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Guidebook on Input Business Planning and Management

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List of Abbreviations

FPO - Farmer Producer Organization

GOI - Government of India

CHC - Custom Hiring Centre

KVK - Krishi Vigyan Kendra

CAGR - Compound Annual Growth Rate

DAP - Di-Ammonium Phosphate

FIG - Farmer Interest Group

SHG - Self Help Group

JLG - Joint Liability Group

 L_1 - Leader 1 of Farmer Interest Group

L₂ - Leader 2 of Farmer Interest Group

BOD - Board of Director

CEO - Chief Executive Officer

GPS - Global Positioning System

FY - Financial Year

SFAC - Small Farmers' Agribusiness Consortium

RI - Resource Institute

1. The Context

FPOs promoted under Companies Act 2013 are organized groups of small and marginal farmers which have mandate to help farmers to improve income through better market access and collective bargaining power both in input and output business. At present there are more than 5000 such organizations in India and most of them are involved in input business. FPOs consider this business line extremely effective to establish connect with famer members, establish business relationship and ensure sale of quality products at appropriate prices while making good revenue.

The input business however requires strategic planning at the FPO level. An attempt has been made here to support FPOs to strategically operate input business by assessing demand, arranging the stock and managing it accordingly, strategizing the procurement process, and maintaining the relevant stock register etc. The guidebook provides an introduction about the agriculture input industry, the advantage of FPO in making the business successful. The toolkit provides different concepts along with the tools to strategize input planning process from procurement to sale of the inputs to end customers.

Note for Trainers

- The handbook will effectively act as a guide for carrying out the day to day activities related to input business as well as effectively monitor the same with respect to inventory management, profitability etc.
- The guidebook serves the purpose of forming input committee, conduct baseline survey, demand estimation and stock indenting, stock/inventory management and ultimately distribution of inputs to FPOs members.

2. Introduction

The green revolution introduced chemical fertilizers to obtain high crop yields which resulted in higher demand of these inputs over time. Subsequently, in 1980s and 1990s the Government supported the farmers with huge subsidies on fertilizers and pesticides, free electricity, canal irrigation, agriculture credit and minimum support prices for major crops.

Over the years, with government support, private players have emerged in manufacturing a wide range of inputs.

of them also have their own call centers, where farmers can contact for procuring the agriculture inputs at fair price.

In spite of these developments, the sector still faces its own challenges. The farmers still purchase from its local retailers, as they are already trapped in debt cycles. The assessment of demand of all the farmers remains difficult. The farmers still believe in local retailers and ended by buying spurious products, as there is no regulation on these products.

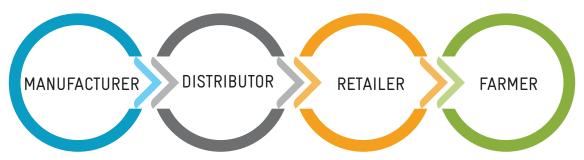


Figure 2.1 Traditional Supply Chain

However, the distribution of inputs to the farmers has largely been done indirectly, i.e. selling the input through distributors/retailers as shown in Figure 2.1. Gradually, the reliance on distributors/retailers amplified, as they allowed the farmers to buy inputs on credit. However, farmers have expressed that these input retailers have been selling spurious quality products to the farmers as they have their own interests to push the high margin products and mobilize high commission sales.

The last decade also saw several input manufactures entering in the retail market. They adopted a model by which they aimed at providing quality inputs to the farmers, at places easily accessible to them, with appropriate advisory and guidance at competitive prices. ITC's Choupal Sagar and Mana Gromor of Coromondal Group are among some of the major input manufacturers to have entered the retail market. These companies managed to create retail stores or outlets in rural areas, for farmers to have easy access to buy quality inputs. As it turned out, operating in the retail segment brought its own challenges for most of the manufacturers.

At present, numerous start-ups and companies have started to connect directly with the farmers. Some of the well-known names are E-choupal, Agrostar, Green Agrevolution Pvt Ltd, Zamindara farm solutions. These companies provide an online platform such as mobile app and some

The seasonality of input purchases affects the capital cycle of businesses adversely. The customer retention in these models is limited and building long term trust with the customers is the need of hour. Apart from online platforms, offline presence is essential to gain long term trust. Here, the FPOs can play a crucial role as the farmer members themselves are the owners as well as managers of the business entity which shall enable the FPOs to build long term trust with the farmers for procuring inputs as well as advisories.

2.1. Growth of FPOs Input Business

Most of the FPOs have started with sale of inputs as a business activity which is in turn followed by aggregation of produce from members and selling the produce to the market. As they gain financial capacity and technical skills, they tend to diversify towards processing, branding and even exports of commodities.

The FPOs have huge benefits in operating input business: i) The FPO can make bulk purchases from manufacturers and with the absence of middlemen, it is likely to achieve better input price efficiency, ii) it can act as a last mile entity to provide farmers advisory services on the recommended input use and various government schemes, practices and technologies for better input use, iii) the FPO facilitated by the government agencies has the priority to sell high quality

certified inputs as well as create awareness about them, iv) the FPO with their large customer base can directly purchase from the manufacture and avail discounts from them which will promote timely delivery of products, better quality and fair price to the farmers.

However, in present scenario, the FPOs input business has issues such as lower operating margins, limited stock availability, no proper demand assessment, lack of inventory management skills etc. At present, the FPOs are not able to perform these activities and largely falls into a situation like bull whip effect i.e. a situation in which the retailers become

highly responsive to demand, and in turn, exaggerate the expectations around it, which causes large fluctuations along the supply chain. A major reason for this occurrence in the agriculture sector is the unreliable forecast of demand (or supply) i.e. FPOs are not able to predict the customers demand and how much produce will be supplied by the farmer members to meet the demand. This unpredictable demand lead to significant inefficiencies in supply chain of FPOs i.e. buying and storing of extra inventory, revenue loss, price crashes. The guidebook enlists various tools which are relevant for tackling the issues faced by the FPO in their input business.

3. Operational Tools for Input Business Planning

To effectively plan the input business, it is necessary to adopt a strategic approach at various stages of input supply chain. In this section, we emphasize on different approaches along with suitable tools used in improving the process of input planning.

3.1. Demand Assessment of FPO Farmer Members

Effective input planning at FPO requires demand assessment, i.e. collecting data and integrating the details about the farmer members on input requirements. The assessment needs to be carried out and monitored by FPO governance team. Thus, before assessing the demand, it is necessary to form an input committee.

Formation of an Input Committee

An input committee should be set-up at FPO level, comprising of BODs, CEO and L_1 & L_2 . The tasks of the committee are as follows:-

- monitoring the collection of data
- compiling the data and estimating the demand
- establishing linkages with manufacturers for procurement of the inputs
- identifying new products to be added and managing the product inventory thereafter

The Leaders ($L_1 \& L_2$) of the farmer interest groups (FIGs) should be assigned mostly for data collection. The BODs selected in the committee should monitor the data collection activity and assemble it for final demand estimation. The CEO should provide information to the BODs on inventory and also follow up with manufactures for procurement of agriculture inputs.

Tool 1: Members Demand Assessment Survey

Purpose of the Tool

Demand assessment is essential for the FPOs to make any informed decision on input business. The demand assessment will assist the FPO to make advance orders to the manufacturers which will ensure timely delivery of products at reasonable prices.

Frequency: Quarterly/Annually Facilitator: Input Committee & L_1 & L_2 of Farmer Interest Groups

Tool Context

The survey is required for collecting farmer member details at the group level i.e. FIG/SHG/JLG. The survey should collect information on the cropping patterns, land owned, products applied & their quantities, household level information, etc. The survey format is illustrated in the Table 3.1 below. It is as per the flexibility of the FPO to use the survey tool as and when they conduct demand assessment.

Table 3.1 Demand Assessment Survey

Section A	Section A: Farmer Basic Details						
Particular	Γ	Detail Particular			Detail		
Farmer N	lame		Surveyor Name				
Village				FPO Name			
Tehsil				Survey Date	9		
District				Mobile No			
Total Acre	eage						
						Remarks	
Irrigated		Dryland	Dryland				
Irrigation	Source					 - Remarks	
Wells		Channels/Bore well				Remarks	
Section E	B: Crop Specific	Details					
				Ac	res		
S No C	Сгорѕ	2018		18	2019		Remarks
		Kharif		Rabi	Kharif	Rabi	
1							
2							
3							
						-	

Section C: Abiotic and Biotic Factors Considered				
Abiotic Factors		Biotic Factors		
Particulars	Remark	Particulars	Remark	
Temperature Problem		Pest Problem		
Rainfall/Humidity Problem		Disease Problem		
Cyclone/Drought Problem				

Section	D: Details on Input Requirement	·		
S No	Input Type	Min Requirement (Kgs/Litres/Days/No)	When Required (Month)	Remarks
I	Fertiliser			
1	Urea			
2	DAP			
3	Mix Ferts			
Ш	Agrochemicals			
1	Kavach			
2	Glyphosate			
Ш	Seed/Seedlings			
1	Mango			
2	Papaya			
3	Maize			
IV	Cattle Feed			
1	Cotton Cake			
2	Maize Grit			
٧	Veterinary Medicines			
1	Vikrol			
VI	Irrigation equipments			
1	Drip			
2	Sprinkler			
VII	Tractors			
1	Mahindra			
VIII	Other Agricultural Machineries			
1	Sekature			
2	Knapsack Sprayer			

Tool 2: Demand Aggregation Tool

Purpose of the Tool

The L_1 and L_2 will collect the information from their groups using the survey. The information will be shared with the input committee at the FPO. The input committee shall compile the information to obtain season wise demand estimates.

Frequency: Every 3 months/Annually **Facilitator:** Input Committee

Tool Context

The FPO input committee needs to know the actual demand estimates for effectively planning the procurement of input products. The Table 3.2 presents the demand aggregation tool, which is compilation of the data from Table 3.1. The tool will help the FPO to get to know the rise or decline in demand, addition of any new farmer member etc.

Table 3.2 Demand Aggregation Tool

S. No.	No. of farmers covered in the FIG	Ouarter 1 or Year 1	Ouarter 2 or Year 2	Ouarter 3 or Year 3
FIG 1				
FIG 50				
Total FPO demand				

3.2. Inventory Management

Inventory management is the next important component for input planning. Here, the flow of goods from manufacturer to warehouse and from these facilities to point of sale are supervised. The main function is to keep a detailed record of new or returned product as it enters or leaves a warehouse or point of sale.

The major components of inventory management is maintaining stock quantities, stock arrangement, stock review and stock disposal. In all of these components, there are certain best tools which are available and can be employed by FPO for managing the stocks.

Component 1: Stock Quantities Maintained

The first component of inventory management is to maintain stock quantities. The Fixed Reorder quantity system is a method which raises an alarm as soon as the inventory level drops below a fixed quantity. Also, it helps in raising the new orders to restock the inventory. The point at which inventory is restock is known a Reorder Point and the inventory quantity at that point is termed as Reorder Level and the quantity of new order is referred as order quantity.

The Reorder level is the summation of Safety stock and Average Lead Time.

Reorder level = Safety Stock +

Average Lead Time Demand (Equation 1)

The first element of equation 1 is safety stock i.e. it is an extra stock that is maintained by the business entity for alleviating any risks arising due to stall in the production process.

The second element of the formula is Average Lead Time Demand. It is defined as the average number of orders demanded during the Lead time. The Lead time is defined as the waiting time i.e. the difference between the time the business made the order and the time it will take supplier to pack the order and ship it. To estimate the average lead time equation 2 should be applied:-

Average Lead Time Demand = Average Demand ×
Average Lead Time
(Equation 2)

Where,

Average Demand is on an average, number of order requests made per day and the average lead time is the time required to manufacture goods or products.

Component 2: Stock Arrangement

Tool 1: ABC Analysis for Inventory Categorization

Purpose of the Tool

The tool is used for arranging inventory into a hierarchy of most important to least important items. The category are as follows:-

- A-items are the products which are frequently sold and require recurring stock and constant quality check
- **B-items** are the products which are medium-priority stock and usually require monthly stock update
- C-items are low-priority stock and are typically carried in high volumes with minimum stock update

FPO should organize the stock within the FPO input shop according to most saleable and valuable products. It will ensure cost-effectiveness within the supply chain. For example, the first step for the FPOs is to prepare a master sheet of its products and estimate the annual consumption value of each product as presented in equation 3.

Annual Consumption Value (ACV)
= annual number of units of a
product sold × cost per unit

(Equation 3)

The next step is to arrange the products in descending order based on their annual consumption value and calculate cumulative percentage of units sold and annual consumption value. Post it, the thresholds for splitting the data into ABC category will be determined.

For example, the Table 3.3 presents an FPO with the number of units sold and cost per units of its different products. Then estimate the Annual Consumption Value based on the equation and then estimating the percentage in column 5 & 6. The percentage column assist us in determining the thresholds. The thresholds are generally unique to your company but typically it is close to 80, 15 or 5 percent, categorised into A, B or C-items respectively. In the table, the last column shows the thresholds and arrange the products accordingly. The FPO management will use the table to adapt a good practice in purchase and inventory policies of each category. It means they can spend more time in discussing with suppliers of A-items and checking every purchase order as these are the highest saleable items. The tool will be helpful for FPO to categorize the input stock and take effective decision on inventory management and maintain the inputs accordingly in FPO input shop.

Table 3.3 ABC Analysis

S. No.	Product	Number of units sold	Cost per unit sold	ACV	% of units sold	% of ACV	ABC analysis category
1	Fertilizer brand 1	500	200	100,000	41.7	55.5	A-items
2	Fertilizer brand 2	400	150	60,000	33.3	33.3	A-items
3	Fertilizer brand 3	100	100	10,000	8.3	5.6	B-items
4	Fertilizer brand 4	100	50	5,000	8.3	2.8	B-items
5	Pesticides brand 1	50	50	2,500	4.2	1.4	C-items
6	Pesticides brand 2	50	50	2,500	4.2	1.4	C-items
7	Total	1200	600	180,000			

Tool 2: The First-In-First-Out (FIFO)

Purpose of the Tool

It is an asset management tool & valuation method in which products procured first are sold, use or disposed first. This is especially crucial for items with a limited shelf-life such chemicals, feed etc. Table 3.4 illustrates an example of FIFO. The second and third column in the table displays the products with their expiry dates and with applying the FIFO tool, the last column indicates the products to be use, sold or disposed of first.

Table 3.4 FIFO example

S. No.	Item	Ехрігу	First In First Out (FIPO)
1	Α	01 January 2019	II
2	В	10 March 2019	III
3	С	02 November 2018	I

Tool Description

The FPO can use FIFO tool sheet for listing their products based on the expiry date and thereby storing it in input shop accordingly.

S. No.	Products	Expiry Dates	FIF0
1			
2			
3			
4			
5			

S. No.	Products	Expiry Dates	FIF0
6			
7			
8			
9			
10			

Component 3: Stock Review

The next component of inventory management is review of stock. It is a formal analysis of stock versus projected future needs.

Tool 3: Visual Check and Master Excel Sheet

Purpose of the Tool

The FPO needs to review the stock regularly. It will help the FPO in timely ordering, where the inventory is held for a minimal time before it is moved to next stage in the supply chain.

Facilitator: CEO

Tool Description

The first element of the tool is to visually check the stock. The FPO should visually check the stock for which no documentation is needed. The second element is to prepare a master excel sheet. The sheet should consists all of the inventory details and as the item moves out of inventory the FPO can remove it from the master list.

Component 4: Stock Disposal

Tool 4: Damaged/Defective Inventory Management

Damaged and defective products should be accounted for separately from other items. An excess of damaged or defective products may reflect a systemic problem in the supply chain such as quality control issues, or problems with the distribution, shipping, and/or storage of products.

Therefore, it's essential to account for damaged and defective products separately from the rest.

3.3. Category Management

A category management is a strategic approach for procurement, where FPO segments its products into groups depending on certain factors. It will help the FPO to ensure maximum savings. In the input business, the FPO can apply the category management approach to simplify the demand, procurement process etc.

The approach will be useful in answering the following questions:

- Spending in each category for better understanding by management
- Market supply trends of each category
- Opportunities for cost savings
- Strategic sourcing and transactional purchasing for each category

The FPOs in their input business should have the following categories:-

- 1. Seeds
- 2. Fertilizer
- 3. Plant Protection Chemicals & Growth regulators
- 4. Irrigation Equipment
- 5. Other farm technologies

3.4. Inventory Audit

The section focuses on tools for regularly conducting inventory audit. The above information collected through various tools are utilized for inserting the data in specific category in inventory audit tools.

The inventory audit tools will be able to serve the following purposes:-

- a) to track purchase, sale of inputs to plan better and increase sales
- b) to track wastage in the store thereby avoiding revenue loss
- c) effective planning of the item purchase
- d) help in tracking farmer member demand side
- e) help in knowing company approx. revenue, profit & Loss against procured items

Input Inventory & Margin

Tool Description

The input inventory and margin tool employs the information collected in above sections, to set up margins in each input category (i.e. seed, fertilizers, pesticides, plant protection chemicals & growth regulators etc.). For example, suppose a FPO named 'X' has generated demand of 1 metric tonne, its values is Rs 1,00,000/-. The FPO place an order of 1 metric tonnes to the input company. The input company is able to supply 0.8 metric tonnes only, which values around Rs 1,60,000/-. The company is short of supplying 0.2 metric tonnes may be due to less inventory with them. Now 'X' FPO sells approx. 0.5 metric tonnes, which values to Rs 1,10,000/-, with balance inventory of 0.3 metric tonnes and values around Rs 50000/-. The FPO will receive a sale margin of 0.1 lakhs (estimated by applying equations 4 to 8).

Purchase Rate = purchase amount/purchase quantity
(Equation 4)

Sale Rate = sale amount/sale quantity (Equation 5)

BI = Actual quantity supplied by company - Total Sales - (Wastage/Outdated stock) (Equation 6)

Sale Margin Amount = (Sale Rate - Purchase Rate) \times Sale Quantity (Equation 7)

Sale Margin % - Sale Margin Amount / (Purchase Rate \times Sale Quantity) \times 100 (Equation 8)

Table 3.5 Input Inventory & Margin Example

	Input Inventory & Margin																		
					FPO Inhouse	Demand City	Orders plac	ed with company	Actual City Supp	lied by Company to FPO	Tot	al Sales	Wastage/0	utdated stock	Balance Inve	ntory/Stock	Sa	le Margin	
S No	Date	FPO Name	Seed	Company	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	%	Amount (Lakhs)	Remarks
1	01/09/19	Х	Tomato Hybrid	Mahyco	1	2	1	2	0.8	1.6	0.5	1.1	0	0	0.3	0.5	9%	0.1	0.2 MT short supply from company
S No	Date	FPO Name	Fertiliser	Company	FPO Inhouse	Demand Oty	Orders plac	ed with company	Actual City Supp	lied by Company to FPO	Tot	al Sales	Wastage/0	utdated stock	Balance Inve	ntory/Stock	Sa	le Margin	Remarks
5 NU	Date	rru name	rentiuser	company	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	%	Amount (Lakhs)	Remarks
2	01/09/19	Х	Urea	Zuari	10	0.536	10	0.52	10	0.52	6	0.32	0	0	4	0.19	4%	0.01	
S No	Date	FPO Name	Plant Protection Chemicals & Growth	Company	FPO Inhouse	Demand Oty	Orders plac	ed with company	Actual City Supp	lied by Company to FPO	Tot	al Sales	Wastage/0	utdated stock	Balance Inve	ntory/Stock	Sa	le Margin	Remarks
3 110	Date	TTO Name	Regulators	Company	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	%	Amount (Lakhs)	Reillains
3	01/09/19	Х	Magnesium Sulphate	MCF	10	0.3	10	0.28	10	0.28	9.9	0.297	0.1	0.003	0	-0.02	7%	0.02	
0.11	Date	FPO Name			FPO Inhouse	Demand Oty	Orders plac	ed with company	Actual Oty Supp	lied by Company to FPO	Tot	al Sales	Wastage/0	utdated stock	Balance Inve	ntory/Stock	Sa	le Margin	
S No	Date	FPU Name	Irrigation Equipment	Company	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	%	Amount (Lakhs)	Remarks
4	01/09/19	Х	Drip Kit	Jain	5	10	5	9.8	5	9.8	4	8	0	0	1	1.80	2%	0.16	
C No.	Date	FPO Name	Transfer of Technology	C	FPO Inhouse	Demand Oty	Orders plac	ed with company	Actual Oty Supp	lied by Company to FPO	Tot	al Sales	Wastage/0	utdated stock	Balance Inve	ntory/Stock	Sa	le Margin	Demonto
S No	nate	rru Name	(TOT) Component	Company	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	Oty (MT)	Amount (Lakhs)	%	Amount (Lakhs)	Remarks
5	01/09/19	Х	Solar Insect Pest Control Trap	Godwill	10	0.35	10	0.3	10	0.3	10	0.35	0	0	0	-0.05	14%	0.05	

3.4.1 Return on Investment

The table 3.5 illustrate an example for estimating return on investment. Suppose 'X' FPO has invested a sum of Rs 1,60,000/- (A) towards tomato hybrid seeds and made sales of Rs 1,10,000/- (B) with sale margin of Rs 10,000 (C) and total expense of Rs 2000/- (D). Now considering all these figures and applying the equations 9 to 10 of Net profit and ROI, we get net profit of 0.08 Lakhs with Gross ROI of 5%.

Table 3.6 Return on Investment Example

	Return on Investment (ROI)										
S No	Seed	Total Procurement Cost (Investment) - A	Total Sales (Lakhs) - B	Sale Margin (Lakhs) - C	Total Expenses (Lakhs) - D	Net Profit- (C-D = E)	Gross ROI- E/A				
1	Tomato Hybrid	1.6	1.1	0.1	0.02	0.08	5%				
S No	Fertliser	Total Procurement Cost (Investment) - A	Total Sales (Lakhs)	Sale Margin (Lakhs)	Total Expenses (Lakhs)	Net Profit- (C-D = E)	Gross ROI- E/A				
2	Urea	0.52	0.32	0.01	0.01	0.00	0%				
S No	Plant Protection Chemicals & Growth Regulators	Total Procurement Cost (Investment) - A	Total Sales (Lakhs)	Sale Margin (Lakhs)	Total Expenses (Lakhs)	Net Profit- (C-D = E)	Gross ROI- E/A				
3	Magnesium Sulphate	0.28	0.297	0.020	0.01	0.01	4%				
S No	Irrigation Equipment	Total Procurement Cost (Investment) - A	Total Sales (Lakhs)	Sale Margin (Lakhs)	Total Expenses (Lakhs)	Net Profit- (C-D = E)	Gross ROI- E/A				
4	Drip Kit	9.8	8	0.16	0.01	0.15	2%				
S No	Transfer of Technology (TOT) Component	Total Procurement Cost (Investment) - A	Total Sales (Lakhs)	Sale Margin (Lakhs)	Total Expenses (Lakhs)	Net Profit- (C-D = E)	Gross ROI- E/A				
5	Solar Insect Pest Control Trap	0.3	0.35	0.05	0.02	0.03	10%				

3.4.2 Daily Stock Register Report

The Register is tool which helps the FPO in maintaining stock details such inward and outward stock, wastage of stock and the reasons for wastage. It is a useful tool for the FPO to take decisions on stock purchases. An example is shown in Table 3.6. Suppose a 'X' FPO has opening stock of approx. 0.5 MT with an inward of 1 MT and an outward

of 0.2 MT. The dump/wastage for the day is NIL and finally closing stock of 1.3 MT is calculated using the closing stock equation.

1. Opening stock – Inward stock – Outward stock – Dump/wastage = Closing Stock (Equation 11)

Table 3.7 Format of Daily Stock Register Report

	Daily Stock Register Report								
S No	Date	Seed	Opening Stock	Inward Stock	Outward stock	Dump/ Wastage	Closing Stock	Remarks	
1	02/09/19	Tomato Hybrid	0.5	1	0.2	0	1.3		
S No	Date	Fertiliser	Opening Stock	Inward Stock	Outward stock	Dump/ Wastage	Closing Stock	Remarks	
2	02/09/19	Urea	15	10	8	0.1	16.9		
S No	Date	Plant Protection Chemicals & Growth Regulators	Opening Stock	Inward Stock	Outward stock	Dump/ Wastage	Closing Stock	Remarks	
3	02/09/19	Magnesium Sulphate	10	5	3	0	12		
S No	Date	Irrigation Equipment	Opening Stock	Inward Stock	Outward stock	Dump/ Wastage	Closing Stock	Remarks	
4	02/09/19	Drip Kit	2	3	2	0	3		
S No	Date	Transfer of Technology (TOT) Component	Opening Stock	Inward Stock	Outward stock	Dump/ Wastage	Closing Stock	Remarks	
5	02/09/19	Solar Insect Pest Control Trap	6	3	2	0	7		

3.4.3 List of Documents/Process for Input Procurement

a) Obtaining License for Input Business.

The FPO should obtain the license for conducting the input business activity. The process for acquiring the license is presented in the following Table 3.8.

Table 3.8 Process of License Acquire for Input Business



Website Registration & Log In:

- Registration process
- Visit http://raitamitra.kar.nic.in
- User Id & Password are generated and sent through SMS
- Registration process completed
- After registration login using Username & Password received via SMS
- A1 application page will open & next step is data entry



Data Entry:

- Data Entry to be done in requested fields
- Also upload the applicant Photo and Scan copy of Signature and submit for easy communication
- Applicant should mention the particulars like firm name, type of dealership, sale and storage point address etc.
- Next enter into annexure page, here applicant should fill source, Name details, Company name, fertilizer grade as per O-Form and enter the validity date and agree to continue



Documents Uploading:

- Upload documents as per checklist given after careful checking
- All documents uploaded should be within 500MB size



Payment Process:

- · Next process is fee payment
- · Applicant should pay license fee through Khajane-II challan only
- Fee payment is through online or by any nationalized banks



Documents Verification & License Allotment:

- After applicant submits application, concerned officer checks and if found ok it moves to higher authority and if any corrections required it is being sent back to applicant seeking necessary corrections.
- Later the licensing authority again verifies the documents and if accepted goes for inspection to concerned jurisdiction officer
- Concerned jurisdiction officer inspects and upload the details of GPS co-ordinates and GPS tagged Photo
- Then inspection report appears in licensing authority login, after verifying inspection report, License will be generated with approval
- Regular intimations appear in applicants login page for further action
- · After approval by licensing Authority, license will appear in dealer's login in draft form
- The approved license is signed digitally by licensing authority.
- License process is completed

b) Invoice

Invoices should be collected from manufactures after receiving delivery. A sample invoice is shown in Figure 3.1.

Tax Invoice **BLUE SKY INDIA LIMITED** GST No. ASDF23486DD B-126, Scar Side Basement Malviya Negar New Dethi-110017 e-mail | info@penall.com, Ph. 011.340345734, 123323467346 State Name | Delhi, State Code | DL TECHGURUPLUS H-195, Sarita Vihar, New Delhi 110076 07PDUJS4678K124 State Name: Delhi Delvery Address TECHGURUPLUS Client Name H-195, Santa Whar, New Delhi 110076 State Code: DL Address GSTIN OPPOSEDS ABJURY 174 S.No Descrip **HSN Code** For BLUE SKY INDIALIMITED **Authorised Signature**

c) The CEO of the FPO should monitor and keep track of payment dues against input supply by applying the payment tracking tool as shown in Table

Table 3.9 Payment Tracking Tool

Company ID	Company Reference	Payment Option (Cash/ Credit)	Amount	Payment Status (Completed or Not completed)

Figure 3.1 Invoice Sample

3.5. Monitoring the Input Business Activities

To monitor the input business activities, a dashboard structure is developed as indicated in Table 3.10. The FPO can make variations to the structure based on their input business. The column second represents the input indicators and the data can be taken mostly from the inventory audit reports. The third column represents the frequency at which data needs to be collected. The last column is the

visualization column presenting the graphs which FPO could develop to analyze their performance.

With the plotted graphs, the CEO and BODs will be able to see the progress of input business. The indicators 1 to 5 measures the input sold and revenue break-up in various input categories. The indicator 6 to 8 represents the comparison between cash and credit sales transactions and indicator 9 to 11 focus on per unit input sold. The insights from the dashboard can be used for a board meeting, annual general meeting to assess and monitor the input business.

Table 3.10 Monitoring the Input Business

S. No.	Measure	Frequency	Source	Visualization
1	Fertilizer Volume Sold	Monthly	Accounts/Tally	Line
2	Pesticides Volume Sold	Monthly	Accounts/Tally	Line
3	Bio & Other Sustainable alternative Volume Sold	Monthly	Accounts/Tally	Line
4	Revenue Break Up from Inputs (Fertilizers, Pesticides, Bio & Alternatives)	Monthly	Accounts/Tally	Pie
5	Top 5 and Bottom 5 FIG's in Input consumptions	Quarterly	Accounts/Tally	List
6	# of Cash Vs Credit Sales transactions	Monthly	TFC POS or Others	Bar
7	Percentage of Credit Clearance	Monthly	TFC POS or Others	Number
8	Input Sales Quarterly	Comparative Current Last Year	Accounts/Tally	Bar
9	Average Input Sales per customer	Monthly	Accounts/Tally	Line
10	Percentage change in Input Customers	Monthly	Accounts/Tally	Bar
11	Commodities Sold for Every Kilo of Input Sold	Quarterly	Accounts/Tally	Number

4. Successful Case Studies on Agriculture Input Business

This sections represents case of two FPOs and emphasize on the strategies adopted by them to increase their customers, directly benefit the farmers, be cost-effective and achieve high profits in agriculture input business.

Anekal Horticulture Producer Company Limited, Karnataka

The FPO was commissioned under Department of Horticulture, Government of Karnataka in March 2016 with approximately 1000 farmer members as shareholders. They started operations with Input business, CHCs and later added output business to their business portfolio.

During their initial stages, due to lack of awareness at farmer level and no systematic planning it was difficult for the FPO to compete with local dealers. The company developed a strategic plan which involves awareness generation among member farmers about FPO input shop, maintaining the quality of input sold, providing better prices to attract farmer members and regularly monitoring the stock and maintaining proper books of accounts.

The FPO had reached a turnover of Rs. 97.24 Lakhs with a marginal profit of Rs. 1.09 Lakhs in initial commencement year and in FY 2017-18. The turnover increased to Rs. 3.18 crore and profit reached to Rs. 1.18 Lakhs as low margins were set-up for selling the inputs to retain existing customers and attract new ones. In later FY 2018-19, total input business turnover reached Rs. 4.06 Cr with profit of Rs. 9.04 Lakhs was achieved. It was largely possible as FPO was well established and adopted a risk seeking strategy to keep low margins, add high quality products to attract new customers. The customer-centric approach became useful to increase increased sales/revenue during these two years and margins leading to stability in input business.

At present, at the FPO input shop 65% of the items constitutes Fertilizers, 30% pesticides and rest 5% are others. In the initial establishment year there were approximately 200 member farmers among 1000 members transacting on regular basis from FPO Input shop. However, it has reached to 600 presently.

Green Vision Farmers Producer Company Limited, Maharashtra

Green Vision Farmers Producer Company Ltd, is one of the FPO was established in Jan 2014 with 310 farmer members.

Initially, the FPO major challenge was creating awareness among farmer members about availability of inputs at FPO shop, and competing with traditional local input dealers which over the years have provide all flexibility and convenience that farmer needs. During this period, FPO took this as a challenge and changed input business scenario.

Some of the commendable innovative steps adopted by FPO includes appointing a trained member to look after the input shop for effective transfer of technical information to farmers and in turn increasing sales revenue. Also other steps include conducting regular farmer training programs addressed by Input company experts, encouraging purchase and sale of branded quality inputs which have good results in the field. Monitoring items expiry on regular basis and in turn planning sale/purchase etc.

The FPO with above mentioned efforts and under the able leadership of CEO, BODs and chairman saw achieving a turnover of approx. Rs. 0.2 Lakhs with a loss of Rs. O.8 Lakhs in FY 2015-16 and in FY 2016-17 it was total turnover of Rs. 90 Lakhs and profit of Rs. 0.95 Lakhs, in FY 2017-18 it was approx. 1.2 Crore turnover with approx. 2 Lakhs profit. In these three years the FPO saw a turnover increase from year to year but profits stagnated at same level owing to very low operating margins to compete better with conventional retailers, bring about better rapport among farmer members, increase overall sales/ revenue

In FY 2018-19, total input business turnover clocked approx. Rs. 1.5 Crore with an approx. profit of 3.5 Lakhs owing to increased margins from sizeable member transactions and increased sales.

It has also received NABKISAN credit facility of 30 Lakhs to boost their transactions and increase revenue and ultimately to become self-sustainable.

In the initial establishment year there were approx. only 200 member farmers among 310 members transacting on regular basis from FPO Input shop but as years passed member size started to grow and now it's approximately 750 and still growing from total current member size of 850.

Conclusion

The guidebook is an attempt to familiarize the FPOs about agriculture input business. It starts with explaining the journey of agriculture input sector in India. The growth of input markets in India especially fertilizers, pesticides, seeds and farming equipments. It highlights the present distribution channel available for sale of these inputs. The FPO entering the system can benefit directly due to its large farmers base.

However, few FPOs have achieved some success in input business but there exists lot of gaps in agriculture input management. The guidebook presents various approaches or tools which are useful for the FPO to strategize their agriculture input planning for achieving maximum revenue, managing the inventory and capturing the demand of their farmer members effectively as well sustaining higher profits.

The guidebook demonstrates few successful case studies of input companies and farmer producer organizations. These companies adopted a customer-centric approach which has led to rise in sale of inputs and attaining higher profits. A digitization platform is also mentioned with the case studies which benefits the FPO for credit linkages and more transparency in inventory management.

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