



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)

FPOs are growth engine
of Indian Agriculture



Resource Material Financial Plan

under
Central Sector Scheme on Formation &
Promotion of 10000 FPOs



Implemented by



Advanced Module on Financial Planning for FPOs

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INTRODUCTION

Farmers Producer Organisations are business entities that need careful financial planning. This training module is an effort of BIRD to support the capacity building of Board of Directors and CEOs in this regard. The highlights of this Module are enumerated in this section.

The Purpose and Objectives of the Advanced Module on Financial Planning:

The Module hopes to equip the CEOs and Board of Directors of FPOs to understand, appreciate and undertake effective financial planning for their identified business ideas/opportunities.

Specifically, at the end of the training module, the participants will be able to:

- Describe the need for financial planning in an FPO
- Describe in brief the various parts of a Business Plan Document and where financial planning fits into the Business Plan
- Practically work out Capital Budgeting for their FPO - including - cash flows
- Calculate Break-Even Point under different scenarios
- Work out a Financial Appraisal using a case through financial measures like NPV, IRR, CBR.
- Explore different financial opportunities available for their FPO and select a few to work on further
- Ask questions on specific financial planning issues related to their FPOs - for the trainers to answer
- Prepare an action plan for their FPO aimed at better Financial Planning.

This Module consists of 16 sessions of 90 minutes duration, held over 4 days. Additionally two sessions are needed to accommodate a formal inauguration/introductions and valedictory/feedback.

This document contains the basic reading for facilitators and is used along with the Teaching Note. The Teaching Note is not prescriptive and indicates the sequence of topics and time needed to cover specific subjects. BIRD is confident that the trainers and facilitators will find appropriate methods to make the sessions interactive and practical, so that the participants from FPOs take back actionable plans to improve the functioning of their organisations.

Session I and II: Key Aspects of Business Planning for FPOs

1. What is a Business Plan?

A Business Plan is a document that summarises the operational and functional objectives of a business. Every business, irrespective of size, needs planning. Business planning is essential for the growth and sustainability of the business. It also provides a broad direction to take benefit of opportunities and tackle obstacles. A Business Plan contains the operational and financial aspects of the business.

2. What is the importance and need for a business plan?

A business plan becomes very important for FPOs as most of the members may be organising themselves for the first time to run a business. A business plan will help the FPO in the following ways:

- a) Designing viable business models for aggregating and marketing agricultural produce and collectively buying inputs.
- b) Maximising the returns to member farmers through various value addition activities.
- c) Providing guidance to the FPO to organise, plan and refine the farm activities of its members as per market needs.
- d) Serving as an important tool to assess the quantum of finance needed to run its business and locate sources of funding.

Considering all the above factors, an FPO needs to prepare a prospective Business Plan for 3-5 years. The Business Plan, when designed with flexibility, has scope for scaling up existing activities/adding new activities/discontinuation of any non-viable activity, as and when opportunities arise.

*In a nutshell a business plan must answer the following questions about the FPO's
Business - **What?/ Who?/ Where?/ When?/ Why?/ How?/ How much?***

3. Features of a good business plan

- a) A good business plan should be a blueprint for the FPO for a 3-5 years period and should act as a guiding document that can inform the FPO, where it is now and where it has to go.
- b) It should act as a link between various stakeholders, viz. farmers/ producers, service providers, markets, development agencies, financial institutions, government departments, etc.
- c) The business plan should target for development of farmers/producer members of FPOs through maximising their incomes and ably compete in the market.

- d) The business plan of the FPOs (generally of small and marginal farmers) must encompass the integrated value chain model, as the risk and profit of the business activities may have a direct impact on all the members of the FPOs.
- e) The business planning exercise should involve identifying gaps and problems faced by the farmers in the targeted cluster.
- f) The business planning exercise should essentially address the issues faced by the farmers in increasing their farm productivity and hence incomes and profitability.

4. Constituents of Business Plan

A business plan document provides broad business related parameters, depending upon which, the FPO can assess the progress in business development and thus take proper business decisions at the right time. A typical business plan has the following components:

1. **Introduction and the Executive Summary:** A typical business plan begins with a brief introduction of the FPO followed by an executive summary. The purpose is to communicate the gist of the plan in a convincing way to those interested in the project including the potential investors, financial institutions, etc.
2. **Business Description:** The details on the business concept, industry, business structure, products, services and business strategy are discussed in this section.

The business description explains the business concept by giving a brief yet an informative picture of the history, the basic nature and the purpose of the business, including business objectives and why the business will be successful.

3. **Marketing Plan:** The marketing plan deals with how the product will be placed in a potential market for better price recovery and profitability. The potential customers, competitors, and strategy for positioning the products in the market are defined under the marketing plan.

Analysing and understanding the industry, the competition, and the market in which the business will operate is fundamental to the business plan. The result of the analysis will:

- Provide a thorough understanding of the business environment
- Guide the development of an effective marketing plan
- Guide the development of a realistic business plan
- Bring forth the special technology, innovation, new perspective, or unique value that the business offers to the customer.

4. **Operational Plan:** Operation is the work (activity) of the business. The operational plan gives an overview of the flow of the daily activities of the business and the strategies that support them. The main purpose of the operational plan is to show that the business is focused on the critical operating factors to make it successful.
5. **Financial Planning:** The financial plan translates all the other parts of the business plan - 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 the 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 covered in the financial plan:

1. Capital requirement and financing pattern
2. Financial projections including cash flow statement
3. Financial returns (Return on Investment, Internal Rate of Return, Net Present Value), income and cash flow statement, balance sheet and other financial ratios, such as break-even analyses.

Developing this section of the business plan may require the help of an accountant and a good spreadsheet software program.

The Preparation of the Financial Plan shall be discussed in detail in the following chapters. Broadly, the three stages of the business planning exercise can be depicted as follows:

Both pre and post stages of business planning are crucial to the business plan development and deployment, to get the expected results.

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 and the strategies to achieve them, potential problems and ways to resolve them, the organisational structure of the business (including titles and responsibilities), and finally, the amount of capital required to finance the venture and keep it going until it reaches a break-even point.

5. Preparation of Business Plan in a simple, clear and step by step manner

In the subsequent chapters of this book, the methodology for preparing the FPO's business plan is described in a simple, clear and step by step manner.

6. Stages of Business Planning

(i) Business preparedness stage

The exercise of business planning needs basic information about the FPO's area, infrastructure and support services available in the vicinity. Such information can be

collected through secondary data and baseline survey or Participatory Rural Appraisal (PRA) exercises conducted in the area. Both financial and non-financial indicators are considered for determining the business's performance. Three simple methods to assist the business preparedness activity are -

- a. Feasibility analysis
- b. SWOT Analysis
- c. Critical Planning Questions

(ii) Formulating a vibrant business plan

A new FPO dealing with agricultural activities should follow seven steps while preparing a vibrant business plan as detailed below-

(iii) Business Progress Monitoring

To ensure the company's progress, the business plan needs to be followed consistently. The future activities in the plan can be modified or adjusted to practical situations.

7. Business Opportunities for FPOs

The FPO, as a business entity, should take over the responsibility of anyone or more activities in the value chain right from procurement of raw materials to delivery of the

final product at the ultimate consumers' doorstep. In brief, the FPO can undertake the following economic activities as a business entity:

An FPO can support the member farmers in getting more income by undertaking any/many/all of the activities listed above. By aggregating the demand for inputs, the PO can buy in bulk, thus procuring at a cheaper price and also saving on transportation costs. Thus reducing the overall cost of production. Similarly, the FPO may aggregate the produce of all members and market it in bulk, thus, fetching a better price per unit of crop produced. The FPO can also provide market information to the member farmers to enable them to hold on to their produce till the market price become favourable. All these interventions will result in more income for the member farmers.

An indicative list of various business opportunities available to FPOs is as given below:

1. Pre-harvest Stage

- Input supply businesses – seeds, fertiliser, pesticides (licence for these inputs), sprayers, pump sets, pipelines, accessories etc.
- Custom hiring business – hiring tractor, power tiller, thresher, land leveller, weeder, transplanter, etc. through common facility centre. (Many State Governments providesubsidies to FPOs for undertaking Custom Hiring Centres)
- Dissemination of technology and innovations in agriculture and allied sector

2. Post-harvest Stage

- Aggregation or procurement and storage of produce
- Marketing business – Bulk marketing to mandi/ whole seller/ institutional buyers
- Primary processing like sorting, drying, cleaning and grading
- Insurance services – Crop insurance, farm machine insurance etc.
- Brand building, Packagingand Standardisation
- Participation in commodity exchanges ande-NAM

- Export of Agri and allied produce
3. **Other ancillary/allied products/services**

8. **Resource mapping of cluster area through Diagnostic Study and Feasibility Study**

A Diagnostic Study of the cluster area (the FPO's territory) should be undertaken to assess the preliminary situation of the farmers as also the status of agriculture and allied activities in that area. It will help the FPO to identify the potential interventions required and understand the specific context of project implementation. The facts and figures that are to be captured, must be comprehensive and lead to action. The process of diagnostic study involves the collection of primary data and secondary data followed by a feasibility study.

- a. **Collection of secondary data:** Secondary data of the cluster area is collected and analysed to identify the potential activities and assess the resources available to support the FPO's businesses. Though most of the needed information is now available on the official website of the concerned district, discussing it further with the concerned line department officials and KVKs would be helpful. The secondary data about the cluster area should provide the following information:
- Block map:** The map shows the boundary and landscape of the cluster area, details of panchayats and villages, connectivity and other details.
 - Occupational structure of cultivators:** Information about activities undertaken by farmers under agriculture and allied sectors and other livelihood activities in the area.
 - Rainfall Pattern:** The analysis of rainfall data for the past 25-30 years to facilitate an understanding of the trends in rainfall patterns and the impact of climate change in the cluster.
 - Seasonality, cropping pattern and preparation of cropping calendar:** Provides information regarding crops grown in different seasons, and relevant technologies for the agricultural operations. Data to be helpful in understanding the production trends, market demand, soil health, labour demand and the availability of resources.
 - Land use pattern and productivity assessment:** The analysis of the data for defining the future interventions in agriculture and allied sector.
 - Natural Resources:** The information on forest cover, non-timber forest produce, watersheds, wastelands, water bodies - tanks, rivers, coastal areas, etc. to help in understanding the economic opportunities available for the people in the cluster.
 - 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 the FPO choose its interventions.

- h) **Infrastructure facilities:** The information on road and rail connectivity, approach between villages, transport facilities, internet connectivity, availability of banking infrastructure, marketing co-operatives and PACS, storage facilities, irrigation facilities, markets etc. can be a key to planning for business.
- i) **Market details:** Information on markets of input and output services is required for assessing the cost of operation and the scope for marketing.

Overall, the analysis of the secondary data helps in understanding the overall socio-economic scenario of the cluster area. These details could be marked on a map which will help to identify the cluster of nearby villages based on commonalities.

- b. **Primary Data Collection through baseline survey and Participatory Rural Appraisal (PRA):** Primary data (first hand data) of the identified cluster is required to help in formulating a technically feasible and economically viable business plan. The FPO can collect the required primary data through a baseline survey.

Participatory Rural Appraisal (PRA) is an approach to collecting data and gathering the farmers' perspectives on various problems/issues encountered by them as also the type of opportunities available in the cluster area.

Depending on the type and nature of data required, appropriate PRA methods and tools may be selected for data collection in the given village/s. Having determined the set of variables to be investigated, a major challenge is deciding on participatory methodologies and techniques for capturing the minimum set of data and information required. E.g., seasonality of crops, mapping problems farmers face while growing a particular crop, etc.

- c. **The output of a baseline survey can present the following information:**

Cropping Activities	
Cropping Season/ Crop Rotation	Land preparation – mode and cost
Quantity of input needed per acre and the cost of input	Cost of cultivation per unit area
Varieties and seed rate	Seed availability – Source and Cost
Access and availability of resources for cultivation (land, water, fertilisers, pesticides, labour, credit and technology support)	Availability of labour/workers and prevailing wage rates
Crop-wise/Activity-wise production and productivity as also the gaps	
Technology	
Level of adoption of Package of practices and gaps	Adoption of new technologies and issues involved

Finance	Formal and informal credit – Sources, cost, outreach, etc.
Marketing	
Marketing supply chains, level of farmers participation, gaps, the scope of developing alternate supply chains	Market price movements Details of service providers and associated margins
Risk Management	
The risks associated with the production (rainfall, water, climatic condition, pest and diseases)	Risk mitigation mechanism – schemes, coverage, tools
Society	Social and cultural situation in the villages

d. **Feasibility Analysis:** Using information from the primary and secondary data, the feasibility of the prospective economic activities in the identified cluster can be assessed. The identified activities can be grouped into

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

Selection of viable economic activities for new FPO

- Based on the baseline survey and PRA exercise, analyse what are the problems faced by the farmers in the cluster area and which kind of problems can be solved through the FPO. ***Remember, the problems faced by the farmers are basically business opportunities for the FPO.***
- While selecting the viable economic activities as the business of the FPO, think about whether the FPO can provide round the year work/farming activities to its members.
- While selecting the economic activities for the FPO, the focus should be on reducing the cost of cultivation as well as a reduction in marketing costs.
- Although the procurement of fertilisers has a very low margin, it is an essential component and helps to develop an organic link between the FPO and the member farmers. Besides, bulk purchase of fertilisers can help reduce farmers' cost of cultivation.
- The prioritisation of the economic activities should be based on the availability of financial resources and the capacity of the FPO with minimum risk. In the beginning, select 4-5 viable economic activities for better output but provide end to end solutions. Avoid financial and operationally unviable activities even though

it seems attractive otherwise. The FPO can't give solutions to all the problems of the farmers.

- Scale-up business activities in a step by step manner based on the available reserves and surplus and operational capacity of the FPO.
- Offer extension services to member farmers for input supply, technology transfer, aggregation, strategic marketing and bring new technologies/ practices/ innovation in to the business activities of the FPO.
- Prepare a crop calendar for each selected crop/allied activity. For example the variety of crops, date of nursery raising/ transplantation/ sowing/ weeding/ harvesting, etc. may be fixed by the mutual consent of farmers and the FPO to bring business discipline among the farmers and manage the demand and supply dynamics.

9. What is Agricultural Value Chain (AVC)?

A value chain is defined as the sequence of activities from production to consumption through processing and commercialisation.

An agricultural value chain is also defined as the **people** and **activities** that bring basic agricultural products like wheat or banana or vegetable from obtaining inputs and production in the field to the consumer, through stages such as processing, packaging, and distribution.

a. Elements of Agricultural Value Chain - Activities and Actors

The economic activities, main value chain actors, supporting value chain actors, demand and supply, the flow of product, money, information and knowledge are the basic elements of the agricultural value chain.

b. Institutional Mechanism in Value Chain:

In the language of value chains, each person in the chain charges an ‘economic rent’ (or a fee) at his or her stage in the chain. *Products, money, information and knowledge* are the basic elements which flow among the value chain actors and businesses. These elements are either transferred or exchanged among the value chain actors and businesses.

c. Ecosystem of the Agricultural Value Chain

- Agri Value chain includes a full range of activities and various value chain actors involved in the movement of the agricultural produce from producer/ farmer up to the ultimate consumer.
- For a value chain to be viable and sustainable, each stakeholder or process in the value chain has a link to the next.
- At each stage, some additional transformation or enhancement is made to the product.
- Additional transformation or enhancement may range from simple storage and movement of the products to complex processing and packaging activities.
- Each segment of a chain has one or more backward and forward linkages.
- A value chain is not an entire sector or sub-sector. It involves a specific group of interrelated producers and other actors who cater to a particular end market.
- The relationship between buyers and sellers can be described through various types of linkages along a continuum:
 - ✓ **Instant or spot market**, where producers come to sell their commodities and where prices fluctuate; this is the riskiest in terms of setting a market price;
 - ✓ A **long-term relationship** (often informal) characterised by trust or interdependency (such as between a farmer and local input trader);
 - ✓ A contract to produce and buy, known more generally as **contract farming**;
 - ✓ A capital investment by one of the buyers for the benefit of the producer, characterised by high levels of producer credibility and dependence; and
 - ✓ Full **vertical integration**

In the Indian context, except the producer, all other value chain actors are quite organised.

Informal and fragmented connectivity led to low bargaining power for farmers, low price realisation and the risk of manipulated prices. Agriculture has been changing rapidly from one of fragmented production and marketing relationships toward integrated market systems, or chains. Driven by gains from economies of scale and globalisation of the food chain, multinational agri-enterprises increasingly dominate the sector with more and more vertical and horizontal linkages or integration. The changes are also being driven by the marketplace and responsiveness to consumer interests, including stricter compliance, timeliness and quality standards. Good Internet penetration in villages has speeded up the process.

d. “Value Chain Development” in the context of FPO

A successful Business Plan is one that has found a way to create value for customers – i.e., a way to address a need of customers. The customers in an FPO can be farmer members or retailers or wholesalers depending on the type of product or service the FPO chooses to operate with. The most important attribute of a “customer value proposition” is its precision - how perfectly it understands the needs of the customer and addresses those needs. However, such precision is a difficult thing to achieve. FPOs often neglect to focus on this one aspect and dilute their efforts by attempting too many things, setting up themselves for an easy failure in achieving their objectives.

The very foundational objective of an FPO is adding value to the produce as against selling the raw product directly in the market. Therefore, Value Chain Development in the context of an FPO comprises “The full range of activities that is required to bring a product or service from conception, through the different phases of production to the final customers. It involves a combination of physical transformation and the input of various producer services.” Though simple in definition, the concept of value chain holds tremendous meaning to it. Farmers start their agricultural activities by pre-sowing and end up marketing their produce, during which, the initial produce will transform into a consumer good. The entire range of activities from pre-sowing to marketing must to be visualised for describing this value chain.

Session III: Financial Planning - Role, Importance and Coverage

1. What is Financial Planning?

Money is essential to bring a Business Plan to reality. A Business Plan begins with – (a) Business Idea Generation, followed by –(b) Opportunities and Threats Analysis (SWOT), leading to the (c) Identification of Business Opportunities, giving shape to a (d) Marketing Plan and Culminating in a (e) Financial Plan.

The financial plan translates all the other parts of the business - the opportunity, the operational plan, the marketing plan, the management team - into anticipated financial costs and results. It contains the current status and the future projection of the 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:

1. Capital requirement and financing pattern
2. Financial projections including cash flow statement
3. Financial returns (Return on Investment, Internal Rate of Return, Net Present Value)

Financial Planning is the last part of the Business Planning Process and it covers the following major aspects:

- Budget and Sources of Finance
- Fixed and variable costs
- Working Capital Requirement
- Financial Analysis
- Financial Statements
- Sensitivity Analysis

2. The Budget

The ultimate tool for an FPO to monitor and keep control over the business operations is the budget. It is the forecast of all cash sources and expenditures. It helps to determine how much money you have, where to use it, and whether you can achieve your financial targets. It is an indicator of the flow of money into, through and out of the business.

Budgeting is the process of creating a **plan to spend the money**. This spending plan is called a **budget**. Creating a spending plan allows us to determine in advance whether we will have enough money to do the things you need to do or would like to do. A budget is a financial plan for a defined period, often one year. It may also include planned sales volumes and revenues, resource quantities, costs and expenses, assets, liabilities and cash flows.

To prepare a good budget, the following three questions should be answered:

- How much net profit (i.e. sales minus costs) do I want the FPO business to make in the financial year?
- How much it will cost (both fixed and variable costs) to generate that profit?
- How much sales revenue is necessary to support both profit and costs?

Three basic elements of budget are:

1. **Sales Revenue**
2. **Costs**
3. **Profits**

Sales Revenue: Sales revenues are the key figures in any budget. One has to estimate the sales revenues that would accrue to the business as accurately as possible. These should be assessed based on the estimated and the unit price (decided on the basis of past sales records or industry averages).

Once the sales targets have been fixed (as accurately as possible), the necessary costs can be estimated which would help in realising the sales revenues.

Costs: Estimating costs in any business is a complicated procedure. Small changes in the assumptions on which the costs are estimated, can render the whole budgeting exercise useless. Costs are of two types – ones that change with volumes of sales and ones that do not change. These are called variable costs and fixed costs, respectively.

Profits: For any business to be viable in the long run, the sales revenues must always be greater than the costs. This difference in the sales and the costs is called profit.

This means that the sales value is of such a volume that it covers all costs and also has a reasonable amount of profits, at least equal to the benchmarked Return on Investment.

$$\text{Sales} - \text{Costs} = \text{Profit} \quad \text{or} \quad \text{Sales} = \text{Profit} + \text{Costs}$$

3. Short Term and Long Term Budget

Short Term Budget: Considers the budget within a year

Particulars	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Fixed Cost												
Variable Cost												
Total Cost												
Revenue												
Net Returns												

Long Term Budget: considers the budget over several years

Particulars	Year	Yr 1	Yr 2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12
Fixed Cost													
Variable Cost													
Total Cost													
Revenue													
Net Returns													

4. Capital Requirement for a business activity

Any business will require money to start and run the business.

The capital requirement will depend on the nature and volume of business and would vary from one business to another. The capital requirement is classified as 'Fixed Capital' or 'Block Capital' and 'Working Capital' or 'Running Capital.'

Capital is the money needed by the business to perform business operations.

Capital in business consists of Fixed Capital and Working Capital.

Fixed Capital is necessary for buying productive assets such as machineries, land, buildings, storage, etc.

Working Capital is used for the day-to-day tasks such as buying materials, paying wages, paying salaries, etc.

Fixed capital or Block capital

Fixed Capital is normally a one-time expenditure whose benefits are expected over a period of time. The expenses on minimum office set-up with furniture, fixtures and other equipment like computers, printers, almirahs, Internet/ telephone connections, etc., are fixed costs. The FPOs are engaged in the activities of procurement, aggregation and grading of raw produce before a sale. In such cases, infrastructure like collection centres, warehouses, weighing machines, graders/ sorters, etc. may be required, which involves Fixed Capital expenditure. This infrastructure can be purchased or can be taken on rent depending upon the situation.

Long term loans are required to meet the fixed capital requirements towards buying machinery or setting up infrastructure.

Working Capital

Working capital refers to finance available for carrying on the day to day business operations. Working capital represents the financial liquidity of the business. The management of working capital makes a big difference in the growth and continuity of business.

Working capital is the difference between a business's current assets and its current liabilities. In simple terms, working capital is the amount of money required by a business to cover its short term liabilities.

Working Capital = Current Assets minus Current Liabilities

Current assets - Assets which in the ordinary course of business can be converted into cash within a brief period (during operating cycle and not exceeding 1 year)

Current Liabilities - Liabilities intended to be paid in the ordinary course of business within reasonably short period of time (normally within a year)

Working Capital is the funds required to carry the required levels of current assets to enable the enterprise to carry on its operation at the expected levels uninterruptedly.

The working capital of FPOs may include the following cost items:

- a. Procurement of raw material, storage cost, processing, transportation, insurance, etc.
- b. Management and administration cost for day to day activities, including staff salary, travel, rent, electricity, water, telecommunication, phone/ fax, stationery, cleaning, meeting expenses of BoD/ GB, license fee, insurance and other statutory fee and other miscellaneous expenses
- c. Training and capacity building of BoDs and FPO functionaries: Training on subjects, like provisions in the Act, rules and regulations, statutory compliances, roles and

responsibilities of BoD and General body, banking operations, etc., and also by exposure visits to the successful PCs.

A **Working Capital Loan** is a short term loan required for running existing operations of the Producer Organisation viz. buying raw materials or building inventories. Working capital loan may be a part of a **Composite Loan** (Term Loan + Working Capital) or a separate limit. There are different methods of working out the working capital limit. Normally, banks provide 20% of the annual turnover as working capital loan.

5. Cash flow Statement

Cash flow statements show cash inflow and outflow from all possible sources of the business over a period of time and are used for planning of extent/expansion of the business activities.

For an existing business, the cash flow statement would consist of the actual figures of income and expenses of previous years combined with projected income and expenditure for the next period. In the case of a new venture, projected financial requirements and disbursements are used. The cash flow statement identifies-

- a. When cash is expected to be received?
- b. How much cash will be received?
- c. When cash will be spent to pay bills and debts?
- d. How much cash will be needed to pay expenses?

Cash flow also identifies the source of cash, i.e., will it come from sales and services rendered or should it be borrowed? It also takes into account receivables and how long it will take the customers to pay.

The cash flow statement deals only with actual cash transactions and not with depreciation or other non-cash expense items and can be prepared for any period of time.

A typical cash flow statement has opening cash in the beginning and the receipts for new cash sales and paid invoices are added and then the payments such as bills, loans, taxes, etc. are subtracted. This gives us the total cash flow (cash in minus cash out) and the closing cash.

A Cash Flow Statement includes - Opening Cash Balance, Cash Inflows for the period, Cash Outflows for the period and Closing Cash Balance:

$$\begin{aligned} &\text{Starting cash} + \text{Cash in} - \text{Cash out} = \text{Ending Cash} \quad \text{OR} \\ &\text{Closing cash balance} = \text{Opening cash balance} + \text{Inflows} - \text{Outflows} \end{aligned}$$

6. Fund Flow Statement

A Funds flow statement is prepared to show changes in the assets, liabilities and equity between two balance sheet dates, it is also called a statement of sources and uses of funds.

The funds flow statement

1. Reveals the net result of business operations done by the entity during the year.
2. Serves as an additional reference for the stakeholders and others like analysts, members, investors, creditors, suppliers, and government to look into the financial position of the company.
3. Shows how the funds were raised from various sources and also how those funds were deployed by a company. It is a great tool for management.
4. Reveals the causes for the changes in liabilities and assets between the two balance sheet dates therefore providing a detailed analysis of the performance of the company.
5. Helps the management in deciding its future course of plans (allocation of financial resources) and also it acts as a control tool for the management.

Sources of Funds	Application of Funds
1. Capital 2. Debts 3. Funds generated from operations 4. Sale of assets (if any)	1. Funds utilised in the creation of Fixed assets 2. Funds utilised in the creation of other Non- current assets. 3. Funds utilised in repaying existing loans. 4. Funds utilised for paying dividends, taxes etc.
*(Balance figure) Excess usage of funds over sources.[Decrease in working capital]	(Balance figure) Excess of Funds, over-application of funds. [Increase in working capital]
Total	Total

Session IV and V: Financial Planning: A Project Approach

1. The Concept of a Project

A Project is a location-specific activity with specific objectives, time and cost and is non-repetitive in nature. The concept of a project is applicable to small as well as big investments - purchasing of buffaloes as also the construction of a huge dam are both projects.

In Banking Terms, a project includes Capital Investment for the creation of capital assets that will generate benefits over an extended period of time.

It is a flexible approach to development and each project is considered to be an independent unit having its own costs and benefits.

'Project' is an Acronym for:

P	Production of Goods and Services
R	Resources: Men, Material, Money etc.
O	Organisation
J	Justification: Social benefits, Wealth, Jobs etc.
E	Economic Viability: Profits
C	Continuity: Planning, Research and Development
T	Time bound implementation and operation

Project planning involves determining and documenting a list of specific ***project goals, deliverables, features, functions, tasks, deadlines and costs***. In other words, it is what needs to be achieved and the work that must be done to achieve it.

2. The Project Approach

It is an integrated approach for systematic exploitation of resources towards a business goal. The Project Approach

- Gives an idea of costs year by year – helps in resources planning
- Shows the impact of investment on the stakeholders
- Enables better assessment of administrative and organisational problems
- Encourage examination of alternatives

Project Approach finds favour, the world over in almost every type of economic activity. In the liberalised economic environment and in the wake of financial sector reforms, the importance of the Project Approach has increased.

3. The Project Cycle and Project Cycle Management

It is a sequence, beginning with an agreed strategy, which leads to an idea for a specific action, oriented towards achieving a set of objectives. Then it is formulated, implemented, monitored and evaluated with a view to improving the strategy and further action.

Project Cycle Management (PCM) involves planning and managing projects, programmes and organisations effectively. Projects sometimes fail because they are badly planned and do not take into account some important factors, particularly the needs and views of stakeholders.

PCM ensures that all aspects of projects are considered carefully, especially at the formulation stage. Under PCM, various aspects of the project are reconsidered throughout the project cycle to ensure that any changes which have occurred are included in the project design. As a result, projects are likely to be successful and sustainable.

(i) Project Identification

- First step in the Project Cycle.
- Decide – What to Produce? Where to produce? And for Whom to Produce?
- Identify the activity, place and market.
- The product needs to be market-driven, demand-driven.
- Find the Market Potential – import/ export, price trends, existing industries
- If choices are many – choose the most appropriate/attractive project

(ii) Project Formulation

The process ensures the identification and elimination of key risks at the earliest possible time and maximises development opportunities by ensuring that projects are well conceptualised.

- The preparation stage of the Project.
- A feasibility study is the first step in Project formulation.
- for complex projects - even a pre-feasibility study may be needed.
- Specialised consultancy firms offer services for conducting feasibility studies.

- All the preparation is necessary to ensure that a proposed project is feasible and appropriate and that it can be successfully implemented.
- Points to be considered while determining the size of the project –
 - Physical resources
 - Financial resources
 - Market size, condition and factors
 - Capacity of the borrower/ entrepreneurs
- Commercial, Technical, Financial, Economic Feasibilities are studied
- Likely future difficulties/risks must be anticipated and the necessary mitigation measures and provisions made.
- Advanced techniques of Project Planning like PERT (Programme Evaluation and Review Techniques) and CPM (Critical Path Method) are used in capital intensive and complex projects which involve long gestation periods.
- A “Liberal Approach” is to be adopted while assuming the costs (assume more costs).
- A Conservative Approach is to be adopted while assuming the benefits (assume fewer benefits/lesser incomes/profit).

(iii) Project Appraisal

- Project Appraisal is a comprehensive and systematic review of all the aspects of a project in order to facilitate the decision making process.
- It is a second look by a person who is in no way involved in its preparation.
- There is no cut and dry formula to decide whether a project is acceptable or unacceptable straight away.
- It highlights weak areas and steps to strengthen them adequately to ensure the success of the project.
- It is an exercise in future, based on certain assumptions/ historical data/ past performances.
- It is a joint exercise by promoters and institutions.
- It has to be completed within a time-bound manner.
- Banks undertake an appraisal of projects before financing.
- The appraisal may involve Financial, Commercial, Managerial, Economic and Environmental analysis.

(iv) Project Implementation

There are three phases of implementation of a project:

- Pre-Implementation - Preparing the schedule of work, arrangement of manpower, inputs etc.
- Implementation - Actual Grounding of the project
- Post Implementation - Operation/ production

Revisions and adaptations are made for unexpected events in each of the phases, and finally the project is brought to completion

(v) Project Monitoring

Monitoring is an ongoing process of keeping track of the project. Banks may undertake two types of monitoring:

- Desk (off-site) Monitoring
- Field (on-site) Monitoring

Monitoring objectives:

- Whether the progress of the project is as per phasing? to review the implementation process for mid-term corrections, if any.
- Whether physical and financial achievements are in step?
- Whether the project is encountering any problem of litigation, land acquisition, statutory clearances or inadequate budgetary allocation, etc.?

(vi) Project Evaluation

A systematic and objective assessment of a completed project, its design, implementation and results is Project Evaluation.

- Evaluation is conducted for the purpose of learning lessons of success and failure from the project.
- The aim is to determine the relevance and fulfilment of objectives, as well as efficiency, effectiveness, impact and sustainability so that the lessons learnt can inform further management decision.
- Several organisations like NABARD and its Training Establishments conduct such evaluation studies and publish them for wider circulation.

4. Financial Appraisal of a Project

The components considered under Financial Appraisal broadly contain the following:

- Cost of a Project: source of finance, Debt-Equity Ratio
- Block/Fixed Capital and Working capital
- Evaluation and interpretation of Financial data
- Cash flow, profitability (estimates of costs and benefits)
- Investment decision using Discounted Cash Flow Methods of BCR, NPV, IRR
- Bankability and Repayment Schedule
- Internal Risk Rating and External rating
- Security: Primary and collateral security, and documents
- Monitoring arrangements

Methods of Financial Appraisal

There are two methods of financial appraisal:

1. **Undiscounted Cash Flow method** - Using Cash Flows as they are, the Payback Period of the project is estimated considering the entire benefit of the project at Present Value. The payback period is the length of time required to recover the initial investment and the projects with a shorter payback period are generally accepted.

2. **Discounted Cash Flow Method (DCF Method)** – Using Time Value of Money by discounting future cash flows – NPV, BCR, IRR. This section is a bit technical, but once the concepts are worked out practically for a project, they will become clearer.

DCF is a method of valuing a project using the concept of time-value wherein all future cash flows are estimated and discounted using the cost of capital to give their present value. Discounted Cash flows (both inflow and outflow) are calculated for the full life cycle of the project by applying a discounting factor and the net cash flow is ascertained by aggregation of discounted cash flows.

Under this technique – for simplifying calculations, the operating cash inflows or outflows are assessed presuming that all costs have been incurred at the end of the year.

Under the Discounting Cash Flow Technique:

- Benefits are spread over the entire life of a project
- Benefits cannot be added and compared with the capital expenditure incurred at one point of time or over a period of years because these two items are incomparable.
- Money (capital) has a price called interest - paid when it is borrowed.
- Why? Because, money can be put to several alternative uses.
- Present value of future income will be smaller.
- How much smaller? Depends upon the intervening period, the amount of future income and the rate of interest - Discounting Factor. Discount factor is the interest rate at which you discount expected future cash flows to the present. Discount factor is “opportunity cost” of capital.

A) Net Present Value (NPV)

- Cost and Benefit streams in the cash flow are to be discounted separately
- Total of Discounted Costs gives Present Worth of Costs (PWC)
- Total of Discounted Benefits in Cash Flow gives Present Worth of Benefits (PWB)
- ***NPV is the difference between Present Worth of Benefits and Present Worth of Costs***
- It is a measure of value creation – When NPV is positive, the project creates value and when negative, the project destroys value
- Investments can be undertaken if its NPV is positive and should be rejected if NPV is negative

B) Benefit-Cost Ratio (BCR)

- It is the Ratio of Present Worth of Benefits to Present Worth of Costs
- $BCR = \frac{\text{Present Worth of Benefits}}{\text{Present Worth of Costs}}$
- If BCR is > 1 , then the project is viable

- It gives broad idea about the project viability.
- It can also explain the NPV position of an investment.
 - ✓ If BCR is equal to ONE then NPV will be equal to Zero.
 - ✓ If it is greater than ONE, then NPV will be positive.
 - ✓ If it is less than ONE, then NPV will be Negative.

Internal Rate of Return (IRR)

IRR is a commonly used measure of a project's viability. It is the discount rate that makes the Net Present Value (NPV) of the project equal to Zero and BCR = 1.

- NPV = Net Present Worth NPW = 0
- Present Worth of Benefits = Present Worth of Costs
- An investment to be accepted if its IRR is higher than its cost of capital and should be rejected if lower
- IRR can also be interpreted as a measure of the profitability of its expected cash flows.
- IRR is calculated by Interpolation followed by a Hit and Trial Method: NPV is calculated for different values of discounting factors till the negative value of NPV is found.
- The formula for calculation of IRR is as under

$$+ \frac{\text{NPV @ higher discount rate}}{\text{NPV @ lower discount rate} - \text{NPV @ higher discount rate}} \times \text{NPW @ lower discount rate}$$

- IRR not estimated beyond 50%
- Present cut off IRR : 15%

An internal rate of return calculation allows us to determine the **interest rate** that a business will earn on the original amount of capital invested and the expected future cash inflows. In other words it provides the discount rate that a business produces rather than applying a discount rate determined from outside the business. It is calculated by equating the present value of expected cash outflows with the present value of expected inflows.

Illustration – Calculation of NPV and BCR

Year	Investment cost	Benefits	Discount Factor DF @15 %	PW of costs (2x4)	PW of benefits (3x4)
1	2	3	4	5	6
0	1,000	-	1.000	1000	-
1	-	400	$(1/1.15) = 0.870$	-	$(400 \times 0.87) = 348$
2	-	500	$(1/(1.15 \times 1.15)) = 0.756$	-	$(500 \times 0.756) = 378$
3	-	500	$(1/(1.15 \times 1.15 \times 1.15)) = 0.658$	-	$(500 \times 0.658) = 329$
Total	1,000	1,400		1,000	348+378+329 =1,055
NPV				1055 - 1000	55
BCR				1055/1000	1.055

Illustration – Calculation of IRR

Year	Investment cost	Benefits	DF @15 %	PW of costs	PW of benefits	DF @ 20 %	PW of costs	PW of benefits
0	1000	-	1	1000	-	1	1000	-
1	-	400	0.87	-	348	0.833	-	333
2	-	500	0.756	-	378	0.694	-	347
3	-	500	0.658	-	329	0.579	-	289
Total	1000	1400		1000	1055		1000	969
NPV					55			-31
IRR	18.2							

From the above table,

- Lower Discounting Rate = 15% Higher Discounting Rate = 20%
- Difference between two Discounting Rates = 20 - 15 = 5%
- NPV @ Lower Discounting Rate = 55, NPV @ higher Discounting Rate = -31

Therefore, the IRR may be calculated as under

$$+ \frac{\quad}{\quad} \times \left[\frac{55}{\quad} \right]$$

Present Value of future cash flows and the IRR can be directly calculated by using computer spread sheets like MSEXcel, lotus-1-2-3, Google Sheets etc.

Summary of Conclusions on the basis of NPV, BCR and IRR is as given below:

BC Ratio	IRR	NPW (NPV)	Viability of the Investment
More than 1	More than lending rate	Positive (+)	Viable
One	Equal to lending rate	Zero	Marginally viable
Less than 1	Lower than lending rate	Negative (-ve)	Not viable

Session VI: Books of Accounts, Projected Financial Statements Balance Sheet and Profit and Loss Accounts and Cash Flow Statement

1. Books of Accounts

a. Books of Accounts to be maintained by Private Limited Company Under the Companies Act:

Every company has to maintain books of accounts, at the registered office or any office that the board of directors may decide. If the company is maintaining books at an office other than the registered office, it has to intimate the same to the Registrar of Companies (RoC). The company can maintain the accounts electronically also. The following books of accounts/records/statements are required to be maintained by a company:

- Cash Book, Journal, Cash flow statement and Ledgers
- Copies of bills or receipts, records of sales and purchases and records of assets and liabilities
- Financial Statements such as Profit and Loss Account (PLA), Balance Sheet (BS) and Trading Account.
- Deeds, vouchers and other Documents in Physical or electronic format

The books of accounts should be maintained for a period of 8 years from the end of the relevant financial year.

b. Maintenance of Books of Accounts under GST Act

- Production or manufacture of goods
- Inward or outward supply of goods or service or both
- Stocks of goods
- Input Tax credit availed
- Output tax payable or paid

These books of accounts should be maintained for 6 years from the last date of filing of annual return for that year.

2. Projected Financial Statements

They are extremely important, and in most cases, the decisive calculation that can help managers. Marketing Plan, Competition Analysis, Production Plan and Operation and Management Plan will provide assumptions that feed into the financial analysis.

Submissions should contain three financial statements (for the last 3 years) and future projections

- A. Income and Expenditure statement
- B. Balance sheet
- C. Cash flow statement

A. Income and Expenditure Statement or Profit and Loss Account

Indicates - How much revenue has the company earned over the time period?

What costs has it incurred to generate these revenues?



How much profit or loss?

B. Balance Sheet

A Balance Sheet provides a snapshot of a business's assets and liabilities.

What assets has the company used to generate its profits?

- Current Assets
- Long-term Assets

How are these assets financed?

- Debt
- Other liabilities
- Shareholders' equity

What is the company's cash position?

C. Cash flow Statement

What is the company's cash flow position:

- How much cash is the business generating?
- How much is used to operate the business?

Cash Flow Statement						
Cash Flow Statement for the year ended March 31, 2016			Month	Cash Inflow	Cash Outflow	Net Balance
Cash Flow from Operations			April			
Cash receipt from Customers	85000		May			
Cash paid for inventory	(5000)		June			
Cash paid for wages	(10000)		July			
Net Cash Flow from Operations	70000		August			
Cash Flow from Investments			September			
Cash received from sale of property and equipment	12000		October			
Cash paid for purchase of equipment	(40000)		November			
Net cash flow from investments	(28000)		December			
Cash Flow from Financing			January			
Cash paid for loan repayment	(15000)		February			
Cash received on loans extended (in any)	5000		March			
Net Cash flow from financing	(10000)		Total			
Net Increase in Cash	32000					

3. Closing of Books of accounts and preparation of Financial Statements

In order to facilitate review of operations of the FPO, the books of accounts are closed periodically i.e., at the end of each quarter, besides annual closing of books of accounts at the end of the financial year.

The following statements are prepared on the closing of books of accounts:

- A. Trial balance
- B. Trading and Profit and Loss Account
- C. Balance Sheet

A. Trial Balance:

A trial balance is a bookkeeping or accounting report that lists the balances in each account of an FPO's ledger. Debit/credit balance of ledger accounts are listed in the Trial Balance. The total of each of these two columns should be identical. The trial balance has the following format:

Trial Balance as on (Date) :

Ledger Account Number	Ledger Account Head	Debit	Credit

Cash/Bank balances appearing in Cash/Bank Book will also be included in Trial Balance.

Based on the Trial Balance and other adjustments (provision for depreciation, expenses, income and closing stock, proposed dividend etc.), financial statements are prepared.

FPOs registered under the Companies Act are required to prepare the following Financial Statements:

- 1. Trading and Profit and Loss Account
- 2. Balance Sheet

Besides the above statement, it is advisable to prepare a Cash Flow statement for the year to know the Cash Flow from operational activities, investment activity and financing activity, for the FPO.

Interconnection of Trial Balance, Profit and Loss Statement and Balance Sheets is depicted in the following figure:



B. Trading and Profit and Loss Account

This statement reflects the operational performance of FPO, while the trading account shows gross profit earned, Profit and Loss account shows net profit earned after operational, administrative and selling expenses. The format of the Trading and Profit and Loss Account is indicated below:

Name of FPO: _____

Trading and Profit and Loss Account for the year _____

Dr.			Cr.		
Particulars	Amount (Rs)	Amount (Rs) Previous Year	Particulars	Amount (Rs)	Amount (Rs) Previous Year
Opening Stock of			By Sales of		
- Inputs			- Inputs		
-Produce			-Produce		
To Purchase of			By Closing		
- Inputs			- Inputs		
-Produce			-Produce		
To Carriage Inward					
To Wages					
Gross Profit Carried Down					
Sub Total			Sub Total		
To salary			By Gross Profit b/d		
To Rent, Electricity, Taxes etc.					
To Audit Fee			By Other Operating income		
To other expenses			By Interest Earned		
To Depreciation on Assets					
To Carriage Outward					
To interest on borrowings					
Net Profit c/d					
Sub Total			Sub Total		
To proposed dividend			Net Profit b/d		
To General reserves					
To other (specific) reserve					
To balance of Profit transferred to Balance Sheet					
Total			Total		

C. Balance Sheet/ Asset Liability Statement

The Balance Sheet is a statement that lists the value of an FPO's assets, liabilities and shareholders'/ members' equity at the end of an accounting period. In other words, it provides an overview of the resources the FPO owns, the debts that it owes and the amount of shareholders'/members' equity and its application **on a particular date**. From the balance sheet one can determine the Net Worth as well as Working Capital requirement of an FPO.

- **Net worth** is the amount by which total assets exceeds total liabilities.
- **Working capital** is current assets minus current liabilities. The level of working capital should be high enough to cover the time needed to convert raw materials into finished goods, finished goods into sales and realisation of cash from Debtors.

The format of the Balance Sheet is given below:

Name of FPO: _____

Balance Sheet as on _____

Liabilities and Capital	Amount (Rs)	Amount (Rs) Previous year	Assets	Amount (Rs)	Amount (Rs) Previous year
1. Share Capital a) Authorised (.... # Shares of Rs each) b) Subscribed and Paid up (..... # shares of Rs each)			1. Fixed Assets a) Furniture acquired out of grant received from NABARD Cost Less: Depreciation till date b) Other Assets Cost Less: Depreciation till date c) Land and Building Cost Less : Depreciation till date		
2. Reserve and Surplus a) General reserve b) Other reserves c) Balance of P& L Account			2. Investments		
3. Grant and Donations received a) From NABARD (i) Furniture/ Office Expenses – Received less utilised (ii) Revolving Fund (iii) Registration charges Received less utilised (iv) Salary of CEO Received less utilised b) From State Government			3. Current Assets a) Loans and Advances b) Closing stock of inputs c) Closing stock of produce d) Cash and bank balances		

i) Capital Grant (in kind)					
4. Secured Loans					
a) Term Loan					
b) Cash Credit					
c) Bank Overdraft					
5. Unsecured Loans					
6. Current Liabilities and Provisions					
a) Sundry Creditors					
b) Proposed dividend					
c) Others					
Total			Total		

4. Key Financial Ratios:

Ratios offer a quick diagnostic tool to understand the financial health of a business. Financial Ratios are studied by lenders when appraising a project. There are four key financial ratios that could be derived from the above financial statements:

(i) Liquidity Ratios

Liquidity also known as 'short-term solvency' means the ability of the business to meet and dispose off its short-term obligations. The creditability of any business is affected by the ability or inability to meet these short-term obligations. Regular default on the part of the business would result in commercial bankruptcy which may further result in sickness and dissolution. Stakeholders like short-term creditors are predominantly concerned with the liquidity or the short-term solvency of the business as their stakes and claims are met in the short run by the business. These ratios are the (a) Current Ratio, (b) Quick Ratio and (c) Absolute Cash Ratio.

(ii) Solvency Ratios

Solvency or Long-term Solvency means the ability of the business to meet and pay off its long-term obligations as and when due. Stakeholders like long-term creditors are predominantly concerned with the long-term solvency of the business as their stakes and claims are met in the long run by the business. These ratios are the (a) Debt-Equity Ratio, (b) Total Assets to Debt Ratio and (c) Proprietary Ratio.

(iii) Efficiency or Activity Ratio:

Efficiency or Activity Ratios, also known as Turnover Ratios, measure the effectiveness of available resources utilised by the business. Efficiency or Activity Ratios indicate the efficiency with which the business is managing its assets and the speed at which the resources are turned or converted into Sales. These ratios are (a) Capital Turnover Ratio, (b) Working Capital Turnover Ratio and (c) Non-Current Assets Turnover Ratio.

(iv) Profitability Ratio:

Profitability ratios measure the business' overall effectiveness of returns generated on sales and investment. There are three kinds of profitability ratios, namely, (a) Profitability in relation to Sales - Net Profit Ratio, (b) Profitability in relation to Equity Shareholders' Funds - Earning per Share (EPS) and (c) Profitability in relation to Investments - Return on Investment (RoI).

Session VII and VIII: Working Capital Assessment

1. Fund Requirement for an FPO:

An FPO may require financial assistance for taking up various business activities as listed below:

- a. Procurement of Raw material, storage cost, processing, transportation, insurance, etc.
- b. Management and administration cost for day to day activities, which may include staff salary, (Manager/CEO, Production Officer, Accountant, Marketing Officer, etc.) travel, rent, electricity, water, telecommunication, phone/fax, stationery, cleaning, meeting expenses of Board of Directors or the General Body, License fee, insurance, other statutory fees and other miscellaneous expenses.
- c. Training and capacity building of BoDs and FPO functionaries: Training on subjects, like provisions in the Companies Act, rules and regulations, statutory compliances, roles and responsibilities of BoD and General body, banking operations, and also by exposure visits to successful FPOs.
- d. Infrastructures like warehouses, machinery, etc.
- e. Furniture, fixtures and other equipment like computer, printer, etc.

While some activities are short term in nature, others have long term credit requirements. FPOs may approach financial institutions for availing term loans (longer duration loans) for their fixed capital requirements such as requirements for infrastructure, machinery, warehouses, shops, etc. They may seek working capital loans (short duration loans normally period of up to 12 months) for their variable capital requirement.

Most of the FPOs require working capital funds support for initial activities like input trading, trading of agriculture produce, etc. Therefore, it calls for an understanding of working capital and its assessment.

2. Working Capital

Working capital is the capital required by an organisation which is used for its day to day operations and managing a business. It includes cash, inventory, accounts receivable, accounts payable, the portion of debt due within one year and other short-term payments.

In simple words, working capital is money required by a company for conducting its regular operations and is defined as -

Working Capital = Current Assets (minus) Current Liabilities

Current assets: Assets which in the ordinary course of business can be converted into cash within a brief period (during operating cycle and not exceeding 1 year)

Current Liabilities: Liabilities intended to be paid in the ordinary course of business within reasonably short period of time (normally within a year)

3. Components of Working Capital

The following components of the day to day business operations require liquid funds and form the requirement of working capital when not met by the FPO's current assets

- Purchase of agri-inputs to be supplied to its members
- Purchase of raw materials in case of processing
- Purchase of agricultural produce in case of simple trading
- Storage of raw material/ finished goods/ Agri produce
- Processing (food processing/ seed processing, etc.)
- Transportation of raw material, agro produce, items for selling, etc.
- Staff salary, travel, rent, electricity, telephone, Insurance of goods and other administrative expenses which can be termed as management and administration cost

4. Working Capital Loan

It is a short term loan, required for running existing operations of the Producer Organisation. It can be used for buying raw materials (seed, fertiliser, etc., in the case of the farm sector and leather, thread, etc., in the case of the non-farm sector) or building inventories.

A working capital loan may be a part of a composite loan (term loan + working capital) or a separate limit.

There are different methods of calculating the working capital limit. Normally banks provide **20% of the annual turnover as a working capital loan**. However, as the FPOs usually deal with multiple crops and activities which are seasonal in nature and their holding period may also be more in some cases like those dealing in seeds. Hence the annual turnover method may be suitable only for those FPOs which are into processing and marketing activities.

5. Assessment of Working Capital requirement

The quantum of working capital requirement depends on various activity-specific internal factors, viz, operating efficiency, the technology employed, level of quality control, etc., and external factors, viz, demand and supply gap, nature of the activity, availability of production inputs (raw material, labour, power and fuel), availability of credit, etc. Thus, the amount of working capital needed would depend on the prevailing conditions, level and type of business (e.g., more working capital is needed if fuel prices go up). The banks, therefore, review and reassess the working capital requirements of borrowing enterprises on a regular basis.

6. Methods of Assessing Working Capital Requirements:

As per the Reserve Bank of India guidelines, banks may sanction working capital lending limits after proper appraisal of the genuine working capital requirements of the borrowers. The banks will consider their business cycle and short-term credit requirements. Typically the following methods are used.

- Cash Budget System
- Operating Cycle Method
- Projected Annual Turnover (PAT) or Turnover Method
- Maximum Permissible Bank Finance (MPBF) System
- Net Owned Funds System

For small units, the Operating Cycle method and the Turnover method are used to assess the working capital requirements. They are explained in detail in the following section.

(i) Working Capital Assessment – Operating Cycle method

Working capital requirements depend upon the operating cycle of the company's business. Operating Cycle means the length of time required to convert items like raw material (RM), work in progress (WIP), finished goods (FG) and receivables into cash. Hence the Operating Cycle is the sum total of the following components:

- The time taken to acquire raw materials and the average period for which they are in the store
- Conversion process time
- Average period for which finished goods are in store
- Average collection period of receivables (debtors)

If raw material/ Agri produce, etc., are to be held by an FPO for a longer period before selling, then the operating cycle would longer. On the other hand, if the time gap between procurement and sale is less, then the operating cycle would be shorter.

Illustration – Operating Cycle Method

Acquire raw material and in store = 60 days

Conversion process time = 10 days

Finished goods in store = 20 days

Collection period of receivables = 30 days

Operating cycle $(60 + 10 + 20 + 30) = 120$ days

No. of Operating Cycles in a year of 360 working days will be $360 / 120 = 3$

If the Enterprise is incurring a total operating expenses of Rs. 12 lakh per annum,

The **Working Capital Requirement** (WCR) would be : $\text{Rs. } 12 \text{ lakh} / 3 = \text{Rs. } 4 \text{ lakh}$

(ii) Working Capital Assessment – Projected Annual Turnover (PAT) Method

Working Capital Requirements may also be worked out on the basis of the **Nayak Committee** recommendations, popularly known as the Turnover Method.

The working capital credit limits provided by lending banks are at a minimum level of 20% of the Projected Annual Turnover (PAT). This norm is applicable in the case of units (new as well as existing), village and tiny units with an aggregate fund-based working capital credit limit of up to Rs.5 Crore from the banking system.

- a. The lending norms pre-suppose that the working capital requirements of a unit may be considered as 25% of the value of output or PAT. Banks normally provide 80% of this amount, the remaining portion is to be brought in by the promoter by way of margin.
- b. The working capital credit limits provided by banks are at a minimum level of 20% of the projected annual turnover.
- c. The total working capital requirements of a unit, pegged at 25% of PAT, assume an average working capital cycle of 3 months. In reality, different units with different activities have different working capital cycle patterns at levels higher and lower than the average cycle of 3 months. It is therefore necessary that the permissible level of bank credit is also assessed by using other methods of appraisal as applicable in each case along with the PAT based appraisal of credit requirements for units.

Illustration – Projected Annual Turnover Method

Projected annual sales = Rs. 10,00,000

Working capital requirements: 25% of projected sales i.e. Rs. 2,50,000

Margin (contribution of Owner): 5% of projected sales i.e. Rs.50,000

Working capital to be funded by bank = Rs 2,50,000 (minus) Rs 50,000
= Rs.2,00,000

Working Capital Assessment for Small Business

Small businesses, retail, village and tiny industries in the Small Scale Industry (SSI) sector form an important business segment for commercial banks. Thus, providing timely assistance to these small entrepreneurs is equally important for lending banks. A timely and adequate level of bank credit helps generate employment in this sector.

It is important that the assessment and delivery of working capital credit facilities for such units are done on realistic parameters and the monitoring of credit facilities is done on a regular basis. The salient points to keep in mind while financing such units:

1. Small enterprises usually do not maintain proper books of accounts.

2. A full-scale application of holding norms for the purpose of assessing working capital credit limits in these situations may not be necessary in practice. Instead, a simpler form of holding norms based assessment may be used.
3. Monitoring the withdrawal of funds and the position of the outstanding balance in small loan accounts against a permitted level of drawing power may not always be practicable due to branches having a large number of such accounts. Commercial banks may disburse the total credit requirements of small units in the form of composite term loans (including the working capital component) and fix a schedule of repayment for the entire loan.
4. Small entrepreneurs tend to divert the amount of credit provided for business needs towards consumption needs.
5. Operating capital cycle of small enterprises also tends to be lower than three months. In view of this, there remains a possibility that the working capital credit requirements of small units are assessed at a level higher than that warranted by the production or business considerations. This is another reason, why diversion of business funds towards consumption needs occurs commonly in this sector.
6. Monitoring such loans is a more difficult proposition for the lending banks than assessing their credit needs.

Hence, a slightly different method of working capital assessment is followed.

Illustration: Working Capital Assessment for a Small Business

Operating Cycle in months		
1	Raw material holding	1 month
2	Semi-finished goods	½ month
3	Finished goods	½ month
4	Receivables	1 month
5	Total working capital cycle	3 months
Working Capital Calculations in Rs. per operating cycle		
1	Sales for the month	50,000
2	Raw material, power, wages, etc.	38,000
3	Drawing made by the promoter for sustenance (own use)	7,000
4	Total expenses per month (2+3)	45,000
5	Surplus per month (1-4)	5,000
6	Gross WC requirement = Total expenses per month x total working capital cycle = (4) x 3 months	1,35,000
7	Less approximate amount of credit available on purchases at any point of time (= 5)	15,000

8	Less: promoters' contribution	30,000
9	Working capital credit requirement (per operating cycle)	90,000

A simple method of computation of the WC credit needs of small businesses is as given below:

Step 1: Calculate the Operating Cycle: The average holding period of important items viz. raw material, semi-finished goods, finished goods and receivables etc. may be assessed by the credit officer on the basis of his/ her experience in dealing with similar kinds of activity. The aggregate of all the holding periods is the estimated operating cycle of the enterprise.

Step 2: Work out an estimate of sales and the corresponding production-related item-wise expenses per month (a justifiable amount of consumption expenses may also be included). The monthly amount of surplus may now be computed by subtracting the monthly expenses from the monthly sales.

Step 3: If the operating cycle is estimated in months, the product of the operating cycle and the total expenses per month may be considered as the gross working capital. It is then reduced by the estimated amount of trade credit generally available to the enterprise and also by the amount of margin to be brought in by the promoter. The process is illustrated below:

- Lending norms for SSI units provide that the minimum amount of bank credit should be 20% of projected annual turnover i.e. Rs 1,20,00 in this case.
- The credit officer may therefore sanction a total WC credit of Rs 1,20,000 in favour of the enterprise but may restrict the disbursement of the loan to the extent of the available amount of chargeable stock, less margin requirement.
- Alternatively and more conveniently, a Composite Term Loan (CTL) for the total amount may be sanctioned (together with other credit requirements, if any) with a stipulation that the principal amount will be repaid in 48 monthly instalments of Rs 2500 each. The periodical interest charges would be paid separately.
- This will ensure a comfortable Debt Service Coverage Ratio (DSCR) of 2:1 and a stretched out repayment period. $DSCR = \text{Net Operating Income} / \text{Debt Service}$.
- The CTL method of credit delivery with a firm repayment schedule is advisable for a bank branch having a large number of such small business loans.
- Regular repayment of the CTL also ensures the quality of the loan asset (small loans) of the branch.

(iii) Broad Terms of Working Capital Financing:

The broad terms of working capital financing from banks are:

- Limits and sub-limits
- Security: Primary and collateral
- Margin requirement
- Rate of Interest
- Commission and other fees
- Drawing power

- g. Submission of Stock Statement and Financial Statements
- h. Stock Audit
- i. Insurance
- j. Repayment Terms: Working Capital Loans are short term loans and generally payable in 12 months from the date of disbursement/sanction, depending upon the operating cycle. The borrowers are sanctioned a limit for meeting their operating expenses and are free to draw and repay as many times as required, within the sanctioned limit and within 12 months period.
- k. Type of Documents/ agreements to be signed:
 - Loan agreement
 - Hypothecation agreement for working Capital
 - Mortgage (equitable/ registered)
 - Demand Promissory Note (DPN)
 - Deed of guarantee (personal/ bank/ government guarantee)

Summary:

Working capital availability can make or break a business however big or small its initial investment. The FPO needs to regularly re-assess its working capital requirements whenever its business operations or external environment changes. Such careful assessment will also help the FPO negotiate with the banks better and manage its funds most effectively.

Session IX: Practical Exercise on Working Capital Assessment

An FPO may use working capital to procure inputs like seeds, fertilisers and pesticides for its member farmers or to buy produce from farmers for eventual sale. In between, the FPO may store the produce or process the same into value-added products.

Timeliness of financing is the crux of meeting the working capital requirements of the FPOs as any money received after the activity is over is likely to be of little use to the FPO and its members.

During the year, there may be some period/months when there is no economic activity and therefore no cash inflows. FPOs must negotiate for loan products such that there is no loan repayment during a lean period. The loan should be repaid during the months of high cash inflows. The timing and how much repayment to structure can be effectively analysed through a simple monthly cash flow projections statement.

“Responsible debt” has manageable interest rates and repayment terms. It supports good cash-flow management and ultimately helps both the lender and the FPOs grow. Conversely, loans with unrealistic repayment terms erode cash flow and hinder early-stage survival and later growth of a business.

Preparing a **cash flow analysis** based on the business plan of the FPO, is the most important aspect of assessing the working capital and term loan requirements. Month-wise cash inflow and outflow is useful to assess the working capital requirements and also for negotiating a reasonable repayment schedule. Cash flow is important for the assessment of term loan requirements also. Financial viability indicators such as BCR, IRR and DSCR based on income and expenditure streams need to be worked out for taking appropriate credit decisions.

A case of ABC FPO, that intends to borrow for its working capital requirements follows.

The Case: ABC Farmer Producer Company Limited

The ABC Farmer Producer Company is looking at the following borrowing option.

- Loan Amount – Working Capital Loan of Rs. 33,00,000.00
- Repayment – Bullet Repayment after 13 months
- Purpose – Commodity trading, Agri-input trading (seeds, fertiliser and pesticides)
- The FPO has planned to utilise the funds requested from the financial institution for seed trading, commodity trading, fertilisers trading and pesticides trading.

The FPO presents its business plan to justify the loan request.

The Business Plan of the FPO

1. Maize seeds shall be procured from the XYZ seeds, and supplied to the member and non-member farmers in the FPO's service area.
2. Wheat shall be procured from the member farmers in the service area and sold to different processors in the district and to traders in the Mandi.
3. Fertilisers shall be procured from MARKFED and then sold to the member farmers in the FPO's service area.
4. Pesticides shall be procured from various distributors in the district and sold to both member and non-member farmers in the service area.
5. 5% yearly increase is assumed both the quantity and price of wheat procured.
6. Operating Cycle of Fertilisers and Pesticides: Start – December 2019, End – January 2021
7. (i) First Operating Cycle of maize Seeds: Start – December 2019 (with the advance amount paid to the seed company), Ends – August 2020
(ii) Second Operating Cycle of Maize Seeds: Start – August 2020, Ends – December 2020 (through the realisation of receivables)
8. Operating Cycle of Wheat Commodity Trading: Start – April 2020, Ends – June 2020. The FPO will hold the wheat after procuring in April 2020 and will sell it in June 2020.
9. The total duration of the loan is 13 months.
10. From the above mentioned operating cycles and the detailed month-wise cash flow, a working capital term loan with a repayment period of 13 months (bullet repayment or one time repayment of loan principal) amounting to Rs. 33 lakh is proposed.

Calculations of Purchase and Sales activities of ABC FPO for three years.

#	Particulars	Unit	Year 1	Year 2	Year 3
1	Procurement of Wheat				
	Quantity (5% increase every year)	Quintal	300.00	315.00	330.75
	Rate	Rs/ Quintal	1,850.00	1,942.50	2,039.60
	Amount	Rs	555,000.00	611,887.50	674,606.00
2	Procurement of Maize Seeds				
	Quantity (5% increase every year)	Quintal	180.00	189.00	198.50
	Rate	Rs/ Quintal	32,500.00	34,125.00	35,831.25
	Amount	Rs	5,850,000.00	6,449,625.00	7,110,711.60
3	Procurement of Urea				
	Quantity (5% increase every year)	Bags	200.00	210.00	220.50
	Rate	Rs/ Bag	277.00	291.00	305.00
	Amount	Rs	55,400.00	61,110.00	67,252.50
4	Procurement of DAP				
	Quantity (5% increase every year)	Bags	200.00	210.00	220.50
	Rate	Rs/ Bag	1,430.00	1,502.00	1,577.00
	Amount	Rs	286,000.00	315,420.00	347,728.50
5	Procurement of pesticides				
	Lumpsum	Rs	165,000.00	181,500.00	199,650.00
6	Average Selling Price				
	Wheat	Rs/ Quintal	2,100.00	2,205.00	2,315.30
	Maize seeds	Rs/ Quintal	37,000.00	38,850.00	40,792.50
	Urea	Rs/ Bag	285.00	299.30	314.20
	DAP	Rs/ Bag	1,450.00	1,522.50	1,598.60
	Pesticides	Lumpsum	198,000.00	207,900.00	218,295.00
7	Revenue Generation				
	Wheat	Rs	630,000.00	694,575.00	765,768.90
	Maize Seeds	Rs	6,660,000.00	7,342,650.00	8,095,271.60
	Urea and DAP	Rs	347,000.00	382,567.50	421,780.70
	Pesticides	Rs	198,000.00	207,900.00	218,295.00
	Total	Rs	7,835,000.00	8,627,692.50	9,501,116.20

Cash Flow Analysis all amounts in Rs.														
Particulars	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21
Cash Inflow – Sales														
Opening Cash before financing	575,000	56,764	43,729	30,693	17,657	44,121	25,586	637,005	365,314	751,779	733,243	714,707	696,171	7,007,636
Sales – Maize seeds									3,330,000				3,330,000	
Sale-Wheat							630,000							
Sale - Fertilisers	24,786	24,786	24,786	24,786	24,786	24,786	24,786	24,786	24,786	24,786	24,786	24,786	24,786	24,786
Sale - Pesticides	14,143	14,143	14,143	14,143	14,143	14,143	14,143	14,143	14,143	14,143	14,143	14,143	14,143	14,143
Cash Outflow - Purchase														
Wheat Procurement					555,000									
Maize seeds procurement	2,925,000								2,925,000					
Fertiliser trading	170,700							170,700						
Pesticides trading	82,500							82,500						
Operational Expenses	2,214	2,214	2,214	2,214	2,214	2,214	2,214	2,214	2,214	2,214	2,214	2,214	2,214	2,214
Overheads (office, salary etc.)	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Closing Cash before financing	2,591,486	68,479	55,443	42,407	525,629	55,836	667,300	395,564	782,029	763,493	744,957	726,421	4,037,886	4,019,350
Proposed loan from financial institution	2,700,000				600,000									
Proposed Repayment														3,300,000
Outstanding loan from financial institution	2,700,000	2,700,000	2,700,000	2,700,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	3,300,000	-

Interest to financial institution	51,750	24,750	24,750	24,750	30,250	30,250	30,250	30,250	30,250	30,250	30,250	30,250	30,250	30,250
Closing Cash after financing	56,764	43,729	30,693	17,657	44,121	25,586	637,005	365,314	751,779	733,243	714,707	696,117	7,007,636	689,100

Session X: Capital Budgeting

Project Costing, Fixed and Variable Costs and Cash Flow Statements

Budgeting for an FPO's business needs to consider several factors. This section provides an overview of the many factors an FPO must consider to arrive at budgeting requirements.

1. Term Loan Requirement for FPOs

A term loan is a loan granted for the purpose of funding capital assets, such as the construction of factory buildings, purchase of machinery, modernisation, rationalisation of plant. This loan repaid out of the future earnings of the enterprise, in phases/instalments, as per a pre-arranged schedule.

A term loan is sanctioned for a fixed term, normally for a period of more than 3 years. The term depends upon the cash flow generated from the business enterprise and the economic life of the assets created.

The term loan is only one of the sources to meet the total Project Cost. The total project cost is assessed on the basis of expenses to be incurred for the following purposes:

- i. Land
- ii. Buildings: Factory building/ shed/ godowns/ administrative building
- iii. Plant and Machinery
- iv. Furniture and Fixtures
- v. Technical knowhow/ research and development
- vi. Preliminary Expenses
- vii. Pre-operative expenses
- viii. Contingencies
- ix. Margin Money for working capital

The following section will list of key parameters to consider under each item of project costs.

2. Project Costing: Technical Parameters for the Investment Components

i. Land

- a. Requirement and suitability of land for the proposed business
- b. Soil testing/ location, etc.,
- c. Cost: as per Sale/ Lease deed, Registration cost
- d. Rates/ lease rents prevailing/ reasonableness of cost of land
- e. Cost of Land Development - Levelling/ fencing/ wall/ gates as estimated by a Civil Engineer
- f. Legalities in land use
 - i. Registration
 - ii. Land use permission

- iii. Title to land/ freehold/ leasehold, legal disputes
 - iv. Lease : rights/ period/ clause/ agreement
- ii. **Building**
 - a. Breakup of items/ cost
 - b. Factory/ office/ ancillary/ godown/ canteen/ sheds
 - c. Space/ area of the buildings
 - d. Acquired/ constructed/ rented/ lease terms
 - e. Cost estimates: rates/quality/type/quotations
 - f. Arrangements for construction: contractors
 - g. Approval of construction plan by local authorities
 - h. Types of construction – estimates by a Civil Engineer
- iii. **Plant and Machinery, Furniture and Fixtures and Technical Knowhow, R&D**
 - a. List and source of plant and machinery – imported/ local, suppliers/ reputation/ report/ contract terms/ performance guarantee/ penalty clause/ servicing/ operation and maintenance / technical specifications
 - b. Erection/ installation/ turnkey/ own/ others
 - c. Requirement/ adequacy
 - d. Cost estimates, Technical know-how/
 - e. Consultancy: agency/ rates/ experience
 - f. Selection criteria i.e. Technical specifications, capacity, quality, after-sales service, guarantee, delivery schedule, cost, terms of payment
 - g. Quotations/ offer letters from manufacturers
 - h. Customs/ Excise Duty/ GST, transportation
 - i. Foundation, erection and commissioning
 - j. Miscellaneous fixed assets and utilities - power/ water/ electricity/ lab/ workshop/ equipment/ furniture/ vehicle
- iv. **Preliminary Expenses - of starting a business**
 - a. Cost of printing MoA/ AoA
 - b. Registration charges
 - c. Legal Charges
 - d. Travel/ postage/ reports/ survey
 - e. Brokerage/ commission/ fees etc.
 - f. Advertisements etc.
- v. **Pre-operative expenses:**
 These are costs incurred between incorporation/registration and commencement of commercial production:
 - a. Rent
 - b. Interest
 - c. legal fee/ stamp duty

- d. Insurance
- e. Stationary, publicity, etc.
- vi. **Contingencies:**
Escalation, unforeseen expenses, sundry items: usually considered at 5-15% of total costs
- vii. **Margin Money for Working Capital**
To be capitalised

3. Preparation of Budget – Short Term and Long Term:

A short-term budget usually prepares for a year of operations. A long term budget however looks at financing requirements for an FPO over several years. The typical line heads for such summary budgets are given in the formats below.

Mapping of Fixed and Variable Costs

Short-term Budget -amount in Rs.												
Particulars	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Fixed Cost												
Variable Cost												
Total Cost												
Revenue												
Net Returns												

Long-term Budget -amount in Rs.												
Particulars	Yr 1	Yr 2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12
Fixed Cost												
Variable Cost												
Total Cost												
Revenue												
Net Returns												

4. Cash Budgeting Method:

Cash budgeting is done for a year, with month to month cash flows being taken up for analysis. Information required (to be called for from the borrower) is as follows:

- a) Balance sheet of the previous financial year (in case of existing FPO)

- b) Projected balance sheet for the budget year
- c) Projected profit and loss account for the budget year
- d) Estimate of monthly sales and purchases
- e) Estimate of monthly expenses and incomes other than from purchases and sales
- f) Seasonality factors in the business, if any

From this information, the cash flow is computed as follows:

A Cash inflow		Opening cash/bank balance (+) amount of receivables at the beginning of the month (+) sales (-) amount of receivables at the close of the month
B	Cash Outflow	Payments made for raw materials /consumables (opening trade credits (+) purchases (-) trade credits at the end of the month); payment made to fixed asset suppliers, payment of interest; Payment of tax; payment towards other expenses such as labour, utilities, etc.; closing cash balance
A - B	Difference	Indicate period when the business is short of cash and to what extent it requires funding

Sl. No.	Particulars/ Months	1	2	3	4	5	6	7	8	9	10	11	12
1	Opening cash balance												
2	Receipts/ sales												
3	Collection of receivables												
4	Miscellaneous receipts												
5	Loans received												
	A. Cash Inflow (add 1 to 5)												
1	Payment for raw materials												
2	Payment for consumables												
3	Payment to creditors												
4	Payment for fixed assets												
5	Taxes, interest and labour payments												
6	Other payments												
7	Closing cash balance												
8	Equity to be deposited												
	B. Cash Outflow (add 1 to 8)												
	Difference between cash outflow and inflow (B –A)												

5. Preparing a Cash Flow Statement

Refer to the table-format that follows this Instruction Section. The columns of a cash flow statement represent the twelve months, ending with a 'total' column. Rows on the statement contain figures for the sources of cash and cash to be paid out.

The figures are projected for each month, reflecting the flow of cash in and out of the business for a one-year period.

Begin with the first month of the business cycle and proceed as follows:

1. **Opening Balance of Cash:** Project the beginning cash balance.
2. **Cash in:** Enter under the first month of the business cycle.
3. Project the cash receipts for the first month.
4. Add beginning cash balance and cash receipts to determine the total cash available.
5. **Cash out:** Project the direct, indirect and interest expenses for the first month.
6. Project money due on taxes, long-term assets and loan repayments.
7. Project amounts to be drawn by owners
8. Total all expenses and draws. This is the total cash paid out.
9. **Cash Balance:** Subtract total cash paid out from total cash available. Enter the result under cash balance/ deficiency. If the result is negative, be sure to bracket this figure.
10. Add any Project loans to be received and equity deposits to be made to cash balance/ deficiency to get the ending cash balance.
11. **Cash - Carry Forward:** Carry forward the ending cash balance for January as February's beginning cash balance.
12. Repeat the process through the last month of the business cycle.
13. **Filling the Total Column:** To complete the total column proceed as follows:
 - a. Enter the beginning cash balance for the first month in the first space of the total column.
 - b. Add the monthly figures for each category horizontally and enter the result in the corresponding total category.
 - c. Compute the total column in the same manner as each of the individual months.
 - d. If you have been accurate in your computations, the December ending cash balance will be exactly the same as the total ending cash balance (cells marked*)

An Example of a Cash Flow Statement is as given below:

Items	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Month													
Beginning Cash Sales													
Cash In													
Cash Sales													
A/R Collections													
Interest Income													
Sale of Fixed Assets													
Loans received													

Other Cash sources														
Total Cash In														
Cash Out														
Inventory and Raw material														
Salaries and wages														
General supplies														
Repair and maintenance														
Travel														
Shipping and delivery														
Legal and accounting fees														
Telephone														
Rent														
Utilities														
Interest charges														
Taxes														
Other operating expenses														
Loan repayments														
Fixed asset payments														
Capital Expenditures														
Total Cash Out														
End of the Month														
Cash Flow														
Cash balance													*	*
Operating Data														
Sales Volume														
Accounts Receivables														
Bad Debts														
Inventory on Hand														
Accounts Payable														
Depreciation														

Session XI and XII: Taking Business Decisions Using Financial Appraisal Tools

A Practice Exercise

Techno-financial parameters and financial appraisal of a Farm Machinery Custom Hiring Centre by Farmer Producer Organisations (FPOs)

Objectives:

- 1) To make available various farm machinery/ equipment to small and marginal farmers at an affordable rent.
- 2) To offset adverse economies of scale due to the high cost of individual ownership.
- 3) To improve mechanisation in places with low farm power availability.
- 4) To provide hiring services for various agricultural machinery/implements used in different farm operations.
- 5) To expand mechanised activities during cropping seasons to include small and marginal holdings.
- 6) To provide hiring services for various high-value crop-specific machines applicable for different operations.

Potential of the Custom Hiring Centre (CHC) for Farm Machinery

Small/marginal farmers do not have easy access to farm mechanisation. As small/ marginal farm holdings constitute more than 85% of total land holdings in India, the potential for CHCs to make farm machinery available in the FPO's area is high. To convert this potential to reality CHCs need institutional credit. Generally, FPOs have a base of around 500 members, who are potential customers for the Custom Hiring Centre. Further, the services of CHC can be made available to non-members in the same area and increase the viability of the CHC.

Location of CHC

Ideally, the CHC should be located at a place which is convenient to most members of the FPO. One CHC is expected to cater to 4 to 5 villages and, therefore, a place equidistant from all these villages is advisable. This will reduce the distance, time and costs involved in moving these agricultural machinery.

Potential Borrowers

FPOs have a base of around 500 members; these members are potential customers for the Custom Hiring Centre. Further, the services of CHC can be made available to non-members also.

The CHC Unit

CHCs are basically units comprising a set of farm machinery, implements and equipment meant for custom hiring by farmers. Though certain implements and equipment are crop-specific, the traction units like tractors, power tillers etc., and self-propelled machinery like combine harvesters etc., are used in common. Therefore, an ideal model envisaged in this project would comprise farm machinery that is commonly used for tillage operations for all crops, multi-crop equipment and a minimum of crop-specific machinery.

Components

This CHC model is essentially suited for areas where paddy, wheat and other food grains crops are predominantly cultivated. The CHC may comprise the following machinery and equipment:

1. A 40 HP tractor - for tillage operations, traction source and transport.
2. Power tiller – for tillage operations in small farms, traction source for small equipment and Agri input transport for a short distance.
3. Multi Crop Power Thresher: separating grain and seed crops from their chaff and straw.
4. Winnowing: For separating the grain from straw
5. Self-Propelled Reaper: For harvesting wheat, paddy, soybean, barley and similar other crops.
6. Sprayers: For spraying pesticides on the standing crops for pest management.
7. Repairing tools: For repairing implements.
8. Mould board plough: For primary tillage operations like ploughing, making ridges and furrows.
9. Cultivator: To prepare proper seedbeds, to bury crop residue in the soil.
10. Cage Wheel: Used to mix black soil properly while preparing the land for crop plantation.
11. Disc Harrow: to till the soil where crops are to be planted 12. Seed Drill: for the mechanised sowing of an agricultural crop.

Project Cost

Sl. No.	Items of Investment	Approx. Cost (Rs)
1	Tractor – 40 HP	625,000
2	Trailer	125,000
3	Implements	
(a)	Mould Board Plough	35,000
(b)	Cultivator – 9 tine	28,000
(c)	Cage-wheel – 18"	25,000
(d)	Disc harrow	35,000
(e)	Seed Drill	50,000
(f)	Accessories	20,000
4	Transplanter	200,000

5	Power tiller -13 HP	175,000
6	Multi crop power thresher with electric motor	150,000
7	Winnower	25,000
8	Self-Propelled Reaper-3.5 hp	150,000
9	Power Sprayer	10,000
10	Manual Sprayer	2,000
11	Servicing Tools	5,000
12	Tools for repairing	25,000
13	Implement shed – 500 sq-ft @ Rs 450 psf	375,000
Total Cost of the unit		20,60,000

Lending terms and other requirements

1. **Margin Money:** The FPO should normally meet 15% of the project cost with its own money. In this model, 20% of working capital assessed has been considered as the margin money for working capital.
2. **Interest rate:** The interest rate shall be as determined by the financing bank. For working out this model, the rate has been considered at 12 per cent per annum.
3. **Security:** As stipulated by the RBI. Refer to recent guidelines.
4. **Credit Guarantee Cover** is available up to 85% of the bank loan from the Small Farmers Agribusiness Consortium (SFAC) for financing FPOs. In view of this, Banks may also sanction the proposal without collateral security.
5. **Insurance:** The financing bank may ensure that the FPO takes adequate insurance cover for the asset.

Assumptions for Income and Expenditure

The FPO can earn rental income from custom hiring of equipment. The recurring costs involved are fuel/lubricant costs for the machinery, driver charges, repairs and maintenance charges, labour, interest on the bank loan and insurance. The details of assumptions regarding income and expenditure from the CHC are indicated in the following table:

Sl. No	Item	Unit	Rental/ cost	Annual Working
1	Annual Usage of Tractors			
a.	Agricultural Operations	Rs per hour	950	900 hrs
b.	Agricultural operations by Hired Tractor#	Rs per hour	900	800 hrs
c.	Rent to be paid to the hired tractor – Agricultural Operations#	Rs per hour	800	800 hrs
d.	Transportation Work by tractor	Rs per day*	1,200	100 days
e.	Transportation Work by hired tractor	Rs per day*	1,200	70 days
f.	Rent to be paid to hired tractor – transportation work	Rs per day	1,200	70 days
2	Annual Usage of Power Tiller	Rs per hour	600	1,400 hrs
3	Annual Usage of Power Sprayer	Rs per day*	100	60 days
4	Annual Usage of Manual Sprayer	Rs per day*	65	60 days
5	Annual Usage of Power Thresher	Rs per day*	750	90 days
6	Annual Usage of Winnowing	Rs per day*	120	45 days
7	Annual Usage of Reaper	Rs per hour	250	400 hrs
8	Diesel price	Rs per litre	75	
9	Lubricant Cost	Rs per litre	400	
10	Diesel requirement of the tractor	Litre per hour	3.5	
11	Diesel requirement of the power tiller	Litre per hour	2	
12	Diesel requirement of Reaper	Litre per hour	1	
13	Monthly repair from repair of agricultural machinery	Rs per month	10,000	
14	Lubricant requirement	% of diesel	2.75	
15	Interest on term loan (% per annum)	12%		
# Since a large number of farmers are members of FPO, one tractor may not be sufficient to carry out operations, so there is need for one more tractor, which will be hired from others at a pre-fixed rate of Rs.800 per hour and will be available on rental basis to the members @ Rs. 900 per Hour				
* Fuel and labour arranged by farmer who hires the machinery from the CHC.				

Statement of Expenditure of the CHC per annum

Sl. No.	Item	Cost	
		Full capacity	75% capacity during First Year
1	Tractor		
	Driver's Salary @ Rs 7000 per month each – 2 drivers	168,000	126,000
	Fuel cost	236,250	177,187
	Hired tractor Rent (Rs)	640,000	480,000
	Lubricant @ 10 % of the fuel cost	23,625	17,719
	Repair and maintenance charges @ 10 % of the cost of the tractor and equipment	94,300	70,725
	Subtotal	11,62,175	8,71,631
2	Power Tiller		
	Driver's Salary @ 7000 per month for 06 months for 06 months – 2 drivers	84,000	63,000
	Fuel cost	210,000	157,500
	Lubricants @ 10 % of the fuel cost	21,000	15,750
	Repair and maintenance charges @ 10 % of the cost of power tiller	17,500	13,125
	Subtotal	332,500	249,375
3	Power thresher		
	Repair and maintenance charges @ 10 % of the cost of the power thresher*	15,000	11,250
	Subtotal	15,000	11,250
4	Winnower		
	Repair and maintenance charges @ 10 % of the cost of the Winnower*	2,500	1,875
	Subtotal	2,500	1,875
5	Self-propelled Reaper		
	Drivers salary @ 7000/- per month for 03 months	21,000	15,750
	Fuel Cost	30,000	22,500
	Lubricants consumption @ 10 of the fuel cost	3,000	2,250
	Repair and maintenance charges @ 10 % of the cost of the Reaper	11,500	11,250
	Subtotal	65,500	51,750
6	Sprayer		
	Repair and maintenance charges @ 10 % of the cost of the Power sprayer*	1,300	975
	Subtotal	1,300	975
7	Other Recurring Cost		
	Salary for the skilled mechanic and helper to be employed for repairing work @ Rs 5000 and	96,000	90,000

	Rs 3000 per month respectively		
	Insurance Premium @ 2 % of machinery cost	14,840	11,130
	Subtotal	134,840	101,130
	Total Recurring Cost (A)	17,17,315	12,87,987
	Recurring cost will increased by 5 % every year	18,03,181	13,52,386
	* Fuel and labour arranged by beneficiary who hires the machinery from the CHC		

Statement of Income per annum

Sl. No.	Item	Income	
		Full capacity	75 % capacity during First Year
1	Tractor	975,000	731,250
2	Power Tiller	840,000	630,000
3	Power Thresher	67,500	50,625
4	Winnowing	4,500	4,050
5	Sprayer	9,900	7,425
6	Reaper	100,000	75,000
7	Repairing of Machinery	120,000	90,000
	Total Income	21,17,800	15,88,350
	Net Income	400,485	300,363
	Benefit will increase every year by hike in the custom hiring charges by 5 %		

Financial Viability of the Project – Calculation of NPV, IRR and BCR

The financial ratios for the CHC Project have been calculated using the MS-Excel (amount in Rs)

Sl. No.	Particulars	Year1	Year2	Year3	Year4	Year5	Year6	Year7	Year8	Year9	Year10
1	Capital Cost	20,60,000									
2	Recurring Cost	12,87,986	18,03,180	18,93,340	19,88,007	20,87,407	21,91,777	23,01,366	24,16,435	25,37,256	26,64,119
3	Total Cost (1 + 2)	12,87,986	18,03,180	18,93,340	19,88,007	20,87,407	21,91,777	23,01,366	24,16,435	25,37,256	26,64,119
4	Benefits	15,88,350	22,23,690	23,34,874	24,51,618	25,74,199	27,02,909	28,38,054	29,79,957	31,28,955	32,85,403
5	Salvage value of assets in 10 th year considering 10 % depreciation										2,06,000
6	Total Benefits (4 + 5)	15,88,350	22,23,690	23,34,874	24,51,618	25,74,199	27,02,909	28,38,054	29,79,957	31,28,955	34,91,402
7	Net Benefits (6-3)	-17,59,636	4,20,509	4,41,534	4,63,611	4,86,792	5,11,132	5,36,688	5,63,522	5,91,699	8,27,284
8	Discounting Factor	15%									
9	NPV of Benefits at 15 % discounting factor										

		1,22,41,464									
10	NPV of Costs at 15 % discounting factor	1,16,76,564									
11	NPV at 15 % discounting factor (9-10)	5,64,900									
13	BCR	1.05									
	IRR	25%									

The outcome of the Financial Ratios calculated above using the MS-Excel is as given below:

NPV at 15 % discounting factor = Rs 5,64,900; BCR at 15 % discounting factor = 1.05 and IRR = 24 %

Repayment of Term Loan and Calculation of Debt Service Coverage Ratio (DSCR)

The Repayment period depends upon the surplus generated and may be up to 08 years without any grace period. The schedule of loan repayment is as given below: (Amount in Rs.)

FPO's CHC Project				Rate of Interest = 12% pa			
Capital Cost = Rs 20,60,000				Repayment period = 8 years			
Bank Loan = Rs 16,48,000				Instalment = Equated principal repayment (Rs 206,000 + interest)			
Year	Principal in the beginning of the year	Net Surplus	Payment of Interest	Repayment of Principal	Total outgo	Principal at the end of the year	DSCR = Net Surplus/Total Outgo
1	16,48,000	3,00,364	1,97,760	2,06,000	4,03,760	14,42,000	0.74

2	14,42,000	4,20,509	1,73,040	2,06,000	3,79,040	12,36,000	1.11
3	12,36,000	4,41,535	1,48,320	2,06,000	3,54,320	10,30,000	1.25
4	10,30,000	4,63,611	1,23,600	2,06,000	3,29,600	8,24,000	1.41
5	8,24,000	4,86,792	98,880	2,06,000	3,04,880	6,18,000	1.60
6	6,18,000	5,11,132	74,160	2,06,000	2,80,160	4,12,000	1.82
7	4,12,000	5,36,688	49,440	2,06,000	2,55,440	2,06,000	2.10
8	2,06,000	5,63,522	24,720	2,06,000	2,30,720	0	2.44
	Average DSCR	1.56					

Session XIII: Break-Even Analysis - A Financial Planning Tool

1. The Break-Even Point

A break-even level of business is a no-profit no-loss zone or level of activity. In other words, it is the level of business activity at which a unit neither makes neither a profit nor incurs losses and the point at which the cost of production is just recovered.

Knowledge of the break-even levels of activity are as important for an FPO as profit-making, even at the stage of conceiving or expanding a project. The cost of production can be Fixed and Variable. Variable costs change in direct proportion to the level of production while the fixed costs remain constant regardless of the level of production.

As evident from the above, Break-Even Point is the level of production necessary to avoid losses. It is also referred to as the “break earning point”. A unit earns profit from sales above the break-even point.

Contribution is the difference between sales revenue or output and variable cost.

Contribution = Sale price per unit (minus) Variable Cost per unit

Hence, the break-even point helps a unit to recover the fixed cost.

2. The Margin of Safety:

What should be the sales revenues so that all the costs incurred in the business are recovered?

At the break-even point, the total variable costs plus the fixed costs = total sales revenue.

Sales above BEP sales indicate the margin of safety available to a unit.

$$\text{Margin of safety} = \frac{(\text{Actual Sales} - \text{Break-Even Sales})}{\text{Actual Sales}} \times 100$$

Plant capacity = 2880 Tonnes/year	Fixed cost = Rs.55.3 lakh/yr
Capacity utilisation = 2016 tonnes/year	Total cost = Rs. 255.2 lakh
Variable cost = Rs.196.9 lakh/yr	Sales = Rs.265.6/year

$$\text{BEP} = \frac{\text{Fixed Costs (Rs 6 lakh)}}{\text{Sales Realisation (Rs 75 lakh) - Total variable Cost (Rs 48 lakh)}} \times 100$$

Once an enterprise has attained the break-even level of the activity, the difference between sales above the break-even level sales and variable costs are the profits.

3. Effects of Changes on Profits:

A business plan must incorporate the fact that the profits and their rate of increase or decrease may be affected by an increase/ decrease, in any one of the following:

1. Selling price
2. Sales revenue
3. Variable costs
4. Fixed costs

These variables encompass all aspects in the context of restructuring or managing a project viz. in terms of finance, marketing and production.

The impact of changes in variable costs on profits is direct if it does not cause any change in selling price or output. An increase in variable costs will increase the break-even point and reduce profits and vice-versa. Other factors remaining unchanged, a fall in fixed costs will, however, lower the break-even point and raise profits and vice-versa.

4. Cost-Output-Profit Analysis of a Multi-Product Enterprise

In the case of a multi-product enterprise, the contribution for each product is estimated by subtracting its variable costs from the sales revenue. The BEP for each product may be arrived at only if the fixed cost for each product is established or apportioned.

The contribution of a multi-product enterprise is the weighted average of the contribution of all products that it manufactures or sells. Weights are accorded in relative proportion to the sale of each product.

Illustration 3: Multi Product Enterprise

Annual estimates of a multi-product enterprise is as given below:

Item	Product 1	Product 2	Product 3
Sales	Rs 10,00,000	Rs 50,00,000	Rs 40,00,000
Variable Costs	Rs 5,50,000	Rs 30,00,000	Rs 27,50,000

Fixed costs are Rs 6,00,000. The estimation of the BEP is as given below:

Item	Product 1	Product 2	Product 3	Total
Product Mix	10 %	50 %	40 %	100 %
Sales revenue	10,00,000	50,00,000	40,00,000	100,00,000
Variable cost	5,50,000	30,00,000	27,50,000	63,00,000
Contribution	4,50,000	20,00,000	12,50,000	37,00,000
Fixed cost				6,00,000
Net Profit				31,00,000

$$\text{Break Even Point} = \frac{6,00,000 \times 100}{100,00,000 - 63,00,000} = 16.21 \%$$

Session XIV and XV: Sources of Finance for an FPO

Equity, Bank Finance, Convergence, Internal Monitoring

1. Different sources of Finance for FPO to meet the financial requirements

Finance for an FPO can be arranged from the following sources.

- **Equity:**

In the case of an FPO, the equity comes from the members and no external financier can participate in the equity investment.

- **Own Resources:**

The reserves and surpluses of previous years are the sources for personal financing. However, in the case of a new FPO, this opportunity will not be there.

- **Suppliers' Credit and Advance Payment from Buyers:**

Suppliers' Credit can be obtained from credit companies or from potential buyers and sellers. The producers who sell their products to the FPO can sell on credit. FPO can get part payment in advance from prospective buyers. It can get agriculture inputs from the Agro dealers on the conditions of payment after-sales. However, this type of finance is not always available for start-up businesses or new ventures.

- **Grant support:**

The FPO being a small holders' organisation may seek capital support and other assistance from the Government under various schemes.

- **Debt financing (loans):**

This is the most preferred way of financing a new business. Here it is a direct obligation to pay an interest on the money lent by the financier. The biggest advantage is that the financier does not have control over the business as opposed to equity financing. However, it is not easy to raise debt financing for a producer's company without collateral and margin; even more so for a new FPO.

2. Access to Finance for FPOs from rural financial institutions

The FPOs have to approach a bank with a financially viable business plan/ Detailed Project Report. Indian banks provide Short Term Loans to meet working capital requirements and Medium to Long Term loans for the acquisition of capital assets (Term Loans) for any business.

A composite loan to take care of both short and long term financial requirements loan is also sanctioned by banks. The finance will depend on the nature and volume of business which would vary from case to case. The banks generally require the following information/ data for sanction of loan:

- a. A business plan and Detailed Project Report (DPR)
- b. Margin money contribution (amount of borrower's contribution to the project)
- c. Details of project management (Executive team and Board of Directors with qualification and experience) of FPO
- d. Details of a dedicated team for execution and monitoring of the project

- e. Details of proposed business plan
- f. Financial requirements for executing the business plan
- g. Audited financial statements of the last 3 years (Balance Sheet and P/L statement) with notes on accounts and annexures. In case the FPO is yet to be formed or if it is less than three years old the projected financial statements may be submitted.
- h. Details of earlier/current loans/grants if any (sanction letters) availed from other Banks/Financial Institutions/Developmental Agencies/ Individuals
- i. Details of security/collaterals to be offered
- j. Copies of Registrations (Certificate of Incorporation/Commencement of business/Society Registration/FCRA/Trust Deeds etc.) and MoA/ AoA
- k. Copies of PAN/TAN/Sales Tax Registration
- l. Copies of approvals for relief in Taxation (I-T and Sales Tax)
- m. Copies of agreements entered into for Lease / Confirmed Orders - if any
- n. Details of associate companies (with audited financials for 3 years)

FPOs need finance as they plan to expand their businesses. Any quality improvement along the value chain also needs finances. Capital loans are required to develop infrastructure such as processing units (dal mills, cotton ginning units, decorticators), processing/grading/sorting yards, storage godowns, cold storage, transport facilities, etc.

The RBI has included financing up to Rupees two crores to FPOs under the Priority Sector Lending, and loans up to five crores to FPOs under Indirect Agriculture. At present, the availability of capital loans from banks is low as banks have yet to develop appropriate financial products for the FPO sector. On the contrary, the NBFCs have taken the lead in fulfilling the finance needs of the FPOs. See table for details.

3. Options available for FPOs, if Financial Institutions do not provide credit facilities

A newly formed FPO does not have enough share capital, reserves and credentials for doing successful business, therefore mobilising funds from banks is difficult in the initial phase. With all the costs included, the FPO may face a huge financial burden from the beginning and the idea of setting up an FPO may not even take off. To overcome the problem, the FPOs may adopt the following business model in the initial years before they generate reserves and establish credentials.

- a. Choose those activities in the initial years which require very less capital or no capital and which are risk-free.

- b. Take dealerships of seeds and fertilisers from the companies and work as commission agents. FPOs can earn good margins and build business relationships with those companies who may offer credit sales in the subsequent years.
- c. Enter into dealership with equipment manufacturing companies selling agriculture implements like water pump sets, mechanised plough, etc. The FPO can earn a commission on sales while making them available to members at lower costs.
- d. Procurement of agricultural produce- identify prospective buyers and enter into buy-back guarantees from them. If crop sales are organised at the farm gate level, the FPO will not incur transportation and storage cost. FPO can earn some margin from the buyers.
- e. Many FPOs have taken advantage of the GoI scheme, which provides 80% of the value of products as loans against the pledge of Warehouse Receipts (WHR) without collateral. The successful demonstration of such a business would build their credentials among the members and other stakeholders.

The demonstration of fair trade practices is very important for the FPO. These small activities give FPOs the opportunity to demonstrate such practices. This can build the FPO's reputation among both its members and the market players it deals with.

4. Challenges faced by FPOs in accessing Institutional credit

Some of the key constraints faced by FPOs are:

- **Low capital base** -Inadequate capital base restricts the capacity of FPOs to raise credit for undertaking sustainable business operations based on the prevailing debt-equity norms of financial institutions. Consequently, the business level of FPOs becomes limited and often they incur losses. It may be noted that unless FPOs carry out relatively larger business operations and make adequate profits, they would find it difficult to attract new members; this is a vicious cycle. Further, as the business of the FPO grows, its share capital also needs to grow and its profits ploughed back into the business.
- **Absence of credit history** -The majority of FPOs, being new, do not have any credit history. Further, FPOs do not have collateral to offer as security for accessing credit from the financial institutions/banks. Hence, the formal financing institutions hesitate to come forward to lend them.
- **Inadequate capacity building:** Inadequate capacity building of Board members/ CEO and lack of professional handholding support by the promoting agencies often result in a lack of adequate participation by the board members in decision making, poor governance and absence of a sound business plan.
- **Member participation is low:** A low level of active member participation in business further limits the prospects of business growth due to which many FPOs are not able to achieve a break-even level.
- **Riskiness of agriculture:** Agriculture, being highly dependent on many external factors such as weather, government policies, etc., its performance is erratic. Since

FPOs undertake business in such an environment, it calls for very careful business planning to achieve commercial viability/ sustainability, particularly in terms of building adequate forward and backward linkages.

- **Several compliance requirements:** FPOs require various types of licences such as those for seeds, fertilisers, and pesticides apart from mandi licences and FSSAI licenses and generally they are not aware of the legal requirements and find it challenging to obtain these licences to carry out the business.
- **Dependence on external experts:** Since a majority of the FPOs are registered under the Companies Act, they have to file various returns with statutory authorities like the Registrar of Companies, Tax authorities etc. However, in the absence of adequate guidance in this regard from promoting institutions, they are largely dependent on external consultants, CA/CS for filing various returns. Due to oversight of these consultants, some of the FPOs have been slapped with hefty penalties which affect the already low capital base of the company apart from raising concerns about corporate governance.

5. Specialised sources of finance for FPOs

NABKISAN Finance Limited: Financial Assistance for FPOs

NABKISAN Finance Limited (NKFL) is a subsidiary of NABARD with equity participation from NABARD, the Government of Tamil Nadu, several banks and a few corporates. The company is notified as a Non-Banking Finance Company (NBFC) by the Reserve Bank of India. The main objective of the company is to provide credit for the promotion, expansion and commercialisation of enterprises engaged in agriculture, and allied and rural non-farm activities. NKFL provides credit for livelihood/income-generating activities to Panchayat Level Federations, Trusts, Societies, Section 25 companies and MFIs for on-lending to its member SHGs, JLGs and FPOs. Among the government-sponsored NBFC, NKFL is one of the most active institutions extending credit to the FPOs.

Various schemes available with NABKISAN are as given below:

(a) Loan Products with the availability of Collateral/ Guarantee Cover

The financial assistance is available as

- (i) Loan for FPO eligible for SFAC Guarantee Scheme** - Working capital, term loan for creation of infrastructure for storage, processing, marketing etc. Bulk loan for on-lending, loan against warehouse receipts.
- (ii) Loan for FPOs/PO not covered under SFAC Guarantee Scheme** - Working capital, term loan for creation of infrastructure for storage, processing, marketing etc. Bulk loan for on-lending, loan against warehouse receipts.
- (iii) Bulk lending to Promoting Institutions for onlending to POs** - For on lending to FPOs/POs for working capital, pledge loans and term loans.

(b) Loan Products without Collateral

- (i) Emerging FPOs/POs with promising prospects –**

Besides the POs which are established and have required infrastructure and other forms of support to be able to provide adequate collateral, there are organisations which are emerging and in nascent stage but with promising prospects but may not be in a position to provide any collateral. To encourage such organisations and to demonstrate to various stakeholders their viability with the required support, lending to such organisations is considered essential. Proposals of such organisations depending purely on the merits and prospects of the proposal will also be supported up to a loan amount of Rs 50 lakh.

- (ii) **Start-up FPOs/POs** - Normally it is expected that the FPOs/POs have to mobilise a minimum capital of Rs.3-5 lakhs to enable them to take up a business activity with an investment of Rs.15-20 lakhs so that they can meet the requirements of their members. The newly formed FPOs plan initial activities on a low scale covering the requirements of a few active members. This activity by the FPO would enable them in subsequent seasons to seek the involvement of more members and also enhance the confidence of the existing/new members in the institution. Demonstration of active business activities by the FPOs even on a low scale would facilitate the FPOs to enlarge membership and also increase equity participation by existing members. Taking these aspects into account, an initial loan based on the capital of the FPO/PO will be provided on a select basis without any collateral.

Credit Risk Coverage

NABKISAN has an arrangement with RABO Foundation to extend guarantee cover all types of Producer Collectives which are in nascent stage and have credit requirements of small size.

6. Convergence for financial Benefits

The Small Farmers' Agribusiness Consortium (SFAC): Three schemes are provided by SFAC to finance FPOs.

(a) SFAC - Equity Grant Fund:

The EGF enables eligible FPOs to receive a grant equivalent in amount to the equity contribution of their shareholder members in the FPO, thus enhancing the overall capital base of the FPO.

The Scheme addresses nascent and emerging FPOs, which have a paid-up capital not below Rs. 30 lakh.

EGF is a cash infusion equivalent to the amount of shareholder equity in the FPO subject to a cap of Rs.15 lakh per FPO. Once approved EGF is directly transferred to the bank account of the FPO. For more information visit: <http://www.sfacindia.com/PDFs/Equity-Grant-Scheme-and-Credit-Guarantee-Fund.pdf>

(b) SFAC –Credit Guarantee Fund:

The Fund has been set up with the primary objective of providing a Credit Guarantee Cover to 'Eligible Lending Institutions' like Banks and NBFCs promoted by Government organisations viz. NABKISAN, NABFINS etc. to enable them to provide collateral-free credit to FPOs by minimising their lending risks in respect of loans not exceeding Rs. 100 lakhs.

The eligible lending institutions shall be eligible to seek guarantee cover for a credit facility sanctioned for each FPO borrower for a maximum of two times over a period of 5 years. Maximum Guarantee Cover is restricted to the extent of 85% of the eligible sanctioned credit facility, or to Rs. 85 Lakh, whichever is lower.

(c) SFAC - Venture Capital Assistance (VCA)

SFAC provides Venture Capital to qualifying projects on the recommendations of the Notified Financial Institution financing the project. This venture capital is repayable to SFAC after the repayment of the term loan of lending Notified Financial Institution as per the original repayment schedule or earlier.

SFAC provides venture capital to agribusiness projects as soft loans to supplement their financial gap worked out by the sanctioning authority of a term loan.

Qualifying projects under Venture Capital:

- Project should be in the agriculture or allied sector or related to agricultural services. Poultry and dairy projects area also be covered under the Scheme.
- The project should provide an assured market to farmers/producer groups.
- The project should encourage farmers to diversify into high-value crops, to increase farm incomes.
- The project should be accepted by Notified Financial Institution for grant of term loan.
- The quantum of SFAC Venture Capital Assistance will depend on the project cost and will be 40% of the promoter's equity or Rs. 50 lakhs, whichever is lower.

NABARD –Producers Organisations Development Fund

The PODF supports FPOs with grants, loans, or a combination of these for capacity building and market interventions. Producers Organisation would be eligible for the following types of loans:

- Term loans
- Composite loans comprising of both working capital and term loan requirements
- Subordinated Debt as Tier II capital based on the requirements of the PO and provided the Memorandum and Articles of Association/bye-laws permit them to accept such a debt.

7. Self Assessment Rating Tool for FPOs

This method is used frequently by the promoting and performance rating organisations to assess the institutional performance of the FPO from time to time. The findings of the

assessment can be used to design and implement the capacity-building strategy for the FPO. The following indicators help us to assess the institutional maturity of the FPOs. The framework is comprised of a set of Criteria and ***Institutional Maturity Indicators (IMIs)*** which measures the capacity and governance of the FPO. A suggestive set of criteria and IMIs are given below:

Sl. No.	Criteria	Indicator
1	Membership	• Size should be good enough to be economically viable and socially cohesive; new shareholders are being added • Not dominated by politically and economically powerful members • Poor and women are included (as mandated) • Single member per household representation norm is used • A majority of members know the purpose of forming the FPO and can give an account of FPO's activities including finances
2	Identity	• The FPO is registered under appropriate law and is compliant to statutory and business requirements • FPO has a proper work place • FPO has a clear purpose and vision for itself and its members
3	Leadership	• Leaders have been elected by the members • Adherence to the procedure while conducting election of the office bearers and executives • Rules are available for leadership roles change, fixed tenure
4	Governance	• FPO has a set of rules (bye-laws) which has been discussed and agreed and sanctions for rule breakers • Regular meetings of BoD and AGM takes place with significant attendance • The majority of members contribute to BoD/AGM discussion and decision making • Up-to-date maintenance of records, books of accounts, statutory and internal audit, etc.
5	Independence (appropriate to the age of the FPO)	• Meetings of BoD/ AGM regularly take place in the absence of Promoting Institution with diminishing support • Records are maintained without or little support from the Promoting Institution • Decisions are taken independent of the Promoting institution
6	Operations	• The FPO has regular operations and projects to support its members

		• The FPO has diversified portfolio of businesses
7	Resource mobilisation and linkages	• FPO raises funds to carry out business - including additional share capital • Overheads expenditure met with the own resources • Reserve funds are available • Mobilisation of specialised skills, information, resources etc. through public and private sector linkages
8	Resource Management	• FPO has Business plan and it is used and monitored • FPO has shown ability to negotiate with the various stakeholders • FPO effectively oversees/manages the work of executives working as salaried persons • Budget control mechanisms in place • Transparency in functioning
9	Capacity Building - learning	• Office bearers and executives have attended training programmes (including specialised training) • Utilisation of acquired skills to identify and solve operational problems • Linkages with other agencies to strengthen knowledge, skills of office bearers, staff and members
10	Distribution of benefits	• Equitable distribution of benefits, dividend and services • Mechanism of benefits sharing developed and adhered to

Session XVI: Modalities for Borrowing from Financial Institutions

This section summarises the many permissions, licences and registrations required by an FPO at various times. While some are essential, others are only required to undertake certain business activities. A detailed list of documents to be submitted along with the Business Proposal is also provided below. Be sure to check for the latest information about these modalities online or at the offices of the respective institutions.

1. Permissions/ Licenses/ registrations required for undertaking the business activities

Sl. No.	Certificate/ Licence	Description	Issuing Department	Renewal Frequency
1	PAN	Applications for allotment of new PAN https://www.tinnsdl.com/download/pan/form49a.pdf . The application can be made either online or through any recognised PAN Facilitation centre.	Income Tax Department	One Time
2	TAN	TAN is applied through "Form No. 49B" (prescribed under Indian Income Tax Law). A completed form can be submitted online at the NSDL website or at the "Tax Information Network Facilitation Centre" (TIN-FC). Application form: https://www.tinnsdl.com/download/tan/form49b	Income Tax Department	One Time
3	GST	Goods and service tax applicable to any entity that deals in sales and purchases	GST Department	Life Time
4	Seed Licence	For any entity involved in trading of seeds	State Agriculture Department	Every 03 years
5	Fertiliser Licence	For any entity trading in buying and selling of fertilisers	State Agriculture Department	Different for different states
6	Pesticide Licence	Any person desiring to manufacture or to sell, stock or exhibit for sale or distribute any pesticide, or to undertake commercial pest control operations with the use of any pesticide	State Agriculture Department	Varies for different types of pesticides
7	APEDA	AGMARK standards for importing and exporting fruit and vegetables	Ministry of Agriculture, GoI	Not specified
8	HALAL/ KOSHER/ FSMS 22000	Applicable for FPOs dealing in poultry and meat.	FSSAI and ISO	Not specified
9	FSSAI	For all processed and packaged food items	Ministry of Food Processing Industries, GoI	1-5 years depending upon different types

				of products
10	Shops and Establishments	Shop license is required to be obtained from state/ municipal bodies as per the law of the particular state	Local Gram Panchayat/ Municipality	Varies from one state to another
11	Weights and Measure licence		Department of Meteorology	
12	ESI, Provident Fund, Child Labour Policy		Labour Department	One Time
13	Licence for environment aspects like land, water etc	Applicable for FPOs involved in processing, storage of chemicals etc.)	Relevant authorities Pollution Control Board	Details not available
14	Fair Trade Certificate	Applicable to FPOs who aspires to do organic product exports	Independent body	Details not available
15	PGS Certification	Applicable to farmers undertaking organic cultivations	Various agencies are involve for different types of produce	As decided by the GoI
16	Third Party Organic Certification	Applicable for farmers undertaking organic cultivation practices	Varies from produce to produce	As decided by GoI
17	Form D under ESI Act	For employing more than 10 employees	State Labour Department	Updated whenever required
18	Apprentice Act	For appointing Apprentice for training	Labour Department	
19	Minimum Residual Levels	For export of agricultural produce	National Accredited Labs	Varies from product to product
20	No Objection Certificate	To set up business	Local Gram Panchayat/ Municipality	Depends upon the business

2. The list of documents to be submitted with the Business Proposal

- Detailed Project Report along with the application for loan/ grant required in Duplicate
- List of movable/immovable Assets of the organisation/promoters
- List of tangible unencumbered security offered as collaterals. In case of landed property, copy of Sale Deed along with extract of latest Land record
- Income Tax and Wealth Tax details of last three years
- Certificate of reliefs given under statute. (IT, Sales Tax, etc.)
- Copies of sanction letters from other institutions, Government Agencies,
- Agencies sanctioning loans, grants or other support services relating to the activity

- h. Provisional Registration Certificate from the concerned authority viz., Registrar of companies, Registrar of Cooperative Societies, District Industries Centre, etc.
- i. Certificate of Incorporation from a competent legal authority. In the case of corporates, certificate of commencement of business issued by Registrar of Companies
- j. Memorandum and Articles of Association/ Bye-laws of Society
- k. Permission/license from Competent Authority (for Textile, Foods and Drugs, Forest, etc.)
- l. Certified copy of sale deed along with extract of latest Land record in respect of land. (The land should be in the name of the company/ society whichever is applicable) or if rented premises, Rent Agreement for a minimum of eight years or covering the entire loan period
- m. Three quotations in respect of each item of plant and machinery and raw material, proposed to be purchased
- n. Import, Export Licenses (IEM)
- o. Details of power requirement and tie-up with State Electricity Board
- p. Permission from Water and Pollution Control Board
- q. Approved Building plan from Competent Authority with cost estimates from the Architect



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.

