

iii. To provide handholding and support to new FPOs up to 5 years from the year of creation in all aspects of management of FPO, inputs, production, processing and value addition, market linkages, credit linkages and use of technology, etc.

iv. To provide effective capacity building to FPOs to develop agri-entrepreneurship skills to become economically viable and self-sustaining beyond the period of support from government.

C. Key features of the scheme:

1) **<u>Target & Coverage</u>**:

a) The scheme aims at providing a holistic & broad based supportive ecosystem for formation of 10,000 new FPOs by 2023-24. For achieving economic viability & self-sustainability beyond support period, newly formed FPOs are to be initially provided handholding support in terms of capacity enhancement in areas of management, governance, business development and business diversification particularly through their participation in supply & value chains, market linkages, credit linkages and use of technology, etc.

b) FPOs are to be formed with a minimum farmer-members' base of 300 with an exception of 100 members in difficult areas like North-Eastern & Hilly regions *(area at a height of 1000 metre or above MSL)*. For above, the farmer-members cohesively located with almost same interest are to be mobilized to form a small informal group of 15-20 members (Farmer Interest Group (FIG)/ Self Help Group (SHG)/ Farmers Club (FC)/ Joint Liability Group (JLG)/ Rythu Mitra Group (RMG)) and with such groups forming an area-based producer cluster based on certain commonalities to be put together to form an FPO.

c) Special focus is to be accorded to small & marginal farmers, women farmers, women SHGs, SC/ST farmers and other economically weaker categories to make the FPOs more effective and inclusive.

d) Concerted efforts to be made for prioritizing formation of FPOs in aspirational districts with a target of promoting at least 15% of the 10,000 FPOs i.e. 1,500 FPOs. The aim set is to promote at least one FPO in each block of aspirational districts of the country.

e) In addition to above, priority is to be given to promotion of FPOs in the notified tribal areas in the country for undertaking business activities in forest and minor forest produce by the tribal communities through convergence with schemes of Tribal Affairs Ministry, DONER and North Eastern Council (NEC).

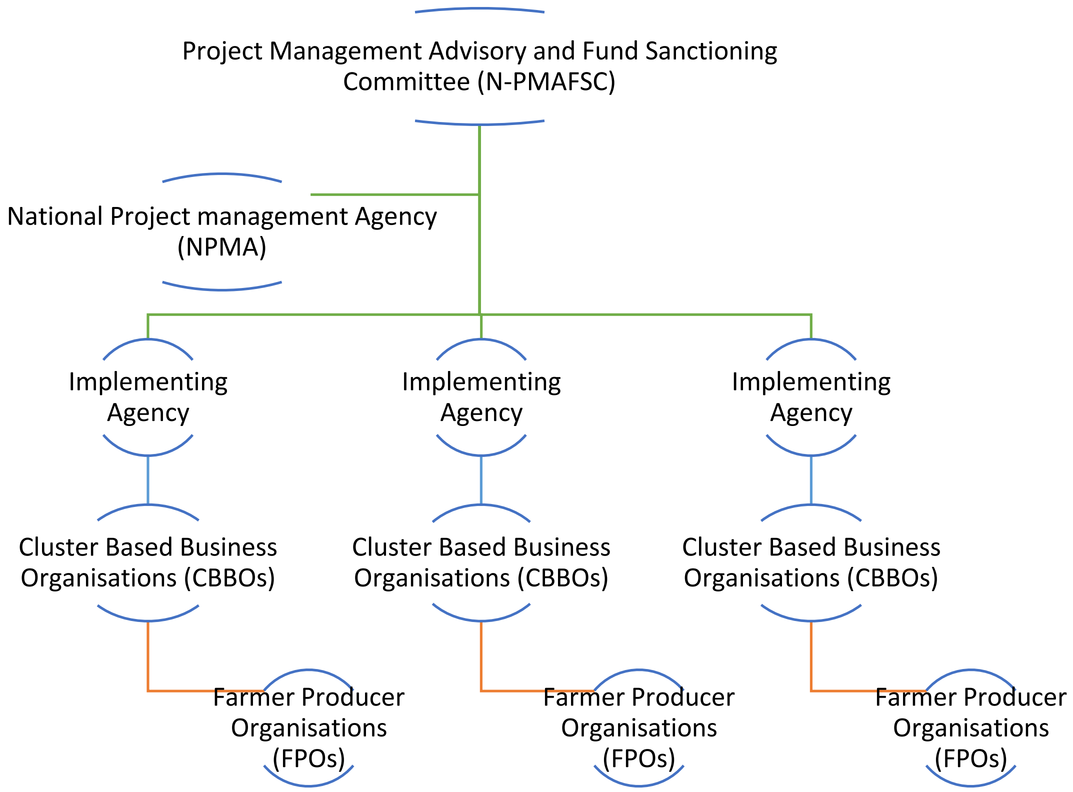
f) Overall, the scheme envisages to cover all blocks in the country under scheme as also achieve an average membership base of 500 farmers in normal areas and 200 farmers in Hilly and North-Eastern regions to make them sizable for economic sustainability and profitability.

g) <u>Types of FPOs Covered</u>: FPO is a generic term, which means and includes farmer-producers' organization incorporated/ registered either under Part IXA of Companies Act or under Co-operative Societies Act of the concerned States and formed for the purpose of leveraging collectives through economies of scale in production and marketing of agricultural and allied sector. **However, FPOs registered under Cooperative Societies Act of the State (including Mutually Aided or Self-reliant Cooperative Societies Act by whatever name it is called) for the purpose of this Scheme, is to be insulated from all kinds of interference including election process and day today management through suitable provisioning in their Memorandum of Association and Bye-laws with a view to encourage healthy growth and development of FPO**

h) Budgetary provision: The scheme is to be implemented till 2023-24 with budgetary support of Rs. 4496.00 crore. Since, financial support *(except management cost)* is to be extended for five years, therefore, FPOs formed will be required to be financially supported till 2027-28. Provision for this additional committed liability for period from 2024-25 till 2027-28 of Rs. 2369.00 crore say Rs. 2370.00 crore will be made. Thus, the total budgetary requirement up to 2027-28 would be Rs. 6866.00 crore. The budget requirement will be met from overall allocations of DAC&FW.

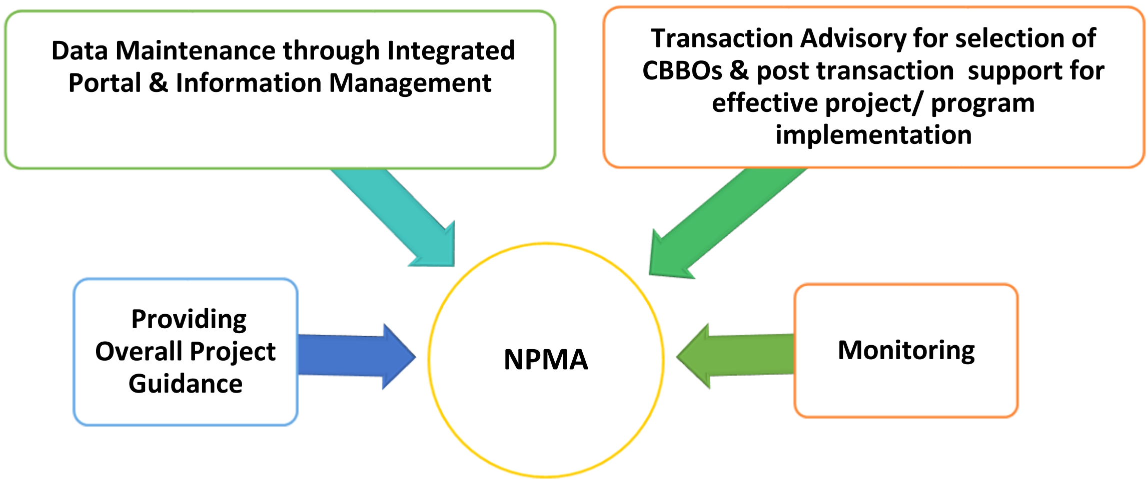
2. Stakeholders – Role & Responsibilities

The program will be implemented under the overall guidance of **Project Management Advisory and Fund Sanctioning Committee (N-PMAFSC)** constituted under the Chairmanship of Secretary, DAC&FW with Joint Secretary (Marketing), and DAC&FW as Member Secretary. The hierarchical structure under the scheme would be as under:

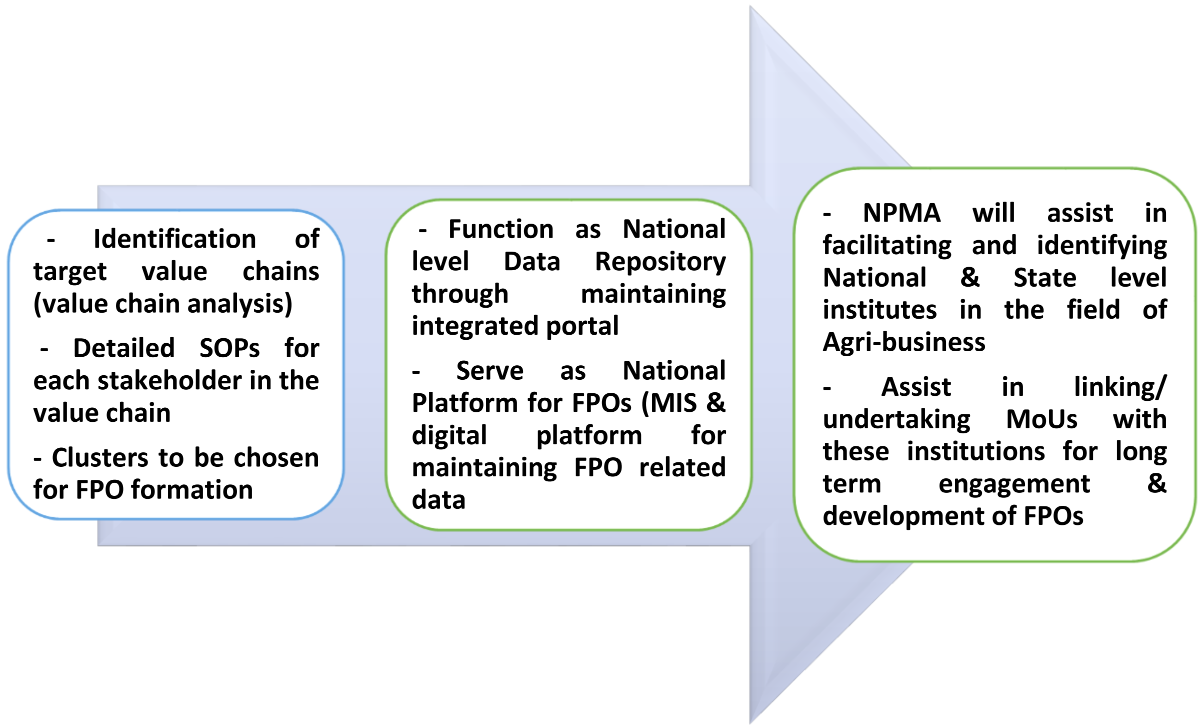


As per the scheme guidelines, the important stakeholders, their respective roles as also the implementation & monitoring mechanism prescribed are as under:

a) **National Project Management Agency (NPMA):** NPMA shall be set up by SFAC for the following purpose:



NPMA to be equipped with a technical team comprising five categories of specialists viz. Agriculture / Horticulture, Marketing & Processing, Incubation Service Provider, IT/MIS and Law & Accounting for providing overall guidance at All India level



b) Implementing Agencies (IAs)

i. For promoting FPOs in uniform and effective manner three Implementing Agencies viz. NABARD, SFAC & NCDC have been identified.

NABARD	SFAC	NCDC
• Promote FPOs registered under Part IX A of Companies Act as also under Co-operative Societies Act of States	• Promote FPOs registered only under Part IX A of Companies Act	• Promote FPOs registered under only Co- operative Societies Act of the States

ii. Based on the Implementing Agencies' area of operation in a particular States/ Regions/Districts/Produce Cluster along with their human resource capital and area of specialization, targets for number of FPOs to be promoted by them will be tentatively allocated by Project Management Advisory and Fund Sanctioning Committee (N-PMAFSC).

iii. In addition to aforementioned three implementing agencies, in case, if any State/Union Territory is desirous to have its own implementing agency, they can approach DAC&FW for consideration of the same.

Role of Implementing Agencies

a) Identification of CBBOs

b) Provide fund to CBBOs & FPOs as envisaged in the Scheme

c) Monitoring of CBBOs & undertake regular desk and/or field monitoring of the borrowing FPOs

d) Ensuring regular data entry on integrated portal (Integrated National Level Data Repository through Portal managed through NPMA)

e) NABARD and NCDC will also maintain and manage the Credit Guarantee Fund (CGF) for credit guarantee to banks for FPO financing

f) Developing tools for FPOs to assess their level of activity, economic viability and sustainability, etc.

g) Coordination with concerned Value-Chain Organization(s) for channelizing their claim to N-PMAFSC for payment

c) Cluster Based Business Organisations (CBBOs):

i. Implementing Agencies will be identifying **Cluster- Based Business Organizations (CBBOs)** at the State/Cluster level to form and promote FPOs. A Committee under

Chairmanship of MD, SFAC with representatives of Chairman, NABARD and MD, NCDC will finalise the eligibility criteria for selection of CBBOs for consideration of DAC&FW.

ii. In a State, based on geography, produce clusters, cropping pattern, etc., there can be one or more CBBO and a CBBO can also serve in more than one State.

iii. CBBOs should have professional expertise & requisite experience in formation of FPOs in agriculture & allied sector and should have a panel of specialists in following domain areas:

Crop husbandry

Agri. marketing / value addition and processing

Social mobilization

Law & Accounts

Information Technology / Management Information System

<u>Role of CBBOs</u>

CBBOs will undertake Feasibility Study in assigned clusters which will include the following:

a) <u>Cluster Identification</u> – Undertaking diagnostic study including Baseline survey to:
- Map the current situation of farming specially in respect of small, marginal and landless farmers for aggregation
- Identify the geographical area for potential interventions
- Based on socio-cultural similarity, identify the produce, existing gap *(production knowhow, supply & value chain, post-harvest management, marketing, etc.)* and the scope of potential interventions
- Shortlist interventions in terms of infrastructure, services, etc. required in the value chain development of identified agricultural/horticultural produce including post-harvest management and marketing

b) <u>Preparation of Prospective Business Plan</u>: Prepare a prospective Business Plan in order to establish a fit case for formation of an economically sustainable FPO

c) Undertake community mobilization as well as mobilization of members for FPO

d) Registration of FPO

e) Execution of Business Plan

f) Training and capacity buildings of FPOs/farmer groups *(FPO management, marketing, financial management, compliance management, etc.)*

g) Monitoring and data submission as required under the scheme

h) Assist in regular interface with stakeholders

i) Convergence with ongoing government programs/schemes & Networking

j) Assist in Federating FPOs

iv. Moreover, interested Central & State Government Agriculture Universities & KVKs promoting FPOs can also seek empanelment as CBBOs in consultation with N-PMAFSC on nomination basis.

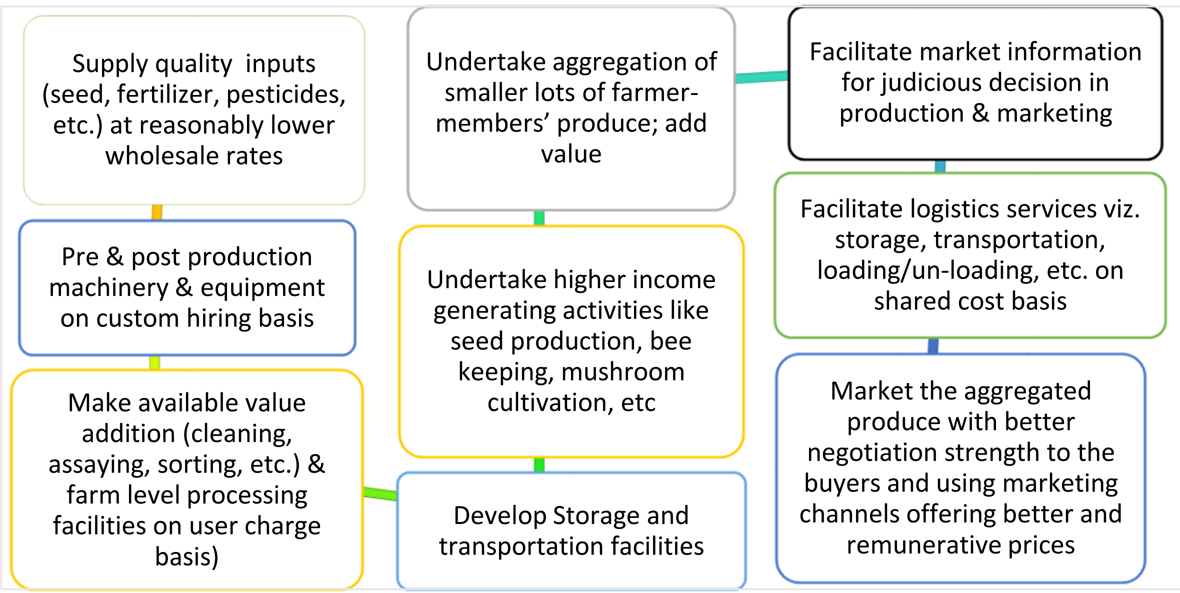
d) <u>Formation of FPO (Industry Concept)</u>

i. Concerned Industries (Value Chain Processing & Export Industries) can also form and promote FPOs directly through cluster approaches and will be eligible for assistance under the scheme. However, their eligibility is subject to the condition of ensuring buyback of at least 60% of the produce of members of such FPOs with appropriate processing & assured marketing linkages on sustainable basis for remunerative prices for improving the income of the members.

ii. The FPOs promoted by them can avail credit guarantee cover under Credit Guarantee Fund from banks along as also equity grant through implementing agencies and the advisory services rendered by NPMA provided they comply with the norms & guidelines of respective schemes.

iii. However, for participating in the program, these entities are required to submit detailed proposals in advance to N-PMAFSC along with year-wise action plan for consideration.

e) <u>Thrust on FPO participation in product value chains</u>: For sustaining an FPO, in addition to business as usual (aggregation model), the focus under the scheme is to explore possibilities for FPOs participation in the supply & value chain business. Thus, the business modelling should incorporate participation of FPOs in supply chain & value chains along with standard model to strike viability. The standard business model could be as under:

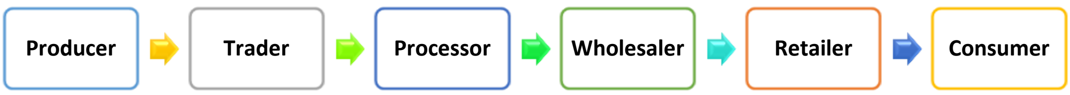


For economical sustainability, diversification of risk and enhanced returns, the FPO can also have additional product and service mix so as to have enough activities and engagements with the members throughout the year.

- **Value Chain Approach:** The business activities should be based on Produce Cluster Area *(a geographical area wherein agricultural and allied produce of similar or of almost similar nature is grown/cultivated)* with a possibility of leveraging economies of scale in production and marketing. A cluster can also be for Organic Produce and Natural Farming. While adopting cluster-based approach for produce or produce mix, formation of FPOs can also focus on *"One District One Product"* approach for development of product specialization. In case, a focused agriculture produce has been declared for a district, FPOs can be encouraged for promoting processing, branding, marketing and export of that product for better value realization. There may be more than one cluster for one product in one district and a cluster can also extend beyond district. Further, the FPOs can federate at District & State level for the product identified as per their requirement of processing, branding and marketing of produce/trading of commodities. This is essential for scaling-up for survivability and growth in an era of competition. Based on their need, success and product, they can also federate at the national level to promote packaging, branding and domestic & international trading of quality produce.

<u>Why Value Chain Business?</u>

Presently, the participation of farmers in the value chain (producer to consumer) is limited to only farm gate in case of majority of the farmers. The prices, he receives for his raw goods is only a small fraction of the price paid by the consumer. On account of not getting involved in aggregation and processing (primary and/or secondary), where price margins are more on account of value addition, he operates on a very thin margin. Thus, there is a need for his participation beyond the harvesting of the produce in the value chain for increased margins/profits. A typical value chain in agri-product comprises of the following:



The trader sells the farmers' produce to a processor, who supplies to a wholesaler and finally through a retailer, it reaches the consumer with transport and other links in between. Each player in this chain adds value, and in return receives an economic return, usually called "economic rent." The amount each actor in the chain receives varies with products and value addition, but the price received by the producer for his raw goods is only a small fraction of the price paid by the consumer. This is on account of the fact that as individuals especially in the bracket of small & marginal farmers which grows small quantities produce have limited bargaining power. Thus, they are neither in a position to influence the price which traders pay them for their produce, nor the purchase price of input suppliers for seeds, fertilizers, pesticides, etc. Moreover, individually they are also not in a position to participate in the value chain beyond trader on account of small lot size they produce (economies of scale) and high capital requirement. However, aggregation model though FPOs can resolve many of these issues related to their participation in the value chain for better share and more remunerations. An example of simple banana supply chain as business opportunity has been discussed below:

Particulars	Price Dist. (Rs)	Price Dist. (%)	Opportunity for FPO in existing Supply Chain	Tentative Margin as a FPO (%)
Farm Gate Price	13.00	52.00		
Commission Charges (PHC/aggregator)	0.50	2.00	As a Commission Agent	2.00
Labour & Transportation	1.50	6.00	Service Profit Margin	6.00
Wastage	1.50	6.00		
Trader Margin	1.50	6.00	As a Trader	6.00
Commission (Mandi)	1.50	6.00		
Wholesale Margin	2.00	8.00	As a Wholesaler	8.00
Secondary Transportation	1.00	4.00		
Retailer Margin	2.50	10.00		
Retail Price (Rs/kg) (7P)	25.00	100.00		22.00

Comparison of Banana Value chain with and without FPO

Price Dynamics in existing supply chain (Rs)		**Price Dynamics in modified supply chain (Rs)**	
Farm Gate Price	13.00	Farm Gate Price	13.00
Commission Charges (PHC)	**0.50**	**FPO (scope of participation)**	**5.50**
Labour and Transportation	**1.50**	Wastage	1.50
Wastage	1.50	Commission (APMC)	1.50
Trade Margin	**1.50**	Secondary Transportation	1.00
Commission (mandi)	1.50	Retailer Margin	2.50
Wholesale Margin	**2.00**		
Secondary Transportation	1.00		
Retailer Margin	2.50		
Total	**25.00**	**Total**	**25.00**

f) Implementation & Monitoring Mechanism

i. A three tier institutionalized structure (National, State and District level) has been conceived under the scheme for effective implementation and monitoring.

Monitoring Committees

National Level Project Management Advisory & Fund Sanctioning Committee (N-PMAFSC)
(Secretary, DAC&FW as Chairperson and JS (Mkt.), DAC&FW as Mem.Sec)

State Level Consultative Committee (SLCC)
(Addl. CS/Sec. Agri./Agri. Mkt. as Chairperson & Rep. from NABARD as Mem. Sec.)

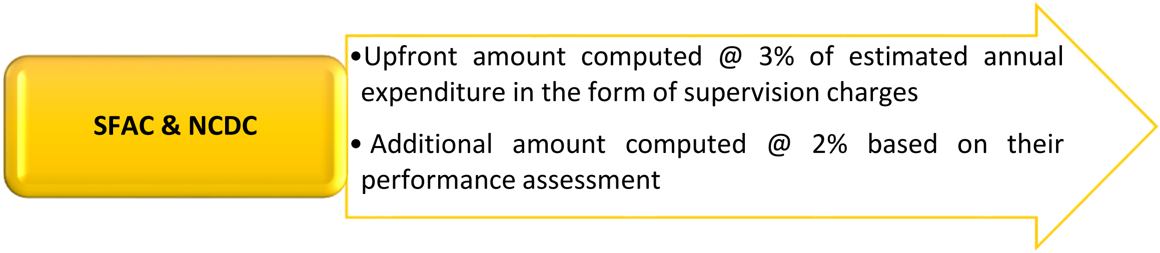
District Level Monitoring Committee (D-MC)
(With District Collector as Chairperson and DDM, NABARD as Mem. Sec.)

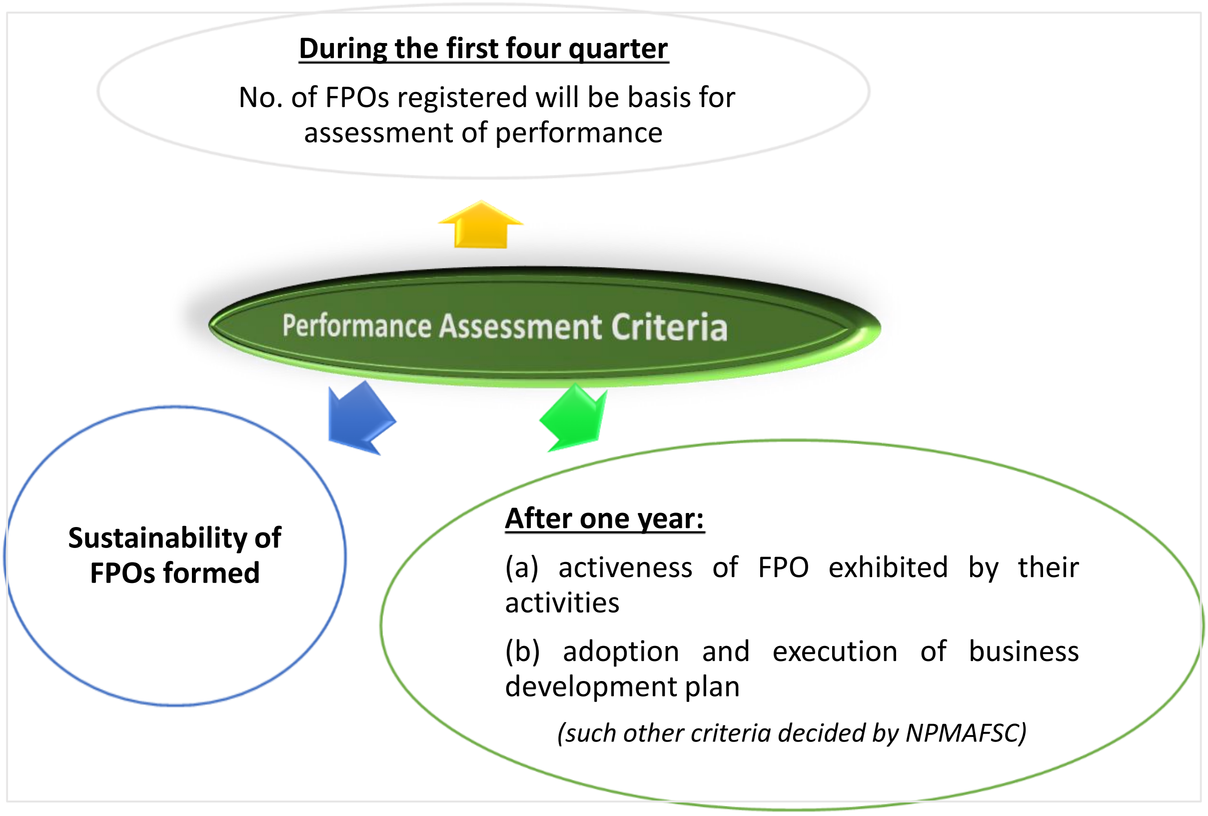
ii. **Role & Responsibilities of Committees**

N-PMAFSC	SLCC	D-MC
Allocation	Monitoring & Review	Monitoring & Review
Coordination	Identification of produce clusters	Facilitate identification of produce clusters
Monitoring & Review	Facilitation (licenses, shops, spaces), common facility centres	Facilitation (licenses, shops, spaces), common facility centres
Policy	Convergence	Convergence

g) Support available under the scheme to different stakeholders

1) <u>Incentive to Implementing Agency:</u>





2) <u>Incentive to Cluster based business organisations (CBBOs)</u>: The formation and incubation cost of CBBO, limited to maximum of **Rs. 25 lakh / FPO** of support or actual whichever is lesser, is to be provided **for five years** from the year of formation.

   a. It includes cost towards undertaking baseline survey, mobilization of farmers, organizing awareness programmes and conducting exposure visits, professional hand holdings, incubation, other overheads etc. Payment will be made to the CBBOs by Implementing Agencies and shall be released after receiving the utilization certificate of the previously released amount.

b. The Implementing Agencies after applying the due diligence will satisfy themselves with the performance of the CBBOs as per the following criteria:

First 6 months

- Performance of the CBBOs will be assessed based on baseline survey, report submitted and aggregation activities undertaken for FPO formation

6 mths to 1 yr

- No. of FPOs formed in allocated aspirational districts in different blocks, if any
- Number of farmers mobilized to become the members of FPOs (min. membership of 300 in plain areas & 100 members in NER & Hilly areas (including such other areas of UTs) as per prescribed minimum number;
- Registration of FPOs
- Formulation of Business Plan for FPOs

Yr-2

- First equity grant availed by the FPOs
- Statutory clearances obtained to carry out business activities
- Minimum 50% of business activities executed as per business plan
- Number of preliminary awareness programmes for member/BoDs and exposure visits of FPOs are undertaken
- First tranche of Equity Grant availed by FPOs, if any
- First tranche of Credit Guarantee Facility availed by FPOs, if any
- Institutional Training provided to CEOs/BoDs
- Registration of FPOs in e-NAM or other electronic platform undertaken and trading activity thereon taken place

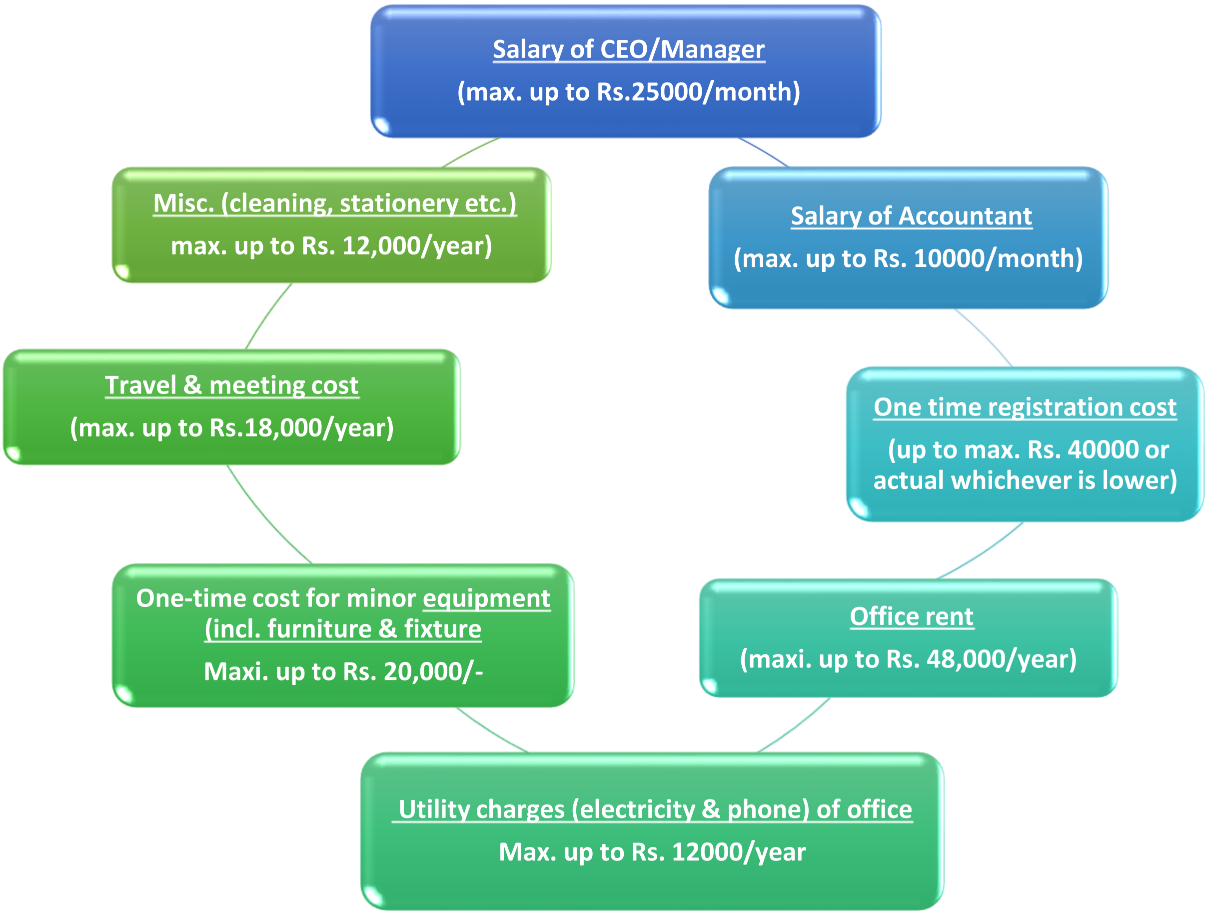
Yr-3 & 4

- Issuing Share Certificates to each member in third year, if any
- Audited Financial Statements for FPOs for second year and third year in due time and filing as required
- MoU and vendor registration as per Business Plan with Marketing Agencies/Institutional Buyers
- Trading/uploading of produce in e-NAM/other sources, if any
- Second tranche equity grant to FPOs, if any; and (f) second tranche of credit guarantee facility, if any

Yr-5

- Audited Statements of accounts of FPO and filing it
- 100% of agri-business plan executed and value chain developed
- Revenue model showing financial growth in last 3 consecutive years
- Detailed project completion Report
- Third tranche of credit guarantee facility if any.

3) FPO Management Cost: Under the scheme, financial support up to maximum of **Rs. 18 lakh / FPO** or actual, whichever is lesser is to be provided to FPOs for **three years** from the year of formation. From fourth year and onwards, the FPOs have to manage their own business activities. The indicative financial support broadly covers:



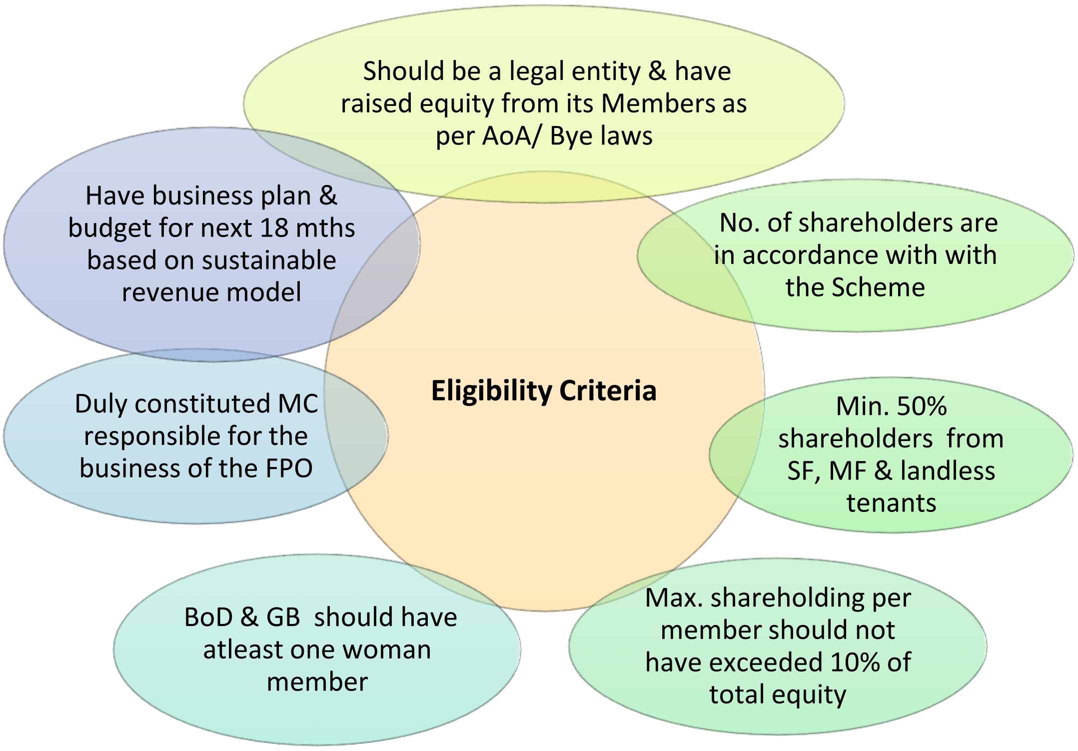
Note: *Any expenditure of operations, management, working capital requirement and infrastructure development etc., over and above this, is to be met by the FPOs from their financial resources*

4) Equity Grant for FPO

- Support: Equity Grant shall be in the form of matching grant up to **Rs. 2000 per farmer** member of FPO subject to maximum limit of **Rs. 15.00 lakh per FPO**.

Objective		
Enhance viability & sustainability of FPOs	**Increase credit worthiness of FPOs**	**Enhance shareholding of members to increase their ownership and participation in their FPO**

- Broad Eligibility Criteria



- Equity Grant sanctioned will be released to respective Implementing Agency for transferring to the bank account of the FPO.

- Post receipt follow-up action time frame: Within 45 days of the receipt of the Equity Grant, FPO will have to issue additional shares to shareholder members.

- No. of times it can be drawn: The FPO can draw the Equity Grant in a maximum of 3 tranches (within a period of 4 years of the first application and within the handholding period of CBBO) subject to the cap and the extent it is able to raise additional Member Equity to qualify for an additional matching grant.

- Recourse on Non Compliance: In the event of violation of any of the terms and conditions, Implementing Agency will have the right to demand and enforce forthwith, the repayment of the entire amount of Equity Grant sanctioned by Implementing Agency along with appropriate damages.

5) Credit Guarantee Facility for Lending Institutions

Objective
Providing a Credit Guarantee Cover to Eligible Lending Institution enabling them to provide collateral free credit to FPOs by minimising their lending risks

NABARD

Will create & maintain a Rs. 1000 crore Credit Guarantee Fund

Provide credit guarantee for FPOs promoted & registered under both Coop. Act & Companies Act

NCDC

Will create & maintain a Rs. 500 crore Credit Guarantee Fund

Provide credit guarantee for FPOs promoted & registered under Co-operative Societies Act only

Covered

Credit facility (term loan, working capital or composite loan) sanctioned within 6 mths from date of application for guarantee cover without any collateral security and/or third party guarantees

Not Covered

Credit facility against collateral security and/ or third party guarantee, risks additionally covered under any scheme operated by RBI/Govt/General Insurer, Overdue for repayment, Rescheduled or Restructured loans on becoming overdue for repayment, etc.

Credit Facilities

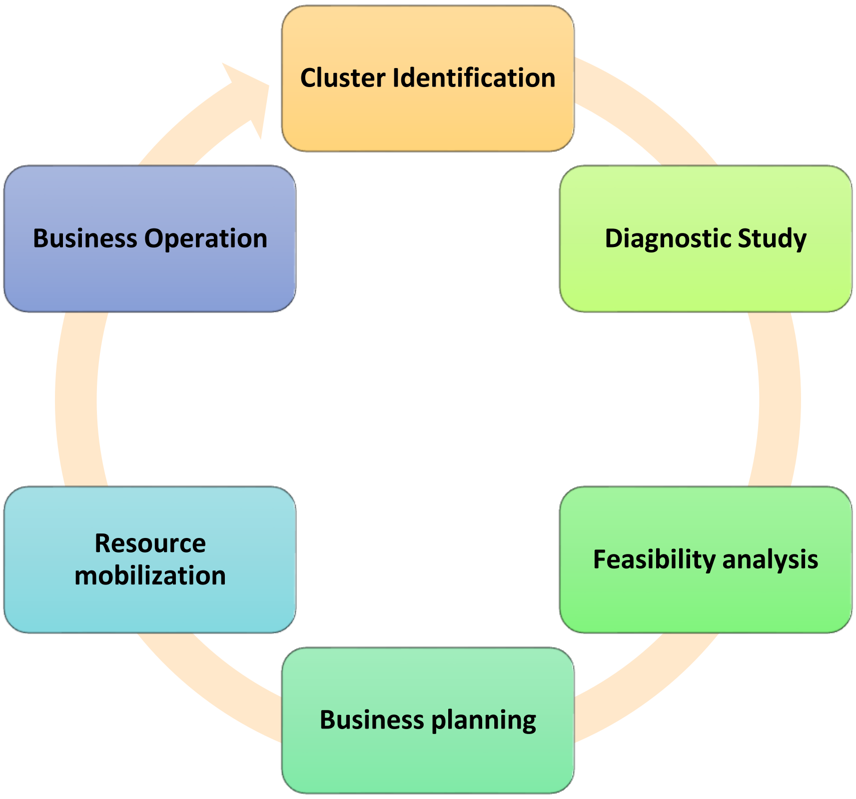
Credit guarantee cover per FPO limited to project loan of Rs. 2 crore

Loans up to Rs. 1 crore, guarantee cover 85% of project loan with ceiling of Rs. 85 lakh (Max. guarantee fee 0.75% of credit facilty)

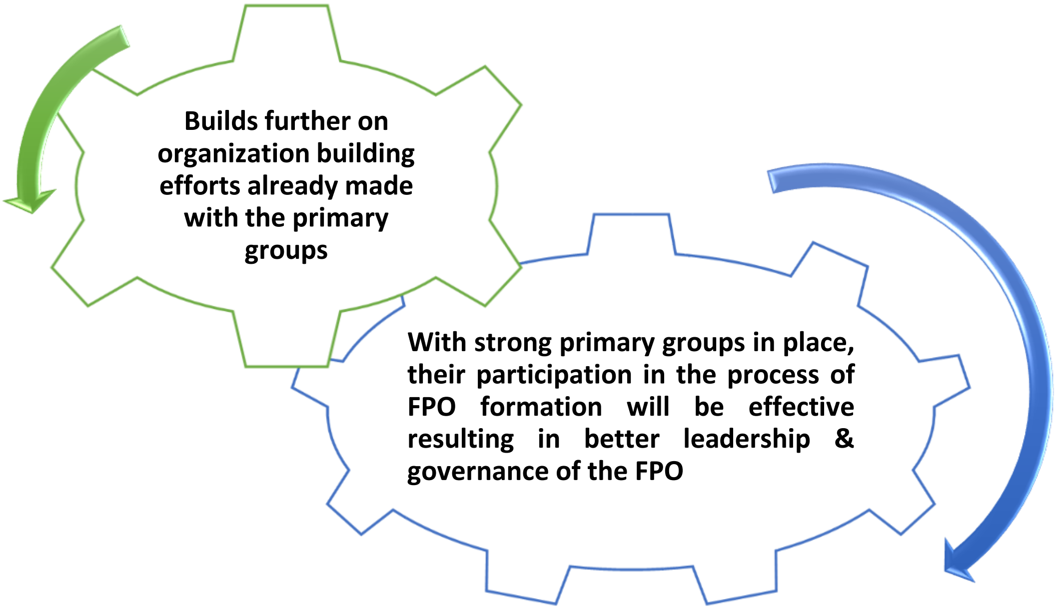
For Rs.1 - 2 crore, guarantee cover to be 75% with a maximum ceiling of Rs. 150 lakh (Max. fee 0.85% of credit facility)

Session III-IV	Grounding vibrant FPO – Process of cluster identification to business plan implementation

Cluster Based Business Organisation (CBBO) have been assigned the task of formation & promotion of vibrant FPOs. The broad approach to be adopted by them would be as under:



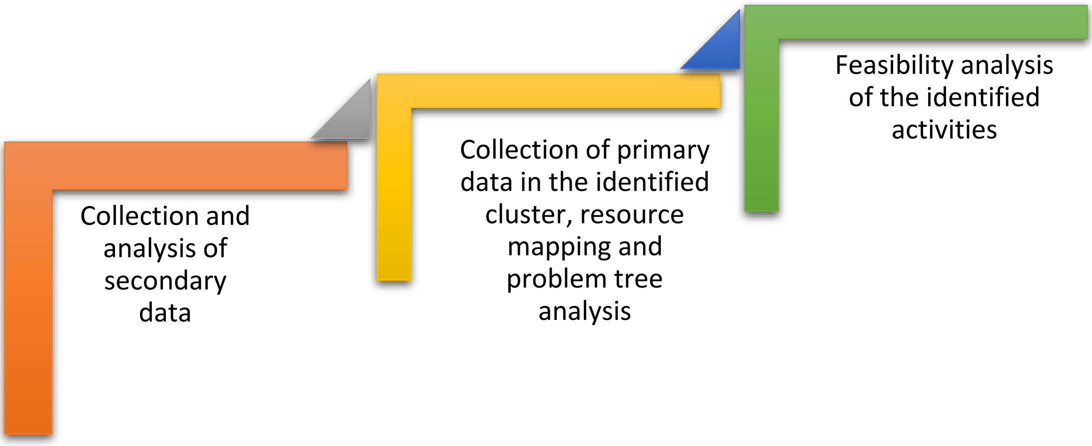
1) **<u>Cluster identification</u>:** Ideally, a cluster of more than 1000 farmers is to identified within one or two Blocks covering about 20-30 contiguous villages in a particular district to form agriculture based Farmer Producer Organisation (*However this may change depending upon the products to be handled by the FPO)*. Normally, selection of the cluster and the members will be done on the basis of the commonalities like produce, farmers' need and common problems which they face in terms of inputs, production and marketing. Strategy involves organizing the primary groups on the basis of common interest, geographies and then federating them as FPO to address the larger issues of economies of scale in input management, integration with the market, participation in supply chain at higher order, value chain development, etc. based on felt need by the members of the primary groups. The benefits of adopting this approach would be:



Past experiences have shown that FPOs mature faster in cases where primary groups like Common Interest Groups (CIGs), Self Help Groups (SHGs), Water Users' Groups (WUGs), etc. are converted into FPOs without altering & diluting their original identity i.e. they continued to function as primary groups as earlier. Further, areas where past project investment on land, water, agriculture had been undertaken *(watershed, wadi, irrigation, land development projects, etc.)*, the FPOs are found to have better control over the production systems and better understanding of the market which works in positive way for the FPOs.

2) **Undertaking Diagnostic Study:** The diagnostic study in selected clusters will be undertaken to assess the preliminary situation of the farmers and the status of agriculture in that area. The study will also facilitate in identifying the potential interventions required and understanding the specific context of project implementation. The objective of the study would be to develop a planning as well as reference document defining the pre-development contours in the context of goal desired to be achieved. Hence, the facts and figures that are presented, must be comprehensive and must lead to an action. The sustainability of any intervention depends on the impact of the intervention on the member families. The design variables for the intervention will include elements like size, scope, institutional structure, management and technology. The diagnostic study will facilitate in finalizing the design variables using the primary and secondary data analysis and contextualize the interventions. The process of diagnostic study would as under:

Process involved in conducting Diagnostic Study



(i) **Collection of secondary data:** Collection and analysis of secondary data would be undertaken for identification of potential activities and assessment of resource availability to continue & sustain the activities to be undertaken by the FPO. Though, most of the needed information is available in the official website of the concerned district (district.nic.in), however, the discussion with the concerned line department officials and concerned KVKs will be required. The collected data will be subjected to analysis to get a bird's eye view about the cluster area and the livelihood opportunities available therein. Even though, it does not give the full picture about the existing status and developmental issues related to livelihood, it surely provide certain leads for further probing. The analysis will be undertaken as under:

- **Preparation of Block map:** Will give the idea about the boundary and landscape of the cluster area, details of panchayats and villages and other details like status of transport facilities, communication facilities, location of banks, infrastructure facilities like godowns, collection centres, markets (both for inputs & outputs), availability of natural resources, crops grown, etc. This information will facilitate fine-tuning of clustering of the block based on the crops/activities.

- **Occupational structure of cultivators:** Information on the details of activities undertaken by farmers under agriculture and allied sectors and other livelihood activities in the area will be collected and analysed. The proportion of cultivators' vs marginal workers will give details on the availability of the workers for the production function and also help to understand the availability of work for the labourer.

- **Rainfall Pattern:** The analysis of the rainfall data for past 25-30 years will facilitate understanding the trends in rainfall pattern and impact of climate change in the cluster. The analysis will also provide us with useful information like period of onset and withdrawal of monsoon, quantity of rainfall received per annum & frequency of occurrence of dry spells/ drought/floods. All the above information will help in understanding the trends in rainfall pattern during the year and the expected risk in the selected crop/activities.

- **Seasonality, cropping pattern and preparation of cropping calendar:** Seasonality in agricultural operations would provide information on the availability of employment opportunities and crops grown in different seasons. Knowledge on this aspect would also facilitate credit assessment & identification of potential relevant technologies for the agricultural operations. The analysis of change in cropping pattern at least for last 5 seasons will help in understanding the production trends, market demand, soil health, labour demand and the availability of resources.

- **Land use pattern and productivity assessment:** The total cultivated area of each of the villages and the wet, dry and backyard land details could be assessed to understand the land use and cultivation practices. The details of waste land, dry land & grazing land availability could also be analysed which will enable us to define the future interventions. Year-wise productivity assessment of the major crops grown in the block can also be assessed to understand the trends in production and productivity in the cluster area and to find out the cropping intensity.

- **Natural Resources:** The information on forest cover, non-timber forest produce, tanks, watershed, wasteland, river, coastal area, etc. will help in understanding the potential economic opportunities available for the people in the cluster. This information can come handy while planning for the resource conservation for the benefit of the farmers.

- **Irrigated area in the Block:** The information on sources of irrigation viz. canal, tank, tube well, open well, drip/sprinkler, etc. and also on aspects like net area irrigated, irrigation intensity, etc. in each village under the cluster can be analysed which can be enabler in taking decision on the interventions required.

- **Infrastructure facilities:** The information on following can be a key to planning for business:

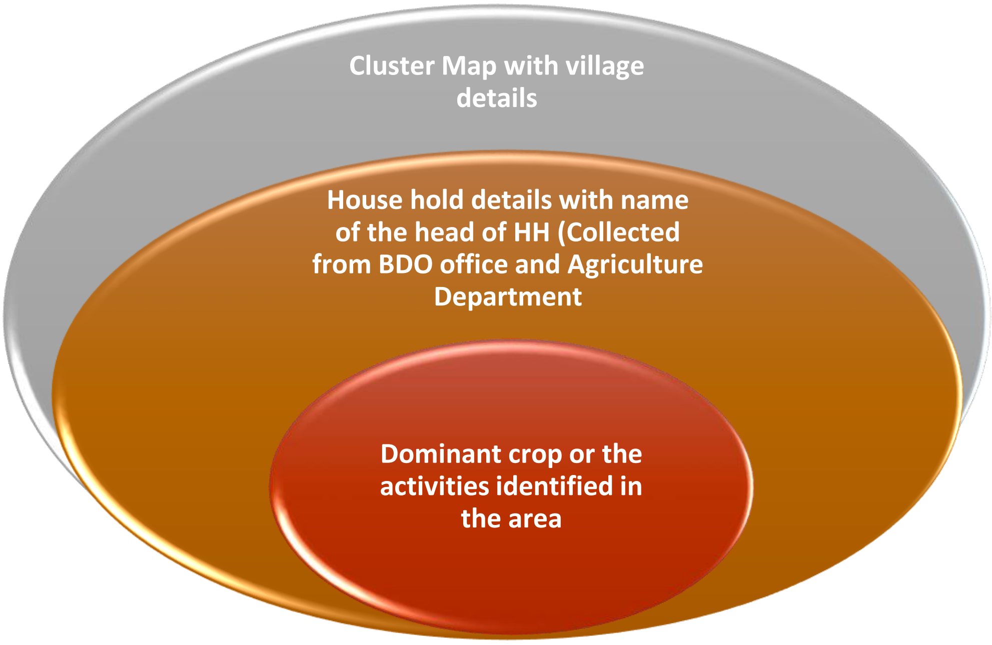
Road & Rail Connectivity	**Approach Road between villages**	**Transport facilities**
Internet Connectivity	**No. of bank branches & distance between the villages and the branch**	**Marketing cooperatives & PACS**
Sorage facilities	**Irrigation sources**	**Markets**

Above details could be analysed and its sufficiency toward running the business could be assessed for finalizing the cluster and the feasibility of running a business.

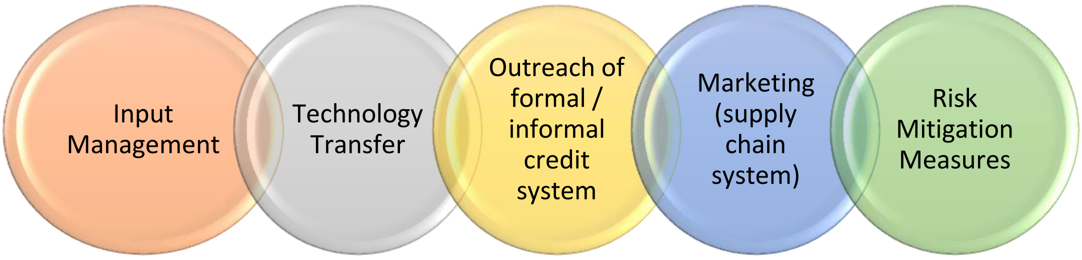
- **Market details:** Information on the distance of market both for input and output services from the production site is very important information for assessing the cost of operation and the scope for marketing. Similarly, the informal intermediaries other than formal market systems operate in the markets which decide the price for most of the commodities. Due to the vulnerable situation, the farmers are forced to accept the price offered by them. To understand this issue, government rates (MSP) and actual prevailing rates are also to be collected through secondary sources and then through interaction with the community to understand the reality.

Overall, the analysis of the secondary data will help in understanding the overall socio-economic scenario, availability & gaps in infrastructure, livelihoods patterns, land-use pattern, dominant crop of the area, availability of work force, market & marketing details, existing natural resources, etc. These details could be marked in a map which will help to identify the cluster of nearby villages based on commonalities.

(ii) **Primary Data Collection (baseline survey & PRA):** Collection and analysis of secondary data is also expected to generate the following information in addition to many more:



- Using this information, base line survey is to be conducted in the identified cluster villages for collection of primary data from each household for undertaking feasibility analysis.
- To undertake feasibility study for a FPO, primary data of the identified cluster is required which will help in formulating technically feasible and economically viable business plan. The required primary data for undertaking base line survey can be broadly categorized in five major heads which are as under:



Input Management	Technology Transfer
Cropping Pattern	Advocated Package of Practices for the crops grown in the area adopted
Land preparation : Method, season & cost	Present level of adoption of technologies
Seed : Availability, accessibility, variety & quantum per unit area	Institution involved in the area
Irrigation : Type of irrigation, infrastructure, frequency and scheduling of irrigation	Mode & efforts of the institutions for transfer of technologies
Fertilizer : Availability, accessibility, type and quantum required per unit area	Farmers and institutions view on the above
Pesticides : Availability, accessibility, type and quantum	Information on new/modern technologies suggest in the area by technical institution
Labour/workers availability workers and the prevailing rates	Issues involved in adoption of new technology
Assets ownership / custom hiring, level of mechanization and expenditure involved	Government schemes related to above along with incentives
Intercultural operations	
Pre and post-harvest management practices and available infrastructure support	
Input-wise expenditure per unit area	
Production and productivity	

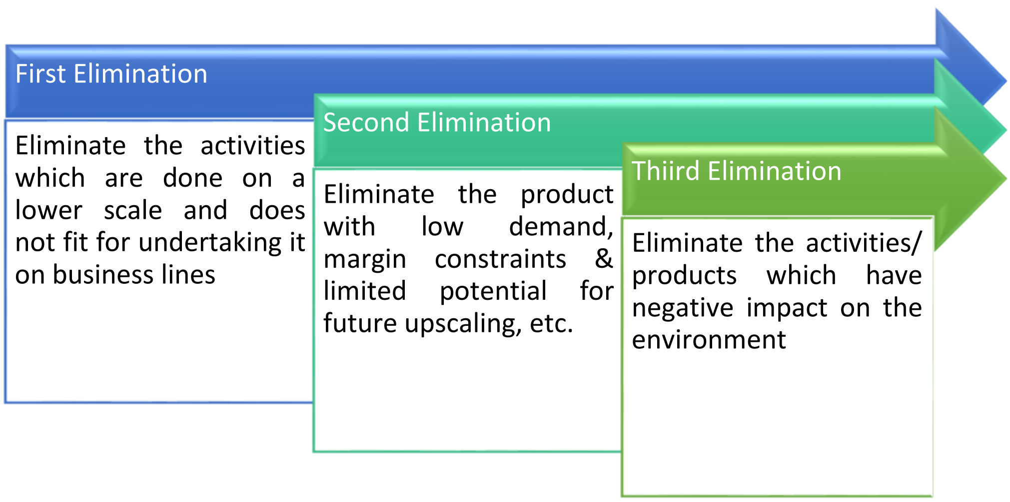
Outreach of credit	Marketing	Risk Management
Types of financial resources available	Types of supply chain	Level of risk associated with production (drought, flood, pest and diseases, water scarcity etc.
Availability and extent of formal credit	Extent of business participation of the farmers in existing supply chain	Coverage of crop insurance
Gap in requisite credit needs	Distribution of economic rents among different stakeholder of supply chain	Diversification of crops
Cost of informal credit	Gaps in economic rent under formal and informal supply chains	Status of agriculture allied sector, expenditure, income / loss, input supply etc.
Issues / constraints in credit outreach	Possibility of alternative supply chains	Outreach of schemes, procurement on MSP

- **<u>Output of baseline survey</u>:** Having undertaken the baseline survey following information is expected to be available for feasibility analysis:

• Cropping Season/ Crop Rotation	• Land preparation – Mode & Cost
• Varieties and seed rate	• Seed availability – Source & Cost
• Level of adoption of Package of practices and gaps	• Cost of cultivation per unit area
• Access & availability of resources for cultivation (water, fertilisers, pesticides, credit and technology support)	• Quantity of input needed per acre and the cost of input
• Availability of labour/workers and prevailing wage rates	• Crop-wise/Activity-wise production & productivity as also the gaps
• The risks associated with the production (rainfall, water, climatic condition, pest and diseases)	• Adoption of new technologies and issues involved
• Risk mitigation mechanism – schemes, coverage, tools	• Market price movements
• Marketing supply chains, level of farmers participation, gaps, scope of developing alternate supply chains	• Details of service providers and associated margins
• Formal & informal credit – Sources, cost, outreach, etc.	• Social & cultural setup

(iii) **Feasibility analysis:** Using the above information from the primary & secondary data, the feasibility of the prospective business plan for the identified cluster can be assessed to achieve success of a proposed business venture. While undertaking feasibility analysis of the gathered information following parameters need to be considered:

General Rules for elimination of unviable economic activities:



Potential gap in the input management

- ✓ Quantitative gap assessment in availability of quality seeds and distributor/retailer margin
- ✓ Quantitative gap assessment in availability in fertilizers/micro nutrients/pesticides on time and distributor/retailer margin
- ✓ Status and utilization of farm mechanisation and gap in farm power
- ✓ Status of diversification in farm implements
- ✓ Assessment of the crop and input-wise cost of cultivation

Potential gap in technology transfer

- ✓ Crop-wise gap in potential and realized yield
- ✓ Extent of adoption of scientific package of practices for different crops grown
- ✓ Extent of adoption of new/modern technologies suggested in the area by technical institution

Potential gap in market and marketability

- ✓ Extent of market surplus of agriculture produce
- ✓ Mechanism of marketing
- ✓ Actors involved in the marketing
- ✓ Opportunity cost / farm gate price during the past 3 years under different supply chain
- ✓ Product-wise demand and supply gap in the nearest mandis
- ✓ Assessment of any product which is in demand in the market but not produced in the cluster
- ✓ Assessment of marketing cost and marketing margin
- ✓ Distribution of economic rent among different stakeholders in prevailing supply chain.

Potential gap in credit outreach

- ✓ Sources of funds for agricultural operation
- ✓ Assessment of the formal and informal credit
- ✓ Gap in the availability of the formal credit
- ✓ Extent of under-financing by the RFIs

Potential gap in risk management

- ✓ Extent of diversification of agriculture & potential thereof
- ✓ Extent of crop insurance coverage
- ✓ Extent of storage facility vis a vis requirement in the cluster
- ✓ Availability of weather forecasting services
- ✓ Level of access to market information/intelligence
- ✓ Level of convergence under various State/Centrally sponsored schemes

Determination of economically viable activities

Based on the above information, the identified activities can be grouped as under

- Aggregation of input
- Aggregate marketing
- Enhancement of production and productivity of identified crops
- Primary and secondary processing
- Trading business

Steps required for assessment of economic viability of identified activities

Step I - Name of the economic activities to be undertaken

Step II – Working out annual cost of operation incl. capital cost

Step III – Estimate the benefit to be accrued

Step IV - Financial appraisal of the identified activity

Step V – Recommendation/ Decision for selection/rejection

Note – Repeat all the steps for all the identified activities

- While identifying the opportunities available for the FPO in the identified cluster based on feasibility analysis, it is of utmost importance to follow due diligence in opportunity selection as errors given below are fairly common:

  ⇒ **"Copy-cat" syndrome**: There are FPOs who choose a given opportunity because others have taken it up and are seen to be doing well. They do not realize that there is no room for too many entrepreneurs in a particular product line.

  ⇒ **Fallacy of Numbers:** Many persons have a tendency for accepting and relying upon income and profitability estimates. Other factors such as location, local competition, risks involved which may affect profitability are not considered.

  ⇒ **Mismatch** in hard/soft skill competencies of entrepreneur

  ⇒ **Undifferentiated products/services**: A large number of small enterprises are not performing well or closing down because they are too identical. There are several similar products in the market. The competition rests on price and the price comes down to an unprofitable label.

- The outcome of the feasibility analysis gives us an insight to take decision on the following counts -

  ⇒ Scope & scale of input business in the cluster

  ⇒ Selection of products for aggregation and marketing

  ⇒ Minimum acreage under crop/s for threshold scale for conducting business

  ⇒ Quantum of produce required for facilitation of marketing by FPO to at least reach the breakeven point

  ⇒ Scope for increasing the production base for future expansion procurement and marketing business

  ⇒ Based on the marketing study, identification of scope for primary/ secondary processing in the cluster area

  ⇒ Scoping for demand based product/crop diversification

  ⇒ Gap in the availability of the infrastructure, convergence linkage, credit, etc. in the cluster area

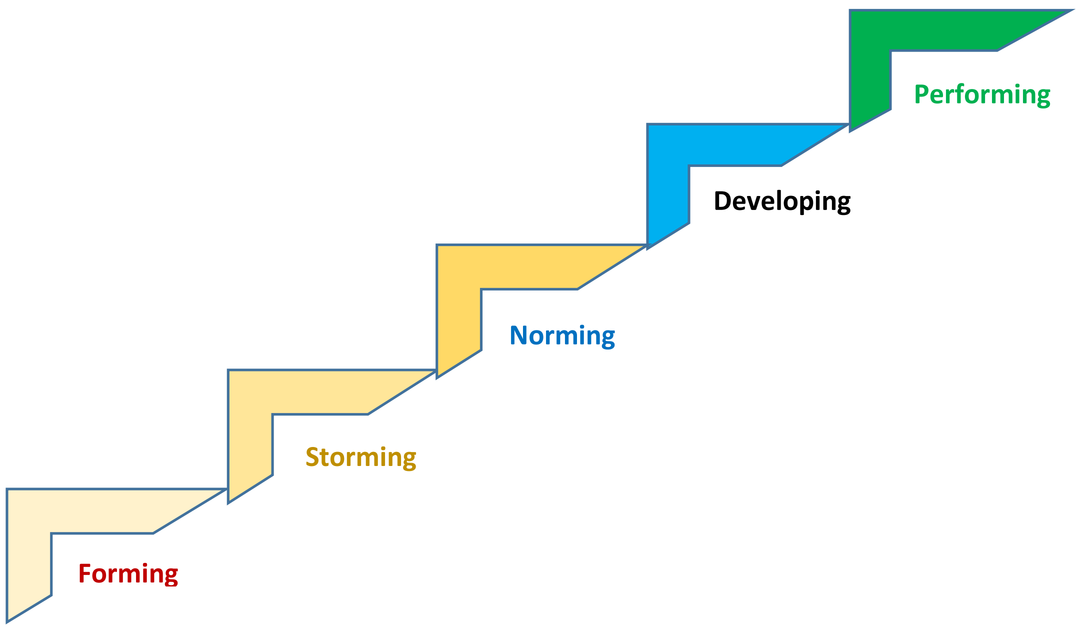
- Using the above information, the plan for the intervention and coverage of members can be planned and incorporated in the business plan.

Effective strategies for mobilization of farmers for formation of FPOs

For the viability and sustainability of the FPO, it is important that the FPO has a reasonable membership base and is also able to retain them by offering them the required services as members are also the customers of the FPO. In community mobilisation for FPOs formation and sustainability, both the human and non-human resources together need to be put-forth in such a way that community priorities and needs are addressed substantially. For increasing the membership base of the FPO, it is pertinent to initiate the process of community mobilisation through following steps:

- **Awareness creation in the identified cluster about the concept of FPO**
- **Discussion on the issues of farmers and their probable solutions with reference to the feasibility study conducted in the cluster area**
- **Involvement of PRI members, progressive farmers and other influential persons in the area**
- **Experience sharing by successful FPO members**
- **Exposure visit to a vibrant FPO in the nearby areas**
- **Capacity building of core group of the identified farmers**

Generally, the group formation process passes through following 5 stages:



Focus on participation of FPOs in Agricultural Value Chains

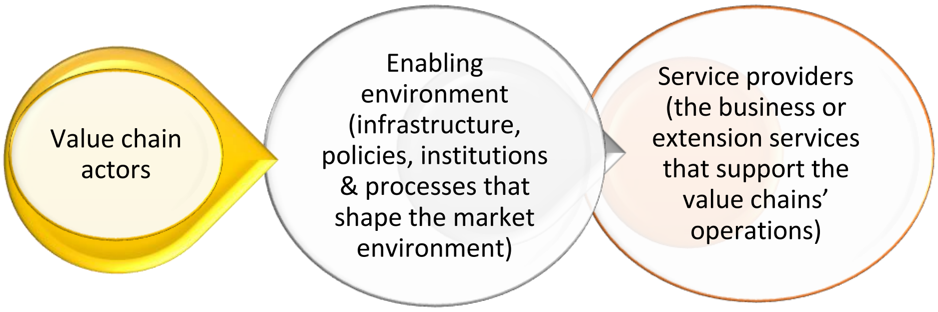
The first step in mapping the market is to delineate the value chain. The flow of inputs to farmers and produce to the market occurs along chains. These can be referred to as value chains because as the product moves from chain actor to chain actor e.g. from producer to intermediary to consumer it gains value. A value chain can be defined as the full range of activities which are required to bring a product or service from conception, through the different phases of production (involving a combination of physical transformation and the input of various producer services), delivery to final customers, and final disposal after use. The chain actors who actually transact a particular product as it moves through the value chain include input (e.g. seed suppliers), farmers, traders, processors, transporters, wholesalers, retailers and final consumers. Value chains may include a wide range of activities and an agricultural value chain might include: development and dissemination of plant and animal genetic material, input supply, farmer organization, farm production, post-harvest handling, processing, provision of technologies of production and handling, grading criteria and facilities, cooling and packing technologies, post-harvest local processing, industrial processing, storage, transport, finance, and feedback from markets.

Agriculture in developing countries often is characterized by dual value chains operating in parallel for the same product: one informal or traditional, and the other formal or modern. Small holders are frequently involved in informal chains that deliver products to local middlemen and then to small local stores. Formal value chains can deliver the same product, usually in better or more uniform quality, from larger farms or more organized groups of small farmers to more commercial wholesalers and from there to supermarkets or exporters. This duality has been accentuated by the explosive growth of supermarkets in developing countries. It can limit many small producers to markets characterized by low-quality products, and low prices and low returns for them — hence a frequent concern is to find ways to integrate small producers into more modern value chains, both domestic and export-oriented.

If we want to understand more about the rationale behind farmers' decisions vis-à-vis the types of inputs that farmers purchase, then we also need to know about the extraneous factors that influence the way that the value chain works. This is where the market map comes in useful.

Market map is a conceptual and practical tool that helps us identify policy issues that may be hindering or enhancing the functioning of the chain and also the institutions and organizations providing the services (e.g. market information, quality standards) that the different chain actors need in order to make better informed decisions

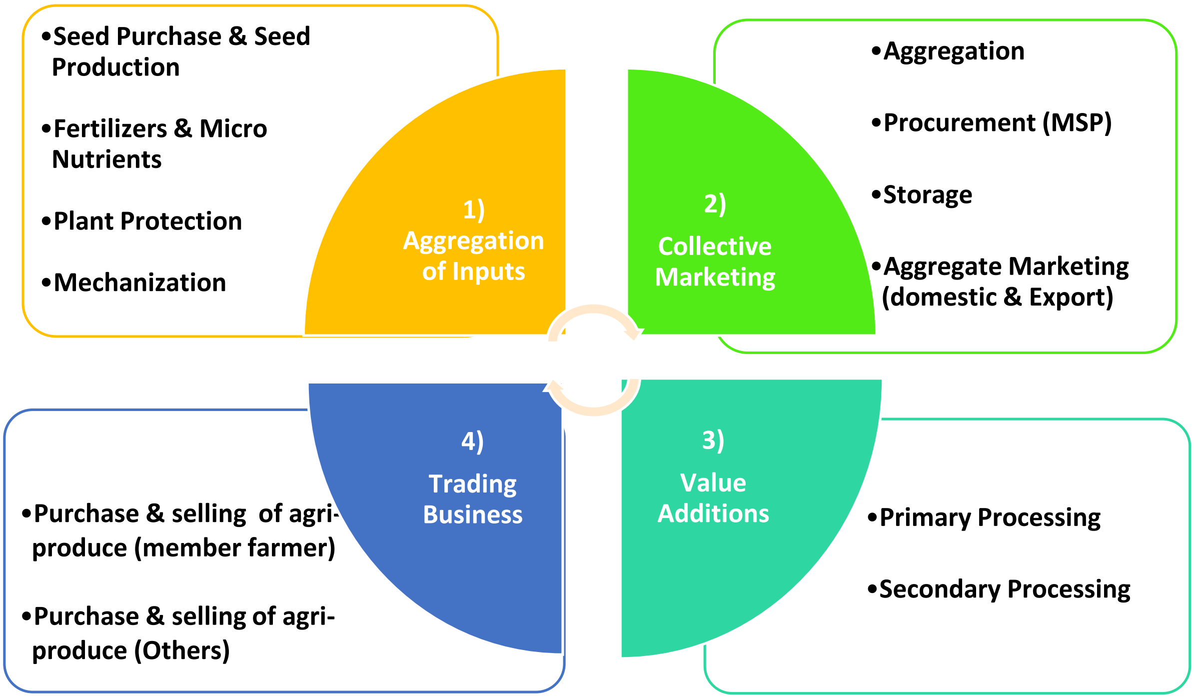
For example, a group of farmers may not know that a particular seed supplier has on offer a seed type that no other seed supplier has in stock. If the farmers do not know the seed is on offer, they may not buy it and, consequently, that particular variety will not be planted. Another example is that farmers might hear from the radio that there is an increasing demand for a particular type of maize. On hearing this on the radio they may well then go and seek out seed of the maize type in question. In order to understand farmer decision-making vis-à-vis what seed they purchase, it is important to note where farmers do or do not get their information from. The Market Map is made up of three inter-linked components



The enabling environment consists of the critical factors and trends that are shaping the value chain environment and operating conditions, but may be amenable to change. These "enabling environment" factors are generated by structures (national and local authorities, research agencies etc.), and institutions (policies, regulations and practices) that are beyond the direct control of economic actors in the value chain. The purpose of charting this enabling environment is not simply to map the status quo, but to understand the trends that are affecting the entire value chain, and examine the powers and interests that are driving change. This knowledge can help determine avenues and opportunities for realistic action, lobbying and policy entrepreneurship. A value chain approach in agricultural development helps identify weak points in the chain and actions to add more value. Farmers could expand their profits from these multiple potential markets if solutions were found for value chain issues such as:

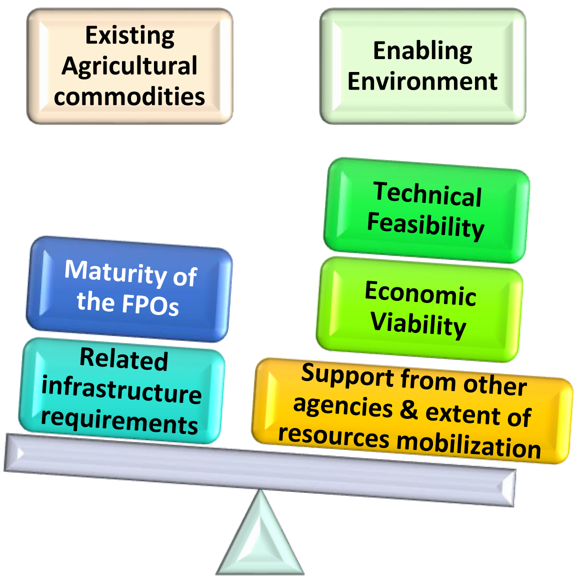
- Poor quality of seeds and varieties inappropriate for the various uses
- Poor quality of product at harvest, with grains of inconsistent size and coloration
- Inadequate threshing techniques and post-harvest drying and storage, which reduce quantity and market quality
- Inadequate grading
- Insufficient market development and communication with markets regarding varieties and quality of agricultural produces desired
- Insufficient training and finance for improved post-harvest management

<u>Principles of mapping agricultural value chain for Farmers Producer Organizations</u>: There are four basic core principals which are required for mapping of existing agricultural value chains and assessment of the opportunity for FPOs to make business out of it.



<u>Stepping business operations of FPOs</u>

The business participation in the above identified activities would be undertaken by the FPOs in a phased manner depending upon:



It is suggested that during the first 6 months (1st Phase) of the business operation, FPOs should focus on aggregation of input management	
6 to 12 mths (2nd Phase)	Start collective marketing of those agriculture produce/s which requires least primary processing for collective marketing
3rd Phase	Secondary processing for example establishment of rice mill for processing of paddy and selling rice to FCI and by products (broken rice, rice bran and husk) in open markets / animal feed manufacturing companies. Similarly, primary and secondary processing of milk can be undertaken during this stage of FPOs. Establishment of the animal feed and poultry feed units is the suggested activities which is requires 75-80% of ingredients raw material produce by the members
On Attaining Maturity & Stability in Business Operations	Trading business may be undertaken wherein the FPO can purchase other produces from other farmers from local as well as from distant producing areas and sell purchased produces in a prospective market during the lean period of the agricultural operation

Potential Farmer Activities/ Services required at intermediary level

Identifications of the key areas required to be addressed by the intermediary (FPOs) is the prime important factor for the success of the FPOs. Step by step process would be as under:

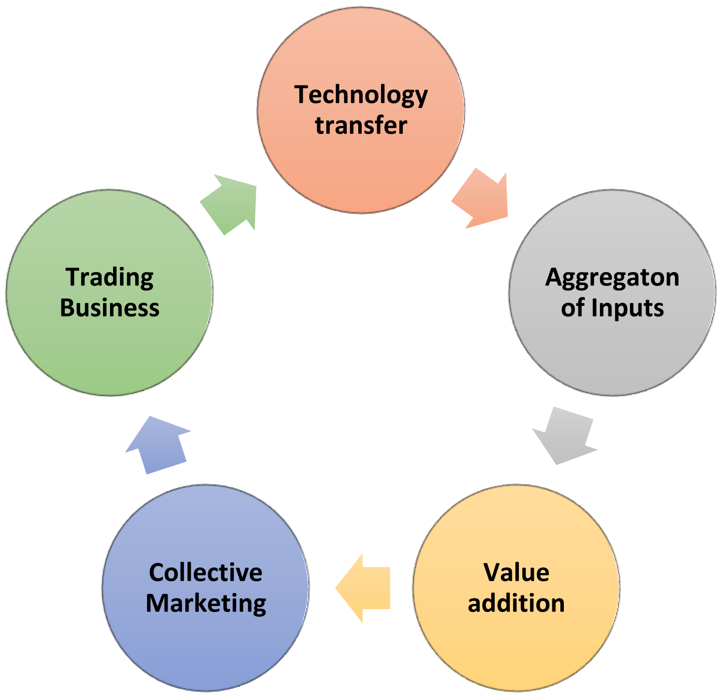
- **Identify services needed by farmers**
  - **Undertake cost-benefit analyses to study intermediaries profitability**
    - **Infrastructure assessment & arrangement for providing services (e.g. sprayers, planters, sheller, dryers, etc.)**
      - **Training of Intermediaries in service**
        - **Build intermediary capacity in business skills and linkage to credit institutions**
          - **Marketing their services *(field days, radio messages, IEC materials, e-extension animated films)***
            - **Increase the scope of service package to at least 4 - 5 services**

Some of the illustrative activities according the agricultural value chain have been given in box given below:

Pre-Production	Production
✓ Crop insurance agent ✓ Soil testing agent ✓ Crop monitoring agent (for banks, insurance companies) ✓ Custom Hiring services ✓ Digital profiling agent	✓ Input supply services ✓ Planting services ✓ Weeding services ✓ Pesticide spraying services
Post-Harvest	**Marketing**
✓ Shelling services ✓ Grain cleaning services ✓ Drying services	✓ Bulking/aggregation services ✓ Rural sales agent, non-agricultural products ✓ Rural banking and Digital Financial Services (DFS) agent

Illustrative Agricultural Value Chain Model of Maize Crop

As we are aware that there are five key elements for the assessment and formulation of the prospective business plan for the FPOs.

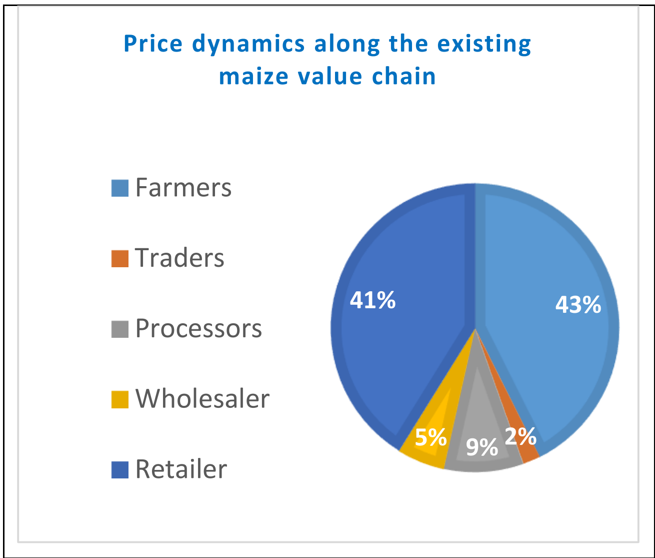


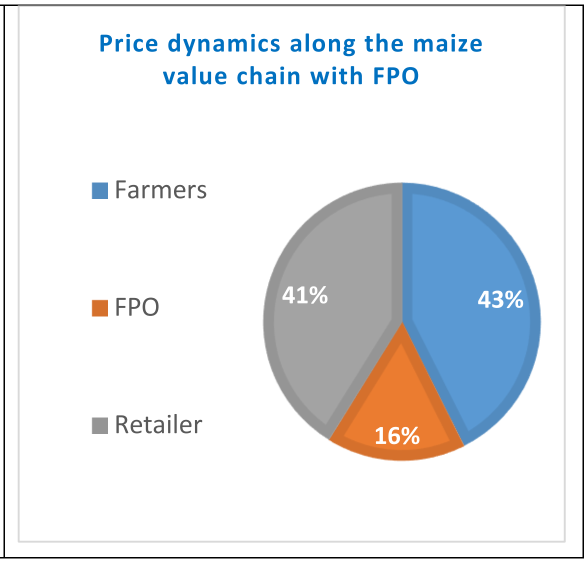
1. Assessment and management plan for ***technological gap***
2. Assessment and management plan for ***input management (Aggregation of Inputs)***
3. Assessment and management plan for ***Primary / secondary processing (Value Addition)***
4. Assessment and management plan for ***marketing (Collective Marketing)***
5. Assessment and management plan for ***trading business*** during the lean period of the agricultural operation of concern FPO's members

Based on price fluctuation trends, a value chain model has been formulated and discussed to understand the working of a value chain under maize crop. It shows, how the dynamics of a value chain can be modified / strengthened through participation of the FPOs as intermediary for better price realization for the farmers.

Price Spread of the maize and major stakeholders

Actor	Value (Rs./Qtl.)	Value (%)	Gross Margin (%)	Actor	Value (Rs./Qtl.)	Gross Margin (%)
Farmers	1300	43	43	Farmers	1300	43
Traders	1360	45	2	FPO	1795	16
Processors	1632	53	9			
Wholesaler	1795	59	5			
Retailer	3051	100	41	Retailer	3051	41





The methodology of applications of the five elements for the cluster of the farmers cultivating maize crops is illustrated as under:

1. **Assessment and management plan for *technological gap***

The potential yield of the maize crop in India is 4.52 MT/ha against the average realised yield of 3.26 MT/ha. Further, potential yield in Tamil Nadu State is 5.81 MT/ha against the realised yield of 5.04 MT /Ha. There is large productivity gap between average potential yield and average realised yield in India. i.e. 1.26 MT/ha. This can be enhanced by undertaking best practices. In terms of economic loss and opportunity of enhancing gross returns due to the productivity gaps can be worked out as under:

Particulars	No of Farmers	Area (ha)	Input Cost (Rs./ha)	Prod. (MT)	Productivity (MT/Ha)	Gross Return (Lakh)	Gross Income (Lakh)
WITHOUT FPO	300	180	39543.80	586.80	3.26	76.28	5.10
WITH FPO	300	180	39543.80	813.60	4.52	105.77	34.59
CHANGE				**226.80**	**1.26**	**29.49**	**29.49**

The above table reveals that there is opportunity of enhancing gross margin of Rs.29.49 lakh in 180 ha of maize crop cultivated by 300 farmers.

2. **Assessment and management plan for input management (Aggregation of Inputs)**

Particulars	No of Farmers	Area (ha)	Input Cost (Rs./ha)	Gross Margin (Rs. In Lakh)
WITHOUT FPO	300	180	39543.80	71.18
WITH FPO	300	180	38153.80	68.68
CHANGE			1390	**2.50**

Similarly, there exists an opportunity of reduction in input cost of Rs.1390/ha through aggregation of inputs by FPO. Hence, there is gross margin of Rs.2.50 Lakh for the FPO for input supply to 300 farmers who are under taking cultivation of maize crop under 180 ha.

3. **Assessment and management plan for primary/secondary processing (Value Addition)**

Particulars	No of Farmers	Area (ha)	Output Cost (Rs./qtl)	Gross Margin (Rs. In Lakh)
WITHOUT FPO	300	180	1300.00	
WITH FPO (as a trader)	300	180	1360.00	3.52
WITH FPO (as a processor)	300	180	1632.00	15.96
CHANGE				**19.48**

There are different stakeholders in the existing value chain of the maize who are undertaking business of aggregator, processors, wholesaler and retailers. There is gross margin of Rs.60/quintal and Rs.272/quintal when product moves from farmers to trader and then trader to processor. If the business model and role of the trader and processor is also taken over by FPO, this will result in enhancement of the gross margin of Rs. 19.48 lakh for a cluster of 300 farmers cultivating maize crop in 180 ha of area.

4. Assessment and management plan for Collective Marketing

Particulars	No of Farmers	Area (ha)	Output Cost (Rs./qtl)	Gross Margin (Lakh)
WITH FPO (as a processor)	300	180	1632.00	
WITH FPO (as a Wholesaler)	300	180	1795.00	9.56
CHANGE				**9.56**

If the FPO also take role of wholesaler and undertake collective marketing of finished product, there is gross margin of Rs.163/quintal. If the business model and role of the wholesaler is taken over by the FPO, it will result in enhancement of the gross margin of Rs. 9.56 lakh for the 300 farmer' cultivating maize crop in 180 ha.

Gross enhance of the business participation and gross margin of the FPO

S. No.	Particulars	No of Farmers	Area (ha)	Gross Margin (Lakh)
1	Enhancement of Productivity	300	180	29.49
2	Aggregation of Inputs	300	180	2.50
3	Procurement and Processing	300	180	19.48
4	Collective Marketing	300	180	9.56
	Total			**61.03**

The above analysis reveals that there is opportunity of enhancing business participation of the farmers in existing value chain through FPO mode along with undertaking basic functions of the FPO i.e. technology transfer, aggregation of inputs, procurements, processing and collective marketing. The example revealed that there is an opportunity of enhancing gross margin of Rs.61.03 lakh by promoting FPO for 300 farmers cultivating an area of 180 ha of maize crop. The contribution in total gross margin would come from enhancement of the productivity (48%), aggregation of input (4%), procurement and processing (32%) and collective marketing (16%)

<u>Participation in value chains through corporate tie- ups</u>: One of the easier method in participation in value chain for the FPOs could be through tie-up with corporates.

<u>Contract Farming</u>

- Under contract farming, agricultural production (including agri-allied sector) can be carried out based on a pre-harvest agreement between buyers (such as food processing units and exporters) and producers (farmers or farmer organisations)
- The producer can sell the agricultural produce at a specific price in the future to the buyer as per the agreement and reduce the risk of fluctuating market price and demand.
- The buyer can reduce the risk of non-availability of quality produce

Types of contracts

Models	Sponsors	General Characteristics
Centralized	Corporates, Other private players & agencies	Generally the initiative is taken by the buyer; Popular in many developing countries for high-value crops; Commitment to provide *material and management inputs* to producer
Nucleus estate	State agencies, Corporates, other private players & agencies	Is a variation of the centralized model where the sponsor also manages a central estate or plantation; The central estate is usually used to guarantee throughput for the processing plant but is sometimes used only for research or breeding purposes; Is often used with resettlement or transmigration schemes; Involves a significant provision of material and management inputs
Multipartite	Sponsorship by various organizations, e.g. -State agencies -State marketing authorities -Private corporate sector - Landowners - Farmer cooperatives	Multiple sponsors for product/activity; Joint-venture approach; requires coordination between sponsors
Informal developer	Entrepreneurs Small companies Farmer cooperatives	Not usually directed farming; Common for short-term crops i.e. fresh vegetables to wholesalers or supermarkets; Normally minimal processing and few inputs to farmers; Contracts on an informal registration or verbal basis; Involves greater risk of extra-contractual marketing

Models	Sponsors	General Characteristics
Intermediary (tripartite)	Private corporate sector, State agencies	Involves sponsor in subcontracting linkages with farmers to intermediaries; Not a holistic approach; there is a danger that the sponsor loses control of production and quality as well as prices received by farmers as it depends on the market

With a view to integrate farmers with bulk purchasers including exporters, agro- industries etc. for better price realization through mitigation of market and price risks to the farmers and ensuring smooth agro raw material supply to the agro industries, Union Finance Minister in the budget for 2017-18 announced preparation of a "Model Contract Farming Act" and circulation of the same to the States for its adoption. Farmer's Producer organizations (FPO's) have a major role in promoting Contract Farming and Services Contract. On behalf of famers they can enter into agreement with the sponsor. The final Model Act "The ….State/UT Agricultural Produce and Livestock Contract Farming and Services (Promotion & Facilitation) Act 2018" came into existence on 22 May 2018.

Salient features of Model Contract Farming Act, 2018

- The Act lays special emphasis on protecting the interests of the farmers, considering them as weaker of the two parties entering into a contract.(i)
    - In addition to contract farming, services contracts all along the value chain including pre-production, production and post-production have been included.
    - "Registering and Agreement Recording Committee" or an "Officer" for the purpose at district/block/ taluka level for online registration of sponsor and recording of agreement provided.
    - Contracted produce is to be covered under crop / livestock insurance in operation.
    - Contract framing to be outside the ambit of APMC Act.
    - No permanent structure can be developed on farmers' land/premises
    - No right, title of interest of the land shall vest in the sponsor
- Promotion of Farmer Producer Organization (FPOs) / Farmer Producer Companies (FPCs) to mobilize small and marginal farmers has been provided
    - FPO/FPC can be a contracting party if so authorized by the farmers.
- No rights, title ownership or possession to be transferred or alienated or vested in the contract farming sponsor etc.
    - Ensuring buying of entire pre-agreed quantity of one or more of agricultural produce, livestock or its product of contract farming producer as per contract.
    - Contract Farming Facilitation Group (CFFG) for promoting contract farming and services at village / panchayat at level provided.

- Accessible and simple dispute settlement mechanism at the lowest level possible provided for quick disposal of disputes.
- It is a promotional and facilitative Act and not regulatory in its structure

Nature of tie-ups with corporates

- Inputs Supply
- Training & Extension Services
- Advisory on weather
- Farm Mechanisation Hub
- Access to credit and funds
- Market Intelligence & Access
- Processing & value addition

Input supply

Farmers are the only business entities who purchase in retail and sell in bulk. Perhaps the activity of FPO which draws maximum membership is supply of quality and timely inputs at door-step. The relationship with corporates is not only restricted to the inputs but extends beyond it. For example Indian Farmers Fertiliser Cooperative Ltd (IFFCO) not only does business of inputs with the FPOs but through its wing Indian Farm Forestry Development Cooperative Limited (*IFFDC)*, a separate Multi-State Cooperative Society undertakes seed production Program on farmer's fields, provides soil testing facilities through its mobile soil testing units to the FPOs, conducts onsite & offsite training programs for associated FPOs covering various aspects of farming and balanced use of fertilizers. The implications of such tie-ups in addition to profits could be:

a. *Increase in membership base of FPOs due to increased faith on account of delivery of adequate and timely inputs at the door step of the member*
b. *With increased share capital, FPO becomes eligible for matching grants*
c. *Record maintenance improved as officers from corporate tie-up agency involves in stock inspections from time to time and guide FPO in improving the MIS systems*

Training and Extension Services

The last mile extension services are the biggest weak link in the farming sector. In our country apart from front line agriculture workers of agriculture department, there are Krishi Vigyan Kendras (KVKs) in almost all districts acting as resource centre for agriculture technology and its dissemination. However, it is practically difficult for KVK to touch each & every farmer effectively with more than 14 crore farming families with only 668 KVKs. Further, the farmers interested in cultivation of niche crops & requiring advanced information may not get all their needs fulfilled. Therefore, farmers need the extension services of corporates who will work with a well-defined group of farmers.

The example which can be quoted in this regard is could be corporates like ITC & BILT for undertaking forest plantation activities on farmer's field by providing the specialised planting material as also building capacities of farmers in the technology adoption along with forward market-tie-us. Another example is Invictus FPC Ltd. (Ghaziabad, UP) promoting piggery after getting trained IVRI, Barelli, National Research Centre on Meat, Hyderabad and National Research Centre on Piggery, Guwahati and now supplying piglets to companies in Manipur and other NE states.

Advisory on weather

Reuter Market Light (RML) is providing personalised messages to the farmers in 09 local languages spread across 17 Indian states. RML services prepared for 450 crop varieties, 1300 markets and 3500 weather stations and are used by 13 lakh farmers across 50,000 villages. Enterprise Solution by RML provide data, insights and intelligence on farmers, farmer groups, and commodities to agri-enterprises to take informed decision.

ICT based Agriculture platform called Krishidoot has brought together farming communities and agribusinesses. Krishidoot is the largest aggregation of Farmer Producer Organisation in India.

Farm Mechanisation Hub

Mahindra Agri Solutions Ltd., a wholly owned subsidiary of Mahindra and Mahindra Ltd. is helping execution of World Bank aided project called Maharashtra Agriculture Competitiveness Project (MACP) to increase productivity, profitability and market access for the farming community in Maharashtra. Mahindra Agri Solutions Ltd through their digital platform *MyAgriGuru* is helping FPOs on crop advisory, weather forecasting, market information, price forecasting, etc. MACP has also established an in-house Centre for "Indian Agriculture Market Intelligence cell" for price forecasting of select agriculture commodities. This forecast report is disseminated through the *MyAgriGuru* App to FPOs empowering them to take better decisions.

Similarly, Escort Crop Solutions operates almost 100 combine harvesters, host of tractors and other equipment on rental basis under franchisee model and has been assisting FPOs by supply of machinery, training of drivers and also providing other services. They are actively looking for with FPOs in these states.

Access to credit and fund

Whenever, FPOs deal with niche products especially the ones which are seasonal in nature, the working capital requirements increases. The problems become compounded when the same are to be processed or sent to distant markets as delays in realisation of funds are expected.

In many cases the corporates dealing with such FPOs come forward in providing advance payment for seasonal procurements to facilitate FPOs in making immediate payments to the farmers from whom the procurements are done. This is important in case of niche crops which are grown by farmers based on specific demand. The system ease out the working capital requirements of the FPO and becomes a win-win situation for all, FPO and its members on one hand and Corporate on the other.

Market Intelligence and Access

Market intelligence benefits a FPO in getting reliable information in advance on demand-supply situation, price discovery, location of markets, etc. NCDEX, the biggest technology based commodity market enables FPO to participate and hedge risk. Based on intelligence, a farmers can plan for their crops based on the future price in the commodity market.

The FPOs can also link with corporates for maximisation of profit like:

⇒ PepsiCo supplying seed and package of practices of tomato for their supply of raw material for processing

⇒ Potato cultivation through contract by Balaji Wafers

Thus, there is an excellent opportunity for FPOs for profit maximization through adoption of B2B model of marketing of products which offers win-win situation both for FPOs and the corporates.

Ninja cart is India's largest fresh produce supply chain company that is using technology platform for connecting producers directly with retailers, restaurants, and service providers using in-house applications that drive end to end operations. Currently, their Supply Chain is equipped to move 1400 tonnes of perishables from farms to businesses, every day, in less than 12 hours. Benefits of the arrangement also includes receiving payment in 24 hours, employment generation, exposure to professional grading & packing operations at the village level, convenient mode of transportation, digital transaction process, etc.

The Reliance Foundation, the CSR wing of Reliance industries has formed 22 FPCs to empower farmers across 12 states. In 2018-19, these FPCs have transacted farm and non-farm products worth over 25.3 crore benefitting 19200 families, raising farmer's income significantly. (Business India, 24 Feb to 08 March 2020)

Some of the companies like Sewa Paper Mills-BILT and JK Paper Mills have formed exclusive FPOs for promotion of pulpwood plantations in their hinterland. Patneswari FPO in Jeypore-Koraput and Nagavali FPO by JK Paper Mills had access to mills for marketing of wood. Sewa Paper Mills was also extending Bulk Supply Bonus where in each ton will be provided extra Rs 100 when supplier provides the materials in bulk.

Thus, the FPOs can enter into arrangements with corporates in accessing bulk markets for their products for increasing their profit margins.

Processing & Value Addition

The major challenge for any FPO is value addition through processing, storage and marketing of processed products. While challenges of finance would be there, additionally challenges related to technology and infrastructure are also there. To a large extent, the association with corporates in this regard would facilitate in overcoming the same.

Disa Multipurpose Cooperative Society (DMCS) were novices in seed sector when they first entered into sector. But the discussions and training programmes conducted by NABARD for such agencies where the corporates like M/s Agrosaw have explained the nitty-gritty have helped them in establishing their own seed processing plants.

Gorakhnath FPC had similar experience by aligning with agencies like National Seed Corporation and major Seed Dealers. Initially, they had only seed grader and their products were rejected. However, later they upgraded their machinery and now produce and market nearly 4000 q of seeds through network of dealers across the State of Odisha.

Sahaja Aharam had established their own processing plants for food processing through tie ups with research institutes and also employing tech savvy staff.

Kishore Biyani's Future Group had signed a memorandum of understanding (MoU) with Sahyadri Farms for direct sourcing of fruits and vegetables for its supermarket chain Big Bazaar, triggering hope among many policymakers that the FPC model may succeed where traditional solutions have failed, in helping India overcome the agrarian case and doubling farmers' incomes. Sahyadri Farms, the farmer producer company (FPC) set up in 2011, has grown to become the largest FPC in the country, with a membership of 8,000 farmers and a turnover of Rs 300 crore and has become India's largest grape exporting company

Challenges in Corporate Tie-ups:

While many examples were seen from field where the tie ups with corporates have helped FPOs in strengthening their business and achieving significant growth but certain operation and legal weaknesses were also observed over a period of time. Some of them are listed below:

- Most of the agreements between corporates were informal or loosely worded
- Corporates wanted continuous supply of good quality materials but FPOs in dealing with large number of farmers could not always guarantee uniform product quality
- Companies use to pick up the best quality product and leave the rest. FPOs faced problem in marketing of the rejected lot
- Corporates were always enjoying the float by delaying payments to FPOs while FPOs had to make arrangements for funds for making immediate payments to farmers
- Companies sometimes create infrastructure in the premises of the FPOs and they insisted that same should not be used for other works even in idle time
- Companies per se may be having fair policies but the field level employees sometimes caused damage to FPOs through fraudulent practices
- Many a times competition was killed by corporates by not allowing FPOs to approach alternate markets even with surplus and vice a versa i.e.companies enjoyed freedom to choose alternate sourcing channel when they got raw material at cheap rates
- FPOs expectations from Companies to invest in extension was not fulfiled
- Sometimes agreements were wholly lopsided and FPOs faced issues in executing deals as per agreement terms

Formulating a prospective business plan for FPO

Every business irrespective of size needs planning. Business planning is essential for growth and sustainability. It provides broad ideas to meet the expected and unexpected opportunities and obstacles the future holds. In case of a PO, it is all the more essential since most of the members will be acting as businessmen for the first time. A business plan will help the FPO in the following ways:

a) Examining viability of the venture in a particular market

b) Provides guidance to the FPO for organising and planning activities

c) Will serves as an important tool in accessing finance/funding

Considering all the above factors, a prospective Business Plan for 3-5 years will be prepared by the CBBOs under the scheme for the FPO. The document will specify the components of a strategy with regard to the business mission, external and internal environments and problems identified in earlier analysis. The business plan will hold good for next 3-5 years and only modified when a new venture is developed or a major new initiative is launched.

In short, the business plan must contain answers to the questions like:
"Who/ What/ Where/ When/ Why/ How/ How Much".

<u>Characteristics of good business plan</u>:

A good business plan follows generally accepted guidelines for both form and content. There are three primary parts to a business plan.

a) The first is the business concept, where you discuss the industry, your business structure, your particular product or service, and how you plan to make your business a success.

b) The second is the market place for the product, in which you describe and analyse potential customers: *who and where they are, what makes them buy* and so on. Here, you also describe the competition and how you'll position yourself to beat it.

c) Finally, the financial section contains your income and cash flow statement, balance sheet and other financial ratios, such as break-even analyses. This part may require help from accountant and a good spreadsheet software program.

<u>The business plan should invariable contain</u>:

⇒ **<u>Marketing Plan</u>:** The marketing plan describes how the product will be sold, how the business will motivate the customer to buy. The purpose of developing and including the marketing plan in the business plan is twofold:

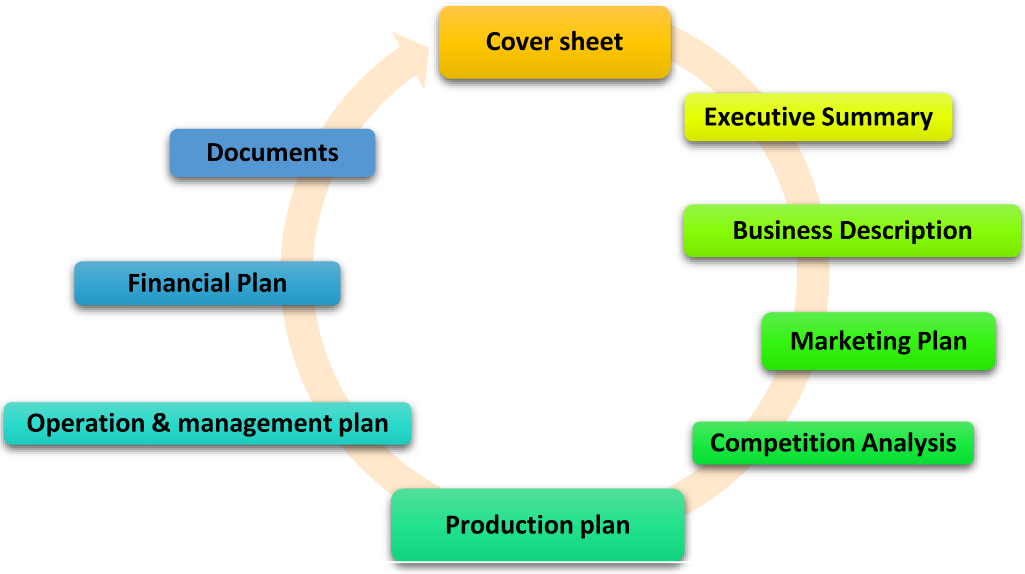
a) The process of designing a coherent marketing plan, that is an integral part of the overall business plan, will help the business to test ideas, explore options, and determine effective strategies for success.

b) The result of a well-conceived and coherent marketing plan will convince the business plan reader about the competence of the business.

⇒ **Financial Plan**: The financial plan translates all the other parts of the business - the opportunity, the operating plan, the marketing plan, the management team—into anticipated financial results. It contains the current status and the future projection of financial performance of the business. The financial plan represents the best estimates of the risks involved, and the return on investment. Three financial areas are generally discussed in the financial plan:

Broad outline of a Business Plan

A business plan is essentially a written description of a business's future. It provides an in depth report on the environment in which the company functions, what the company plans to do in the near future and predictions on its performance. A business plan conveys business goals, the strategies one uses to meet them, potential problems that may confront one's business and ways to resolve them, the organizational structure of business (including titles and responsibilities), and finally, the amount of capital required to finance your venture and keep it going until it breaks even.



A Typical Business Plan Document would be as under:

A. ***Cover sheet:*** *Serves as the title page of the business plan. It should contain the following:*

   a) *Name of the Producer Company*

   b) *Company address*

   c) *Company phone number (include area code)*

   d) *Logo (if any)*

   e) *Names titles addresses phone numbers (include area code) of CEO/Board of Director*

   f) *Month and year of the plan was issued*

   g) *Name of the person/organisation who prepared it*

B. ***Executive Summary:*** *Within the overall outline of the business plan, the Executive Summary will follow the title page. The Executive Summary should be to the point and in a nutshell convey the value of your proposition.*

   Key elements that should be included are:

   i. *Business Concept, the business and market: Describes the business, its product and the market it will serve. It should point out just exactly what will be sold, to whom and why the bushiness will hold a competitive advantage.*

   ii. *The management team: A brief summary of the business team composition, special skills required to operate the proposed business successfully should be provided in the executive summary of the business plan. The nature and type of deployment of the key personnel and in case of specialized needs who would support the key business proposition.*

   iii. *Business rationale - why the proposal is different: A statement of business rationale establishing how and why the proposal is different than other businesses of the same nature in the prevailing industry. This will prompt the financial institutions and others watching and planning to support the business.*

   iv. *The proposal: State clearly the intent of the proposal and what precisely you are planning to do and achieve the intended output.*

   v. *Basis for its success: State your logic as to why you think the proposed business would succeed in the present circumstances and how it will meet the intended outputs. Strength – Opportunity matrix may help summarize the logic.*

vi. *Profitability and financial feature: Highlights the important financial points of the business including sales, profits, cash flows and return on investment.*

vii. *Financial requirements: Clearly state the capital needed to start the business and to expand. It should detail how the capital will be used, and the equity, if any, that will be provided for funding. If the loan for initial capital will be based on security instead of equity, you should also specify the source of collateral.*

viii. *Risk assessment and mitigation strategies: The executive summery may also include a brief sketch of the potential and killer risks assessed while analyzing the business proposition visa- vis industry and the potential competitors. How the risks would be mitigated should form the body of the risk mitigation or aversion strategy.*

ix. *Current business position and prospects: Provides an overview of the market in which the start-up is to function. In brief, it focuses on the proposed strategy to beat the competition.*

x. *Future Prediction as to the targeted market share, profitability and return on investment*

xi. *Key conclusions: Based on above the key conclusions may be drawn for a quick snap shot vision of the whole business plan.*

C. Brief description of the business

Business Description:

a. *The business background: The business description is an extended version of the Executive Summary, where you must convey the crux of your proposition and provide some depth of knowledge regarding the plan.*

b. *Location and operational area: The business description usually begins with a short description of the industry. When describing the industry, discuss the present outlook as well as future possibilities. You should also provide information on all the various Markets within the industry, including any new products or developments that will benefit or adversely affect your business. Base all of your observations on reliable data and be sure to footnote sources of information as appropriate.*

c. *Method of operation: When describing your business, the first thing you need to concentrate on is its structure, i.e., wholesale, retail, food service, manufacturing or service oriented. Also state whether the business is new or already established. A very major part of the Business Description is detailed information about the team.*

d. *Defining the prospective market and the customers: You should also mention, who you will sell to, how the product will be distributed, and the business's support systems. Support may come in the form of advertising, promotions and customer services.*

e. *Type of business and services offered: Once you've described the business, you need to describe the products or services you intended to market. The product description statement should be computed enough to give the reader a clean idea of your identification. You may want to emphasize any unique features or variations from concept that can typically be found in the industry. Be specific in showing how you will give your business a competitive edge. The revenue model you propose must also be touched upon in the business description.*

f. *Statement of viability: This section deals with financial analysis of the proposal and depicts the viability of the business which enables the resource institutions, Shareholders and others assess and allocate resources.*

D. ***Marketing Plan:*** *A marketing plan includes information about the total market with emphasis on the target market. It helps in identifying the target customers and suggest the means to rightly position and supply the products or services to them.*

a. ***Target market:*** *Identify characteristics of the customers. Tell how the results have been arrived. Back up information with demographics questionnaires and surveys. Estimate the market size.*

b. ***Competition:*** *Evaluate indirect and direct competition. Show how one can compete.*

c. *Evaluate competition in terms of location market and business history.*

d. ***Place:*** *Tell about the manner in which products and services will be made available to the customer. Back up decisions with statistical reports, rate sheets etc.*

e. ***Promotion:*** *How the advertising will be tailored to the target market? Include rate sheets, promotional material and time lines for advertising campaign.*

f. ***Pricing:*** *Pricing will be determined as a result of market research and costing of the product or service. Tell how the pricing structure has been arrived and back it up with materials from research.*

g. ***Product:*** *Answer key questions regarding product design and packaging. Include graphics and proprietary rights information.*

h. ***Timing of market entry:*** *Decide when to enter the market and how this decision has been arrived at.*

i. ***Targeted sales:*** *State the sales targeted for the next 3 years. The first year's sales may be presented month-wise.*

j. ***Industry trends:*** *Give current trends about how the market may change and what is the plan to adjust with the changing scenario.*

E. <u>Competition Analysis</u>

a) *The competition analysis is a statement of the business strategy and how it relates to the competition. The purpose of the competitive analysis is to determine the strength and the weaknesses of the competitors within the proposed market, the strategies that will provide the proposed business a distinct advantage the barriers that can be developed in order to prevent competition from entering your market, and any weakness that can be exploited within the product development cycle.*

b) *The first step in a competitor's analysis is to identify the current and potential competition. There are essentially two ways you can identify your competitors. The first is to look at the market from the customer' view point and the group all your competitors by the degree to which they contend for buyers' perception value in terms of money or satisfaction by its use. The second method is to group competitors according to their various competitive strategies so you understand what motivates them.*

c) *Once you have grouped your competitors, you can start to analyze their strategies and identify the areas where they're most vulnerable. The aim is to get a competitive advantage over them. The analysis could be carried out on the parameters like (1) reasons behind their success or failure; (2) prime customer motivator; (3) major component costs and (4) industry mobility barriers.*

d) *The strategy for negotiating the proposed market share may focus on (1) product (2) distribution (3) pricing (4) promotion and (5) advertisement. Arriving at a projection of the market share for a business plan is very much a subjective estimate. It is based on not only an analysis of the market share but on highly targeted and competitive distribution, pricing and promotional strategy. The market share should have a time horizon. To estimate this, factors like industry growth which will increase the total number of users and conversion of users from the total feasible market needs to be considered.*

e) *This section of business plan should include strategies for successful positioning of the business in the competitive business environment. The strategic issues like how the competitors are positioning themselves, what specific attribute your product have that competitors' do not and what customers' needs does your product fulfil.*

f) *The success of the business significantly depends on pricing policy. To keep the pricing policy competitive any of the of the following methods could be used: Cost-plus pricing- it assures that all costs both fixed and recurring or variable are attained with desired percentage of profit; b) Demand pricing- the pricing based on demand; c) Competitive pricing – this strategy is implied by the companies that are entering in to the market where* *there are already established pricing exists and it is difficult to differentiate one product from another; d) Mark-up pricing – used mainly by retailers, mark-up pricing is calculated by adding your desired profit to the cost of the products. Each method listed above has several strength as well as weakness.*

g) *Distribution includes the entire process of moving the product from the place of manufacturing to the end users. The type of distribution network chosen will depend upon the industry and the size of the market. A good way to make your decision is to analyse your competitors to determine the channels they are using, and then decide whether to use the same type of the channel or an alternative that may provide you with a strategic advantage. Some of the more common distribution channels include direct sales, retailers, wholesalers, etc.*

h) *The promotion strategy in its most basic form is the controlled distribution of the communication designed to sell your product or services. In order to accomplish this, the promotion strategy encompasses every marketing tool utilized in the communication efforts. This includes advertising, packaging, public relations, sales promotion, etc.*

F. Production plan

a) *The purpose of the production plan section is to provide a detailed overview of how the actual production will be carried out in the case of a manufacturing concern, or the service performed in the case of service industry.*

b) *The production plan is very crucial for a manufacturing concern. In the case of a service company, it may be done away with and the relevant issues would be covered in the operation and management plan. The production plan should include – production process adopted, capacity planning and task scheduling and cost estimation.*

G. Operation and management plan

a) *The operation and management plan is designed to describe just how the business functions on a continuing basis. The operation and management plan will highlight the logistics of the organization such as the various responsibilities of the management team, the tasks assigned to each division within the company, and capital and expense requirements related to the operation and management of the business.*

b) *There are two areas that need to be accounted for when planning the operations of your company. The first area is the organizational structure of the company, and the second is the expense and capital requirement associated with its operation.*

c) *Organizational structure: The organization structure of the company is an essential element within a business plan. It should include the personnel deployed by the producer organization like Chief Executive Officer, Accountant, Service Providers, the personnel from the supporting agency for the technical skills like agriculture Technologies and* *marketing. Details of the key personnel should be appended with the business plan to foster confidence in the financial agencies.*

d) *Depending upon the organization structure, the personnel requirement at various levels of the organization is estimated. In addition to this, the costs of support services required for the functioning of the organization are estimated. These costs are then used to compute the overhead costs which, in turn, are used in the calculations involved for the financial statements.*

H. ***Financial Plan:*** *These are the records used to show past, current and projected finances. The following are the major documents that would be required to include in the business plan. The work is easier if these are done in the order presented.*

a) ***Cash flow statement (budget):*** *This document projects what your business plan means in terms of rupees. It shows cash inflow and outflow over a period of time and is used for internal planning. Cash flow statements show both how much and when cash must flow in and out of your business.*

b) ***Three year income projection:*** *A pro forma income statement showing your projections for your company for the next three years. Use the pro forma cash flow statement for the first year's figures and project the next according to economic and industry trends.*

c) ***Break-even analysis:*** *The break-even point is when a company's expenses exactly match the sales or service volume. It can be expressed in total rupees or revenue exactly offset by total expenses or total units of production (cost of which exactly equals the income derived by their sales). This analysis can be done either mathematically or graphically.*

d) ***Debt-service ratio:*** *The Debt Service coverage ratio is a measure of the firm's ability to meet long term obligations. This ratio is expressed as the amount a project pays (or proposes to pay) each year for principal and interest on the debt/loan; that is, the amount of debt service to be paid when compared with the funds available to pay that debt service.*

I. Supporting documents

a) *Brief profile of the PC and Resumes of the key Director/CEO*

b) *Copies of Leases, if any*

c) *Letters of Reference*

d) *Contracts / work order / MoU for selling produces etc.*

e) *Legal Documents (registration, business license, etc.)*

Session	Facilitating convergence of various on-going schemes for supporting FPO Enterprises
V	

Given the importance of agriculture sector, Government of India has taken several steps for its sustainable development. Steps have been taken for:

- ⇒ Facilitation in enhancing the production & productivity of different agriculture crops & Agri-allied activities through development & dissemination of improved technologies
- ⇒ Improving the access to irrigation & enhanced water-use efficiency
- ⇒ Improvement of health of production systems like soils
- ⇒ Strengthening marketing systems

Support for above has been/is being provided through implementation of different schemes. Broadly the schemes can be categorised in two categories viz. the Central Sector Schemes and Centrally Sponsored Schemes. Centrally Sponsored Schemes are different from Central Sector Schemes in the sense that Central Sector Schemes are implemented by Centre directly while Centrally Sponsored Schemes are implemented through States. Though, the schemes are implemented by States but are largely funded by Central Government with a defined State Government share. This is done to provide flexibility to States to mould the schemes according to the local requirements, flow of funds, accountability, enforceability, implementation, etc.

Similarly, other than government, there are schemes of other organisations viz. developmental institutions, banks, corporates, etc. which have direct or indirect linkage with farmers of farmers' oriented organisation like FPOs.

<u>FPOs needs to link up with Institutions</u>:

a) To mobilise essential resources like finance, agricultural inputs, information, marketing & liaison, value addition and other services required for the activities of FPO and its members
b) To have access to new technologies from private and government institutions, academic institutions, etc.

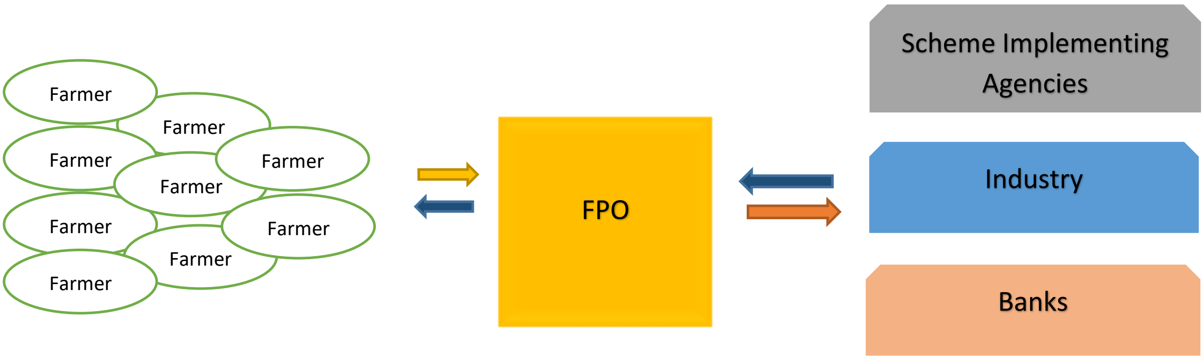
Literally, convergence happens when two or more things come together to form a new whole. The other synonym for convergence could be *confluence, conjunction, meeting, etc. Here under convergence, we talk about linkage of the beneficiaries (farmers) to the support available (cash/kind) under the various ongoing schemes of the government and other agencies.*

The lack of linkage or convergence can generally be on two counts:

⇒ Awareness about the scheme & incentives

⇒ Knowledge gap on the process part of it i.e. fulfilling the modalities under the program for linkage in order to avail the benefits

The critical gaps viz. time & knowledge constraint existing at individual level in accessing benefits under such programs can be circumvented through an aggregation model and here FPOs can play a very important role.



Convergence efforts can result in the following advantages:

(i) Help the farmer to taking advantage of ongoing programs where FPOs will act as facilitators

(ii) Help in creating opportunities for FPOs for business diversification (setting up of storage facilities, custom hiring centre, soil testing lab, processing units, etc.)

(iii) Help in facilitate implementers in identification of right beneficiaries with ease

Let us understand it through this example:

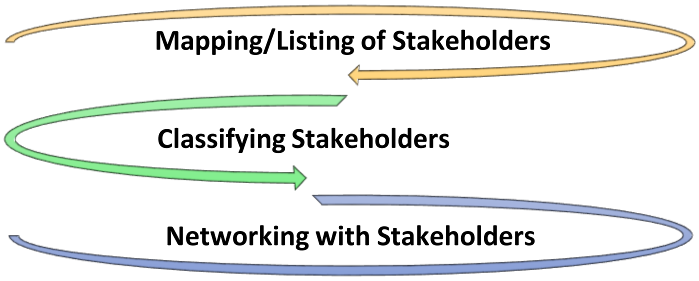
An FPO was involved in doing input business. Most of the farmers in the FPO were growing vegetable growers and they wanted to get into the business of aggregation and selling the produce. They decided to approach the office of Horticulture department to seek their opinion. After going there, they came to know about the Departments scheme under National Horticulture Mission. It was informed by the Horticulture Development Officer (HDO) that he still has a budget for distribution of high quality vegetable seeds, if they are interested. He also informed that a capital subsidy can also be availed of for setting up of a low cost cold storage. They came back and discussed among themselves and studied the feasibility aspect. After deciding to go ahead, they invited the official to their next board meetings for further discussion. Six months down the line, the department not only provided them with improved seeds but was also able to connect them to online buyer group for marketing of their produce.

The FPO was also helped by HDO in drafting the agreement with the buyer. Subsequently, the department also facilitated set up of a grading and sorting facility with financial support under MIDH. Using the good quality seed, the farmers were also able to improve their productivity and the FPO was able to create a requisite infrastructure for grading and sorting.

Thus, from the above, we can visualise the importance of convergence. But, for convergence to happen, networking and stakeholder engagement is very important.

Stakeholder: An individual, group or organisation who is impacted by the outcome of a project and also have an interest in the success of the project

The simplified step-wise approach for stakeholder analysis & networking could as under:



1. **Mapping/Listing of Stakeholders**: Preparation of list of people or institutions, FPOs interact/likely to come across in conduct of FPO business. FPO Stakeholders are individuals, institutions that are directly or indirectly engaged or who can influence the FPO positively or negatively.

Stakeholder Examples		
Primary	**Secondary**	**Tertiary**
⇒ Users/Beneficiaries	⇒ Local Authority ⇒ Direction of Municipality Technical Services ⇒ Traditional Authorities ⇒ NGOs ⇒ Development Agencies ⇒ Businesses and Suppliers ⇒ Govt. Line Departments ⇒ Research Institutions ⇒ School and University ⇒ Services Providers	⇒ Financial Institutions ⇒ Donors ⇒ National Authorities (at all levels) ⇒ Opinion Leaders ⇒ Civil Society ⇒ Foreign Cooperation Agencies ⇒ Media

2. **Classifying Stakeholders**: Stakeholders can be placed in 3 categories (very important, somewhat important and not so important)

3. **Networking with Stakeholders**: Engaging with important and somewhat important on a regular basis through networking

⇒ **Methods of Stakeholder Engagement**

- One-on-one Meeting
- Group Meeting
- Organising Events and inviting stakeholders
- Inviting stakeholders to BOD meetings
- Phone calls
- WhatsApp Groups
- Disseminating information through WhatsApp
- Email
- Virtual Meetings

⇒ **How to create a stakeholder engagement and prepare a networking plan**

Name of stakeholder (if institution, name of contact person with designation and role)	Reasons for Linking	How to engage with them	Name of person responsible for initiating link	By when	Constraints (in linking)	Ways to overcome constraints? Whose support?

Market Network

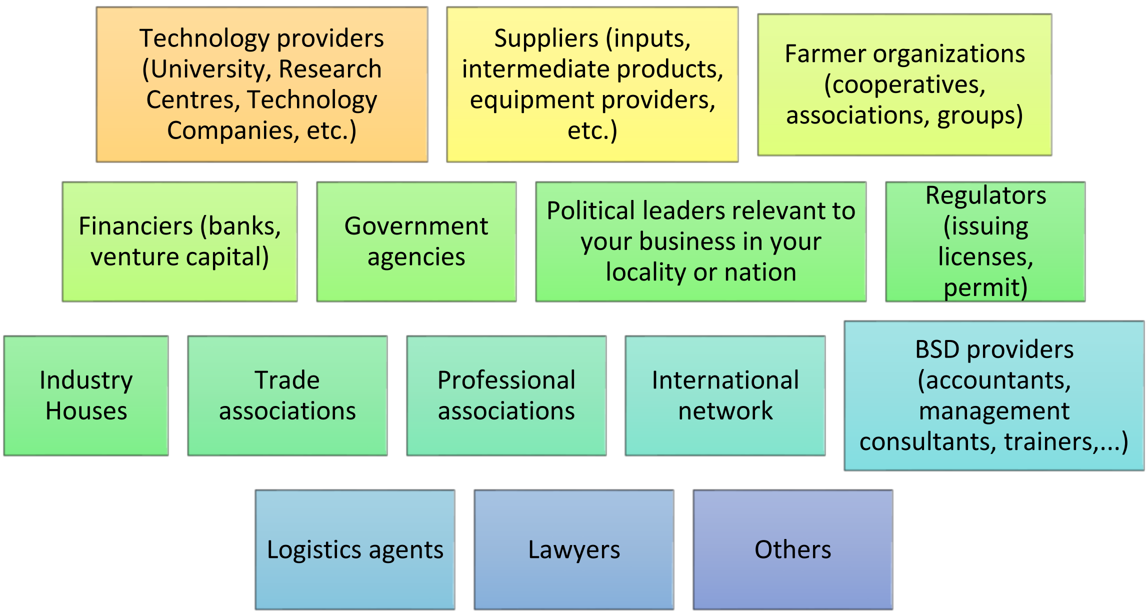
Farmers in India have traditionally been selling their produce via government operated wholesale marketplaces called APMC (Agriculture Produce Marketing Committee) Yards or Mandis. These marketplaces operate on a structure of licensed commission agents who act as traders in the marketplace, buying from farmers and middlemen and selling to wholesale buyers. One of the biggest challenges with this model has been cartelization by commission agents to manipulate prices which results in farmers receiving unfair value for their produce. In addition, farmers are prone to facing malpractices like incorrect produce weighing & grading which further affects the money they receive for their produce. Any sale which the farmer does at the mandi is also subject to marketing charges and fees which increases the farmer’s cost of sales, adding to already existing costs like transportation of farm produce to the mandi, and other production related costs. Till recently, APMC Yards or government mandis had monopoly status in most states which further led to lack of alternatives for farmers to market their crops.

A Market Network is a hybrid business model comprising of a marketplace, a social network and SaaS (software as a service) tools. In the agri-value chain a digital market network would allow all the players in the value chain to discover each other via profile pages, connect and exchange information in real time to negotiate deals and manage the transactions and workflows to complete their business. Agri Market Network allows all agri-value chain participants to discover, connect and transact with each other in a real-time, transparent and fair trade driven environment.

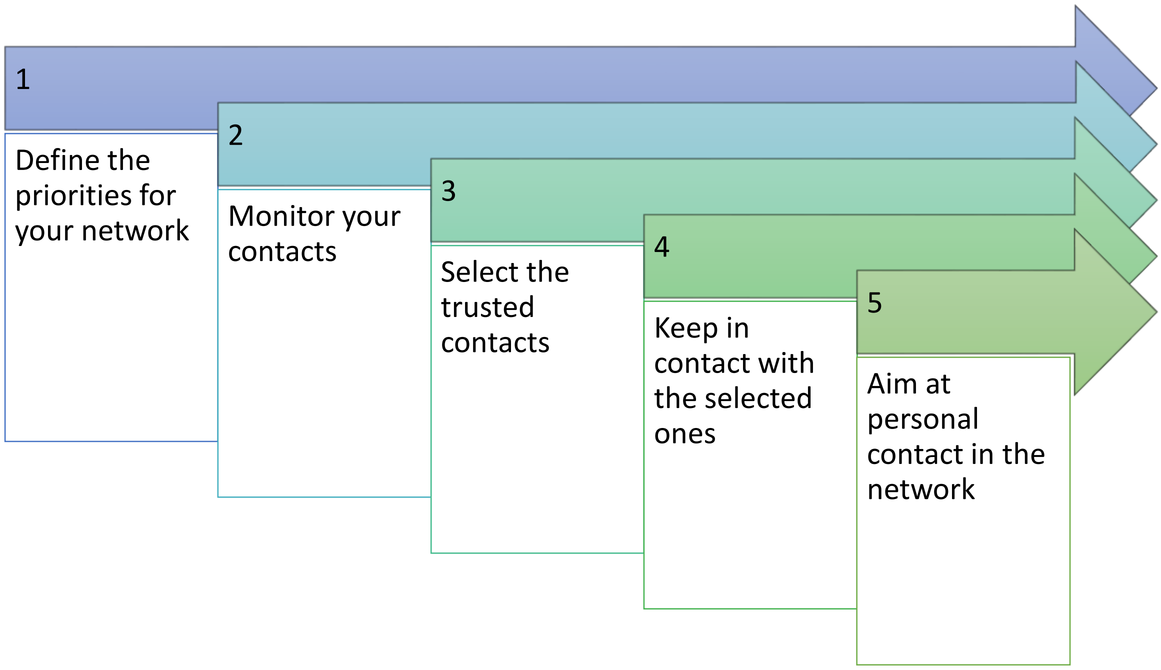
Farmers should act as shareholders, suppliers and also customers of the ecosystem thereby gaining from long term wealth creation as the ecosystem grows. By leveraging block-chain technology, aim should be to make all network transactions transparent for all participants and allow full origin traceability of farm inputs and produce across the supply chain. Combining this with fair trade business principles, one can ensure to deliver the deserved share of value for each player across the value chain.

FPOs can facilitate in making an eco-system to enable any local service enabler (eg. logistics providers, food processors, financial institutions, etc.) to participate in the Market Network and connect with the rest of the network participants to derive and share value across the ecosystem. Once a Market Network participant sign-in, they can manage their profiles, market their services, connect and communicate with other network participants and initiate or complete transactions in a transparent and secure manner.

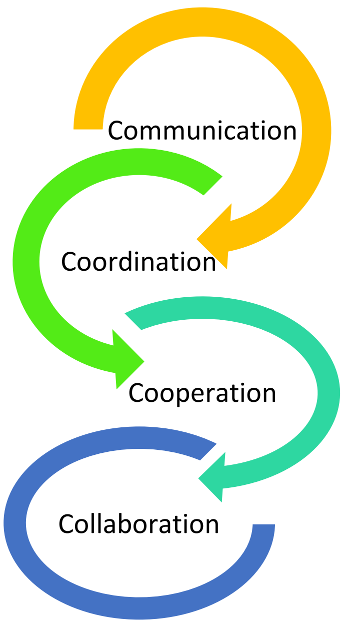
As an agribusiness leader, with whom you would want to network?



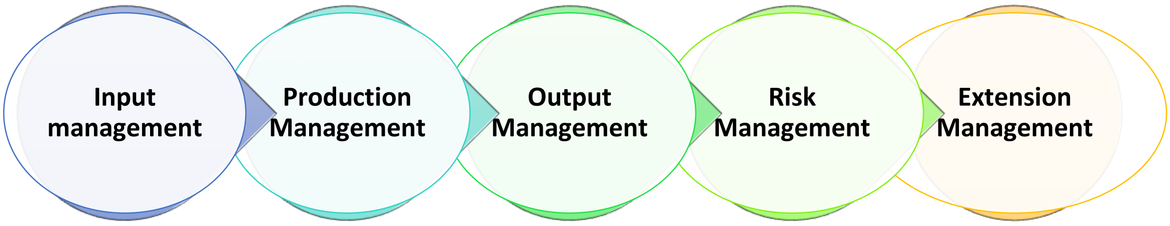
Methodology



Four "C" in networking



Schemes/programs (Indicative) relevant to agriculture and allied activities can be broadly categorised as under:



A) Input management Schemes/Programmes

S. No.	Name of Scheme	Particulars
1	Soil Health Card Scheme (SHC)	State Governments to issue soil health cards to all farmers in the country. The objective is to provide information to farmers on soil nutrient status of their soil and recommendation on appropriate dosage of nutrients to be applied for improving soil health and its fertility. The soil status will be assessed regularly every 2 years and soil health card issued for all land holdings in the country so as to promote balanced and integrated use of plant nutrients
2	Sub-mission on Seed and Planting material (SmSP)	A Centrally Sponsored Scheme for increasing production and SRR; Up-gradation of farm saved seed; Strengthening multiplication chain, promoting new technologies/methodologies, strengthening and modernizing seed production infrastructure, facilitating movement, ensuring availability, facilitating dissemination and effective system for protection of seed /plant varieties
3	Protection of Plant varieties and Farmers' Rights Authority	In order to provide for the establishment of an effective system for protection of plant varieties, the rights of farmers and plant breeders and to encourage the development of new varieties of plants and protection of plant varieties and farmers' rights, authority has been establishment and is located at NASC Complex, Pusa. PPV&FR Authority has established branch offices at different locations
4	Pradhan Mantri Krishi Sinchayee Yojana (PmkSY)	The scheme is operational since 2015 with the motto of *'Har Khet Ko Paani'* for providing end-to-end solutions in irrigation supply chain, viz. water sources, distribution network and farm level applications

S. No.	Name of Scheme	Particulars
5	Watershed Development Component of Pradhan Mantri Krishi Sinchayee Yojana (WDC-PmkSY) (erstwhile IWMP)	Programme for harnessing, conserving and developing degraded natural sources such as soil, vegetative cover and ground water table; prevention of soil run-off; rain water harvesting and recharging of ground water table; increasing the productivity of crops; introduction of multi-cropping and diverse agro-based activities; promoting sustainable livelihoods and increasing the household incomes
6	Sub-mission on Agricultural Mechanization (SMAM)	The financial assistance as cost subsidy to the tune of 25-50% is being provided for the individual ownership of the farm machinery which is also applicable for farm machinery component under RKVY, NFSM, NHM & NMOOP schemes for different categories of Machinery & Equipment. The financial assistance @40% is provided for establishment of farm machinery banks to provide the custom hiring services for the benefits of small and marginal farmers. To promote the mechanization in selected village with low level of farm mechanization, financial assistance @80% of the project cost for farm machinery banks is given to the group of minimum 8 farmers. Hiring assistance for various farm operations carried out through the farm machinery banks set up under financial assistance is also provided @ 50% of the cost of operation/ha limited to Rs. 2000/ha to farmers
7	Sub mission on Plant Protection and Plant Quarantine (SMPPQ)	It is one of the scheme under Green Revolution (Krishonnati Yojana). The primary aim of this Sub Mission is to minimize loss to quality and yield of agricultural crops from the ravages of insect pests, diseases, weeds, nematodes, rodents, etc. and to shield our agricultural bio-security from the incursions and spread of alien species

B) Agriculture Credit

S. No.	Name of Scheme	Particulars
1	Kisan Credit Card (KCC) Scheme	All eligible farmers are provided with hassle free and timely credit for their agricultural operation. Marginal farmers, share croppers, oral lessee and tenant farmers are eligible to be covered under the scheme. The broad objectives of the scheme is too meet the short term credit requirements for cultivation of crops, post-harvest expenses, produce marketing loan, consumption requirements of farmer household, working

S. No.	Name of Scheme	Particulars
		capital for maintenance of farm assets and activities allied to agriculture (like dairy animals, inland fishery etc.), investment credit requirement for agriculture and allied activities (like pump sets, sprayers, dairy animals etc.)
2	Interest Subvention (IS) Scheme	Government of India has been implementing Interest Subvention Scheme since 2006-07. The incentives under the scheme are as under: a. Interest subvention of 2% per annum is provided to banks on their own funds used for short term crop loans up to Rs.3.00 lakh per farmer provided the lending institutions make available short term credit at the ground level at 7% per annum to farmers. b. Farmers are provided with 3% additional interest subvention for the short term crop loan of up to Rs. 3.00 lakh for a maximum period of one year for prompt repayment on or before the due date. Thus, farmers, who promptly repay their crop loans as per the repayment schedule fixed by the banks, are extended loans at an effective interest rate of 4% per annum. c. Government of India has extended the facility of Kisan Credit Card (KCC) to fisheries and animal husbandry farmers to help them meet their working capital needs. The KCC facility will help fisheries and animal husbandry farmers to meet their short term credit requirements of rearing of animals, poultry birds, fish, shrimp, other aquatic organisms and capture of fish. Under Kisan Credit Card (KCC) facility, for the existing KCC holders the credit limit is Rs. 3 lakh including animal husbandry and fisheries activities whereas the KCC holders for animal husbandry and fisheries have the credit limit of Rs. 2 lakh to meet their working capital requirements for animal husbandry and fisheries activities. Under KCC facility, Interest subvention is available for animal husbandry and fisheries farmers @ 2% per annum at the time of disbursal of loan and additional interest subvention @ 3% per annum in case of prompt repayment as Prompt Repayment Incentive. d. In order to meet the working Capital needs of the Cooperatives and Farmer owned milk producer companies, Interest subvention on working capital loan taken from scheduled Commercial Banks / RRBs / Cooperative Banks / Financial Institutions between 1st April

<table>
<tr><th>S. No.</th><th>Name of Scheme</th><th>Particulars</th></tr>
<tr><td></td><td></td><td>2020 and 31st March 2021 by Cooperatives/FPOs for conversion of milk into conserved commodities and other milk products. The scheme has made provisions for providing interest subvention of 2% per annum, with an additional incentive of 2% per annum interest subvention to be given in case of prompt and timely repayment/interest servicing</td></tr>
<tr><td>3</td><td colspan="2">
<u>Agriculture Infrastructure Fund (AIF)</u>:

Announced on 15.05.2020 with an objective of mobilizing medium-long term debt financing facility for investment in viable projects for post-harvest management infrastructure and community farming assets through incentives and financial support in order to improve agriculture infrastructure in the country. Farmers (including FPOs, PACS, Marketing Cooperative Societies, Multipurpose cooperative societies) can undertake setting-up and modernization of key elements of the value chain including post-harvest management projects like:

Post Harvest Management
- Supply chain services including e-marketing platforms
- Warehouses
- Silos
- Pack Houses
- Assaying Units
- Sorting & Grading units
- Cold Chains
- Logistics Facilities
- Primary Processing Centres
- Ripening Chambers

Building Community Farming Assets
- Organic inputs production
- Bio stimulant production units
- Infrastructure for smart & precision agriculture
- Projects identified for providing supply chain infrastructure for clusters of crops including export clusters
- Projects promoted by Central/State/Local Governments or their agencies under PPP for building community farming assets or post harvest management projects

The scheme will be operational from 2020-21 to 2029-30 with a targeted sanctions in four years viz. sanction of Rs. 10,000 crore in the 1st Yr and Rs. 30,000 crore each in next three financial years. Moratorium for repayment under this financing facility may vary subject to minimum of 6 months and maximum of 2 years. The incentives under the scheme are as under:

<table>
<tr><td>Interest Subvention Cost</td><td>⇒ All loans under this financing facility will have interest subvention of 3% per annum up to a limit of Rs. 2 crore.
⇒ Subvention will be available for a maximum period of 7 years.</td></tr>
</table>
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S. No.	Name of Scheme		Particulars
			⇒ In case of loans beyond Rs.2 crore, then interest subvention will be limited up to 2 crore.
		Credit Guarantee Cost	⇒ Credit guarantee coverage will be available for eligible borrowers from this financing facility under Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE) scheme for a loan up to Rs. 2 crore ⇒ Fee for this coverage will be paid by the Government. ⇒ In case of FPOs the credit guarantee may be availed from the facility created under Credit Guarantee Fund proposed to be created under CSS on Formation & promotion of 10000 FPOs of DACFW
		Cap on lending rate	⇒ Lending rate to be decided after due consultation with lending entities & circulated to all stake holders ⇒ 06 Monthly / Annual MCLR + 100 basis point (Floating) subject to max. 9% up to 2 crores ⇒ Banks can decide market driven rates above 2 crore
		Top-Up Scheme	⇒ Any grant/subsidy available under any present/future scheme of Central/State government can be availed for projects under this financing facility ⇒ In cases of capital subsidy such amount shall be considered as promoter's contribution ⇒ However, a minimum of 10% of the project cost shall be mandatory as promoter's contribution
4.	<u>Joint Liability Group (JLG) Scheme</u>: JLG is an informal group comprising 4 to 10 individuals coming together for the purpose of availing bank loan on individual basis or through group mechanism against mutual guarantee. The JLG mode of financing serves as collateral substitute for loans to be provided to the target group i.e. small, marginal, tenant farmers, oral lessees, share croppers, etc.		

C) Production management schemes for higher productivity

S. No.	Name of Scheme	Particulars
1	National Food Security Mission (NFSM)	National Food Security Mission was launched in 2007-08 to increase the production of rice, wheat and pulses through area expansion and productivity enhancement; restoring soil fertility and productivity; creating employment opportunities; and enhancing farm level economy

S. No.	Name of Scheme	Particulars
2	Bringing Green Revolution to Eastern India (BGREI)	The scheme targeted at increasing production & productivity of rice and wheat by adopting latest crop production technologies, promoting cultivation in rice fallow areas to increase cropping intensity and income of the farmers, creating water harvesting structures and efficient utilization of water potential and promoting post-harvest technology and marketing support.
3	National Mission on Oilseeds and Oil Palm (NMOOP	The strategy of the Mission includes increasing Seed Replacement Ratio (SRR) with focus on varietal replacement; increasing irrigation coverage under oilseeds, diversification of area from low yielding cereals crops to oilseeds crops; inter-cropping of oilseeds with cereals/pulses/sugarcane; use of fallow land after paddy/potato cultivation; expansion of cultivation of Oil Palm, increasing availability of quality planting materials of Oil Palm & TPBs, maintenance cost and Intercropping during gestation period of oil palm and TBOs
4	Mission for Integrated Development of Horticulture (MIDH)	A Centrally Sponsored Scheme for the holistic growth of the horticulture sector covering fruits, vegetables, root & tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, cocoa and bamboo.
5	Horticulture Mission for North East and Himalayan States (HMNEH)	The Mission covers entire spectrum of horticulture, right from planting to consumption, with backward & forward linkages. With effect from 2014-15, HMNEH scheme has been subsumed under the Mission for Integrated Development of Horticulture (MIDH).
6	National Livestock Mission (NLM)	Sub-Mission on Fodder and Feed Development: Addressing the problems of scarcity of animal feed resources in order to give a push to the livestock sector making it a competitive enterprise for India and also to harness its export potential. The major objective is to reduce the deficit to nil. Sub-Mission on Livestock Development: Productivity enhancement, entrepreneurship development and employment generation (bankable projects), strengthening of infrastructure of state farms with respect to modernization, automation and biosecurity, conservation of threatened breeds, minor livestock development, rural slaughter houses, fallen animals and livestock insurance. It is further envisaged to expand the scope of innovative projects by formulating new initiatives for small ruminants and poultry

S. No.	Name of Scheme	Particulars
		Sub-Mission on Pig Development in NER: There has been persistent demand from the North Eastern States seeking support for all round development of piggery in the region. GoI would be supporting the State Piggery Farms and import of germplasm so that eventually the masses get the benefit as it is linked to livelihood and contributes in providing protein-rich food in 8 States of the NER Sub-Mission on Skill Development, Technology Transfer and Extension: The extension machinery at field level for livestock activities is very weak. As a result, farmers are not able to adopt the technologies developed by research institutions. The emergence of new technologies and practices require linkages between stakeholders and this sub-mission will enable a wider outreach to the farmers
7	Fishery (Blue revolution)	Central Sector components on Blue Revolution for integrated development and management of fisheries was formulated with a Central outlay of Rs. 3000 crore for five years with following components: a) National Fisheries Development Board (NFDB) and its activities. b) Development of Inland Fisheries and Aquaculture c) Development of Marine Fisheries, Infrastructure and Post-Harvest Operations d) Strengthening of Database & GIS of the Fisheries Sector e) Institutional Arrangement for Fisheries Sector f) Monitoring, Control and Surveillance (MCS) and other need-based Interventions **g)** National Scheme of Welfare of Fishers

D) Output Management Schemes – Post Production

S. No.	Name of Scheme	Particulars
1	Agricultural Marketing: Under the AMI sub-scheme	i. To develop agricultural marketing infrastructure for effectively managing marketable surplus of agriculture

S. No.	Name of Scheme	Particulars
		including horticulture and of allied sectors including dairy, poultry, fishery, livestock and minor forest produce. ii. Promoting innovative and latest technologies and competitive alternative agricultural marketing infrastructure by encouraging private and cooperative sector investments, direct marketing, creation of scientific storage capacity, Integrated value chains (confined up to primary processing stage only) iii. To provide Infrastructure facilities for grading, standardization and quality certification of agricultural produce. iv. To create general awareness and provide training to farmers, entrepreneurs, market functionaries and other stakeholders on various aspects of agricultural marketing including grading, standardization and quality certification v. Promoting innovative and latest technologies and competitive alternative agricultural marketing infrastructure by encouraging private and cooperative sector investments, direct marketing, creation of scientific storage capacity, Integrated value chains (confined up to primary processing stage only) vi. To provide Infrastructure facilities for grading, standardization and quality certification of agricultural produce **vii.** To create general awareness and provide training to farmers, entrepreneurs, market functionaries and other stakeholders on various aspects of agricultural marketing including grading, standardization and quality certification
2	National Agriculture Market (e-NAM)	e-NAM *(Electronic National Agriculture Market)* by Central Government in 2016. Under the scheme, a pan India electronic trading portal (e-NAM) is deployed in selected regulated wholesale markets in States across the country and it is a reformed linked scheme wherein States are required to carry out pre-requisite reforms to enable: a. A Single licence to be valid across the State b. Single point levy of market fee c. Provision for electronic auction as a mode of price discovery

S. No.	Name of Scheme	Particulars
		⇒ FPOs/FPCs can register on e-NAM Portal via website (www.enam.gov.in) or mobile app or providing following details at nearest eNAM mandi: - Name of FPOs/ FPCs - Name, address, email Id and contact no. of authorized person (MD/CEO /Manager) - Bank account Details (Name of Bank, Branch, Account No., IFSC Code) ⇒ FPOs can act as an aggregator for its member and sell through e-trading as one/ multiple lot depending upon requirement FPOs. In case of unsold lots, logistics arrangement are to be made by FPOs ⇒ FPOs can contact vehicle providers for transporting agricultural produce, using "KISAN RATH" mobile app launched by Government of India. To download and install the app please search for "KISAN RATH" on Google Play Store for Android app and App Store for iOS app. ⇒ There is a provision for personalised dashboard and real time information on arrival, quality and price of commodities. ⇒ The entire payment will be credited to bank account of FPO/FPC. ⇒ Post credit of payment disbursal of amount to Individual members farmers has to be done by FPOs ⇒ FPOs/FPCs will be provided access to e-NAM Dashboard to see MIS and Reports related to the Trade executed by FPOs/FPCs ⇒ Union budget 2017-18 made provision to install collection/ sorting/ grading/ packing facilities at their premises
3	Schemes of Small Farmers Agribusiness Consortium (SFAC	⇒ Equity Grant Scheme (EGS): For Farmer Producer Companies (FPCs), SFAC extends support to the equity base by providing matching equity grants to their shareholder members subject to a maximum of Rs. 15 lakh per FPC in two tranche. ⇒ Credit Guarantee Fund (CGF) Scheme: Credit Guarantee Fund has been set up with the primary objective of providing a credit guarantee cover to Eligible Lending Institutions (ELI's) which are providing collateral free loans to FPCs thereby minimising their lending risks. The Credit Guarantee Fund

S. No.	Name of Scheme	Particulars
		offers a cover of 85% to loans extended by banks to FPCs without collateral, up to a maximum of Rs. 1 crore. ⇒ Venture Capital Assistance (VCA) Scheme: Provide financial support to Agribusiness entrepreneurs who are generally first generation entrepreneurs having business skills but their financial resources are limited for setting up units. SFAC would provide venture capital to agribusiness projects by way of soft loan to supplement the financial gap worked out by the sanctioning authority of term loan under Means of Finance with respect to cost of project. ⇒ Delhi Kisan Mandi (KM): SFAC launched Kisan Mandi at Delhi in October 2014, with the objective of linking farmers and FPOs to wholesale and retail buyers in the Fruits and Vegetables (F&V) segment. The Delhi Kisan Mandi has already begun its operations and provides a platform for direct sale of fruits and vegetables to wholesale and retail buyers in Delhi/NCR. ⇒ Procurements: SFAC was nominated as a Central Procurement Agency for pulses and oilseeds in November, 2012. SFAC's unique procurement model utilizes registered Farmer Producer Companies (FPCs) as the field level agency to physically conduct the procurement operations, with technical and logistic support as well as funding provided by SFAC
4	Minimum Support Price (MSP)	MSP is a form of market intervention by the GoI to insure agricultural producers against any sharp fall in farm prices and are announced at the beginning of the sowing season for certain crops on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACP)
5	Price Support Scheme (PSS)	Implemented for procurement of oil seeds, pulses and cotton through Central Nodal Agencies at the MSP declared by the Government. The basic objectives of PSS are to provide remunerative prices to the growers for their produce with a view to encourage higher investment and production and to safeguard the interest of consumers by making available supplies at reasonable prices with low cost of intermediation
6	Market intervention Scheme (MIS)	Market Intervention Scheme is for procurement of agricultural and horticultural commodities which are perishable in nature and are not covered under the Price Support Scheme (PSS). The scheme is implemented at the request of a State/UT government which is

S. No.	Name of Scheme	Particulars
		ready to bear 50% of the loss (25% in case of North-Eastern States), if any, incurred on its implementation
7	Pradhan Mantri Kisan SamPada Yojana	The following schemes are being implemented under PM Kisan SAMPADA Yojana: • Mega Food Parks • Integrated Cold Chain • Value Addition Infrastructure • Creation / Expansion of Food Processing & Preservation Capacities • Infrastructure for Agro-processing Clusters • Creation of Backward and Forward Linkages • Food Safety and Quality Assurance Infrastructure • Human Resources and Institutions

E) Risk Management Schemes for agriculture

S. No.	Name of Scheme	Particulars
1	Pradhan Mantri Fasal Bima Yojna (PMFBY)	• Covers all food grains, oilseeds and annual commercial/horticultural crops • One season one rate – a uniform maximum premium of 2% for kharif, 1.5% for rabi, food & oil seed crops and 5% for annual commercial/horticultural crops • Covers all risks of crop cycle (preventive sowing; risk to standing crops and post-harvest losses) • For losses due to hailstorm, landslide and inundation assessment of yield losses at individual field level • Post-harvest losses for cut & spread crops on field up to 14 days due to cyclone/cyclonic rains and unseasonal rains. • On account payment up to 25% of sum insured due to prevented sowing or mid-season adversity
2	Drought Management Scheme	DAC&FW is mandated to coordinate relief measures necessitated by drought, hailstorm, pest attack, frost/cold wave. Spatial distribution and quantum of rainfall during South-West Monsoon

S. No.	Name of Scheme	Particulars
		(June- September) mainly determines the incidence of drought in the country, as South West Monsoon accounts for more than 70% of annual rainfall
3	Risk management & insurance in animal husbandry and dairying	Providing protection mechanism to the farmers/BPL/SC/ST/ landless livestock rearers against any eventual loss of their indigenous / crossbred milch animals, pack animals and other livestock (Goat, Sheep, Pigs, Rabbit, yak and Mithun) animals due to death

F) Extension Management in Agriculture

S. No.	Name of Scheme	Particulars
1	State Extension Programmes for Extension Reforms Scheme (ATMA Scheme)	The erstwhile Scheme *'Support to State Extension Programmes for Extension Reforms (ATMA)'* being implemented since 2005 has now been included as a component of the Sub-Mission on Agriculture Extension (SMAE) under umbrella scheme "Green Revolution Krishonnati Yojana" with some cost revisions. It is now under implementation in 676 districts of 29 states & 3 UTs of the country. The scheme promotes decentralized farmer driven and farmer accountable extension system through an institutional arrangement for technology dissemination in the form of an Agricultural Technology Management Agency (ATMA) at district level
2	Mass media support to agricultural extension	• Telecast of Krishi Darshan programmes on Doordarshan • Broadcast of Kisan Vani Programme on All India Radio (AIR) • Telecast/Broadcast of spots/jingles advisories under 'Free Commercial Time (FCT)' on AIR & DD • <u>Kisan Call Centers (KCC)</u>: Providing answer to farmers' queries on agriculture & allied sectors through toll free telephone lines. A country wide common eleven digit number '1800-180-1551' has been allocated for KCC • <u>Extension Education Institutes (EEI)</u>: Four Extension Education Institutes namely, Nilokeri (Haryana), Rajendranagar, Hyderabad (Telangana), Anand (Gujarat), Jorhat (Assam) are functioning at the Regional Level

S. No.	Name of Scheme	Particulars
		• Model Training Courses (MTC): Model Training Courses of 8 days duration on thrust areas of Agriculture, Horticulture, Animal Husbandry, Fisheries Extension are supported by the Directorate of Extension (DOE) with the objective of improving the professional competence and upgrading the knowledge and developing technical skills of Subject Matter Specialists/ Extension workers of Agriculture and allied departments of the State Governments • Diploma in Agricultural Extension Services for Input Dealers (DAESI): DAESI is of one year (expanded to 48 weeks) regular course launched in 2003 with an objective to impart education in agriculture and other allied areas to the input dealers so that they can establish linkage to their business with extension services, besides discharging regulatory responsibilities enjoined on them • Mera Gaon Mera Gaurav (ICAR): This programme has been initiated to effectively promote direct interface of scientists of ICAR Institutes and State Agricultural Universities with the farmers to hasten the lab to land process • Mkisan-use of basic mobile telephony: DOA&FW has developed a portal mkisan (mkisan.gov.in), where around 2.5 crore farmers are registered and experts/scientists of different departments like IMD, ICAR, State Government, SAUs send information to farmers in local languages. Weather information about likelihood of rainfall, temperature, etc. enables farmers to make informed decision in choice of seed varieties, decide on timing of sowing and harvesting. With market information, farmers are better informed about markets to sell produce, prevailing market prices and quantity demanded in the market. Thus, they can make informed decisions to sell produce at the right price and right time. This helps reducing distress sales by farmers due to market supply fluctuations • Farmers' portal (www.farmer.gov.in): Farmers' Portal is a one stop shop for farmers where a farmer can get relevant information on range of topics including seeds, fertilizer, pesticides, credit, good practices, dealer network, availability of inputs, agromet advisory, etc. • Development of mobile apps ◦ **Kisan Suvidha App**

S. No.	Name of Scheme	Particulars
		• Pusa Krishi App • Crop Insurance App • AgriMarket App • CCE agri App • Crop Insurance Portal: A portal for all stakeholders including Farmers, States, Insurance Companies, Banks covering both the insurance schemes viz. PMFBY and WBCIS. Provides information to farmers on premium, cut-off dates & company contacts for their crop & location along with insurance premium calculator and creation of database of notified/allotted dynamically
3	Agri-Clinics and Agri-Business Centres (ACABC)	• A Central Sector Scheme, "Establishment of Agri-Clinics and Agri-Business Centres (AC&ABC)" has been under implementation since April, 2002 to supplement the efforts of public extension, support agricultural development and create gainful self-employment opportunities to unemployed youths with qualification in agriculture and allied sectors. • The National Institute of Agricultural Extension Management (MANAGE), Hyderabad is the implementing agency for training component and NABARD is the implementing agency for subsidy component of ACABC scheme. • Credit linked back-ended upfront composite subsidy @ 44% for women, SC/ST and all categories of candidates from North-Eastern and Hill States and 36% in respect of other categories • The subsidy is admissible for loans up to Rs.20 lakh in case of individual and Rs.100 lakh in case of Group Projects (for ventures set up by a group of 5 trained candidates) • The scheme promotes involvement of agri-preneurs trained under the ACABC scheme in providing advisory and extension services to the farmers in agriculture and allied areas through agri-ventures established with financial supports.

G) Programme / Schemes supporting Agri-Allied Activities

S. No.	Name of Scheme	Particulars
1	Rashtriya Krishi Vikas Yojana - Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR)	

- RKVY scheme was initiated in 2007 as an umbrella scheme for ensuring holistic development of agriculture and allied sectors by allowing states to choose their own agriculture and allied sector development activities as per the district/state agriculture plan.
- Till 2013-14, the scheme was implemented as an Additional Central Assistance (ACA) to State Plan Scheme with 100% central assistance.
- It was converted into a Centrally Sponsored Scheme in 2014-15 also with 100% central assistance.
- Since 2015-16, the funding pattern of the scheme has been altered in the ratio of 60:40 between Centre and States (90:10 for North Eastern States and Himalayan States). For Union Territories the funding pattern is 100 % central grant.
- RKVY scheme incentivizes States to increase public investment in Agriculture & allied sectors. Under RKVY, States have been provided flexibility and autonomy for selection, planning approval and execution of projects/programs under the scheme as per their need, priorities and agro-climate requirements. The funds are released to the State Governments/UTs on the basis of projects approved in the State Level Sanctioning Committee Meeting (SLSC) headed by the Chief Secretary of the concerned State, which is the empowered body to approve projects under the scheme. It is for the State Govt. to further implement the scheme in the State as per its requirement in areas which requires focused attention for increasing production and productivity in the State.
- The Cabinet approved (as on 1st November 2017) for continuation of the ongoing Centrally Sponsored Scheme (State Plans) - Rashtriya Krishi Vikas Yojana (RKVY) as **Rashtriya Krishi Vikas Yojana- Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR)** for three years i.e. 2017-18 to 2019-20 with broad objectives of making farming a remunerative economic activity through strengthening the farmer's effort, risk mitigation and promoting agri-business entrepreneurship.
- Under RKVY-RAFTAAR, major focus is on pre & post-harvest infrastructure, besides promoting agri-entrepreneurship and innovations. Funds under RKVY-RAFTAAR would be provided to the States as grant by the Central Government in the following streams.

  I. **Regular RKVY-RAFTAAR -70% of annual outlay will be allocated among States as per criteria under following heads.**

     a. Infrastructure and assets- **50% (of 70%) of regular RKVY-RAFTAAR**

        Outlay - pre-harvest infrastructure (20%), post-harvest infrastructure (30%)

     b. Value addition linked production projects (agribusiness models) that provide assured/ additional income to farmers including Public Private Partnership for

S. No.	Name of Scheme	Particulars
		Integrated Agriculture Development (PPPIAD) projects - **30% (of 70%) of regular RKVY outlay.** c. Flexi funds- **20% (of 70%) of regular RKVY-RAFTAAR** **Outlay -** States can use this fund for supporting any projects as per their local needs preferably for innovative activities in agriculture and allied sectors. II. **RKVY-RAFTAAR special sub-schemes (20% of total annual outlay) -** Based on national priorities as notified by GoI from time to time for development of region and problem specific areas. III. **Innovation and agri-entrepreneur development (10% of annual outlay) -** For encouraging innovation and agri-entrepreneurs through skill development and financial support. It will support incubatees, incubation centers, KVKs, awards, etc. These funds will be with Central Govt. (DAC&FW) including 2% of administrative costs at the Centre. **In case the funds not utilized, it will be diverted to regular RKVY & sub-schemes.** • Till date 16,633 projects have been sanctioned under RKVY out of which 8232 projects have been projects completed by the states of which large number pertain to creation of infrastructure and assets. Geo-tagging initiative is also being taken up using an android app to precisely locate RKVY assets through **Bhuvan Geoportal** by the government **For more details visit https://rkvy.nic.in**
2	Entrepreneurship Development and Employment Generation	• To encourage entrepreneurship in various poultry, sheep, goat and piggery activities and provide capacity building for employment opportunities. Farmers, individual entrepreneurs, NGOs, Self Help Groups (SHGs), Joint Liability Groups (JLGs) etc. are provided credit linked back ended capital subsidy under the scheme. • NABARD is the subsidy channelizing agency under Entrepreneurship Development & Employment Generation (EDEG) component of National Livestock Mission. This includes: ⇒ Poultry Venture Capital Fund (PVCF) ⇒ Integrated Development of Small Ruminants and Rabbit (IDSRR) ⇒ Pig Development (PD) ⇒ Salvaging and Rearing of Male Buffalo Calves (SRMBC) **For more details visit www.dahd.nic.in**

S. No.	Name of Scheme	Particulars
3	Attracting and Retaining Youth in Agriculture (ARYA)	The ARYA project was implemented to empower the Youth in Rural Areas to take up various Agri-enterprises in Agriculture, allied and service sector for sustainable income and gainful employment. The project is running in 25 districts of 25 States through KVKs. **For more details visit https://dfr.icar.gov.in/Extension/ARYA**

H) Sustainable Agriculture Management

S. No.	Name of Scheme	Particulars
1	<u>Paramparagat Krishi Vikas Yojana (PKVY)</u> PKVY is one of the schemes under National Mission for Sustainable Agriculture (NMSA) to promote certified organic cultivation in 2 lakh ha covering 10,000 clusters. Financial assistance of Rs 50,000 per ha per farmer is provided in 3 years to develop the organic cluster of 20 hectares. The scheme objectives are as under: ⇒ To promote eco-friendly concept of cultivation reducing the dependency on agro-chemicals and fertilizers ⇒ To optimally utilize the locally available natural resources for input production ⇒ To promote use of local indigenous traditional techniques for management of plant nutrition and plant protection ⇒ To develop potential markets for organic products target ⇒ Realizing yield potentials in rainfed/hilly areas ⇒ Improving and sustaining soil health ⇒ Reducing cost of cultivation ⇒ Cluster based approach ⇒ Decentralized and participatory approach **For details visit https://pgsindia-ncof.gov.in/pkvy**	
2	<u>Mission Organic Value Chain Development for North Eastern Region (MOVCDNER)</u> Realizing the potential of organic farming in the North Eastern Region of the country, Ministry of Agriculture and Farmers Welfare launched a Central Sector Scheme entitled "Mission Organic Value Chain Development for North Eastern Region" for implementation in the states of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura during 2015-16 to 2017-18. The scheme aims at development of certified organic production	

	in a value chain mode to link growers with consumers and to support the development of entire value chain starting from inputs, seeds, certification, to the creation of facilities for collection, aggregation, processing marketing and brand building initiative. The scheme was approved with an outlay of Rs. 400 crore for three year. The scheme is being implemented in NER states through State Lead Agencies (SLA). **For details visit http://agricoop.nic.in**
3	National Mission for Sustainable Agriculture (NMSA) NSMA is one of the eight Missions outlined under National Action Plan on Climate Change (NAPCC). NMSA as a programmatic intervention made operational from the year 2014-15 aims at making agriculture more productive, sustainable, and remunerative and climate resilient by promoting location specific integrated/composite farming systems; soil and moisture conservation measures; comprehensive soil health management; efficient water management practices and mainstreaming rainfed technologies **For details visit https://nmsa.dac.gov.in**
4	Sub-mission on agroforestry (SMAF) The Sub-Mission on Agroforestry (SMAF) has been made operational from 2016-17 to promote "Har Medh Par Ped" ("Trees on Farm Bund"). The Sub-Mission on Agroforestry is to be operated with funding pattern 60:40 (GoI : State Govts) basis for all States excepting for 8 States of North-Eastern Region & the Hilly States of Himachal Pradesh, Uttarakhand and Jammu & Kashmir where it would be 90:10 fund sharing. For UTs, the assistance will be 100% from GoI. Farmers would be supported financial assistance to the extent of 50% of the actual cost of the interventions (limited to 50% of the estimated cost). The estimated costs are as under:

S.N	Activity	Est. Costs	Remarks
A	Nursery		
i	Small Nursery (0.5 ha)	10	Min. capacity - 25,000 plants/year
ii	Big Nursery (1.0 ha)	16	Min. capacity - 50,000 plants/year
iii	Hi-tech Nursery(2.0 ha)	40	Min. capacity - 100,000 propagules/year
B	Peripheral/Boundary Plantation	Rs. 70/plant	On actual no. of plants planted
C	Low Density Block Plantation		Going for plantation without sacrificing the yield of existing crops/cropping systems
i	Upto 100 trees/ha	Rs. 70/plant	
ii	101 -500 trees/ha	Max. 28000/-	Actual of planting Intensity
C	High Density Block Plantation		

	i	501 – 1000 plants/ha (spacing norm 3.5 m x 3.5 m)	Max. Rs. 30,000	Intermediate blocks /strip plantations /shelterbelt/wind breaks in waste and degraded land not suitable for growing crops
	ii	1001 – 1200 plants/ha (spacing norm 3 m x 3 m)	Max. Rs. 35,000	
	iii	1201 – 1500 plants/ha (spacing norm 2.5 m x 2.5 m)	Max. Rs. 45,000	
	iv	>1500 plants/ha (spacing norm less than 2.5 m)	Max. Rs. 50,000	

For more details visit https://nmsa.dac.gov.in/pdfdoc/Agroforestory_Guidelines

5 Agri-market infrastructure Fund (AMIF)

AMIF with a corpus of Rs. 2,000 crores. There are about 22,000 rural huts in the country which are reported to be not having adequate market infrastructure. These rural huts are mostly under the panchayats at village level. For development of these rural huts into grameen agricultural markets, NABARD proposed to create Agri-market Infrastructure Fund of Rs. 2,000 crores by mobilizing funds from the market and give to state governments as loan at subsidized interest rate. Since these proposed grameen agriculture market will come up near the farm gate/villages, the farmers will have easy access to the market and the aggregated agricultural produce can be moved to nearest APMCs or institutional buyers can also purchase the produce from these grameen huts.

MGNREGA under their rural infrastructure scheme have provision to set up village haat at the village or block level. Development of such permanent market centres will help rural farmers to promote marketing of their produce and boost socio-economic development. The basic infrastructure/facilities provided by MGNREGA include:

- ⇒ open raised platforms & covered platform
- ⇒ toilets (separate for women and men)
- ⇒ drinking water facility
- ⇒ drains
- ⇒ brick/stone soling in the moving space
- ⇒ garbage pits at corner
- ⇒ office block
- ⇒ storage (small size)
- ⇒ boundary wall/fence with two gates one for incoming and second for outgoing
- ⇒ parking space
- ⇒ drinking water facilities for cattle
- ⇒ In addition to the above basic facilities, small assaying lab/ equipment, weighing scale, IT facilities can also be provided.

	These grameen agricultural markets can also be integrated with e-NAM platform. Provision for value addition can also be made. Setting up of grameen agricultural market near farm gate may also reduce the loss and benefit both the farmers and buyers. **For more details visit https://dmi.gov.in/Documents/SchemeGuidelines**
6	Long Term Irrigation Fund (LTIF) In Union Budget for 2016-17, a path breaking announcement made in the irrigation sector for setting up of Long Term Irrigation Fund (LTIF) in NABARD with an initial corpus of Rs 20,000 crore for funding of irrigation projects which were languishing incomplete for want of funds for many years. Accordingly, 99 projects were identified under LTIF. **For details visit https://www.nabard.org**
7	Micro irrigation Fund In Union Budget of 2017-18, with a view to provide impetus to micro irrigation in the country, the government announced creation of a dedicated Micro Irrigation Fund to be instituted with NABARD with an initial corpus of Rs. 5000 crore for encouraging public and private investments in modern irrigation methods such as sprinkler and drip irrigation and offering support for expanding coverage of Micro Irrigation by encouraging the States to avail this credit at a lower interest rate. The Scheme also aims to encourage water use enhancing practices to realize the objective of 'Per Drop More Crop' interventions. The corpus fund can be utilized by the States in any of the following manner so as to achieve the objective of the PMKSY Mission: ⇒ To provide extra budgetary support to the states for meeting state share, top up subsidy if any, innovative projects, area expansion and project mode implementation in irrigation commands. ⇒ The states were supposed to access the loan at about 8% interest rate (interest rate for raising fund from market and NABARD margin/service charges. The loan is to be repaid in 7 years with an initial grace of 3 years. **For more details visit: https://pmksy.gov.in/MicroIrrigation/Archive/Guideline_MIF**
8	Fisheries and Aquaculture Infrastructure Development Fund (FIDF) The Union Government in its Budget 2018 has set aside Rs.8000 crore for setting up of a dedicated Fisheries and Aquaculture Infrastructure Development Fund (FIDF). FIDF will provide concessional finance to the State Governments/Union Territories, State entities, cooperatives, individual entrepreneurs, etc. for development of fisheries infrastructure facilities both in marine and inland fisheries sector. The infrastructure facilities to be funded under the FIDF will broadly cover development of fishing harbours/ fish landing centres, fish seed farms, fish feed mills/plants, cage culture in reservoirs, mari-culture activities, introduction of deep sea fishing vessels, setting up of disease diagnostic and aquatic quarantine facilities, creation of cold chain infrastructure facilities such as ice plants, cold storage, fish transport facilities, fish processing units, fish markets etc. The fund has the potential to benefit over 4 million marine and inland fishers especially women, SHGs, weaker

	sections, due to availability of modern infrastructure and added value of produce. The fund is expected to: ⇒ fill the large infrastructure gaps in fisheries sector ⇒ create employment opportunity to the rural population in fishing and allied activities ⇒ contributes towards enhancement of fish production and productivity ⇒ offers manifold benefits ⇒ fulfil the requirements of tapping the full fisheries potential in the country The fund would be created in collaboration with NABARD, NCDC and Specified commercial banks. National Fisheries Development Board (NFDB) will be the Nodal Implementing Agency for overall coordination of the FIDF activities. **For more details visit http://mmd.nfdb.gov.in/FIDF-Guidelines**
9	Dairy Processing & Infrastructure Development Fund (DIDF) Consequent to the Union Budget 2017-18 announcement, Dairy Processing & Infrastructure Development Fund has been set up as a corpus of Rs 8004 crore with NABARD. Out of Rs 10881 crore of financial outlay for project components of DIDF, Rs 8004 crore shall be loan from NABARD to NDDB/NCDC, Rs 2001 crore shall be end borrowers contribution, Rs 12 crore would be NDDB's share and Rs 864 crore shall be contributed by DADF towards interest subvention. NABARD shall disburse Rs 2004 Cr, Rs 3006 Cr and Rs 2994 Cr during the year 2017-18, 2018-19 and 2019-20 respectively. Allocation of Rs 864 Crore for meeting interest subvention will be made over a period of 12 years from 2017-18 to 2028-29. The project will focus on building an efficient milk procurement system by setting up of processing and chilling infrastructure & installation of electronic milk adulteration testing equipment at village level. With this investment, 95,00,000 farmers in about 50,000 villages would be benefitted. Additional Milk processing capacity of 126 lakh litre per day, milk drying capacity of 210 MT per day, milk chilling capacity of 140 lakh litre per day, installation of 28000 Bulk Milk Coolers (BMCs) along with electronic milk adulteration testing equipment and value added products manufacturing capacity of 59.78 lakh litre per day of milk equivalent shall be created. **For details visit https://nabard.org**
10	Animal Husbandry Infrastructure Development Fund (AHIDF) AHIDF with a corpus of Rs. 15,000 crore was setup for incentivizing investments by individual entrepreneurs, private companies, farmer producer organizations (FPOs) and Section-8 companies under the Atma Nirbhar Bharat Abhiyaan to establish: ⇒ Dairy processing and product diversification infrastructure ⇒ Meat processing and product diversification infrastructure ⇒ Animal feed plant

a) Dairy Processing: Eligible entities (EEs) can establish new units and strengthen existing dairy processing units with quality and hygienic milk processing facilities, packaging facilities or any other activities related to dairy processing.

b) Value added product manufacturing: EEs can also avail loan for establishment of new units and strengthening on existing manufacturing units for value addition of the milk products viz. Ice Cream unit, Cheese manufacturing unit, Ultra High Temperature (UHT) Milk processing unit with tetra packaging facilities, Flavoured Milk manufacturing unit, Milk Powder manufacturing unit, Whey powder manufacturing unit,

c) Meat processing and Value addition of facilities:

⇒ Establishment of new meat processing unit and strengthening of existing rural meat processing facilities for sheep/goat/ poultry can be processed.

⇒ Establishment of new meat processing unit and strengthening of existing meat processing unit in semi urban areas for sheep/goat/ poultry can be processed.

⇒ Establishment of new meat processing unit and strengthening of existing meat processing unit in urban areas for sheep/goat/ poultry can be processed.

⇒ Large scale integrated meat processing facilities/ plant/ unit.

⇒ Export oriented integrated buffalo meat processing facilities/ plant/ unit

⇒ Integrated Poultry meat processing facilities/unit

⇒ Pork processing facilities/unit

⇒ Value Added Products: Meat products like Sausage, nuggets, ham, salami, bacon making or any other value addition unit can also be established as an integral part of the meat processing unit. Standalone proposals for setting up of meat value addition unit can also be proposed under AHIDF in the existing unit or new units.

⇒ The project cost of each meat processing plant should compulsorily include Effluent Treatment Plant (ETP), Meat Microbiological Testing Laboratory, Residue Testing laboratory, Cold storage for holding the offals, skin/ hide processing areas and their preservation and refrigeration facilities for holding the chilled products and value added products for minimum of 24 hours.

d) EE can also avail benefit for establishment of Animal Feed manufacturing and strengthening of existing units/ plant of the following categories:

⇒ Establishment of Mini, Medium and Large Animal Feed Plant

⇒ Total Mixed Ration Block Making Unit

⇒ By pass protein unit

⇒ Mineral Mixture Plant

⇒ Enrich Silage making unit

⇒ Animal Feed Testing Laboratory to be attached with the Medium to Large feed plant or the EE can avail benefit for establishment of Animal Feed Testing Laboratory in the existing Feed Plant to ensure quality feed.

Benefits under the scheme:

- ⇒ The beneficiaries are to contribute a minimum of 10% margin money as investment. The balance 90% would be the loan component to be made available by scheduled banks.
- ⇒ Government of India will provide 3% interest subvention to eligible beneficiaries.
- ⇒ There will be 2 years moratorium period for principal loan amount and 6 years repayment period thereafter.
- ⇒ From the Credit Guarantee Fund, Credit guarantee would be provided to those sanctioned projects which are covered under MSME defined ceilings. Guarantee Coverage would be up to 25% of Credit facility of borrower.

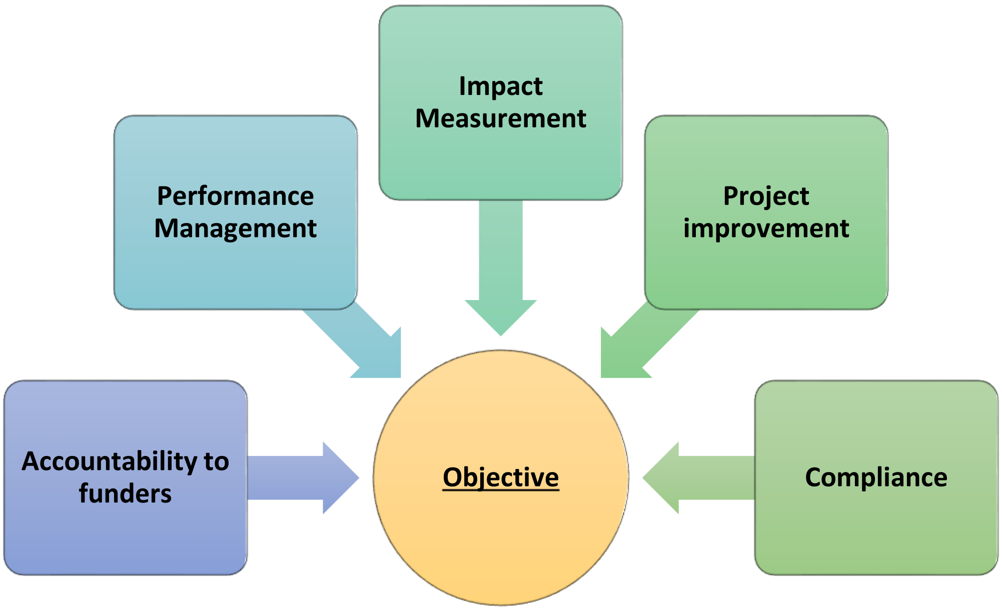
The beneficiaries intending to invest for establishing dairy and meat processing and value addition infrastructure or strengthening of the existing infrastructure can apply for loan in the scheduled bank through ***"Udyami Mitra"*** portal of SIDBI.

For more details visit www.dahd.nic.in

Session VI	Framework of Institutional Monitoring Mechanism – Role and Responsibilities of various Stakeholders

Institutional Monitoring

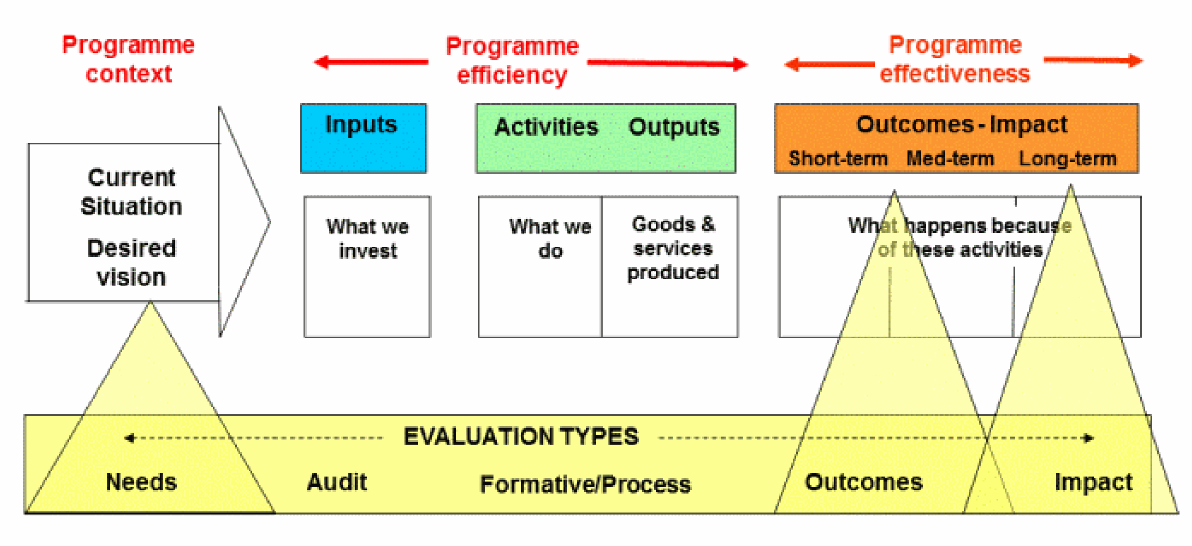
Institutional Monitoring can be defined as a systematic collection and analysis of information of an ongoing project or business activity. The important purposes of monitoring under any developmental programme are as under:



Primarily, the monitoring exercise is aimed at improving the **efficiency and effectiveness** of implementation of a programme.

Efficiency	Effectiveness
Efficiency is defined as the ability to accomplish something with the least amount of wasted time, money, and effort or competency in performance	**Effectiveness is** defined as the degree to which something **is** successful in producing a desired result; success.
Efficiency measures the outputs -- qualitative and quantitative -- in relation to the inputs.	**Effectiveness** is a measure of the extent to which an programme was able to achieve the specific objectives set under the program
Funding agency will like to monitor: • Performance of Implementing Agencies in timely shortlisting of CBBOs	Funding agency will like to monitor:

Efficiency	Effectiveness
• Performance of CBBOs in timely undertaking the baseline surveys, feasibility studies, business plan formulation, formation & registration of FPO and the progress in implementation of business plan • Performance of FPOs in undertaking business activities • Timely completion of physical & financial targets would be indicative of overall programme efficiency	• Increase in the crop productivity levels in the identified cluster through FPO approach • Crop/Activity diversification as a resultant of project interventions by FPOs • Increase in the income levels of farmers producers engaged with the FPO • Level of participation of the farmers in the product supply & value chains • Higher the increase in income levels and production levels higher would be the effectiveness of the programme



(https://learningforsustainability.net/evaluation)

Monitoring Mechanism under the Scheme

Considering the significance of effective implementation and better monitoring mechanism for success of a scheme, a well-structured, Three-Tier Institutionalized monitoring mechanism has been laid out under the scheme. The framework comprise of instituting Monitoring Committees at National, State and District level for monitoring the progress under the scheme against the set objectives.

Monitoring Committees

National Level Project Management Advisory & Fund Sanctioning Committee (N-PMAFSC)
(Secretary, DAC&FW as Chairperson and JS (Mkt.), DAC&FW as Mem.Sec)

State Level Consultative Committee (SLCC)
(Addl. CS/Sec. Agri./Agri. Mkt. as Chairperson & Rep. from NABARD as Mem. Sec.)

District Level Monitoring Committee (D-MC)
(With District Collector as Chairperson and DDM, NABARD as Mem. Sec.)

National Level Project Management Advisory & Fund Sanctioning Committee (N-PMAFSC)

To cohesively coordinate the Implementing Agencies, activities and to decide the policy guidelines in the matter for better outcome of the Scheme, there is a National Level Project Management Advisory and Fund Sanctioning Committee (N-PMAFSC) constituted in DAC&FW. The composition of the Committee shall be as under-

S.N.	PARTICULAR OF THE MEMBERS	DESIGNATION
1	**Secretary, DAC&FW**	**Chairperson**
2	Addl. Secretary (Marketing), DAC&FW	Member
3	AS&FA, DAC&FW	Member
4	JS (MIDH, RKVY, Co-operation), DAC&FW	Member
5	JS (MoFPI), as nominated by its Secretary	Member
6	JS (DoAHD), as nominated by its Secretary	Member
7	JS (Deptt. of Fisheries), as nominated by its Secretary	Member
8	JS (MoRD), as nominated by its Secretary	Member
9	JS (DoNER),as nominated by its Secretary	Member
10	JS (Tribal Affairs) nominated by Secretary	Member
11	Managing Director (SFAC)	Member
12	Managing Director (NCDC)	Member
13	NABARD's representative not below the rank of CGM	Member
14	**JS (Marketing), DAC&FW**	**Member Secretary**

⇒ The Chairperson has the flexibility to co-opt any additional member(s) including from any other Ministry /Department, States or expert(s) to assist the functioning of the Committee.

⇒ In case of co-opted Members(s) from States, it shall be on rotation basis.

⇒ Two prominent farmer members or representatives of FPOs are also to be nominated as member of the Committee by Government of India.

⇒ Directorate of Marketing & Inspection, an attached office of DAC&FW will provide the necessary secretarial services and assistance including technical inputs to N-PMAFSC in coordination, scrutiny and sanction of proposals and will coordinate with NPMA, which shall also assist N-PMAFSC with inputs on policy formulation, coordination among implementing agencies.

Duties & Responsibilities of N-PMAFSC

- **Coordinate** with all the Implementing Agencies, State Level Consultative Committee and District level Monitoring Committee (D-MC) for smooth implementation.
- It will **monitor the progress** under the scheme through stakeholder engagements
- It will **allocate the produce clusters/districts/States to Implementing Agencies** for formation and promotion of FPOs
- It will **undertake scrutiny** of Action Plan of Implementing Agencies (IAs), consider recommendation of release of fund to IAs
- It will **provide policy inputs** to DAC&FW for need based modification in the Scheme
- It will **provide aid and advice** to Implementing Agencies as may be required for smooth functioning of the scheme.
- Based on suggestions received from various Implementing Agencies, other Ministries, States and experience/need, **N-PMAFSC may examine and recommend revision** of the minimum membership norm per FPO to DAC&FW.
- It may **seek** detailed input and analysis as may be required from time to time from NPMA and also seek assistance of DMI in verification etc.

State Level Consultative Committee (SLCC)

Considering the significance and strategic roles of the State Government and its machinery in synergizing the efforts through its various programs, for undertaking a periodic review of the progress under the scheme, a State Level Consultative Committee called SLCC will be constituted. The Composition of the SLCC would be as under:

S.N.	PARTICULAR OF THE MEMBERS	DESIGNATION
1	**Addl. Chief Secy/Secy. I/c Agriculture/ Agriculture Marketing**	**Chairperson**
2	Secretary of Ministry/Department, Horticulture	Member
3	Secretary of Ministry/Departments, Animal Husbandry & Fisheries	Member
4	Secretary of Ministry/Departments, Co-operation	Member
5	Secretary of Ministry/Departments, Marketing	Member
6	Secretary of Ministry/Department, Rural Development	Member
7	Secretary of Ministry/Department, Panchayati Raj	Member
8	Representative of SFAC	Member
9	Representative of NCDC	Member
10	**Representative of NABARD**	**Member-Secretary**
11	Convener, SLBC	Members
12	Two Experts from Agriculture Universities/Institutions	Members

- Representative of NABARD will be Member Secretary to convene and coordinate the meetings of SLCC, however, in State (s) where there is presence of NCDC and State level SFAC and they are playing lead and significant roles in formation and promotion of FPOs, their representatives may be Member Secretary in place of NABARD. In case of any dispute, decision of N-PMAFSC in this regard shall be final.

- In State/UT where there is no post of ACS/PS, Secretary (In-charge of Agriculture) will be the Chairperson and members may be Directors of line Departments

- Chairman may co-opt additional Member(s) as per requirement and In-charge of DMI of respective State/UT may be invited in the meeting as special invitee

- Two prominent farmer members or representatives of FPOs in the State/UT are also to be nominated as member of the Committee

- State Governments/ UT Administration will issue order for formation of State Level Consultative Committee

Duties & Responsibilities of SLCC

- It will **regularly monitor and review the progress** of FPO development and functioning through regular meetings
- It will **work out a strategy for all stakeholders** including the IAs & Other institutions engaged in formation and promotion of FPOs including State Government machinery engaged in agricultural and rural development **to work synergistically to achieve the set objective under the Scheme**
- The Committee **will deliberate and identify the constraints** in implementation of scheme. The same to be communicated to DAC&FW and N-PMAFSC for taking appropriate policy decision, if so required
- It will **direct respective State Government departments** to help in identification of produce clusters for recommendation to N-PMAFSC and assist in mobilization of farmers to form the FPOs
- It will **formulate an effective extension mechanism** to be undertaken through existing State extension machinery down the line
- **Most importantly, the committee will coordinate with respective State Government departments** to facilitate FPOs in getting the license/registration for inputs, shops/spaces in the mandis and also availing the assistance for development of various infrastructures relating to production and postproduction activities
- **The Committee will also ensure** that FPOs be associated /involved in all the farmers' centric schemes of the Government to the extent feasible
- It **will facilitate in making available** land at appropriate place for development of common facility centre and also custom hiring centre.
- It **will also strategize and prioritize** for linking of Common Facility Centre (CFC) with e-NAM or with any other e-trading platform.

Thus, it can be observed from above that the SLCC's role is much larger than just to acting as a Monitoring Committee under the scheme.

District Level Monitoring Committee (D-MC)

D-MC has been assigned the role of a coordinator at the district/cluster level as effective coordination among the stakeholders is critical to the success of the scheme. The Composition of the District Level Monitoring Committee would be as under:

S.N.	PARTICULAR OF THE MEMBERS	DESIGNATION
1	**District Collector**	**Chairperson**
2	CEO , District Council	Member*
3	District level officer of Agriculture Department	Member
4	District level officer of Horticulture Department	Member
5	District level officer of Animal Husbandry Department	Member
6	District level officer of Fisheries Department	Member
7	District level officer of Marketing Department	Member
8	District level officer of Cooperation Department	Member
9	**DDM , NABARD**	**Member-Secretary**
10	Lead District Manager (LDM)	Member
11	Experts from KVK, ATMA, Local producers' Organisations (3 No.)	Members
12	Representative of NCDC/SFAC , if available	Members

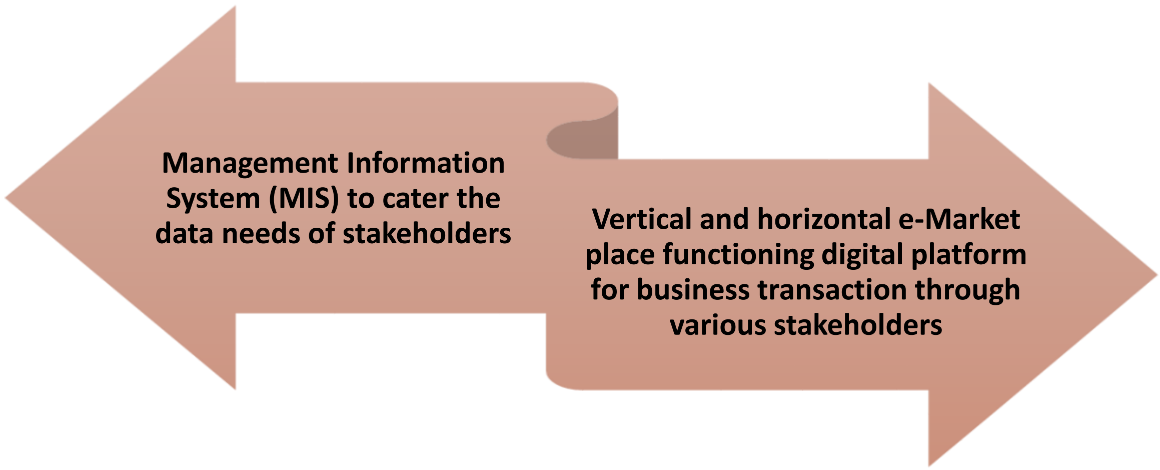
- The District level Committee will be chaired by CEO, Zila Parishad in State(s) where development/agriculture related work is the responsibility of Zila Parishad
- Chairperson may co-opt additional Member(s) including the representative of CBBOs/ PACs as per requirement
- The implementation of the Scheme **would also be reviewed by District Development Coordination & Monitoring Committee (DISHA) in their periodic reviews**
- State Government/UT Administration will issue advisories to Districts for formation of District Level Monitoring Committee

Duties & Responsibilities of D-MC

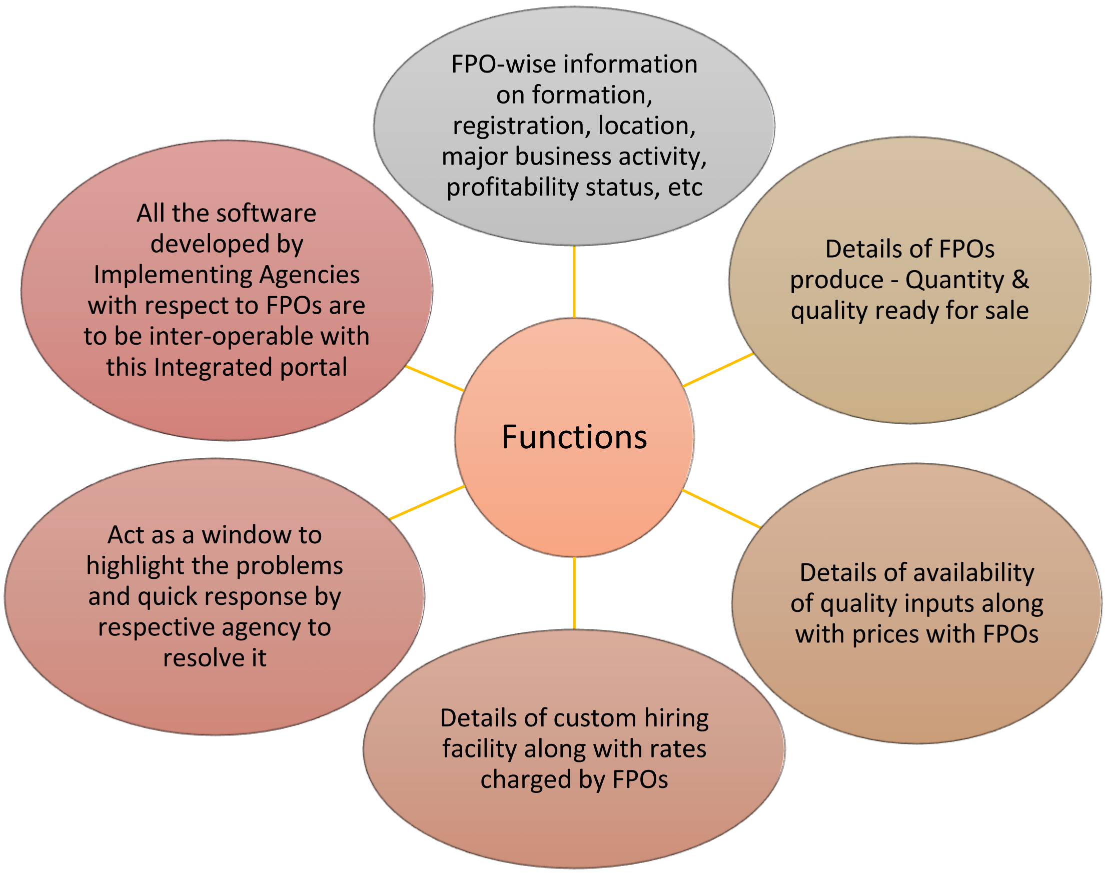
- It will closely monitor and review the progress of FPO development and functioning by holding its regular meetings
- It will suggest the potential produce clusters in the district (where FPOs can be formed & promoted) to N-PMAFSC and will also assist Implementing agencies, CBBOs and other stakeholders in identification of cluster(s) and activities and also in mobilization of farmers
- It will resolve the financial constraints of FPOs through the forum of District Level Bankers' Committee and provide feedback to N-PMAFSC
- It will identify the constraints in implementation of scheme at the ground level and communicate the same to SLCC for further taking up the matter with DAC&FW and N-PMAFSC for appropriate policy decision

Development of an Integrated Portal under the Scheme

NPMA in consultation with DAC&FW will get configured an "Integrated portal" which will also act as National Level Data Repository. The portal will serve as an e-National Platform for FPOs. The portal will have basically two components:

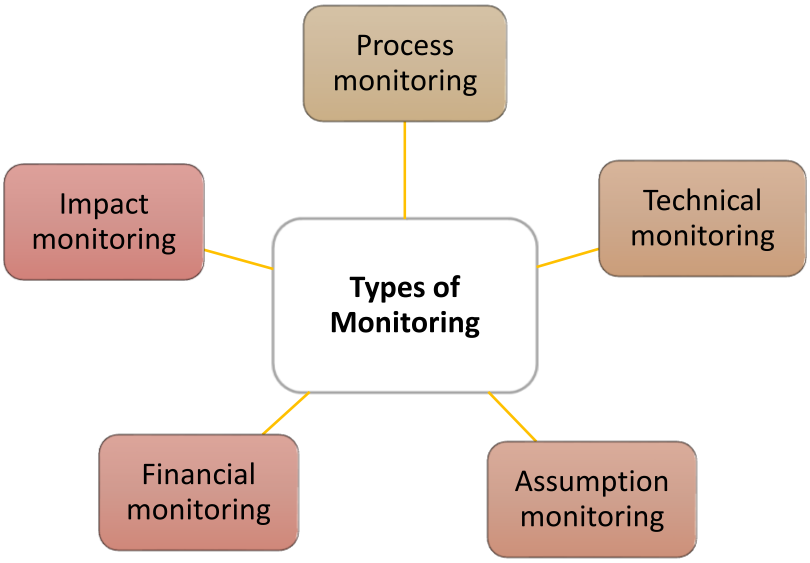


The portal will facilitate data tracking up to FPO level. The integrated portal will be developed through outsourcing or through NIC by SFAC.



Monitoring Process

Monitoring process under the scheme would involve systematic and routine collection of data during project implementation for the purpose of establishing whether an intervention is moving towards the set objectives or programme goals. There are several types of monitoring which are indicated below:



Process monitoring / physical progress monitoring: In process monitoring, routine data is collected and analysed in order to establish whether the programme tasks and activities are leading towards the intended results. It authenticates the progress of the programme towards the intended results. This kind of monitoring measures the inputs, activities and outputs. In other words, process monitoring answers the questions "what has been done so far, where, when and how has it been done?" Most of the data collected during project implementation usually serves this kind of monitoring
Technical monitoring: Technical Monitoring involves assessing the strategy that is being used in programme implementation to establish whether it is achieving the required results. It involves the technical aspects of the project such as the activities to be conducted. This may prompt a change of strategy where the project might opt for household distribution of bottled chlorine.
Assumption Monitoring: Any programme has its working assumptions which have to be clearly outlined in the programme log frame. These assumptions are those factors which might determine programme success or failure, but which the programme has no control over.
Financial Monitoring: Financial monitoring simply refers to monitoring program expenditure and comparing them with the budgets prepared at the planning stage. The use of funds at the disposal of a programme is crucial for ensuring there are no excesses or wastages. Financial monitoring is

also important for accountability and reporting purposes, as well as for measuring financial efficiency
Impact monitoring: It is a type of monitoring which continually assesses the impact of the project activities to the target population. Indeed, impacts are usually the long term effects of a project. However, for programmes with a long life span there emerges a need for measuring impact change in order show whether the general conditions of the intended beneficiaries are improving or otherwise

Source: https://impact-evaluation.net

At every level (FPO, CBBO, IA, D-MC, SLCC & N-PMAFSC), suitable monitoring formats for submission of data need to be evolved. Broadly, the returns should generate the following information at different level:

N-PMAFSC Level

S. No.	Parameters	Remarks
1	Periodic information on State-wise CBBOs shortlisted by the Implementing Agencies under the scheme	
2	Periodic information on number & nature of Produce Cluster identified by CBBOs/Implementing Agencies (Agency-wise/State-wise)	
3	Periodic information on number FPOs registered under Cooperative Acts & Companies Act by CBBOs/ Implementing Agencies (Agency-wise State-wise)	
4	Status of FPOs formed in Aspirational Districts	
5	Status of federating FPOs at District, State & National Level	
6	Sanction & releases to IAs and compliances thereof	
7	Performance under Equity Grant & Credit Guarantee Scheme	
8	Information on bottlenecks in scheme implementation from IAs, SLCC, D-MC, etc. required for policy fine-tuning, if any	
9	Program evaluation for ascertaining the achievement of set objectives	
Note: The above are only indicative/suggestive in nature and need based parameters can be added		

SLCC Level

S. No.	Parameters	Remarks
1	Periodic information on CBBOs shortlisted by the Implementing Agencies within the State under the scheme	
2	Periodic information on number & nature of Produce Cluster identified by CBBOs/Implementing Agencies within the State. Will also like to review the role played by State Government departments in identification of produce clusters for giving further directions.	
3	Periodic information on number FPOs registered under Cooperative Acts & Companies Act by CBBOs/ Implementing Agencies within the State. Will also like to review the facilitation role of State Government Departments in FPOs	

	getting license/registration for inputs, shops/spaces in the mandis, land allocation for development of common facility centres (CFC), linking of CFC with e-NAM and also their other convergence role as advocated under the scheme with State Sponsored programmes	
4	Status of FPOs formed in Aspirational Districts of the State	
5	Status of federating FPOs at District & State Level	
6	Sanction & releases to IAs and compliances thereof	
7	Performance under Equity Grant & Credit Guarantee Scheme	
8	Information on bottlenecks in scheme implementation from IAs & D-MC, etc. required for policy fine-tuning, if any	
9	Program evaluation for ascertaining the achievement of set objectives	
Note: The above are only indicative/suggestive in nature and need based parameters can be added		

D-MC Level

S. No.	Parameters	Remarks
1	Periodic information on CBBOs shortlisted by the Implementing Agencies within the State under the scheme	
2	Periodic information on number & nature of Produce Cluster identified by CBBOs/Implementing Agencies within the State. Will also like to review the role played by State Government departments in identification of produce clusters for giving further directions.	
3	Periodic information on number FPOs registered under Cooperative Acts & Companies Act by CBBOs/ Implementing Agencies within the State. Will also like to review the facilitation role of State Government Departments in FPOs getting license/registration for inputs, shops/spaces in the mandis, land allocation for development of common facility centres (CFC), linking of CFC with e-NAM and also their other convergence role as advocated under the scheme with State Sponsored programmes	
4	Status of FPOs formed in Aspirational Districts of the State	
5	Status of federating FPOs at District & State Level	
6	Sanction & releases to IAs and compliances thereof	
7	Performance under Equity Grant & Credit Guarantee Scheme	
8	Information on bottlenecks in scheme implementation from IAs & D-MC, etc. required for policy fine-tuning, if any	
9	Program evaluation for ascertaining the achievement of set objectives	
Note: The above are only indicative/suggestive in nature and need based parameters can be added		

Field Level Monitoring

Field level monitoring involves collection of actual data at the field level and corroborating the same with the data provided by the CBBO/FPO. It also involves collection of 'elaborate' data from the field by interacting with the farmers/producers and other stake holders. Specific monitoring format could be evolved as per the requirement of the monitoring

Agency. For the convenience and understanding of the readers, indicative monitoring format and grading tools for monitoring and rating of FPOs are given below. The performance of CBBOs and that of FPOs should be comprehensively reviewed by the implementing Agencies periodically. FPOs are expected to manage business activities professionally and generate income on a sustainable basis. Only the CBBOs & FPOs which have progressed satisfactorily will be eligible for support under the scheme *(The timelines along with targets have been clearly elaborated in the scheme)*. During the field visit following points can be ascertained from the records maintained by the CBBO/FPO and also through interaction with the members of the FPOs.

- Information on the number of shareholder membership (should not be less than 300 in plain areas and 100 in north eastern and hilly areas). However, efforts should be made by the CBBO to achieve an average membership size of 500 farmers in plain areas and 200 farmers in hilly and north eastern areas to make them sizable for economic sustainability and profitability.
- Information on whether, the FPO gave special focus to include small, marginal and women farmers/ SHGs, SC/ST farmers and other economically weaker categories etc. as members to make FPO effective and inclusive.
- Whether, minimum 50 percent of the shareholder members were availing at least one of the services provided by the FPO
- Whether, the FPO has the necessary business related licenses, arranged/ tied up other pre-requisites/ logistics for businesses, as per the Business Plan.
- Status in respect of audited balance sheet (previous year) and the regularity in submission of statutory / non-statutory compliances

INDICATIVE FORMAT FOR CONDUCTING FIELD MONITORING VISIT OF FPO

Date of Visit: **Date of last monitoring visit:**

1. Name of the Farmer Producer Organization:

2. Location: Village - **Block -** **District-** **State-**

3. Date of Sanction of proposal:

4. Date of Formation/ incorporation: **Villages /GP covered:**

5. Registration no. with date:

6. Registered under (Companies / Cooperative Act):

7. Membership:

First Year		Second Year		Third Year		Fourth Year		Fifth Year	
Total Members	Shareholder Members	Total Members	Shareholder Members	Total Members	Shareholder Members	Total Members	Shareholder Members	Total Members	Shareholder Members

8. Equity Mobilised (Total): Rs. **Per Shareholder Contribution: Rs.**
(Periodicity of collection of equity: Monthly/Quarterly/ Half-yearly / yearly / not fixed)

9. Share certificates issued (Yes/No):

10. Composition of Board (Elected/Nominated):

11. Bye-laws / MoA / AoA (Prepared / not prepared):

12. Types of Records / Registers Maintained
(Membership Register, Equity Mobilisation Register, Meeting Register, Stock Register, Sales register, etc.)

13. CEO details -

Name of the CEO	Qualification	Date of Appointment	Training Received	Reasons for non receipt of training

14. Suitability of CEO:

15. Vision of CEO / Role clarity:

16. If CEO, not appointed reasons therefor:

17. Details of Board of Directors / Governing Council:

Name of BOD	Qualifications	Training Received	Reasons for non-receipt of training

18. Views of BoDs/Governing Council on roles & responsibilities:

19. Meeting of Board / Governing Council, etc.:

Financial Year	No. of Meetings to be conducted as per statute	No. of Meetings actually conducted	Reasons for less number of meetings, if any

20. FPO Promotion - Financial Achievement (as per attached sheet):

21. Status of Business Plan, Action plan for 3 years:

22. Various Licenses & Certificates obtained, along with dates:

23. Linkage with Government Schemes / Corporates, if any:

24. Types of Businesses (Rs. lakh)

Types	Quantity	Seasons	Annual Sale business	Turn over
Input Supply				
Aggregation				
Value addition & Marketing				
Advisory				
Consultancy				
Custom hiring				
Others				

25. Reasons for not staring business activities (if applicable):

26. Insurance cover of the premises & stock:

27. Marketing and Storage arrangement for agri-produce:

28. Type of services being provided to members:

29. Loan Facility - Name of the bank: Amount: Purpose: Date of Sanction:

30. Comment on repayment of loans:

31. Default in payments to suppliers, if any:

32. Procedure of profit sharing amongst members:

33. Submission of half yearly financial statements (to ROC/RCS)**:**

34. Role of CBBOs in Management of FPO:

35. Grading of FPO:

36. Comments on improvement of grading:

37. Further interventions required for sustainability and mobilization of financial resources:

38. View / comments of members on the relevance and quality of services:

a. Estimated % benefit from reduction in cost of cultivation, input, procurement, custom hiring, etc.

b. Transfer of technology leading to enhanced productivity & crop diversification

c. Marketing along with participation in supply & value chains

d. Produce aggregation

e. Value addition

39. Interventions/ work done by FPOs

Sr. No	During previous six months		During next six months
	Activities/ Interventions planned	Activities/ Interventions done	Activities/ Interventions planned
1			
2			

40. Other relevant observations ………….

NABARD's FPO Performance Measurement (Grading) Tool

As on DD/MMMM/YYYY

Sr. No	Max Marks (Category wise)	Parameter	Max Marks	Obtained Marks
A	**5**	**Age profile FPO**		
i		> 5 Years	5	
ii		4-5 Years	4	
iii		2-3 Years	3	
iv		<1 Year	2	
B	**10**	**Governance**		
i		Composition of Board (no blood relatives /representation to women /SF/MF), Experience / professional qualifications of Board members / representative of Farmers' association, etc.) (Range 3 to 0)	3	
ii		Extent of strategic support from promoter or promoting organisation to FPO (Range 2 to 0)	2	
iii		Regular conduct of Board Meetings & quorum (Range 3 to 0)	3	
iv		Quality of agenda and discussion / decision making (Range 2 to 0)	2	
C	**10**	**Management**		
i		Availability of Full Time professional CEO -4 Marks , Part time CEO -3 marks, Non-professional, part time CEO from FPO Members -2 marks ; CEO below 10th std. - 1 mark.	4	
ii		Availability of paid staff -2 marks, If not - Zero marks	2	
iii		Training/Experience of staff (CEO & Staff trained -4 marks, only CEO or staff trained -2, No training -zero mark)	4	
D	**5**	**Infrastructure**		
i		Separate office Premises/own/rented (Range 3 to 1) - (0 marks for no office)	3	
ii		Other Infrastructure like computers, furniture, fixtures, etc. -2 marks; only furniture -1 mark, No infrastructure-0 mark)	2	
E	**10**	**Membership of FPO**		
i		More than 1000	10	
ii		Between 501 to 1000	8	
iii		Between 201 to 500	6	
iv		Between 101 to 200	4	
v		Between 50 to 100	2	

Sr. No	Max Marks (Category wise)	Parameter	Max Marks	Obtained Marks
vi		Below 50	1	
F	**5**	**% of total members contributing to Share Capital**		
i		> 90%	5	
ii		> 70%	4	
iii		>60%	3	
iv		>50%	2	
v		<50 %	1	
G	**5**	**Total Share capital collected (Rs lakh)**		
i		>5 lakh	5	
ii		3-5 lakh	3	
iii		< 3 lakh	1	
H	**10**	**Training of Board members**		
i		All Board members trained	10	
ii		> 80% of Board members trained	8	
iii		> 70% of Board members trained	6	
iv		> 50% of Board members trained	4	
v		<10% of Board members trained	2	
vi		< 10 % of Board members trained	0	
I	**4**	**Business Plan**		
i		Business plan including financial plan prepared for 3 years	4	
ii		Business plan including financial plan prepared for 1 year	2	
J	2	**Financial Aspects**		
i		Availed financial assistance from lending institutions - 2 Marks, If not zero mark	2	
K	**10**	**Turn over (Annual)(Rs lakh)**		
i		Above 50 lakh	10	
ii		Between 25 to 49 lakh	8	
iii		Between 10 to 24	6	
iv		Less than 10 lakh	3	
v		No business	0	
L	4	**Market linkage**		
i		Market linkage established with corporate buyers/ processors etc.	4	
ii		Dependent on local market/s	2	
M	**10**	**% of members availing services (Input supply/Extension, other services to members)**		
i		Over 75 %	10	
ii		Over 50 %	8	
iii		Over 25%	5	
iv		Over 10%	3	
v		Less than 10 %	0	
N	**5**	**Convergence with Govt. Schemes / corporates etc.**		

Sr. No	Max Marks (Category wise)	Parameter	Max Marks	Obtained Marks
i		SFAC equity support provided and convergence with Govt / other agencies achieved	5	
ii		Either SFAC support or Govt. convergence achieved	3	
iii		No convergence	0	
O	**5**	**MIS/Compliance / recod keeping**		
i		Regular submission of Audited Balance sheet & other legal compliances	3	
ii		Only audited balance sheet regular & other compliances are irregular	2	
iii		Balance sheet not audited and compliances not done	1	
iv		No balance sheet, No compliance	0	
v		Maintained all required registers (Range 2 to 1)	2	
vi		Register not maintained	0	
	100	**Total Marks**		
	Grade	**Marks obtained**	**Remarks**	
	A	**>75%**		
	B	**60-75%**		
	C	**50-60%**		
	D	**<50%**		

(Source: NABARD FPO grading tool)

Parameters for Management Audit

1	**Preliminaries (Total marks 1.0)**	**Max. Marks**	**Marks Obtained**
1.1	Profile of FPO		
1.2	Office of the FPO	1	
2	**Core Management Elements**		
2.1	**FPO Management (Total Marks: 35.0)**		
i	Memorandum of Articles & Articles of Association	3	
ii	Mandatory registers and common seal	5	
iii	Share allotment, transfers and transmission	3	
iv	Annual general meeting	3	
v	Board of directors meeting	5	
vi	Abstract of balance sheet & profit and loss statement	2	
vii	RoC compliances and filings	10	
viii	GST compliance	2	
2.2	**Finance management (Total marks 24)**		
i	Basics of bank accounts	2	
ii	Accounting systems	10	
iii	Loans and borrowings	3	
iv	Equity grant	5	

v	Credit guarantee find scheme	2	
vi	Venture capital assistance	2	
2.3	**Human resource management (Total marks 10)**		
i	Scheme benefits and services	5	
ii	Professional trainings to CEOs and BoDs	3	
iii	Exposure visits to BoDs and CEOs	2	
2.4	**Business management (Total marks 20)**		
i	Business activities	10	
ii	e-NAM linkage and web marketing initiatives	6	
iii	IE code and export status	2	
iv	Procurement for SFAC / department	1	
v	Contract seed production	1	
2.5	**General administration (Total marks 10)**		
i	Committees and function status	2	
ii	Office records and registers	2	
iii	Periodical technical reports	1	
iv	Linkage with FIG and joint ventures	2	
v	Process of fixed assets purchase for FPO	1	
vi	MoUs for any project	1	
vii	Court cases and legal issues	1	
	Ranking marks for FPO (Grand total of marks 100)		

(Source: Tamil Nadu Consortium of Farmer Producer Company Ltd.)

References

i. Building Operationally Sustainable Farmer Producer Organisations – Practitioners' Guide for Business Development Planning in FPOs *by National Institute of Rural Development & Panchayati Raj*

ii. Capacity Building of Board of Directors of Farmer Producer Organisations (FPOs) – A Trainers' Guide *by GIZ & Skill Green Global*

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iv. Farmers Producer Organisations - Frequently Asked Questions (FAQs) *by NABARD*

v. Jagriti - Farmer Producers Organisation – Introduction & Rationale *by Mahila Abhivruddhi Society (APMAS)*

vi. Guidebook on Legal Compliances *by GIZ, NABARD, BIRD & Government of Karnataka*

vii. Guidebook on Lending to Farmer Producer Organisation *by GIZ, NABARD & BIRD*

viii. Guidebook on Input Business Planning & Management Legal Compliances *by GIZ, NABARD, BIRD & Government of Karnataka*

ix. Guidebook on Marketing *by GIZ, NABARD, BIRD & Government of Karnataka*

x. Guidebook on Strengthening Farmer Interest Groups *by GIZ, NABARD, BIRD & Government of Karnataka*

xi. Management Audit for Farmer Producer Companies *by Tamil Nadu Consortium of Farmer Producer Company Ltd.*

xii. Ministry of Agriculture and Farmers Welfare, GoI National Policy Guidelines 2013

xiii. Parikalpana – Institutional Structure & Design of Farmer Producers Organisation *by Mahila Abhivruddhi Society (APMAS)*

xiv. Prerana – Governance in Farmer Producers Organisation *by Mahila Abhivruddhi Society (APMAS)*

xv. Resource Book on Formation & Functioning of Farmer Producer *Companies by Action for Social Advancement (ASA), Bhopal*

xvi. Step by Step guide to business planning *by Farmer Producer Organisation, BIRD, Lucknow*

xvii. Vinimaya – Membership in Farmer Producers Organisation *by Mahila Abhivruddhi Society (APMAS)*

xviii. Manual on Intrapreneurship and Management for Farmer Producer Companies *by Maharastra Agricultural Competitiveness Project (MACP)*

xix. Implementing community enterprise system for sustainability of agricultural communities- A manual *by Amar KJR Nayak, XIMB, Bhubaneswar*

Bankers Institute of Rural Development (BIRD), Lucknow is an autonomous institute promoted by National Bank for Agriculture and Rural Development, the Development Bank of the country. It is a premier institute for providing training research and consultancy services in the field of agriculture and rural development banking in India and abroad. The Institute was established in 1983, for addressing the capacity building needs of stakeholders. BIRD, Lucknow is an ISO 9001: 2015 certified training Institute

Clients

All Banks, Government agencies, MFIs, NBFCs, Financial Sector, NGOs and Civil Societies.

Coverage (Training, Consultancy, Research)

Project Lending-Agriculture and MSME, Climate Finance, Rural Banking, Farmer Producer Organization, Micro Finance, Human Resource, Financial Inclusion, Training of Trainers, Executive Development, Management Development Programme, IT based Banking, Green Finance, Responsible CSR, Group approach to Development, Women Empowerment, Organizational Development, Investment & Treasury Management, Risk Management.

Faculty

Faculty are drawn from NABARD, banks and scholars of respective fields and have pan- India level field experience. The faculty have specialization in Banking Finance, Financial Inclusion, Agriculture & Allied sector, Fisheries, Forestry and Human Resources, etc.

Infrastructure

43 acre green campus has world class infrastructure in terms of class rooms, simulation and AV Rooms, Board Room, Conference Hall, Auditorium, Library, Gym, Air-conditioned Hostel Rooms, Local and International cuisine.