Third Semester B.Sc(Hons.) Agri.
Ag.Econ.3.2
Agricultural Finance and Co-operation
(2+1=3)
(Theory Note)
## Course Curriculum

**Course No:** Ag. Econ 3.2  **Credit:** 2 + 1 = 3  
**Course Title:** Agricultural Finance and Co-operation

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Dt.27/06/2018
AGRICULTURAL FINANCE

Meaning:

Agricultural finance generally means studying, examining and analyzing the financial aspects pertaining to farm business, which is the core sector of India. The financial aspects include money matters relating to production of agricultural products and their disposal.

Definition of Agricultural finance:

Murray (1953) defined agricultural finance as “an economic study of borrowing funds by farmers, the organization and operation of farm lending agencies and of society’s interest in credit for agriculture.”

Tandon and Dhondyal (1962) defined agricultural finance “as a branch of agricultural economics, which deals with and financial resources related to individual farm units.”

Nature and Scope:

Agricultural finance can be dealt at both micro level and macro level. Macro finance deals with different sources of raising funds for agriculture as a whole in the economy. It is also concerned with the lending procedure, rules, regulations, monitoring and controlling of different agricultural credit institutions. Hence macro-finance is related to financing of agriculture at aggregate level.

Micro-finance refers to financial management of the individual farm business units. And it is concerned with the study as to how the individual farmer considers various sources of credit, quantum of credit to be borrowed from each source and how he allocates the same among the alternative uses within the farm. It is also concerned with the future use of funds.

Therefore, macro-finance deals with the aspects relating to total credit needs of the agricultural sector, the terms and conditions under which the credit is available and the method of use of total credit for the development of agriculture, while micro-finance refers to the financial management of individual farm business.

Significance of Agricultural Finance:

1) Agril.finance assumes vital and significant importance in the agro – socio – economic development of the country both at macro and micro level.

2) It is playing a catalytic role in strengthening the farm business and augmenting the productivity of scarce resources. When newly developed potential seeds are combined with purchased inputs like fertilizers & plant protection chemicals in appropriate / requisite proportions will result in higher productivity.

3) Use of new technological inputs purchased through farm finance helps to increase the agricultural productivity.

4) Accretion to in farm assets and farm supporting infrastructure provided by large scale financial investment activities results in increased farm income levels leading to increased standard of living of rural masses.
5) Farm finance can also reduce the regional economic imbalances and is equally good at reducing the inter-farm asset and wealth variations.

6) Farm finance is like a lever with both forward and backward linkages to the economic development at micro and macro level.

7) As Indian agriculture is still traditional and subsistence in nature, agricultural finance is needed to create the supporting infrastructure for adoption of new technology.

8) Massive investment is needed to carry out major and minor irrigation projects, rural electrification, installation of fertilizer and pesticide plants, execution of agricultural promotional programmes and poverty alleviation programmes in the country.

Three basic economic activities constitute the managerial process of the farm. They are production activities, financing activities and marketing activities. Production activities comprise the decisions like what products to be produced, method of production and how much of each product should be produced. Financial activities relate to decisions of obtaining and use of credit. Marketing activities involve managerial decisions related to procurement of inputs and distribution and sale of output.

Financial decisions more often than not overlap the production and marketing decisions. For example, nature of enterprises and the quantum of the product determine the amount of capital and provide solution to the decisions of how much capital should be used in the farm business. Evaluation and involvement of alternatives among enterprises is linked with the decisions of how products are produced. Analogously, marketing decisions are linked with financial decisions, because product marketing and selection of input marketing are often determined by the quantum of financing. Thus, we should recognize that production, financing and marketing decisions are concerned with financial acquisition and financial use depending upon the goals of financial manager.

**Importance of Finance:**

Agricultural finance is one of the most important inputs in all agricultural development activities for increasing agricultural production. It is necessary that farmers must be provided with adequate and timely finance for irrigation, farm mechanization and land development etc. So agricultural finance is very important instrument in facilitating the process of agricultural activities. Finance is very important in the context of new strategy and for making the agricultural sector up to date and modern.

Agricultural credit itself is not a input but it helps creating environment for adoption of modern production technology using more production inputs and encouraging private investments on the farms. Both non-institutional credit agents give money lenders, landholders’ relatives, trader’s friends and institution credits agents like co-operatives, commercial banks are in operation.

As the available resources base and the capacity to generate sufficient levels of financial resource within the rural sector particularly in the agriculture sector is limited at present, institutional financing is considered as principle source of external finance to support and accelerate the development of the agriculture sector. The provision of adequate, timely and liberal credit to the farmers has become an integral part of the agricultural development policy in India.
The involvement of commercial banks in agricultural development was negligible and was largely in terms of indirect credit. The nationalization of 14 major banks in July, 1969 and 6 banks in April 1980 gave further impetus to farm finance by commercial banking facilities to hitherto neglected are. Special attention was given to priority sector including agriculture and special programmes and schemes were launched to help the weaver section including small and marginal farmers.

In ancient period agriculture was subsistence type, capital need was less for agricultural production and hence, credit was also limited. In course of time agriculture became more capital intensive and hence credit intensive. In India about 69 per cent cultivators are small and marginal cultivators, their income level is quite low. Low income results into low saving, because of low saving one can not make additional investment and again has to face low income. Thus, Indian cultivators are found in a vicious circle, to break this circle, credit is essential. Investment in agriculture at the time of sowing and developing of crops is required and if the farmer is not having his own funds then credit can fulfill these needs.

Agriculture is an important industry and like other industries it also requires capital. Due to the peculiarities of agriculture, especially its uncertainties, low returns, high rate of rent and limited scope for employment, a large number of cultivators cannot manage the needed finance without recourse to borrowing. One of the most important lessons of universal agrarian history is that the agriculturist must borrow, due to the fact that an agriculturist's capital is locked up in his lands and stocks. For stimulating the tempo of agricultural production, it is necessary that the farmer must be provided with adequate and timely credit.

Farm finance is not a just a science to manage the money, but is an applied science of allocating scare resources to derive the optimum output. The role of farm finance in strengthening and development of both input and output markets in agriculture is crucial and significant. Indian agriculture is still traditional, subsistence and stagnant in nature, hence agricultural finance is needed to create the supporting infrastructure for adoption of new technology. Massive investment is needed to carry out major and minor irrigation projects, rural electrification, installation of fertilizers and chemical plants and poverty alleviation programmes in the country.

Farm finance has vital impotence in the agro-socio economic development of the country both at individual /micro level and at aggregate /macro level.

It is importance for higher productivity of resources.

- Application of new technological inputs
- Accretion to farm assets & farm income, improve the living standards of rural masses.
- It reduce the regional economic imbalances is equally good at narrowing down the inter farm asset is wealth variations.
- It strengthening and development of both input & output marketing in agril.
- It needed to create the supporting infrastructure for adoption of new technology.
Credit and its Classification

* Meaning of Credit:

The dictionary meaning of the word credos is confidence felt in a person’s ability, honesty to pay money with the belief that it will be repay it in specified period.

- Credit means trust in borrower’s ability to pay and his willingness to pay

**Credit:** Credit/ Loans are certain amount of money provided for certain purpose, on certain conditions with some interest which should be repaid sooner or later.

* Characteristics of good Agricultural Credit:

(1) It should be in accordance with state and central Govt. agril policy.
(2) It should be an effective alternative of the private financing agencies.
(3) Persons working in financing agencies dealing with loan issuing workers must be trained.
(4) It should be capable to co-ordinate agril. and its allied activities.
(5) Credit should not be provided only against as set but should be provided against crop estimates and repayment capacity.
(6) Effective inspection on use of credit should be made by the credit supplying agencies.
(7) It granted through easy procedure.
(8) It may be provided on low or reasonable rate of interest
(9) It may be granted as such way that it should be protest the dignity and social status of the farmers.
(10) It should be act to educate disciplines & guide to the farmers.

CLASSIFICATION OF CREDIT

**Loans/ credits** are certain amount of money provided for certain purpose on certain conditions with some interest which should be repaid sooner or later.

It is broadly classified based on various criteria.

I Based on Purpose
II Based on Time (Length of period)
III Based on Security
IV Based on Liquidity
V Based on Lenders
VI Based on Borrowers
VII Based on Approach
VIII Based on Contact

(I) Based on purpose

1. Production (Agriculture) Loan
2. Investment Loan
3. Marketing Loan
4. Consumption Loan

(1). Production Loans:

Loan given to the farmers to increased the crop production. These are also called Seasonal Agril. Operations (SAO) loans or short term loans or crop loans. These loans are repayable within a period ranging from 6 months to 18 months in single installment.

(2) Investment loans:

Loans given for equipment whose productivity is distributed over more than one year. e.g. loans given for tractor, pump sets, tube wells etc.

(3). Marketing Loans:

These are meant for helping the farmers to overcome distress sales & market the produce in a batter way. Regulated markets & commercial bank based on warehouse receipts, advanced 75 % of the value of the produce.

(4). Consumption loan:

Any loan advanced for the purpose other than production, is broadly categorized as consumption loan.

- It assists in more productive use of the crop loans
- It restricted to hit area by natural calamities
- It given in group guarantee basis with a maximum of three members.
- It repaid within 5 crop seasons or 2 ½ years whichever is less.

(II) Based on Time:

It depends on the repayment period of the loan amount

(1) Short Term Loans:

These loans are to be paid back within a period ranging from 6 to 18 months. All crop loans are said to be short-term loans, but, the length of the repayment period varies according to the duration of the crop. The farmers require this type of credit to meet the expenses for the ongoing agricultural operations on the farm like sowing, fertilizer application, plant protection measures etc.

(2) Medium Term Loans:

These loans are extended for a period varying from 15 months to 5 years. These loans are required by the farmer for bringing about some improvements on his farm business by way of purchasing implements, electric motor, milch animal etc.

(3) Long term loans:

These loans fall due for repayment over a long time ranging from 5 years to more than 20 years. These loans together with medium term loans are called investment or term loans. These loans are meant for bringing about permanent improvements on the land, like leveling and reclamation, construction of farm building, purchase of tractors, raising orchards etc.

(III) Based on Security:

The loan under this category into sub-categories, viz, secured and unsecured loan.

1. Secured Loans:

Loans advanced against some security by the borrower are termed as secured loans. Various forms of securities are offered in obtaining the loan which is as follows:

(i) Personal Security:

Borrower himself stands as the guarantor. It is advanced on the farmer’s promissory note.

(ii) Collateral Security:

It is the property that is pledged to secure a loan. The movable properties of the individuals are offered as security. Examples are: LIC bonds, fixed deposit bonds, warehouse receipts, jewellery, machinery, livestock etc. These are some of the properties accepted as collateral security by the institutional lending agencies.

(iii) Chattel Loans:

These are specific type of loans particular category of lenders. Loans obtained from pawn brokers by pledging movable properties such as jewellery, utensils made of various metals are the examples.
(iv) Mortgage:

The immovable properties are presented for security. For Example, land, farm buildings, etc.

**Mortgages are of two types**

a) **Simple mortgage:** When the mortgaged property is ancestrally inherited property of borrower then simple mortgage holds good. Here, the farmer-borrower has to register his property in the name of the banking institution as a security for the loan he obtains. The registration charges are to be borne by the borrower.

b) **Equitable mortgage:** When the mortgaged property is self-acquired property of the borrower, then equitable mortgage is applicable. In this no such registration is required, because the ownership rights are clearly specified in the title deeds in the name of farmer-borrower.

(v) Hypothecation:

Borrower has ownership right on his movable and the banker has legal right to take a possession of property to sale on default (or) a right to sue the owner to bring the property to sale and for realization of the amount due. The person who creates the charge of hypothecation is called as hypothecator (borrower) and the person in whose favour it is created is known as hypothecate (bank) and the property, which is denoted as hypothecated property.

This happens in the case of tractor loans, machinery loans etc. Under such loans the borrower will not have any right to sell the equipment until the loan is cleared off. The borrower is allowed to use the purchased machinery or equipment so as to enable him pays the loan instalment regularly.

**Hypothecated loans again are of two types’ viz., key loans and open loans.**

a) **Key loans:** The agricultural produce of the farmer-borrower will be kept under the control of lending institutions and the loan is advanced to the farmer. This helps the farmer from not resorting to distress sales.

b) **Open loans:** Here only the physical possession of the purchased machinery rests with the borrower, but the legal ownership remains with the lending institution till the loan is repaid.

2. Unsecured Loans:

Based on confidence between the borrower and lender the loan transaction take place. There is no mention of any type of security here.

(IV) Based on Liquidity:

Under this type, the loans are classified into self-liquidating loans and partially liquidating loans or non-liquidating loans.

(i) **Self liquidating Loans:**

The income generates through these loans helps the farmer to repay the loan amount in the same season.

  e.g. short term loans or crop loan

(ii) **Partially liquidating loans or non-liquidating loans:**

The income generate through there borrowings will help to pay part of the loan component only. In other words, these loans are cleared over a time period by the farmer-borrower.
e.g. term loans

(V) Based on Lender’s: Credit is also classified on the basis of lender such as

a) Institutional credit: Here are loans are advanced by the institutional agencies like co-operatives, commercial banks. Ex: Co-operative loans and commercial bank loans.

b) Non-institutional credit: Here the individual persons will lend the loans Ex: Loans given by professional and agricultural money lenders, traders, commission agents, relatives, friends, etc.

(VI) Based on Borrower’s: The credit is also classified on the basis of type of borrower.

a) Based on the business activity like dairy farmers, poultry farmers, rural artisans etc.

b) Based on size of the farm: agricultural labourers, marginal farmers, small farmers, medium farmers, large farmers

c) Based on location hill farmers (or) tribal farmers.

(VII) Based on approach:

a) Individual approach: Loans advanced to individuals for different purposes will fall under this category.

b) Area based approach: Loans given to the persons falling under given area for specific purpose will be categorized under this. Ex: Drought Prone Area Programme (DPAP) loans, etc

c) Differential Interest Rate (DIR) approach: Under this approach loans will be given to the weaker sections @ 4 per cent per annum.

(VII) Based on contact:

a) Direct Loans: Loans extended to the farmers directly are called direct loans. Ex: Crop loans.

b) Indirect loans: Loans given to the agro-based firms like fertilizer and pesticide industries, which are indirectly beneficial to the farmers are called indirect loans.
PROBLEMS OF RURAL & AGRIL. INDEBTEDNESS

On account if extreme poverty of the rural people they have to incur heavy debt to meet their production requirements, social commitments and even consumption needs. The debt passes from generation to generation because the income from agriculture is too meager to pay off the debt and the malpractices of the money lenders do not allow the farmers to free themselves from the burden of debt. Therefore it has been correctly stated that “The Indian farmer is born in debt, lives in debt and dies in debt.” (Remark by Royal Commission of agriculture)

CAUSES OF RURAL INDEBTEDNESS

The problem of rural indebtedness is considered in a very casual manner in India and it is customary to regard the illiteracy of farmers, unfavorable climatic conditions increase in the pressure of population, subdivision and fragmentation of holdings, the money lender system, defective marketing, wasteful expenditures by farmers etc. as the causes of rural indebtedness.

1. Ancestral debt (Inherited debt): The most important and the chief cause of the existing indebtedness is the inherited debt, which is handed over from father to son, generation to generation.
2. Sub-division & fragmentation of holding: Due to the over population and pressure of population on land, and is divided and fragmented further & further. Due to uneconomical land holding farmers becomes more and poorer.
3. Poverty of the rural people: Poverty of the rural people is most important factor responsible for indebtedness in rural, sector with ridiculously low income; the poor people are unable to repay their loan.
4. Agriculture depends upon nature: There is every possibility, almost every season that there may be no rains or inadequate or untimely rain, drought condition, weather effect.
5. Wasteful or unproductive expenditure: The social and religious functions pertaining to marriages, births, deaths etc. are the wasteful or unproductive expenditure increase the indebtedness.
6. Defective marketing system: The system of agricultural marketing in India is full of defects. As a result the farmer is not able to procure a fair price for his produce. Because of is economic dependence on the money lender and village trader, he is forced to sell off a large part of his produce to them. They give him a very low price for his produce keeping him constantly in a state poverty.
7. Defective agricultural credit system: The system of agril. credit is wrong with defected substantial part of credit granted by money lenders. Money lenders are fully exploiting the farmers. Money lenders are least interested in whether their money is used for productivity. They charges exorbitant rates of interest, manipulate accounts and write-down inflated figures of loans, do not enter payment of installments of loans by the farmers etc.
8. Absence of alternative source of income: There was steady decline of Indian industries during the British region. Cause of the decline of small and cottage industries, village handicrafts etc. dependence on agriculture increased. But agriculture is heavily dependent on monsoon and years of draught or floods spell misery to the rural poor who have to incur heavy debt to make both ends meet.
9. Ignorance & Illiteracy of the cultivators: standard of education is very low in Indian agricultural farmers. Most of the farmers are illiterate and ignorant and as a result all the agencies concerned with them are fully exploits them.
CLASSIFICATION OF CREDIT INSTITUTION IN AGRICULTURE

Agriculture Credit

A. Non-Institutional agencies

1. Money lenders
2. Traders and commission agent
3. Relatives
4. Land lord & others

B. Institutional agencies

1. Co-operative bank
2. Scheduled commercial bank
3. Regional Rural Bank (RRB)
4. Land Development Bank (LDB)
5. National Bank for Agricultural And Rural Development (NABARD)

A. Non-Institutional Agencies (Private):

1. **Money lenders:** Under unorganized financial agencies, the money lender is important source both from the point of view of easy availability and the volume of business.

   Money lender as a credit agency continue to play dominant role in rural credit, although these agencies charge more rate of interest and follow unethical (immoral) practice. The reason for this that their lending procedure is relatively simple and credit assistance timely.

   **Malpractices followed by money lenders are as follows:**

   1. Deduct in advance the total interest for the year.
   2. Many moneylenders get thumb impression or signature on blank sheet of paper before lending money and later on enter more money.
   3. Few have receipts / pass books.
   4. High rate of interest.

2. **Traders and commission agent:** In the sphere of agril. Credit, traders and commission agents also supply a sizable part of finance. Commission agent are providing short term finance to the cultivators and exploiting them fully by heavy rate of commission, interest etc.

3. ** Relatives:** Farmers some time take loan from relatives in case of urgent need. These loans are generally available on soft terms and short term with low or negligible interest.

4. **Land lord & others:** Agriculturist also seek loan from land lord and other people. The loan from these sources generally costly because of high rate of interest in this loan is common. Most of the money supplied by this system is consumed as non-productive use and hence this system is not considered healthy.

B. Institutional Agencies:

1. **Co-operative Banks:** The co-operative credit agencies in India can be divided in two categories. i.e. those dealing with short and medium term needs and those serving long term needs. The structure of short and medium term credit is three tier i.e. (1) Primary Credit Societies (PCS), (2) District Co-operative bank (DCB), (3) State co-operative bank (SCB).

   In the case of long term credit, the structure is two tier i.e. (1) Primary land development bank, (2) Central land development bank.

   **(i) Primary Credit Societies (PCS):**
These are primary unit at a village level functioning in which funds are directly to the borrowers. The main sources of their funds are share capital and loan from Central Co-operative Bank (CCB). Share capital is kept just nominal with a view that maximum villagers may become the members of the society. Loans are granted for short period normally for one year for carrying out agricultural operations purpose of input purchase. Only some profit distributed to the share holder and remaining profit are spent on the welfare of the villages. The organizations of such types of societies are as per the Act of 1904.

(ii) District Co-operative Bank (DCB):

Known as District central co-operative banks, organized as per co-operative societies Act 1912. These bank works as an intermediary to link the primary credit societies and with money market. They also form an important link between state co-operative bank and primary agril. Credit societies. The main sources of their funds are their own share capital and reserves and deposit from the public and loan from the (SCB) State co-operative banks. Their main objective is to lend money to the village primary credit societies. They are above the Primary Credit Societies and below the State Co-operative or Apex Bank.

(iii) State Co-operative Bank (SCB)

Known as Apex-bank generally one bank in each state. It is final link in the chain between the small, scattered primary societies and the money market, and also with Reserve Bank of India. The nature of their work is mostly supervisory. Its main function is to finance and control the District Central Co-operative banks. It serves as a link between NABARD from which it borrows and lends to co-operative central banks and the village co-operative societies.

Main Function:

1. Act as a banker’s bank to the central co-operative banks.
2. Ensuring the co-ordination and uniformity in banking policy.
3. Prompting the cause of co-operation in general.

Land Development Bank (LDB):

There was no suitable agency in the country to help agriculturist in meeting their long term requirements for the development of his land and other programme. Thus better and suitable machinery was needed to enable the cultivators to get such loans according to their requirements. This brought idea of land development bank in the country. The long term credits in agril. sectors are met by this bank. Loan is provided against the mortgage of land.

Characteristics of Banks:

1. Lending money for long term against the mortgage of their lands.
2. Increasing their capital by issuing debentures.
3. Supported by Government.

Function of Bank:

1. Extend credit for redemption of old debts.
2. Improvement, reclamation and development of land.
4. Other improvement like sinking and repairs of well.
2. Scheduled Commercial Banks: (Nationalized 1969)

Commercial banking on western styled started in India in the beginning of 19th century. Commercial banks are important financial intermediaries for promoting and mobilization savings and allocating investment among productive sectors like agriculture by providing short term and medium term loan up to 10 years. In 1969, 14 major commercial banks were nationalized (at present 29 banks nationalized) there are 53123 branches of which about 60% are in rural areas. This banks are financing to farmers, land less labourers, artisan and economically weaker section of the society. After nationalization, there has been substantial increase in the involvement of commercial banks in agril. Sector and emerged as an important source of agricultural finance.

The commercial banks collected their resources in the shape of deposits, paid up capital and borrowings from the R.B.I. and utilize them by way of loans.

3. Regional Rural Banks (RRBs):

Started in 1975 under ordinance of president of India. These banks are financing the rural people through their branches in rural areas. These banks are formed by the Central government and Nationalized Commercial Banks. The main objective of RRBs is to provide credit to the weaker section- small and marginal farmers, landless labourers, artisans and small entrepreneurs by development of village areas.

Capital Structure:

The capital of every RRB was Rs. 1 crore and the issued capital was Rs. 25 lakhs. 50 per cent of the issued capital being subscribes by the central Government, 15 per cent by concerned state Government and 35 per cent remaining part by the sponsoring bank.

Objective:

According to regional rural banks act 1976, the RRBs were to set up mainly with a view to develop the rural economy by providing for the development of agriculture, trade, commerce, industry and other productive activities in the rural areas. These banks aimed at providing credit and other facilities particularly to the small and marginal farmers, agricultural labourers, rural artisans and small entrepreneurs.

Management:

The management of each RRB is being done through a nine-member Board of Directors headed by a chairman. The strength of the Board could be raised up to 15 with the approval of Government of India which appoints its Chairman. The central Government nominees three directors (in addition to chairman), the State Government two director, while sponsoring bank nominates the remaining three directors.

Banking Business:

Every RRB status of scheduled commercial bank and has been empowered to mobilize deposits and to grant short term loans directly (whether individually or in groups) only to small and marginal farmers, agricultural labourers, rural artisans, small entrepreneurs. They can provide loans both for productive as well as consumption purpose.
4. Land Development Bank (LDB):

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2. Increasing their capital by issuing debentures.
3. Supported by Government.

Function of Bank:

1. Extend credit for redemption of old debts.
2. Improvement, reclamation and development of land.
3. Purchase of agril. machinery/equipments.
4. Other improvement like sinking and repairs of well.

5. National Bank for Agriculture and Rural Development (NABARD):

The most important development in the field of rural credit in recent years is the setting up the National Bank for Agriculture and Rural Development (NABARD) in July 1982. It took over from Reserve Bank of India all the functions that the latter performed in the field of rural credit. NABARD is giving credit to farmers indirectly through co-operative societies, nationalized banks, land development banks etc.

Objectives:

1. The Bank serves as a refinancing institution for institutional credit to promote the activities of rural areas.
2. The Bank also provides direct lending to any institution as may be approved by the Central Government.
3. The bank has an organic links with the Reserve Bank and maintains a close link with it.

Functions of NABARD:

1. It works as an apex body to look after the credit requirements of the rural sector.
2. It has authority to oversee the functioning of the co-operative sector through its agricultural credit department.
3. It provides short term credit (up to 18 months) to state co-operative banks for seasonal agricultural operations (crop loan), purchase and distribution of fertilizers and working capital requirements of co-operative sugar factories.
4. It provides medium term credit (18 months to 7 years) to state co-operative bank and RRBs for approved agricultural purpose, purchase shares of processing societies and conversion of short-term crop loans into medium term loan in areas affected by natural calamities.
5. It provides medium and long term credit (not exceeding 25 years) for improvements in agriculture to State Co-operative Bank, Land Development Bank, RRBs and Commercial Banks.
6. It maintains a research and development fund to be used to promote research in agriculture and rural development.
7. It offers advice and guidance to State Governments, Federation of Co-operatives and National co-operative Development Corporation (NCDC) and functions in close contact with RBI and Government of India pertaining to agriculture and rural development.

**Difference between Agril. Credit and Credit for Commerce and Industries**

<table>
<thead>
<tr>
<th>Credit for Agriculture</th>
<th>Credit for Commerce and Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand for finance remaining stable irrespective of the ups and downs in output.</td>
<td>Demand for credit in industries directly linked to the output.</td>
</tr>
<tr>
<td>Agricultural business is full of uncertainty and due to the possibilities of crop diseases, attack by insects etc. it is not possible for framer to calculate exactly the need of credit.</td>
<td>In manufacturing industries precise calculation of financial needs can be made as it is possible to anticipate the output and returns on output.</td>
</tr>
<tr>
<td>In agriculture, farmers need credit for consumption because there is an interval between sowing and harvesting the crop.</td>
<td>In manufacturing industries, there is in the first instance no such demand for consumption.</td>
</tr>
<tr>
<td>In agriculture, there is every chance of misuse of consumption credit in unproductive use etc.</td>
<td>In industries, the payment of wages paid before the output is complete or sold.</td>
</tr>
<tr>
<td>In India, there are no adequate facilities for irrigation and therefore agriculture is gamble in monsoon and there are number of chances for crop failure as result no bank wishes to finance because there are not sure about repayment.</td>
<td>Industries are not depending upon nature and therefore, output is fixed, over and above industries is well organized and as a result they are getting finance on soft terms for their business as compared to agriculture.</td>
</tr>
</tbody>
</table>
PRINCIPLES OF AGRICULTURAL CREDIT

1. SAFETY: Safety of Funds, borrower should be in position to repay the loan plus interest.

Repayment by borrower depends on:

(a) Borrower’s capacity (Tangible Assets)

(b) Willingness to pay (by honesty & character of the borrower).

2. LIQUIDITY: It means security of assets which are easily marketable without much loss.

Bank lend funds for Short-term i.e. for Working Capital, payable on demand. Borrower’s Assets should be easily encashable such as Goods and Commodities are easily saleable as against Land and Building. So liquidity is easier in goods as compared to Fixed Assets.

3. PROFITABILITY: Banks are giving loans to public to earn profit.

Loan given by Bank is Depositor’s Money. It is to be repaid along with interest on deposit.

There are expenses on staff’s salary etc.

Bank should not grant advances or loans to unsound parties with doubtful repaying capacity.

Three R’s of Credit

Lending Agency should lend only those projects or activities within the format of 3R’s (i.e. Principals of Lending). The project should be Technically Feasible and Economically Viable.

When we take up the economic feasibility test of credit, three basic financial aspects are assessed by the banker.

1. If the loan is advanced will it generate return more than the cost?
2. Will the returns have surplus, to repay the loan when it takes due.
3. Will the farmer standup to risk & uncertainty in farming.

It known as Three R’s of credit

1. Returns from the investment
2. Repayment capacity
3. Risk bearing ability of the farmer - borrower

(1) Returns from the Investment

This is an important measure in the credit analysis. The farmer’s demand for credit can be accepted only when he will be able to generate returns that will enable him to tide over the costs. Returns depend upon the decision like what to grow, how to grow, how much to grow, whom to sell, where to sell etc. Which the farmers taken in their production activities. Farmers should be able to generate incremental income when they go for the additional costs to be made good by the borrowed funds.
Partial Budget technique

<table>
<thead>
<tr>
<th>Season/ crop</th>
<th>Existing Plan</th>
<th>Alternative Farm Plan</th>
<th>Incremental Income (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Area (ha.)</td>
<td>Gross Returns (Rs.)</td>
<td>Costs (Rs.)</td>
</tr>
<tr>
<td>Kharif Paddy (improved)</td>
<td>1.0</td>
<td>7000</td>
<td>3500</td>
</tr>
<tr>
<td>Summer Paddy (improved)</td>
<td>1.0</td>
<td>7400</td>
<td>3900</td>
</tr>
</tbody>
</table>

By getting a loan amount of Rs. 1700 and Rs. 1700 in kharif and summer respectively, the farmer can switch over from improved varieties of paddy to high yielding varieties in both seasons. The borrowing fund is quite productive generating an incremental amount of Rs. 5,700 per hectare of land.

It is an important positive factor in favour of the farmer to present his claims for the loan amount from the institutional agency.

(2) Repayment capacity:

It means the ability of the farmer to clear off the loan obtained for production purpose within the time fixed by the bank.

The loan should not only be profitable but also have potential for effecting repayment. This condition emerges out of the fact that repayment capacity not only depends upon the returns but also on several other factors.

\[ Y = (X_1, X_2, X_3, X_4, X_5, X_6) \]

\[ Y = \text{Repayment Capacity (in Rs.)} \]

\[ (+) X_1 = \text{Gross returns from the enterprise for which loan was taken during a season/year (in Rs)} \]

\[ (-) X_2 = \text{Working expenses (Rs)} \]

\[ (-) X_3 = \text{Family consumption expenditure (Rs)} \]

\[ (-) X_4 = \text{Other loan due (Rs)} \]

\[ (+) X_5 = \text{Literacy} \]

\[ (+) X_6 = \text{Managerial skill} \]

Though the returns are increase other factors may offset the returns which reducing the repayment capacity.
The estimation of repayment capacity varies from crop loans (self-liquidating loans) to term-loans (non-liquidating loans or partially-liquidating loans).

- **For self liquidating**

Repayment Capacity: Gross income - (working expenses excluding crop loan + family living expenses + other loans due + miscellaneous expenditure + crop loan)

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Amount (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Without loans</td>
</tr>
<tr>
<td>Gross Returns</td>
<td>28,000/-</td>
</tr>
<tr>
<td>Working expenses excluding crop loan</td>
<td>8,800/-</td>
</tr>
<tr>
<td>Family living expenses</td>
<td>10,000/-</td>
</tr>
<tr>
<td>Other loans due</td>
<td>4,000/-</td>
</tr>
<tr>
<td>Miscellaneous expenditure</td>
<td>600/-</td>
</tr>
<tr>
<td>Crop loan</td>
<td>-</td>
</tr>
<tr>
<td>Repayment capacity</td>
<td>4,600</td>
</tr>
</tbody>
</table>

The farmer generated gross income of Rs. 41,500/- with a loan amount of Rs. 5,000/- His repayment capacity stood at 13,100/- after clearing the loan which indicates his credit worthiness.

- **Repayment capacity in respect of partially liquidating loans:**

Repayment Capacity = Gross Income – (Working expenses including short term loans + family living expenses + other loans due + miscellaneous expenditure + annual installment due for term loan)

<table>
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</tr>
<tr>
<td>Miscellaneous expenditure</td>
<td>600/-</td>
</tr>
<tr>
<td>Annual installment due for farm loan</td>
<td>-</td>
</tr>
<tr>
<td>Repayment capacity</td>
<td>4,600</td>
</tr>
</tbody>
</table>

Farmer has taken an investment loan of Rs. 20,000/- which is payable in 5 equal annual installments of Rs. 5620/- each. In this case also the term loan is productive enough to augment quite comfortably. The repayment capacity stood at Rs. 7,480/- after deducting the annual installment.

**Causes for Poor Repayment Capacity:**

Following are the causes for poor repayment capacity of the farmers:
1. Small size of land holdings;
2. Low productivity and production;
3. Low prices and fluctuations of agricultural commodities;
4. High family expenditure;
5. Using farm credit for unproductive purpose;
6. Low farmer’s equity;
7. Lack of adoption of improved technology; and
8. Poor management of farm resources.

**Measures to Strengthen Repayment Capacity:**

Following are the measures to be adopted to strengthen the repayment capacity of the farmers:

1. Increasing net income by proper organization and operation of the farm business;
2. Adopting potential technology for increasing production and reducing the farm expenses;
3. Removing imbalances of the resources availability;
4. Scheduling the repayment plans according to the flow of income;
5. Adopting the risk management strategies like crop insurance/ machinery insurance etc.

(3) **Risk Bearing Ability:**

It is the ability of the farmer to withstand the risks that arise due to financial loss.

Risk can be quantified through statistical techniques like coefficient of variation, standard deviation, programming models etc.

**Sources of risk in farming are:**

1. Production risk;
2. Technological risk;
3. Risk caused by illiteracy and ignorance;
4. Personal risk (Sickness);
5. Institutional risk,
6. Weather uncertainly,
7. Price uncertainly

The farmer may satisfy the banker with regards to returns and repayment capacity, but yet another factor to be fulfilled is risk-bearing ability.

If the CV (coefficient Variation) of paddy yield in given area is 15 %, the expected gross returns are deflated by 15 % to arrive at the corrected yield or income.

**Repayment Capacity under risk (Risk)**

= Deflated gross returns – (working expenses excluding proposed loan + family living expenses + other loans due + miscellaneous expenditure + crop loan)

Deflated Gross Return (Income) is = 41,500 – (41,500 / x 0.15%) (Rs. 41,500/- expected Gross income)
Example: Estimation of Risk Bearing Ability or RPC under: Risk.

<table>
<thead>
<tr>
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</tr>
<tr>
<td>Repayment capacity under risk</td>
<td>-</td>
</tr>
</tbody>
</table>

Measures to strengthen Risk Bearing Ability:

1. Developing owners equity
2. Developing moral characteristics i.e. honesty, integrity, feeling responsibility etc.
3. Reducing farm / family expenditure
4. Taking up stable and reliable enterprises
5. Providing ability to borrow in both good and bad periods
6. Creating ability to earn money and save money
7. Taking up crop and other insurance.
‘5’ Cs OF CREDIT

To the economic viability of a scheme or investment activity are 5 Cs.

1. Character
2. Capacity
3. Capital
4. Condition
5. Commonsense

1. CHARACTER:

The basis for any credit transaction is trust. Even though the bank insists up on security while lending a loan, an element of trust by the banker will also play a major role. The confidence of an institutional financial agency on its borrowers is influenced by the moral characters of the borrower like honesty, integrity, commitment, hard work, promptness etc. Therefore both mental and moral character of the borrowers will be examined while advancing a loan. Generally people with good mental and moral character will have good credit character as well.

2. CAPACITY:

It means capacity of an individual borrower to repay the loans when they fall due. It largely depends upon the income obtained from the farm.

\[ C = f(Y) \]  
\[ C = \text{capacity and } Y = \text{income} \]

3. CAPITAL:

Borrower must have adequate funds of his own to put in the Business along with the borrowing from Bank. So, borrower’s own Capital should also be sufficient to realize bank’s money.

4. CONDITION:

It refers to the condition needed for obtaining a loan from the financial institutions.

5. COMMONSENSE:

It’s the perfect understanding between the lender and the borrower in credit transaction. This is in fact a prima facie requirement for obtaining credit for the borrower.


7 Ps of farm credit / Principles of farm finance

The increased role of financial institutions due to technological changes on agricultural front necessitated the evolving of principles of farm finance, which are expected to bring not only the commercial gains to the bankers but also social benefits.

The principles so evolved by the institutional financial agencies are expected to have universal validity. These principles are popularly called as 7 Ps of farm credit and they are

1. Principle of productive purpose.
2. Principle of personality.
3. Principle of productivity.
5. Principle of proper utilization.
6. Principle of payment and

1. Principle of productive purpose:

This principle refers that the loan amount given to a farmer - borrower should be capable of generating additional income. Based on the level of the owned capital available with the farmer, the credit needs vary. The requirement of capital is visible on all farms but more pronounced on marginal and small farms. The farmers of these small and tiny holdings do need another type of credit i.e. consumption credit, so as to use the crop loans productively (without diverting them for unproductive purposes). In spite of knowing this, the consumption credit is not given due importance by the institutional financial agencies.

This principle conveys that crop loans of the small and marginal farmers are to be supported with income generating assets acquired through term loans. The additional incomes generated from these productive assets add to the income obtained from the farming and there by increases the productivity of crop loans taken by small and marginal farmers.

The examples relevant here are loans for dairy animals, sheep and goat, poultry birds, installation of pump sets on group action, etc.

2. Principle of personality:

The 3Rs of credit are sound indicators of credit worthiness of the farmers. Over the years of experiences in lending, the bankers have identified an important factor in credit transactions i.e. trustworthiness of the borrower. It has relevance with the personality of the individual.

When a farmer borrower fails to repay the loan due to the crop failure caused by natural calamities, he will not be considered as willful – defaulter, whereas a large farmer who is using the loan amount profitably but fails to repay the loan, is considered as willful - defaulter. This character of the big farmer is considered as dishonesty. Therefore the safety element of the loan is not totally depends up on the security offered but also on the personality (credit character) of the borrower. Moreover the growth and progress of the lending institutions have dependence on this major influencing factor i.e. personality. Hence the personality of the borrower and the growth of the financial institutions are positively correlated.
3. Principle of productivity:

This principle underlines that the credit which is not just meant for increasing production from that enterprise alone but also it should be able to increase the productivity of other factors employed in that enterprise. For example the use of high yielding varieties (HYVs) in crops and superior breeds of animals not only increases the productivity of the enterprises, but also should increase the productivity of other complementary factors employed in the respective production activities. Hence this principle emphasizes on making the resources as productive as possible by the selection of most appropriate enterprises.

4. Principle of phased disbursement:

This principle underlines that the loan amount needs to be distributed in phases, so as to make it productive and at the same time banker can also be sure about the proper end use of the borrowed funds. Ex: loan for digging wells The phased disbursement of loan amount fits for taking up of cultivation of perennial crops and investment activities to overcome the diversion of funds for unproductive purposes. But one disadvantage here is that it will make the cost of credit higher. That’s why the interest rates are higher for term loans when compared to the crop loans.

5. Principle of proper utilization:

Proper utilization implies that the borrowed funds are to be utilized for the purpose for which the amount has been lent. It depends upon the situation prevailing in the rural areas viz., the resources like seeds, fertilizers, pesticides etc., are free from adulteration, whether infrastructural facilities like storage, transportation, marketing etc., are available. Therefore proper utilization of funds is possible, if there exists suitable conditions for investment.

6. Principle of payment:

This principle deals with the fixing of repayment schedules of the loans advanced by the institutional financial agencies. For investment credit advanced to irrigation structures, tractors, etc the annual repayments are fixed over a number of years based on the incremental returns that are supposed to be obtained after deducting the consumption needs of the farmers. With reference to crop loans, the loan is to be repaid in lump sum because the farmer will realize the output only once. A grace period of 2-3 months will be allowed after the harvest of crop to enable the farmer to realize reasonable price for his produce. Otherwise the farmer will resort to distress sales. When the crops fail due to unfavourable weather conditions, the repayment is not insisted upon immediately. Under such conditions the repayment period is extended besides assisting the farmer with another fresh loan to enable him to carry on the farm business.

7. Principle of Protection:

Because of unforeseen natural calamities striking farming more often, institutional financial agencies cannot keep away themselves from extending loans to the farmers. Therefore they resort to safety measures while advancing loans like

*Insurance coverage
*Linking credit with marketing
*Providing finance on production of warehouse receipt
*Taking sureties: Banks advance loans either by hypothecation or mortgage of assets
*Credit guarantee: When banks fail to recover loans advanced to the weaker sections, Deposit Insurance Credit Guarantee Corporation of India (DICGC) reimburses the loans to the lending agencies on behalf of the borrowers.

**Lead Bank Scheme**

The Lead Bank Scheme was launched by the RBI in 1969 as an area approach for providing banking facilities in rural areas. The LBS was recommended by D R Gadgil study group that pioneered the idea of providing social banking in the post-independence period. Under LBS, every district across the country would be assigned to a commercial bank. The bank should have major presence in that district to do the work of the Lead Bank. The lead bank makes surveys and makes loan facility to various sectors.

The National Credit-Council constituted a study group in October 1968 to recommend an appropriate organizational frame work, for implementing the schemes which help in achieving the social objectives set before the country. The study group headed by Prof.G.R.Gadgil, then Deputy Chairman of the Planning Commission. / Suggested an area approach for banking development. It recommended that each commercial Bank be allocated districts, so as to take a leading role in its respective district as regards banking development. The study group felt that this step would help in extending institutional credit on easy terms to the hitherto neglected sectors, weaker sections of the society and backward areas. After the nationalization of 14 Major Commercial Banks, the Reserve Bank of India appointed a Committee of Bankers, headed by F.K.F. Nariman, to evolve a co-ordinate programme for providing banking facilities to the under banked districts of the country. The committee, in its report submitted to the Reserve Bank in November 15,1969, recommended the setting up of 'Lead Banks' in each district. The Nariman committee recommended that Banks should be allocated specific districts, where they would take the lead in surveying the potential of banking development, in extending branch expansion and extending credit facilities. The recommendations of the Nariman Committee was discussed at the Meeting of the standing Committee of Bankers in December, 1969. The principle of the 'Lead Bank' was accepted at the Meeting. Thus, the Reserve Bank of India, after careful consideration of the recommendations of the Gadgil study group and Nariman Committee, gave final shape to the Lead Bank Scheme towards the end of 1969.

**OBJECTIVES OF THE LEAD BANK SCHEME**

Under the scheme, Lead Banks shared the responsibility of surveying and developing the banking potential of all the districts. Lead Banks were expected to assume the role of catalytic agents of economic development in their respected lead districts. They were expected to serve as leaders to bring about a co-ordination of co-operative banks, commercial banks and other financial institutions in their respective districts in the interest of district development. This is a very vital role in which the banks are required to associate and align their operations with planned regional development. On the basis of the survey, the lead banks were expected to estimate the deposit potential and fill the credit gaps to improve bank advances in rural areas, especially to priority sectors and weaker sections. The close involvement of the Lead Bank with a particular area will not only result in deposit mobilization but also in the expansion of finance to agriculture and small industries. The following important benefits were expected to flow from the scheme.
(i) The whole country would be served by a well-knit system of commercial and co-operative banking.
(ii) Branch expansion, supervision and guidance would become effective.
(iii) A dynamic relationship between commercial banks, co-operative credit institutions and
government authorities at the district level would evolve.
(iv) Major constraints impeding the development of the districts economy would be identified
and the Lead Bank would induce the appropriate agencies to remedial action.

FUNCTIONS OF THE LEAD BANK

Reserve Bank of India spelt out the following functions to be performed by the Lead Bank.

To survey the resources and potential for banking development in its district.

To survey the number of industrial and commercial units, farms and other establishments which
do not have bank accounts, or which depend primarily on money lenders, increasing the resources of
such units by additional production through help from the banking system.

To examine the facilities for marketing of agricultural produce and industrial production, storage and
warehousing and the linking of credit with marketing in the district.

To study the facilities for stocking of fertilizers and other agricultural inputs and repairing and
servicing of equipments.

To recruit and train staff for offering advice to small borrowers and farmers in the priority sectors
and for the follow-up and inspection of the end use of loans. To assist other primary lending
agencies.
**Kisan Credit Card**

The Kisan Credit Card has emerged as an innovative credit delivery mechanism to meet the production credit requirements of the farmers in a timely and hassle-free manner. The scheme is under implementation in the entire country by the vast institutional credit framework involving Commercial Banks, RRBs and Cooperatives and has received wide acceptability amongst bankers and farmers. The broad guidelines of the revised scheme are as follows:

**Objectives/Purpose**

Kisan Credit Card Scheme aims at providing adequate and timely credit support from the banking system under a single window to the farmers for their cultivation & other needs as indicated below:

- To meet the short term credit requirements for cultivation of crops
- Post harvest expenses
- Produce Marketing loan
- Consumption requirements of farmer household
- Working capital for maintenance of farm assets and activities allied to agriculture, like dairy animals, inland fishery etc.
- Investment credit requirement for agriculture and allied activities like pump sets, sprayers, dairy animals etc.

*Note:* The aggregate of components a. to e. above will form the short term credit limit portion and the aggregate of components under f will form the long term credit limit portion.

**Eligibility**

- All Farmers – Individuals / Joint borrowers who are owner cultivators
- Tenant Farmers, Oral Lessees & Share Croppers
- SHGs or Joint Liability Groups of Farmers including tenant farmers, sharecroppers, etc.

**Fixation of credit limit/Loan amount**

The credit limit under the Kisan Credit Card may be fixed as under:

- **All farmers other than marginal farmers:**
  - **The short term limit to be arrived for the first year:** For farmers raising single crop in a year: Scale of finance for the crop (as decided by District Level Technical Committee) x Extent of area cultivated + 10% of limit towards post-harvest / household / consumption requirements + 20% of limit towards repairs and maintenance expenses of farm assets + crop insurance, PAIS & asset insurance.
  - **Limit for second & subsequent year:** First year limit for crop cultivation purpose arrived at as above plus 10% of the limit towards cost escalation / increase in scale of finance for every successive year (2nd, 3rd, 4th and 5th year) and estimated Term loan component for the tenure of Kisan Credit Card, i.e., five years.
  - **For farmers raising more than one crop** in a year, the limit is to be fixed as above depending upon the crops cultivated as per proposed cropping pattern for the first year is changed in the subsequent year, the limit may be reworked.
  - **Term loans for investments** towards land development, minor irrigation, purchase of farm equipments and allied agricultural activities. The banks may fix the quantum of credit for term and working capital limit for agricultural and allied activities, etc., based on the unit cost of the asset/s proposed to be acquired by the farmer, the allied activities already being undertaken on the farm, the
bank’s judgment on repayment capacity vis-a-vis total loan burden devolving on the farmer, including existing loan obligations.

- **The long term loan limit** is based on the proposed investments during the five year period and the bank’s perception on the repaying capacity of the farmer
- **Maximum Permissible Limit**: The short term loan limit arrived for the 5th year plus the estimated long term loan requirement will be the Maximum Permissible Limit (MPL) and treated as the Kisan Credit Card Limit.

**Fixation of Sub-limits for other than Marginal Farmers:**

Short term loans and term loans are governed by different interest rates. Besides, at present, short term crop loans are covered under Interest Subvention Scheme/ Prompt Repayment Incentive scheme. Further, repayment schedule and norms are different for short term and term loans. Hence, in order to have operational and accounting convenience, the card limit is to be bifurcated into separate sub limits for short term cash credit limit cum savings account and term loans.

**Drawing limit** for short term cash credit should be fixed based on the cropping pattern and the amounts for crop production, repairs and maintenance of farm assets and consumption may be allowed to be drawn as per the convenience of the farmer. In case the revision of scale of finance for any year by the district level committee exceeds the notional hike of 10% contemplated while fixing the five year limit, a revised drawable limit may be fixed and the farmer be advised about the same. In case such revisions require the card limit itself to be enhanced (4th or 5th year), the same may be done and the farmer be so advised. For term loans, installments may be allowed to be withdrawn based on the nature of investment and repayment schedule drawn as per the economic life of the proposed investments. It is to be ensured that at any point of time the total liability should be within the drawing limit of the concerned year.

Wherever the card limit/liability so arrived warrants additional security, the banks may take suitable collateral as per their policy.

**For Marginal Farmers**: A flexible limit of Rs.10,000 to Rs.50,000 be provided (as Flexi KCC) based on the land holding and crops grown including post harvest warehouse storage related credit needs and other farm expenses, consumption needs, etc., plus small term loan investments like purchase of farm equipments, establishing mini dairy/backyard poultry as per assessment of Branch Manager without relating it to the value of land. The composite KCC limit is to be fixed for a period of five years on this basis.

**Disbursement**: 

The short term component of the KCC limit is in the nature of revolving cash credit facility. There should be no restriction in number of debits and credits. However, each installment of the drawable limit drawn in a particular year will have to be repaid within 12 months. The drawing limit for the current season/year could be allowed to be drawn using any of the following delivery channels.

- a) Operations through branch
- b) Operations using Cheque facility
- c) Withdrawal through ATM / Debit cards
- d) Operations through Business Correspondents and ultra thin branches
e) Operation through PoS available in Sugar Mills/ Contract farming companies, etc., especially for tie-up advances  
f) Operations through PoS available with input dealers  
g) Mobile based transfer transactions at agricultural input dealers and mandies  

**Other features:**  
Uniformity to be adopted in respect of following:  

Interest Subvention/Incentive for prompt repayment as advised by Government of India and / or State Governments. The bankers will make the farmers aware of this facility.  

The KCC holder should have the option to take benefit of Crop Insurance, Assets Insurance, Personal Accident Insurance Scheme (PAIS), and Health Insurance (wherever product is available and have premium paid through his KCC account). Necessary premium will have to be paid on the basis of agreed ratio between bank and farmer to the insurance companies from KCC accounts. Farmer beneficiaries should be made aware of the insurance cover available and their consent is to be obtained, at the application stage itself.  

One time documentation at the time of first availment and thereafter simple declaration (about crops raised / proposed) by farmer from the second year onwards.  

**Processing Fee as decided by banks.**  

What are the benefits of KCC Scheme?  

- Simplifies disbursement procedures.  
- Removes rigidity regarding cash and kind.  
- No need to apply for a loan for every crop.  
- Assured availability of credit at any time enabling reduced interest burden for the farmer.  
- Helps buy seeds, fertilizers at farmer’s convenience and choice.  
- Helps buy on cash-avail discount from dealers.  
- Credit facility for 3 years – no need for seasonal appraisal.  
- Maximum credit limit based on agriculture income.  
- Any number of withdrawals subject to credit limit.  
- Repayment only after harvest.  
- Rate of interest as applicable to agriculture advance.  
- Security, margin and documentation norms as applicable to agricultural advance  

**How to get Kisan Credit Card?**  

- Approach your nearest public sector bank and get the details.  
- Eligible farmers will get a Kisan Credit Card and a pass book. It has the name, address, particulars of land holding, borrowing limit, validity period, a passport size photograph of holder which may serve both as an identity card and facilitate recording of transactions on an ongoing basis.  
- Borrower is required to produce the card cum pass book whenever he/she operates the account.
Tools of Financial Analysis

BUDGETING:

It may be defined as a detailed physical and financial statement of a farm plan or of a change in farm plan over a certain period of time. Farm budgeting is a method of analyzing plans for the use of agricultural resources at the command of the decision-maker. In other words, the expression of farm plan in monetary terms through the estimation of receipts, expenses and profit is called farm budgeting.

Types of Farm Budgeting: The following are the different types of farm budgeting techniques:

a) Partial Budgeting.
b) Enterprise Budgeting.
c) Complete Budgeting.

a) Partial Budgeting: This refers to estimating the outcome or returns for a part of the business, i.e., one or few activities. A partial budget is used to calculate the expected change in profit for a proposed change in the farm business. A partial budget contains only those income and expense items, which will change, if the proposed modification in the farm plan is implemented. Only the changes in income and expenses are included and not the total values. The final result is an estimate of the increase or decrease in profit. In order to make this estimate, a partial budget systematically, answers to following four questions relating to the proposed change:

1) What new or additional cost will be incurred?
2) What current income will be lost or reduced?
3) What new or additional income will be received? and
4) What current costs will be reduced or eliminated?

The first two questions identify changes which will reduce profit by either increasing costs or reducing income. Similarly, the last two questions identify factors which will increase profit by either generating additional income or lowering costs. The net change in profit can be computed by estimating the total increase in profit minus the total reduction in profit. A positive value indicates that the proposed change in the farm plan will be profitable.

All the changes in farm plan that can be appropriately adapted with the help of a partial budget can be grouped into three types.

They are as given below:

1) Enterprise substitution: This indicates a complete or partial substitution of one enterprise for another. E.g. substituting one acre of paddy for one acre of sugarcane.

2) Input substitution: Changes involving the substitution of one input for another or the total amount of input to be used are easily analyzed with a partial budget. E.g. substituting machinery for labour.
3) Size or scale of operation: Included in this category would be changes in total size of the farm business or in the size of a single enterprise. E.g. Buying or renting additional land or machinery.

b) Enterprise Budgeting:

Enterprise is defined as a single crop or livestock commodity. Most farms consist of a combination of several enterprises. An enterprise budget is an estimate of all income and expenses associated with a specific enterprise and an estimate of its profitability. It is pre-requisite for the preparation of a complete farm budget or for the application of farm planning techniques like linear programming. An enterprise budget lists down all the expected output, both in physical as well as value terms, for a unit of a particular activity (i.e., per hectare, per animal or per 100 birds) on the farm. The enterprise budget is important since it depicts the relative profitability of different enterprises or activities or alternatives, which can be used to determine the relative dominance of different enterprises. It includes variable cost or total operating cost and fixed cost including depreciation and interest on fixed asset. Any enterprise budget can also be analyzed in terms of cash versus non-cash expenses and total cost versus actual cash outlay.

C) Complete or Whole Farm Budgeting:

It is a technique for assembling and organizing the information about the whole farm in order to facilitate decisions about the management of farm resources. It attempts to estimate all items of costs and returns and it presents a complete picture of farm business. It is generally used by beginners or by those farmers who want to completely overhaul their existing farm organization and operation. Complete and partial budgeting is mutually complementary, i.e., the partial budgeting should be used at various stages of complete budgeting in order to decide the changes to be effected in the farm organization.

The process of complete budgeting involves:

i) appraisal of existing farm resources, their uses and efficiency,
ii) appraisal of alternatives or opportunities or various production activities that can be included and their resource requirements and
iii) preparing and evaluating the alternative plans for their feasibility and profitability.

2) Complete Budgeting and Partial Budgeting:

The differences between these two are:

i) Complete budgeting accounts for drastic changes in the organization and operation of the farm, while partial budgeting treats minor changes only.
ii) All the available alternatives are considered in complete budgeting, whereas partial budget considers two or a few alternatives only.
iii) Complete budgeting is used for estimating the results of entire organization and operation of a farm, while partial budget helps only to study the net effects in terms of costs and returns of relatively minor changes.
Balance sheet

**Balance sheet** is a list of the accounts having debit balance or credit balance in the ledger. On one side it shows the accounts that have a debit balance and on the other side the accounts that have a credit balance. The purpose of a balance sheet is to show a true and fair financial position of a business at a particular date. Every business prepares a balance sheet at the end of the account year. A balance sheet is defined as:

Balance sheet or Net worth statement: It is a statement of the financial position of a farm business at a particular time, showing its assets, liabilities and equity.

If the assets are more than the liabilities it is called net worth or equity and its converse is known as net deficit.

The typical balance sheet shows assets on the left side and liabilities & equity on the right side. Both sides are always in balance hence the name balance sheet.

Balance sheet is so called because it is prepared with the closing balance of ledger accounts at the end of the year. It has two sides - assets side or left hand side and liabilities side or right hand side.

**Assets mean** all the things and properties under the ownership of the business *i.e.* building, plant, land, machinery, stock, cash etc. Assets also include anything against which money or service will be received *i.e.* creditors accrued income, prepaid expenses etc.

**Liabilities mean** our dues to others or anything against which we are to pay money or render service, *i.e.* creditors, outstanding expenses etc.

Asset side of the balance sheet indicates the different types of assets owned by a concern, while liabilities side discloses the various sources through which funds have been obtained in order to acquire those assets. Balance sheet reveals the financial position of the firm on a particular date at a point of time, so it is also called "position statement". It is prepared on the last day of the accounting year and discloses concern for the whole year cannot be determined through the balance sheet because financial position is ever changing.

**Features of Balance Sheet:**

Balance sheet has the following features:

1. It is the last stage of final accounts.
2. It is prepared on the last day of an accounting year.
3. It is not an account under the double entry system - it is a statement only.
4. It has two sides - left hand side known as asset side and right hand side known as liabilities side.
5. The total of both sides are always equal.
6. The balances of all asset accounts and liability accounts are shown in it. No expense accounts and revenue accounts are shown here.
7. It discloses the financial position and solvency of the business.
Importance of balance sheet:

- Farmer claim against the farm business equal to the equity amount
- It can be easily prepared if farm records are their
- It useful to know financial position of the farm business at any point of time.
- It can also study the performance of a business over years.

**Importance terminology:**

1. **Tangible Assets:** Assets which have physical existence and which can be seen, touched and felt are called "tangible assets", e.g. building, plant, machinery, furniture etc.
2. **Intangible Assets:** Assets which have no physical existence and which cannot be seen, touched or felt are called "intangible assets", e.g. goodwill, patent right, trade mark etc.

Types of assets – 3 types

1. **Current Assets:** They are very liquid or short-term assets. They can be converted into cash within a short time, usually one year. For example, cash on hand, agril. Produce ready for disposal, i.e., stocks of paddy, jowar, wheat, black gram etc.
2. **Working Assets (Intermediate assets):** These assets take two to five years to convert into cash form. e.g. Machinery, Equipment, livestock, tractors, trucks etc.
3. **Long term Assets: (Fixed assets):** An asset that is permanent or will be used continuously for several years is called long-term assets. It takes longer time to convert into cash due to verification of records, legal transactions etc. e.g. land, farm building etc.

**Type of Liabilities: 3 Types**

1. **Current liabilities:** Debt that must be paid in the short term or in very near future. e.g. crop loans, cost of maintenance of cattle etc.
2. **Intermediate liabilities:** These loans are due for the repayment within a period of two to five years e.g. Livestock loans, Machinery loans etc.
3. **Long term liabilities:** The duration of loan payments more than five years. e.g. Tractor loans and land development loans etc.

**INCOME STATEMENT OR PROFIT AND LOSS STATEMENT**

This is entirely different from balance sheet, in a balance sheet; we considered assets and liabilities and did not consider operational efficiency in terms of receipts and expenses. In Income statement the items included are receipts, expenses, gains and losses. It defined as a summary of receipts and gains minus expenses and losses during a specific period. It is prepared for the entire farm for one agricultural year.

**Receipts:** They mean the returns obtained from the sale of crop produce and other supplementary products like milk and eggs, wages, gifts etc. Gain in the form of appreciation in the value of assets is also included in the receipts. However, returns from the sale of capital assets, such as livestock, machinery, farm buildings etc. are not included because such returns/income are not really obtained during the period.
**Expenses:** Operating and fixed costs are recorded here. Losses in the form of depreciation on the asset value fall under the expenditure item. However, the amount incurred on the purchase of capital assets is not considered.

**Net Income:** It constitutes net cash income, net operating income and net farm income.

**Net Cash Income:** It gives the position of cash receipts minus cash expenses only during the period for which income statement is prepared.

**Net Operating Income:** It is arrived at by deducting operating expenses from the gross income. Fixed costs are not given any consideration. Operating expenses include crop loans.

**Net Farm Income:** Net farm income equals net operating income less fixed costs. Compared to net cash income and net operating income, it is relatively a better measure of assessing the performance of a farm. It is the return accrued to own capital and family labour employed.

Income statement prepared for a given farm foe a given year may present a very bright picture of the farm. A realistic position on the performance of a farm can be gauged by preparing income statements over years to show the actual situation, as the parameters influencing farm business are subject to fluctuations.

An income statement is the list of all farm expenses or business debts on the hand and all receipts or business credits on the other

**Uses / Advantages of Income Statement**

1. Provide information on cost and returns of different enterprises.
2. Provide the basis for a simple study and analysis of farm business
3. The analysis provides farmer an opportunity to compare the year’s results with his expectations.
4. It helps to make comparisons of his efficiency with the performance of other farmers operating under similar situations.

**Recent Trends in Agricultural Credit**

Since the nationalisation of commercial banks in 1969, India had strongly pursued a policy of “Social and Development Banking” in the rural areas. As a result, formal institutions of credit provision, mainly commercial banks, emerged as important sources of finance to agriculture displacing usurious moneylenders and landlords. The policy of social and development banking was a supply-led policy; it aimed at augmenting the supply of credit to rural areas, and that too at an affordable interest rate.

Commercial banks fail to achieve their aim. As a result, the decade of the 1990s was a period of the reversal of the achievements of social and development banking. The situation of the 1990s however, changed in the 2000s. Beginning from the early 2000s there was a revival of agricultural credit in India. Between 2002 and 2011, agricultural credit grew by 17.6 per cent per annum, which was significantly higher than the growth rate of 2.6 per cent recorded for the 1990s. From 2004 onwards the flow of agricultural credit has been increasing. **There are three distinct features of the growth in agricultural credit. First,** a significant portion of the increase in total bank credit to
agriculture in the 2000 was accounted for by indirect finance to agriculture. Indirect finance does not go directly to cultivators but to institutions that support agricultural production in rural areas. Of the total increase in credit supply to agriculture between 2000 and 2011, about one third was contributed by indirect finance. The reason for growth in indirect finance to agriculture credit attributes to the new definition in the official agricultural policy, which states that from 1993 onwards, indirect finance should be considered as part of priority sector advances. Secondly, much of the increase in total advances to agricultural credit (direct + indirect finance) in 2000s were on account of a sharp increase in the number of loans with size of Rs. 10 crore and above, and particularly of Rs. 25 crore and above. Thirdly, there was an increased provision of agricultural credit from bank branches in urban areas in the 2000s. Much of these large-sized advances were made towards financing large agri-business oriented enterprises. There is little evidence to argue that major beneficiaries of the revival in agricultural credit in the 2000s have been the small farmers and marginal farmers.

**Kisan Credit Card**

The Kisan Credit Card Scheme (KCC) was introduced in 1998-99 to provide credit to farmers. The Indian commercial banks have been providing Kisan credit (also called cash credit or revolving fund) to farmers for more than a decade now. The base of fixing Kisan credit limit is land holdings, crops cultivated, and crop duration. The consumption needs of the farming family have also been taken into consideration while computing the limits. The Kisan credit card provides a lump sum loan released to the farmer to meet his crop needs like purchase of seeds, manure, pesticides, labour, and irrigation etc. The farmer is expected to draw from this account based on his needs on different occasions. He is expected to pay back the entire amount within one year mostly after the proceeds of the crops are realised so that he can apply for fresh Kisan credit limit. No doubt Kisan credit helps farmer most at the time of commencement of the farming operation. However, it is not possible for all farmers to repay the loan amount within one year. In order to repay the loan amount within one year he takes money from lenders and again he borrows to repay money lenders. Consequently, he left with no money to undertake his farming operations. He enters into a debt trap. Moreover, the Kisan credits are given to the farmers against mortgage of the lands on which cultivation is undertaken. In India, more often than not, farmers do not have proper title of the land on which they are cultivating. Thus, Kisan credit is useless for them. Therefore, Kisan credit policy is not as per the requirement of Indian farmers; it failed to entertain agriculture credit to all farmers.

**Self Help Groups (SHGs)**

A self-help group has been defined as a small and formal association of poor having preferably similar socio-economic background and who have come together to realise some common goals based on the principle of self-help and collective responsibility. The Self Help Group movement in India has gained a momentum in recent years. The promotion of self-help groups in India began more formally in 1992 with the launch of the SHG-Bank Linkage Programme by National Bank for Agriculture and Rural Development. The programme’s main aim was to improve rural poor’s access to formal credit system in a cost effective and sustainable manner by making use of SHGs. The invention of Self-Help Group is a boon for the small farmer in general and village women in particular. It has been responsible for bringing in a qualitative change in the lives of thousands of people. Under Self-Help Group, banks are expected to provide credit to the SHGs against group guarantee and members of the group stand as collective guarantors. Banks allow the members of the SHGs to decide on which members of the group shall borrow and how much, and
the methodology of repayment. Normally, SHGs loans are term loans wherein the members are expected to repay the loans in regular instalments over a period of time. In India most farmers, especially small farmers and marginal farmers neither have title of the land nor have any collateral security. As a result, they fail to get credit from commercial banks. In this situation, SHGs help them to get credit without any hassles.

South based NGO, Sri Kshetra Dharmasthala Rural Development Project (SKDRDP) has been promoting SHGs of the small farmers for more than two decades and helping them with credit facilities for their farming operations. This movement popularly known as pragathibandhu groups in Karnataka state has helped more than one and half million farmers directly or through their family members who are members of the SKDRDP promoted SHGs. SKDRDP sources bulk loans from commercial banks and lends them to SHGs for undertaking their farming operations. The unique feature of the SKDRDP is that SHGs members have to repay in weekly instalments. This uniqueness encourages farmers to go for subsidiary activities like dairy farming, vegetable cultivation, floriculture, or pure daily wage labour so that they can earn money every week to repay loan. This scheme of repayment has not only help farmer to repay loan easily but also help them thinking innovative. Realising the potentiality of the SHGs, the National Bank for Agriculture and Rural Development Bank (NABARD) is now actively facilitating promotion of Joint Liability Groups (JLGs) of farmers for providing necessary credit through JLGs. Commercial banks and Non-Government Organisations (NGOs) are given incentives for promoting JLGs and credit linking them with bank. Department of financial services, ministry of finance, government of India issued a directive in November 2011, wherein advising bank to provide cash credit or revolving fund to SHGs instead of term loans. This will act as a twin edged sword. On the one hand, members of the SHGs will get loan easily and on the other hand it can give freedom to the group to decide on the priorities of the members and lend to them on its own terms without having to take guidance from the banker.

**The Gramin Bank Model**

The Gramin Bank model, developed originally in Bangladesh, is one of the most popular models of micro finance institutions and has been replicated in various parts of the world. Under this model, non-government organisations (NGOs) form and develop self help groups (SHGs). Gramin Bank has reversed conventional banking practice by obviating the need for collateral. It has created the need for a banking system based on mutual trust, accountability, participation, and creativity. It offers credit for creating self-employment, income generating activities and housing for the poor, as opposed to consumption. In India, three main models of micro credit are being followed and they are different from the Gramin Bank model. Under the first model, bank themselves assumes the role of Self Help Promoting Institutions (SHPIs) by promoting formation of SHGs and extending loans to them. Under the second model, groups are formed and nurtured by NGOs, Government Agencies, or other community based organisations. These agencies act as facilitators. Bank open saving accounts of the SHGs formed and nurtured by the NGOs and provide them credit in due course of time. This is the most popular and wide spread model of micro credit in India. Under third model, the NGOs (SHPIs) promote formation of SHGs. Bank provide bulk assistance to these SHPIs for undertaking financial intermediation. NGOs, here, thus act as both facilitators and micro finance intermediaries.
Microfinance

The concept of micro finance is understood as providing poor families with very small loans (micro credit) to help them engage in productive activity or grow their tiny business. The importance of micro finance lies in the fact that the formal/institutional banking sector has not lived up to its social responsibility of meeting the financial needs of the poor due to various reasons such as: (a) lack of branch network in the rural area, (b) lack of collateral security of farmers and poor people, and (c) lack of education, awareness among the poor. Micro finance scheme in India has emerged as major avenues for bringing the poor within the purview of the organised financial sector. The access to credit for the poor from conventional banking is often constrained by lack of collaterals, information asymmetry and high transaction cost associated with small borrower accounts. In operational terms micro credit involves small loans, up to Rs. 25000, extended to the poor without any collateral for undertaking self-employment project (RBI, 2007-08). Realising the importance of credit in the development process, the government and the Reserve Bank of India have taken various steps in this regard and have encouraged banks to make timely and adequate finance available to poor for agricultural credit as well as allied activities making institutional credit to the poor.

SCALE OF FINANCE:

The cost of cultivation, which can be stated as the expenses for successful raising of a crop per acre or hectare or unit area would indicate the average expenses, inputs such as fertilizers, insecticides, pesticides, irrigation, supervision, harvesting and marketing of the crops. The factors of cost of cultivation would clearly indicate that the part of the expenses are required to be incurred by the farmers in stages; while part of the expenses are required by them for purchase of inputs from the market. Depending upon the total cost of cultivation, the funds considered by bank as loans for various purposes is known as Scale of Finance.

Scale of finance is fixed for annual, perennial crops and livestock also.

Livestock will have fixed costs of finance and they are termed as unit costs. The unit varies with the type of livestock. Ex: for milch cattle the unit refers to two animals, for sheep and goat a minimum of 10 animals and for poultry a minimum of 500 birds.

Factors influencing the scale of finance:

1. Type of the crop: It varies from crop to crop.
2. Nature of the crop: Within the same crop between the improved varieties and high yielding varieties (HYVs) the scale of finance differs.
3. Season: Scale of finance differs with season for the same crop.
4. Type of land: Based on the type of the land i.e. irrigated or dry the scale of finance differs with the same crop.
5. District/Area: For the same crop the scale of finance varies from district to district.

The Banks have circulated to their officers the scales of finance on various crops which should not rigidly apply under all sets of conditions. The loan amounts considered by banks are need based to meet the cost of the actual cultivation of various important crops.

Disbursement:
The disbursement procedures of loans aim at ensuring the end utilization of funds. Since the resources at the disposal of the cultivators and the loans/credits raised by them can not meet their demands, utilization of funds lent for other than intended purpose is not uncommon due to socio-economic compulsion and lack of commercial consciousness. Care should be taken to disburse the cash and kind components in such a manner that they are not misutilised by the beneficiaries. It is necessary to ascertain the comparative rates of the inputs, preferably from the price list of various inputs published and circulated by the manufacturing companies.

**Supervision:**

It is necessary to inspect crops at various stages of growth to ascertain crop conditions, probable yields, occasional damages etc. The general stipulation to inspect the farms for the end utilization of funds may not be possible in view of the large number of accounts and simultaneous operations carried out by the farmers in a homogeneous cropping pattern.

**Margin:**

The margin in short –Term crop loans varied from 10 to 25 per cent. In deserving cases, margin is also required to be waived. It is also necessary to waive the margin in case of small and marginal farmers who are not in a position to raise the necessary margin.

**Rate of Interest:**

The practice of applying the rate of interest varies from Bank to Bank and is governed either by the land holding or purpose of loan or its quantum. It is advisable and rational that the rate of interest should be according to the land holdings.

**Securities:**

The number of documents, nature of securities and the cost thereof vary from Bank to Bank and from State to State.

**Marketing:**

The marketing is closely related with the repayment, which should be generally stipulated, coinciding with the time of marketing of crops. Efforts should also be made to link up repayment with the marketing in certain types of advances of assured and single point organized markets. Such as marketing of sugar-cane to the sugar factories.
The farmers depended upon on PACS (in three-tier structure) for their short and medium – term credit requirements and on PLDBs (in two-tier system) for long –term credit needs till 1987, which means that the farmers had to obtain their total loan requirements from two different types of co-operative institutions. Regarding marketing of the farm produce, the farmers faced hardship in getting the services of marketing co-operative societies under three tier systems. To help co-operatives serve in a more useful way, the Government of some State thought that it is appropriate to bring some organizational changes in the working of co-operatives in the state. Accordingly, a committee under the chairmanship of Shri Mohan Kanda was constituted to come out with meaningful and practicable alternatives in this regard. The committee submitted its report in May, 1985. It recommended for the establishment of ‘Single Window System’ and bill was passed in January 1987. The main idea of introducing this system is to supply all types of agricultural credit required by the farmers and provide processing and marketing facilities under one roof i.e., through PACS. The single window system is a three-tier structure in co-operative credit and two-tier structure in co-operative marketing. The organizational structure is sketched out below.

Functions of PACS under single window system are:

1. To advance the ST, MT and LT loans;
2. To supply the needed farm inputs;
3. To distribute essential commodities; and
4. To arrange the marketing of farm produce of the farmer members.
CROP INSURANCE

Agricultural production is fraught with risk and uncertainty conditions. Risks are very many and generally measurable, whereas uncertainty situations are not amenable to measurement. Uncertainty, price risk and production risks are the major types confronting Indian agriculture. However, risks also emanate from institutional changes along with natural hazards like flood, draught, hail, cyclones, earthquakes etc. Natural hazards cause widespread devastation and grave loss to the properties of humans and their lives. Under such situations, disaster management programmes will be implemented by the Government with large—scale help coming both from the people and the Government.

Market risks arise from the fluctuations in demand and supply situations of goods and over-indulgence of middlemen in the market system. Strategies like storage, processing etc. are being restored to overcome such situations.

Risks that is associated with the weather aberrations such as change in the rainfall distribution, quantum of rainfall, floods, droughts etc., result in heavy losses of crop and livestock products. Inefficient management of farms due to illiteracy causes losses in production of crops and allied products.

Many management strategies have been evolved over time to combat production risks. They are practices of improvement of soil moisture holding capacity through bunding, leveling, mulching, mixed cropping, coupled with other agronomic practices and tenancy practices. Crop insurance oflate is being given prime importance by Government of India primarily with the idea of safeguarding the farmers against crop losses during draught and flood years.

Origin of Crop Insurance Scheme:

The desire to introduce two pilot schemes, viz., crop insurance scheme and cattle insurance scheme with objective of protecting the farmers from the heavy losses of crop and livestock by the Government of India, dates back to 1948, soon after the independence. But, none of the State Governments agreed to implement the schemes due to paucity of funds. In the 1970, an Expert Committee on crop insurance under the Chairmanship of Dharamnarain was appointed by the Government of India to examine and analyze administrative and financial implications of the scheme with a view to introducing it. In his report he ruled out the possibility of implementing the scheme in India. Contrary to this report, Prof. Dandekar strongly defended the implementation of the scheme. In 1973, the Government of India had to set up General Insurance Company (GIC) to carry out all types of insurance business throughout the nation with four subsidiary insurance companies.

At the instance of the Government of India, GIC first introduced the crop insurance scheme in 1973 on experimental basis as a pilot scheme in selected centers of Gujarat. Only H4 cotton was considered for implementation of the scheme.

Area based crop insurance scheme was subsequently introduced from 1979 by GIC on a pilot basis in selected areas. If the actual average yield of the crop in the selected area was less than the guaranteed yield of the crop, then the indemnity would become payable to all the insured farmer-borrowers. Sum assured was 100 per cent of the crop loan but a ceiling was imposed with regard to payment of indemnity, i.e., Rs. 5,000 per farmer in the case of dry land and Rs. 10,000 per farmer in the case of irrigated areas. This scheme was implemented by 12 States in India up to 1984.
The objectives of the scheme were:

* Financial support to farmers in the event of crop failure - as a result of drought, floods.
* Credit eligibility of farmers after a crop failure for the next crop season.

In the year 1985, Comprehensive Crop Insurance Scheme (CCIS) was introduced by GIC in all the states. The scheme covers all the farmers availing crop loans and it is limited to cereals such as rice and wheat, millets, oilseeds and pulses. Two percent of the sum insured is fixed as premium for rice, wheat and millets, whereas for the oilseeds and pulses it is one percent. Indemnity is calculated based on the following formula:

\[
\text{Indemnity} = \frac{\text{Shortfall in the yield of the crop}}{\text{Threshold yield of the crop}} \times \text{Sum insured}
\]

Eighty per cent of the average annual yield of the crop in a given area over the last previous five years is considered as threshold yield in that area. Shortfall in the yield of the crop is the difference between threshold yield of crop and actual yield of the crop in a particular area in the year under reference. The scheme is applicable only to farmer-borrowers.

On June 23, 1999 the Prime Minister launched a new crop insurance scheme called Rashtriya Krishi Bima Yojana (RKBY) under the National Agricultural Insurance Scheme (NAIS). Participation in RKBY was compulsory for farmers growing notified crops and availing crop loans from formal credit Institutions. In case of loaner farmers, the Sum insured was equal to the amount of crop loan advanced.

Under NAIS, premium rates are 3.5% of sum insured for bajra and oilseeds, 2.5% for other Kharif crops, 1.5% for wheat and 2% for other Rabi crops. Small and marginal farmers are entitled to a premium discount of 10%. In the case of commercial/horticultural crops, actuarial rates are being charged. NAIS is being implemented by 23 states and two Union territories.

Government set up an organization called Agriculture Insurance Company of India Ltd (AIC) with support from the general insurance companies and NABARD for effective implementation of the above scheme. All major cereals and pulses and oilseed crops were covered under CCIS and few horticultural crops like onion, potato were covered in NAIS. Spread of CCIS was poor. But the CCIS has helped financial institutions to reduce overdues and maintain the flow of crop loans/short term credit at least in areas where indemnities were paid by the GIC of India. There are also other schemes like ‘Varsha Bhima’, ‘Sowing failure policy-2’ being operated on a pilot basis.
**Salient Features of the System:**

1. The credit requirements of the farmers are to be based on the cost of cultivation (variable costs) of the crop.
2. The eligibility to receive the loan is not gauged by ownership of the land but by the factor that he is a bona fide farmer who needs credit for cultivation.
3. The disbursement and recovery of the loan are to be made in accordance with the crop production scheduled.
4. The loan should be given both in cash and kind, and kind component is related to quantum of actual total inputs required for production of a particular crop.
5. The quantum of loan should be fixed according to the variety and the season in which it is grown and type of crop, i.e., irrigated or rainfed.
6. Crop loan should be recovered with tie-up arrangement, i.e., linking credit with marketing, and
7. Crop loan is fixed by the district consultative committee which consists of experts from the fields of agriculture, animal husbandry, banking, etc.

**Advantages of Crop Insurance:**

1. It stabilizes the farm business during the period of crop failure;
2. The farmer can act much more confidently in farm business as there is protection against hazards of farming;
3. It prevents the farmers to approach non-institutional agencies during the periods of crop failure;
4. It enhances the use of modern inputs to boost the productivity in agriculture;
5. In high-risk areas crop insurance serves as a catalyst in bringing area under cultivation which otherwise remained uncultivated.

**Limitations of Crop Insurance:**

1. It provides coverage only to a limited number of crops-wheat, paddy, oilseeds, millets and pulses excluding important crops such as sugarcane, potato, cotton etc.;
2. the coverage was restricted to rainfed crops only and because of this, the scheme was not effective in State such as Punjab, Haryana and Western Uttar Pradesh; and
3. The scheme covered only those farmers who had taken loans from financial institutions and the sum insured was limited to a maximum of Rs.10,000 only.

**DEPOSIT INSURANCE AND CREDIT GUARANTEE CORPORATION OF INDIA (DICGC)**

The failure of two scheduled banks, viz., Palai Central Bank Ltd.(Kerala) and Laxmi Bank Ltd. (Maharashtra) in 1960 gave a rude shock to the stability of the banking system in the country. This forced RBI to frame legislative measures so as to arrest bank mortality and create confidence in depositors. In 1961, RBI formulated proposals for the establishment of Deposit Insurance Corporation (DIC) on the model of the Federal Deposit Insurance Corporation in USA. The Deposit Insurance Corporation bill was passed and the Corporation came into existence on January 1, 1962. In order to provide safety to the banking system from risks involved in lending to priority sectors, the Government of India established Credit Guarantee Corporation of India limited (CGCI) in 1971. The CGCI is associated with Credit Guarantee Organization (CGO), set up in 1960 to provide guarantee in respect to lending to small-scale industries. Subsequently, in 1978 CGCI and CGO were merged
with Deposit Insurance Corporation of India (DIC) and new institution by the name of Deposit Insurance and Credit Guarantee Corporation of India (DICGC) was established.

**Role of the Corporation:**

1. The Corporation gives protection to the depositors particularly the small depositors, from the risk of loss of their savings in the event of a bank’s failure; such protection increases the confidence of the depositors in the individual banks and reduces the occurrence of panicky withdrawals of deposits;
2. The corporation contributes to the stability and orderly growth of the individual banks as well as collectively of the banking system; and
3. It plays an active role in developing the banking habits of the people and ensures a larger mobilization of their savings.

DICGC is a wholly owned subsidiary of RBI with a paid up share capital of Rs. 50 crore, contributed entirely by RBI. The corporation maintains three funds viz., **general fund, deposit insurance fund and credit guarantee fund**. The share capital of the Corporation is held in the general fund and the administrative expenses are met from the interest from this fund. The deposit insurance fund is built up by the premium received from the insured banks and augmented by the interest earned on the fund investment. The deposit insurance fund is utilized exclusively for meeting the deposit insurance claims.

The credit guarantee fund is used for meeting the credit guarantee claims, among the guarantee schemes introduced by the Corporation. The small loan guarantee scheme, 1971, covers among others, the credit facilities granted by commercial banks and RRBs to farmers. The scheme covers advance granted to borrowers, undertaking various types of agricultural and allied activities such as raising of crops, poultry farming, dairy farming and animal husbandry. The guarantee cover has been varying from time to time. Currently the guarantee is provide at 60 per cent of the amount in default.

In 1982, the small loan (Co-operative Credit Societies) Guarantee Scheme was formulated with a view to providing guarantee cover for advance granted by co-operative credit institutions at the primary level for agriculture and allied activities.
TIME VALUE OF MONEY

Future value of Present Money. A rupee today is worth more than a rupee in future. This is primarily due to its opportunity cost, i.e., interest. Interest will be added to the principal over time and hence its value increases. Future value of present sum is an important concept in financial analysis and this is called compounding. In the compounding process, the interest is added to the principal at the end of each time period. The future value of present investment is calculated by using the formula of compound interest:

\[ A = P \left(1 + \frac{i}{100}\right)^t \]

Where,
- \( A \) = Future value of present sum invested,
- \( P \) = Principal amount invested,
- \( i \) = Interest rate in per cent, and
- \( t \) = Number of years.

There are two methods of project appraisal, viz., undiscounted measures and discounted measures. In undiscounted measures, payback period, ranking by inspection, proceed per rupee of outlay etc., are important. Under discounting measures, Net Present Worth (NPW), Benefit-Cost Ratio, Internal Rate of Return (IRR) and Profitability Index are prominent.

UNDISCOUNTED MEASURES

The undiscounted measures are the naïve methods of choosing among the alternative projects. The methods listed under these measures often mislead in ranking of the projects and hence, choices go wrong.

**Ranking by Inspection:**

It is based on the size of costs and length of cash-flow stream. Suppose if the two projects are with the same investment and the same net value of production, but with difference in the length of the period, then the longer duration is preferred to the one with shorter time period. This leads to bias in the choice obviously due to the absence of appropriate analysis.

**Payback Period:**

Another simple method of ranking a project is the length of time required to get back the investment on the project.

The payback period of the project is estimated by using the straightforward formula:

\[ P = \frac{I}{E} \]

Where,
- \( P \) = Payback period of the project in years
- \( I \) = Investment of the project in Rs. And
- \( E \) = Annual net cash revenue in Rs.
The performance of a project is based on the shorter payback period.

### Estimation of Payback Period

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash Flow (in Rs.)</th>
<th>Project - A</th>
<th>Project - B</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>-20,000</td>
<td>-20,000</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5,000</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>5,000</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>5,000</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>5,000</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5,000</td>
<td>4,000</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>5,000</td>
<td>4,000</td>
<td></td>
</tr>
</tbody>
</table>

Project- A = Rs. 20,000/ Rs. 5,000 = 4 years

Project- B = Rs. 20,000/ Rs. 4,000 = 5 years

It is inadequate to exercise the option among the alternatives, because it fails to consider very important points like, consistency of running, returns after the payback period and weather the cash-flows would be positive or negative in future.

### Proceed per Rupee of Outlay

This is worked out by dividing the total proceeds with the total amount of investment, and a given project is ranked based on the highest magnitude of the parameters.

### DISCOUNTED MEASURES

Cash-flows are yearly net benefits accrued from the project. If they are weighed by discount rate, they become discounted cash-flows. These discounted cash-flows are the best estimates to decide on the worth of the project. This approach will give the net present worth of the project. The present worth of the costs is subtracted from the present worth of the benefits in order to arrive at the net present worth of the project every year.

### Measurement of the Cash flow of the Project

From the annual stream of gross benefits of the project, the capital invested and the other input costs like labour, machinery, fertilizers, pesticides, management, etc., are deducted.

### Net Present Worth (NPW):

This is simply the present worth of the cash flow stream. Sometimes, it is referred to as Net Present Value (NPV). The selection criterion of the project depends on positive value of NPW when discounted at the opportunity cost of the capital.

\[
NPW = \frac{P_1}{(1+i)^1} + \frac{P_2}{(1+i)^2} + \ldots + \frac{P_n}{(1+i)^n} - C
\]

Where, \( P_1 = \) Net cash flow in first year,
\( i = \) Discount rate,
\[ t \quad \text{= Time period, and} \]
\[ C \quad \text{= Initial cost of the investment.} \]

Project with positive NPWs are given weightage in the selection compared to those with negative present values. Table 1 presents the particulars of NPV calculations for two projects.

**Benefit-Cost Ratio:**

We compare the present worth of costs with present worth of benefits. Absolute value of the benefit-cost ratio will change based on the interest rate chosen. While ranking the projects depending upon the B-C ratio, the most common procedure of selecting a project is, to choose the project, having B-C ratio of more than one, when discounted at opportunity cost of capital.

\[
\frac{\text{Present worth of gross returns}}{\text{Present worth of costs}} = \frac{82867.99}{60789.57} = 1.36
\]

\[
\text{Benefit – Cost Ratio} = \frac{24292.88}{19704.53} = 1.23 \quad \text{(Mango)}
\]
<table>
<thead>
<tr>
<th>Year</th>
<th>Sericulture (One ha.)</th>
<th>Mango orchard (One ha.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Costs (in Rs.)</td>
<td>Returns (in Rs.)</td>
</tr>
<tr>
<td>1</td>
<td>38,900</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>9,239,28,475</td>
<td>19,236</td>
</tr>
<tr>
<td>3</td>
<td>10,575</td>
<td>32,550</td>
</tr>
<tr>
<td>4</td>
<td>11,952</td>
<td>35,610</td>
</tr>
<tr>
<td>5</td>
<td>12,858</td>
<td>39,802</td>
</tr>
<tr>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table: 2 Estimation of Benefit-Cost Ratio for Two Projects (Hypothetical)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sericulture (One ha.)</th>
<th>Mango orchard (One ha.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Costs (in Rs.)</td>
<td>Returns (in Rs.)</td>
</tr>
<tr>
<td>1</td>
<td>38,900</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>9,239, 28,475</td>
<td>0.7561</td>
</tr>
<tr>
<td>3</td>
<td>10,575</td>
<td>32,550</td>
</tr>
<tr>
<td>4</td>
<td>11,952</td>
<td>35,610</td>
</tr>
<tr>
<td>5</td>
<td>12,858</td>
<td>39,802</td>
</tr>
<tr>
<td></td>
<td>60789.57</td>
<td>82867.99</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table: Estimation of NPW for Two Projects (Hypothetical) Cancelled

<table>
<thead>
<tr>
<th>Year</th>
<th>Costs (in Rs.)</th>
<th>Returns (in Rs.)</th>
<th>Net income (in Rs.)</th>
<th>Discount factor at 12%</th>
<th>NPW (in Rs.)</th>
<th>Year</th>
<th>Costs (in Rs.)</th>
<th>Returns (in Rs.)</th>
<th>Net income (in Rs.)</th>
<th>Discount factor at 12%</th>
<th>NPW (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>38,900</td>
<td>-</td>
<td>-38,900</td>
<td>0.8929</td>
<td>-34,733.81</td>
<td>At the end of 6th year</td>
<td>25,000</td>
<td>-</td>
<td>-25,000</td>
<td>0.507</td>
<td>-12,675</td>
</tr>
<tr>
<td>2</td>
<td>9,239,28,475</td>
<td>19,236</td>
<td>15,334.94</td>
<td>0.7972</td>
<td>19,263.04</td>
<td>At the end of 7th year</td>
<td>4,250</td>
<td>10,260</td>
<td>6,010</td>
<td>0.452</td>
<td>2,716.52</td>
</tr>
<tr>
<td>3</td>
<td>10,575</td>
<td>32,550</td>
<td>21,975</td>
<td>0.7118</td>
<td>16,41.81</td>
<td>At the end of 8th year</td>
<td>4,792</td>
<td>12,550</td>
<td>7,758</td>
<td>0.404</td>
<td>3,134.23</td>
</tr>
<tr>
<td>4</td>
<td>11,952</td>
<td>35,610</td>
<td>23,658</td>
<td>0.6355</td>
<td>15,034.66</td>
<td>At the end of 9th year</td>
<td>5,368</td>
<td>14,530</td>
<td>9,162</td>
<td>0.361</td>
<td>3,307.48</td>
</tr>
<tr>
<td>5</td>
<td>12,858</td>
<td>39,802</td>
<td>26,944</td>
<td>0.5674</td>
<td>15,288.03</td>
<td>At the end of 10th year</td>
<td>5,975</td>
<td>16,275</td>
<td>10,300</td>
<td>0.322</td>
<td>3,316.60</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NPW 26,565.63</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>At the end of 11th year</td>
<td>6,456</td>
<td>19,396</td>
<td>12,940</td>
<td>0.287</td>
<td>3,713.78</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>At the end of 12th year</td>
<td>7,187</td>
<td>21,470</td>
<td>14,283</td>
<td>0.257</td>
<td>3,670.73</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>NPW 7,184.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Table: 2 Estimation of Benefit-Cost Ratio for Two Projects (Hypothetical)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sericulture (One ha.)</th>
<th>Mango orchard (One ha.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Costs (in Rs.)</td>
<td>Returns (in Rs.)</td>
</tr>
<tr>
<td>------</td>
<td>------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>1</td>
<td>38,900</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>9,239,28,475</td>
<td>7,365.33</td>
</tr>
<tr>
<td>3</td>
<td>10,575</td>
<td>7,527.29</td>
</tr>
<tr>
<td>4</td>
<td>11,952</td>
<td>7,595.50</td>
</tr>
<tr>
<td>5</td>
<td>12,858</td>
<td>7,295.63</td>
</tr>
<tr>
<td></td>
<td><strong>64,517.56</strong></td>
<td><strong>91,083.17</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Internal Rate of Return:

In the computation of Internal Rate of Return (IRR), the time value of money is accounted. The method of working IRR provides the knowledge of actual rate of return from the different projects. Thus IRR is known as ‘Marginal Efficiency’ of capital or yield on the investment. It is the discount rate at which the present values of the net cash flows are just equal to zero, i.e., NPW = zero.

In the working procedure, an arbitrary discount rate is assumed and its corresponding NPW is arrived at. The positive NPW value of the project indicates that IRR is still higher and the next assumed arbitrary IRR value must be comparatively higher than the initial level. The process continued until NPW becomes negative. The IRR is found out using the following equation.

\[
\text{IRR} = \text{Lower rate} + \frac{\text{Difference between the two discount rates}}{\text{Present worth of the cash flow at the two discount rates}} \times \frac{\text{Absolute difference between the present worth of the cash flow at lower discount rate and present worth of the cash flow at the two discount rates}}{\text{Absolute difference between the present worth of the cash flow at lower discount rate and present worth of the cash flow at the two discount rates}}
\]

Estimation of IRR for Sericulture (one ha.) (Hypothetical)

<table>
<thead>
<tr>
<th>Year</th>
<th>Costs (in Rs.)</th>
<th>Returns (in Rs.)</th>
<th>Net Income (in Rs.)</th>
<th>Discount factor (40%)</th>
<th>Net Present worth (in Rs.)</th>
<th>Discount factor (45%)</th>
<th>Net Present worth (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>38,900</td>
<td>-</td>
<td>-38,900</td>
<td>0.7143</td>
<td>-27,786.27</td>
<td>0.6897</td>
<td>-26,829.33</td>
</tr>
<tr>
<td>2</td>
<td>9,239</td>
<td>28,475</td>
<td>19,236</td>
<td>0.5102</td>
<td>9,814.21</td>
<td>0.4756</td>
<td>9,148.64</td>
</tr>
<tr>
<td>3</td>
<td>10,575</td>
<td>32,550</td>
<td>21,975</td>
<td>0.3644</td>
<td>8,007.69</td>
<td>0.3280</td>
<td>7,207.80</td>
</tr>
<tr>
<td>4</td>
<td>11,952</td>
<td>35,610</td>
<td>23,658</td>
<td>0.2603</td>
<td>6,158.17</td>
<td>0.2262</td>
<td>5,351.44</td>
</tr>
<tr>
<td>5</td>
<td>12,858</td>
<td>39,802</td>
<td>26,944</td>
<td>0.1859</td>
<td>5,008.89</td>
<td>0.1560</td>
<td>4,203.26</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>52,913</strong></td>
<td></td>
<td><strong>1,202.69</strong></td>
<td></td>
<td><strong>-918.18</strong></td>
</tr>
</tbody>
</table>

\[
\text{IRR} = 40 + 5 \left\{ \frac{1202.69}{1202.69+918.18} \right\} = 40 + 5 \{0.5671\} = 40 + 2.7249 = 42.84 \%
\]
Estimation of IRR for Mango Orchard (Hypothetical)

<table>
<thead>
<tr>
<th>Year</th>
<th>Costs (in Rs.)</th>
<th>Returns (in Rs.)</th>
<th>Net Income (in Rs.)</th>
<th>Discount factor (25%)</th>
<th>Net present worth (in Rs.)</th>
<th>Discount factor (30%)</th>
<th>Net present worth (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>At the end of 6th year</td>
<td>25,000</td>
<td>-</td>
<td>-25,000</td>
<td>0.262</td>
<td>-6,550.00</td>
<td>0.207</td>
<td>-5,175.00</td>
</tr>
<tr>
<td>At the end of 7th year</td>
<td>4,250</td>
<td>10,260</td>
<td>6,010</td>
<td>0.210</td>
<td>1,262.01</td>
<td>0.159</td>
<td>955.59</td>
</tr>
<tr>
<td>At the end of 8th year</td>
<td>4,792</td>
<td>12,550</td>
<td>7,758</td>
<td>0.168</td>
<td>1,303.30</td>
<td>.0123</td>
<td>954.23</td>
</tr>
<tr>
<td>At the end of 9th year</td>
<td>5,368</td>
<td>14,530</td>
<td>9,162</td>
<td>0.134</td>
<td>1,227.71</td>
<td>0.094</td>
<td>861.23</td>
</tr>
<tr>
<td>At the end of 10th year</td>
<td>5,975</td>
<td>16,275</td>
<td>10,300</td>
<td>0.107</td>
<td>1,102.10</td>
<td>0.073</td>
<td>751.90</td>
</tr>
<tr>
<td>At the end of 11th year</td>
<td>6,456</td>
<td>19,396</td>
<td>12,940</td>
<td>0.086</td>
<td>1,112.84</td>
<td>0.056</td>
<td>724.64</td>
</tr>
<tr>
<td>At the end of 12th year</td>
<td>7,187</td>
<td>21,470</td>
<td>14,283</td>
<td>0.069</td>
<td>985.53</td>
<td>0.043</td>
<td>614.17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>35,453</td>
<td>443.49</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-313.24</td>
</tr>
</tbody>
</table>

\[
\text{IRR} = 25 + 5 \left\{ \frac{443.49}{443.49 + 313.24} \right\} \\
= 25 + 5 \{0.586\} \\
= 25 + 2.93 \\
= 27.93 \%
\]

**Profitability Index:**

It is defined as the ratio of net present values of the cash flows to the initial capital expenditure (Co).

\[
\text{NPV} \quad \text{PI} = \frac{\text{NPV}}{\text{Co}}
\]

Estimation of profitability Index

Original amount invested in a project = Rs. 60,000

<table>
<thead>
<tr>
<th>Year</th>
<th>Cash flow (in Rs.)</th>
<th>Discount factor (15%)</th>
<th>Net Present worth (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14,500</td>
<td>0.8696</td>
<td>12609.20</td>
</tr>
<tr>
<td>2</td>
<td>14,900</td>
<td>0.7561</td>
<td>11265.89</td>
</tr>
<tr>
<td>3</td>
<td>16,600</td>
<td>0.6575</td>
<td>10914.50</td>
</tr>
<tr>
<td>4</td>
<td>18,700</td>
<td>0.5718</td>
<td>10692.66</td>
</tr>
<tr>
<td>5</td>
<td>19,000</td>
<td>0.4918</td>
<td>9344.20</td>
</tr>
<tr>
<td>6</td>
<td>20,000</td>
<td>0.4323</td>
<td>8646.00</td>
</tr>
<tr>
<td></td>
<td>1,03,700</td>
<td></td>
<td>63472.45</td>
</tr>
</tbody>
</table>
Net present values of the cash flows 63,472.45

PI = --------------------------------- = --------- = 1.06

Original amount invested 60,000

1. Compounding:

Compounding is used to translate present cash flow into their future values. Suppose we invest Rs. 1.00 in a bank which will pay 10% interest per year. At the end of the first year, the investment will earn an interest of 10 paisa. If we add this amount of interest to the original principal, we will have a new principal of Rs. 1.10 at the start of second year. At the end of second year, the new principal (Rs. 1.10) will earn an interest of Rs. 0.11 so that the principal at the start of third year will be Rs. 1.21. Compounding factor enable calculation of future value of present money.

What is the future value of the following investment?

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Initial Amount (Rs.)</th>
<th>Compounding rate of interest</th>
<th>Period (years)</th>
<th>Compounding factor</th>
<th>Future Value (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6000</td>
<td>15</td>
<td>10</td>
<td>6000x4.045</td>
<td>24240</td>
</tr>
<tr>
<td>2</td>
<td>500</td>
<td>20</td>
<td>16</td>
<td>500x18.4884</td>
<td>9442</td>
</tr>
</tbody>
</table>

2. Discounting:

This is to derive the present value of future income at a specified rate of interest. This is because, money has time value. Discounting factor enable calculation of present value of future amount.

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Amount to be received (Rs.)</th>
<th>Future Period in Years</th>
<th>Rate of interest</th>
<th>Discounting factor</th>
<th>Present Value (Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24276</td>
<td>10</td>
<td>15</td>
<td>24276x0.247185</td>
<td>6000</td>
</tr>
<tr>
<td>2</td>
<td>9244</td>
<td>16</td>
<td>20</td>
<td>9244x0.054088</td>
<td>500</td>
</tr>
</tbody>
</table>

3. Annuity Factor:

This factor is used when a constant stream of benefits is expected for the entire project life or certain number of years of project life. Annuity factor is the sum of total discount factors.

B. Institutional Agencies:
1. Co-operative Banks:

1. State Co-operative Banks: (SCBS)- Known as Apex Bank

These are the co-operative credit organizations present at the State level. DCCBs and PACS are the members of these banks. These institutions supervise the activities of the member banks and mobilize and deploy the financial resources among the member banks. They serve as a link between the RBI and PACS.

The specific functions of the State co-operative banks are:

- They help to the State Governments in formulating development plans with regard to co-operative institutions.
- They co-ordinate the policies of the co-operatives with the government.
- They formulate & implement uniform credit policies.
- They act as bankers bank to DCCBs.
- They grant subsidies to & DCCBs for the smooth functioning of co-operatives.

2. District Central Co-operative Banks: (DCCOB)

It links between state co-operative bank and PACs

Objective: to lend money to the village primary credit society.

Functions:

1. Supervise & inspect the activities of PACS
2. They maintain close and continuous contact and guide the primary societies.
3. They undertake not-credit activities.
4. They accept deposits from the member societies.
5. They undertake non-credit activities like supply of seeds, fertilizers besides sugar, kerosene and other consumer goods.
6. Primary Agricultural Co-operative Credit Society: - (PACS) Formed society as the co-op. society Act of 1904. The co-operative principles like limited liabilities, limited area of operation, honorary management, voluntary participation of village etc., were framed for the smooth functioning of the societies. The societies are at the village level and directly meant for the farmers regarding provision of requisite short-term and medium-term loans.

Functions:

1. They borrow adequate & timely funds from DCBS and help the members in financial matters.
2. They attract local saving in the form of share capital & deposits from the villages.
3. The distribute fertilizers, insecticides etc., to the needy farmers.
4. Provide machinery on hire basis to the farmers.
5. Said economic development of the village.
6. Involve in marketing of farm produce on behalf of the farmers borrowers.
7. They provided storage facilities and marketing finance.
8. They provide consumers goods like rice, wheat, sugar, kerosene, cloth, etc., at fair prices.

**Long term Co-operative Loans:**

*Central Land Development Bank (CLDB)*

As an apex bank in the two tier co-operative credit structure, it provides long-term finance to PLDBs and also to its affiliated branches working in the States. Branches of CLDBs, PLDBs, and individual enterprise are the members of the CLDB. NABARD is the refinancing agency to the CLDBs. It supervises, inspects and guides the PLDBs in their banking operations. It floats debentures for raising the necessary funds. The CLDB generally provides loans to member banks for the redemption of old debts, development of land, purchase of agricultural machinery and equipment, development of minor irrigation, etc.

*Primary Land Development Bank (PLDBs)*

- Established in the year 1920 in Punjab
- Later during the period 1920-29, many land mortgage Banks were establish in Punjab, Madras, Mysore, Assam & Bengal.

**Function:**

1. They provide long term finance to the needy farmers for the development of the land, increasing agril. production & productivity of the land.
3. Provide finance in purchasing tractors, machinery and equipment.
4. Provided finance for the construction of farm structure.
5. They mobilize rural savings.

**Social Control and Nationalization of Banks:**

At the time of independence, the private sector banks were predominantly Urban–oriented and under the control of a few industrialists which had not helped in achieving the basic socio–economic objectives. The credit needs of agriculture, small–scale industries and also weaker sections such as small traders and artisans continued to be ignored. Even though for nearly three fourths of population, agriculture is the main occupation and contributed 50 per cent of gross domestic product, the total bank credit advanced to this sector was only one per cent as on June, 1967. The bulk of the deposits contributed by the public were being advanced to the industrial and trade sectors ignoring the prime sector of agriculture. In agriculture, the credit scene was dominated by the private money lenders who were charging exorbitant rates of interest.

All these situations compelled the imposition of social control over the banks in 1968. The main aim of social control was achieving of wider spread of bank credit to the priority sectors thereby reducing the authority of managing directors in advancing the loans. Social control created the tempo of
banks expansion, as evident by the addition of 785 new branches by the end of first half of 1969. But this did not make dent in increased canalisation of credit to agricultural sector and to the other weaker sections. The directions issued by the Government were also ignored by many of the banks. Under these circumstances the Government thought that the social control of banks was not sufficient for socio-economic development and nationalization of banks was considered as an alternative solution.

The Government of India on **19th July 1969** promulgated an ordinance called “The Banking companies Ordinance 1969” (Acquisition and Transfer of Undertakings). Under this act 14 commercial banks having deposits of **more than Rs. 50 crores** each were nationalized and they were

<table>
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<tbody>
<tr>
<td>3. Bank of Baroda.</td>
<td>10. Indian Bank</td>
</tr>
<tr>
<td>5. United Commercial Bank</td>
<td>12. Canara Bank</td>
</tr>
<tr>
<td>6. Dena Bank</td>
<td>13. UCO Bank</td>
</tr>
</tbody>
</table>

The objectives of nationalization as set out by the then Prime Minister, Smt. Indira Gandhi were:

1. Removal of control of banking by a few industrialists;
2. Elimination of the use of bank credit for speculative and unproductive purposes;
3. Expansion of credit to priority areas, which were neglected such as agriculture and small industry;
4. Giving professional bent to the bank management;
5. Provision of adequate training as well as reasonable terms of service to bank staff.

Spurred by the success of first spell of nationalization of 14 commercial banks, **six more banks** in the private sector, having deposits more than Rs. 200 crore were nationalized on **15th April 1980**. The six banks were:

1. Punjab and Sind Bank
2. Andhra Bank
3. New Bank of India
4. Vijya Bank
5. Oriental Bank of Commerce, and
6. Corporation Bank

As a result of two spells of nationalization of banks, by the end of June, 1992 bank advances towards agriculture sector were 16.2 per cent of total credit as against one per cent by the end of June, 1967.

**Regional Rural Banks (RRBs):**
All India Rural Credit Review Committee (AIRCRC) under chairmanship of Sri. B. Venkatappaiah during the year 1969 was of the opinion that over large parts of the country the marginal and small farmers were deprived of having access to the cooperative credit both for production and investment purposes. This stressed the establishment of institutional financial agencies under public sector. Consequently the first spell of nationalization of banks was done with greater expectations, but the situation had not changed as per the expectations.

Hence, the Government of India appointed a working committee under the chairmanship of Sri. M. Narasimham to study the financial assistance rendered to the weaker sections in the rural areas. This working committee recommended the setting up of rural based institutional agencies called “Regional Rural Banks” after identifying shortcomings in the functioning of commercial banks and cooperatives.

The Government of India accepted the recommendations of Sri.Narasimham committee and regional rural banks came in to existence through regional rural banks ordinance on 26th September, 1975. Initially only 5 RRBs were set up on pilot basis with sponsorship of commercial banks on October 2nd, 1975. This ordinance of 1975 was replaced by the Regional Rural Banks Act, 1976.

In 1975, a new category of banking institution was opened in the form of regional rural banks. **Regional Rural Banks are also called 'Gramin Banks'.** These banks are sponsored by the lead bank of the concerned district. **The main aim of Regional Rural Bank is to meet the credit requirements of marginal and small farmers, landless labourers, rural artisans and small entrepreneurs, these banks have limited area of operation. Generally, 50 per cent share capital is provided by Government of India, 15 per cent by the State Government and remaining 35 per cent is contributed by the sponsoring lead bank (Commercial bank).** These banks have a **Board of Directors of 9 members, 4 members are appointed by the Central Government, 2 by the lead bank, 1 by the State Government and 2 by the Government of India** from amongst other share holders. Lead bank also provides bank staff for two years to start the work.

The list of RRBs first opened in the country is:

<table>
<thead>
<tr>
<th>List of RRBS</th>
<th>Head Quarters</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Syndicate Bank</td>
<td>Muradabad (UP)</td>
</tr>
<tr>
<td>- S.B.I.</td>
<td>Grakhpur (UP)</td>
</tr>
<tr>
<td>- United Bank of India</td>
<td>Malda (W.B.)</td>
</tr>
<tr>
<td>- Punjab National Bank</td>
<td>Bhiwani (Haryana)</td>
</tr>
<tr>
<td>- United Commercial Bank</td>
<td>Jaipur (Rajasthan)</td>
</tr>
</tbody>
</table>

**Objectives:**

1. To develop rural economy;
2. To provide credit for agril. & allied field,
3. To encourage village industries, artisans, carpenters etc.,
4. To reduce dependence of weaker sections on money lenders.
5. To fill up the gap created by moratorium on money lenders.
6. To help the poor financially for their consumption needs.
Characteristic features of RRBs:

1. **Sponsorship:** It sponsored by scheduled commercial banks.

2. **Jurisdiction:** The operational areas are to be covered by each RRB varies from one to two districts for efficient functioning. Coming to the population to be served by each branch, it has been kept at 20,000 roughly.

3. **Management:** Board of directors numbering eight, headed by a chairman, who is the officer of the sponsoring bank. Of the 8 directors, three are nominees of the sponsoring bank, two from the State Government dealing with the district development programmes and three from the Central Government.

4. **Share capital:** The authorized share capital of RRB has been fixed at Rs. One crore and issued capital at Rs. 25 lakh. This is contributed by the Central Government, State Government and the sponsoring bank in the ratio of 50:15:35 respectively.

5. **Functions:** The main function is, to grant loans and advances particularly to small & marginal farmers, agril. labourers, co-operative societies, co-operative farming societies for agril. purposes, artisans etc., within the operational area of the RRB. They also provide banking facilities like issue of drafts, collection of Cheque, etc.

6. **Rate of Interest:** The rate of interest on the loans changed is the same as collected by PACS. They allowed offering 0.5% interest more on deposits than that of commercial banks.

**National Bank for Agriculture and Rural Development (NABARD)**

Agril. Refinance & Development Corporation (ARDC) has not made much work in the field of direct financing & delivery of rural credit against the high credit demand for rural development. As a result, many Committees and Commissions, viz., Banking Commission (1972), National Commission on Agriculture (1976) and Committee to Review Arrangements for Institutional Credit for Agriculture and Rural Development (CRAFICARD) in 1979 were constituted CRAFICARD under the chairmanship of B. Sivaraman former member of Planning Commission were constituted, recommended the setting up of a national level institution called NABARD for providing all types of production & investment credit for agriculture and rural development. In pursuance of its recommendations, NABARD came into existence on **12 July 1982.** The then existing national level institutions such as ARDC, Agricultural Credit Department (ACD) and Rural Planning Credit Cell (RPCC) of RBI were merged with NABARD with a paid up capital of Rs. 500 crore equally contributed by GOI and RBI.

**Board of Management:** All directors in the Management Board are appointed by the Central Government in consultation with RBI.

In addition to Chairman and Managing Director, the Board consists 13 other directors. Out of these two are experts in rural economics and rural development. Three directors are representatives of co-operatives and three from commercial banks. Three directors are officials of the Government of India & two belong to State Governments.
Source of Founds:
- Authorized Share capital Rs. 500 core
- Issued and paid up capital Rs. 100 core

Other sources:
- Borrowing from the Govt. of India.
- Issue & sale of bonds by the Govt. of India.
- Borrowing from RBI
- Deposits from state Govt. & local authorities
- Gifts & grants received.

Objectives:
1. As an apex refinancing institution, NABARD survey and estimates all types of credit needed for the farm sector and rural development
2. Taking responsibility of promoting and integrating rural development activities through refinance.
3. With the approval of Government of India, NABARD also provides direct credit to any institution or organization or an individual.
4. Maintaining close links with RBI for guidance and assistance in financial matters.
5. Acting as an effective catalytic agent for rural development i.e in formulating appropriate rural development plans and policies.

Functions:

The activities of NABARD are presented under three categories

A. Credit activities
B. Developmental activities
C. Regulatory activities

A. Credit activities:

- It prepares for each district annually a potential linked credit plan.
- It participates in finalization of annual action plan of block, district & state level.
- It monitors implementation of credit plans.
- If lay down the form & condition to be followed by credit institutions in financing production, marketing and investment activities of rural farm & non-farm sector.
- It provides refinance facilities as detailed below:

Short -term Refinance:

- It is for agril production operations & marketing of crops by the farmers’ cooperatives etc.
- Marketing & distribution of inputs like fertilizers, seeds, pesticides, etc. and
- Production and Marketing activities of village and cottage industries, handicrafts, handlooms, artisans and other rural non-farm enterprises.

Medium & Long -term Returns:

- Investment in agriculture and allied activities such as minor imitation, farm mechanization, land development, dairy, forestry, installation of pump sets etc.
Investment activities of artisans, small scale industries, village and cottage industries, handicrafts, hand looms, power looms etc.  
Activities of voluntary agencies/self-help group of rural poor.

Criteria & Extent of Refinance:

The criteria of refinance to any scheme submitted by financing institutions are:

- Technical feasibility of the project and adequate response from the beneficiaries.
- Financially viability & adequate international income to the borrower to repay loan.
- Organizational arrangement to ensure close supervision by financing banks.

Various activities for refinance:

- Pilot rainfed farming project (100%)
- Waste land development Scheme (100%)
- Agro-processing units (75%)
- Bio-gas scheme (75%)
- Farm Mechanization (50%)
- Rural Electrification (50%)

B. Development Activities:

The following are the developmental activities undertaken by NABARD for the productive use of credit.

(i) Institutional Development:

- It helps co-operative banks & RRBs for development action plan.
- It provides financial assistant to co-operative and RRBs for the establishment of technical and monitoring cells with them to improve the quality of their project formulation and project monitoring.
- It provides organization development intervention (ODI) through training institute (Bankers Institutes for Rural Development) (BIRD) Lucknow.
- It provided financial assistance for the training of institute of co-operative banks.
- It provides borrowers education on ethics of repayments.

(ii) Research & Development Funds:

- Supporting operational research projects aimed at upgradation and transfer of technology from lab to land.
- Organizing national and international seminars, conferences, symposia, etc., on subject related to rural development and banking.
- Conducting programmes for upgrading skills of prospective borrowers.
- Providing grant to selected Krishi Vikas Kendras.

C. Regularities activities:
As the apex development bank, NABARD shares with RBI, some of the regulatory and supervisory functions in respect of co-operative banks and RRBs.

- Under banking regulation Act.1949 NABARD undertakes inspection of RRBs and Co-operative banks (other than PACS).
- Any RRB or Co-Op bank seeking permission of RBI, for opening branches needs recommendation of NABARD.

**Kisan Credit Card (KCC)**

The Government of India introduced Kisan Credit Card scheme by banks during 1998-99. The scheme was designed by NABARD. KCC aims at adequate and timely support from the banking system to the farmers for their short-term production credit needs in cultivation of crops, purchase of inputs etc in a flexible and cost effective manner.

Under this scheme, the farmers would be issued a credit card-cum pass book incorporating the name, address, particulars of land holding, borrowing limit, validity period etc and it will serve both as an identity card as well as facilitates the financial transactions. Credit limit on the card may be fixed on the basis of operational holding, cropping pattern and scale of finance as recommended by the District Level Technical committee (DLTC) / State Level Technical committee (SLTC).

As per the recommendations of Sri R.V. Gupta committee in the year 1998, on the flow of credit to agricultural sector, apart from the total credit need, a 20 per cent of total peak level credit requirement (PLCR) will be given contingent credit need (with a maximum ceiling of Rs.10,000). The KCC should normally valid up to 3 years and subject to annual review.

**Agricultural Finance Corporation (AFC)**

In view of the inexperience of the commercial banks in financing agriculture, a need was felt to set up an institutional agency at the national level to take care of this aspect. The Agricultural Finance Corporation was promoted by the Indian Banks Association and it was incorporated on 10th April 1968 under the Indian Companies Act 1956, with an authorized share capital of Rs. 100 crore and issued share capital of Rs. 10 crore.

The corporation has two distinct roles, viz., financing the individuals/ institutions/ organizations involving agricultural development and promoting commercial bank advances for agricultural development.

(i) **Financing Role:**

Top priority is being given by the Corporation to the following projects.

- **Sinking and deepening irrigation wells;**
- **Production, distribution and marketing of agricultural inputs such as seeds, fertilizers, implements and machinery;**
c. Construction of storage structures for food grains and fertilizers;
d. Establishment of agricultural service units, etc.

(ii) Promotional role:

This is needed a challenging task for AEC. It provides expertise in the formulation of appropriate projects to all commercial banks working under its guidance and advancing loans. To increase the credit absorbing capacity in agriculture for modernizing agriculture, it suggests the following steps to be taken by commercial banks.

1. Commercialization and industrialization of agriculture;
2. Development of requisite infrastructure for rapid agricultural development;
3. Removal of various difficulties and handicaps experienced by the commercial banks and the farmer-borrowers;
4. Simplification and streamlining the procedures in sanctioning the loans.

Reserve Bank of India (RBI)

The Reserve Bank of India (RBI) was established in 1935 under the Reserve Bank of India Act, 1934. Its headquarters is located at Mumbai.

The RBI was set up to

- regulate the issue of bank notes
- secure monetary stability in the country
- operate currency and credit system to its advantage

The role of RBI in agricultural credit was found in the establishment of Agricultural Credit Department (ACD).

The primary functions of ACD are

* To coordinate the functions of RBI with other banks and state cooperative banks in respect of agricultural credit

* To maintain expert staff to study all the questions of agricultural credit and be available for consultation by central government, state governments, scheduled commercial banks and state cooperative banks.

* To provide legislations to check private money lending and checking other malpractices.

All India Rural Credit Survey Committee (AIRCSC) under the chairmanship of Sri. Gorwala in 1954 suggested several recommendations with regard to the activities of RBI in the sphere of rural credit. Based on this, two funds were established after amending RBI act, 1934.

1. National Agricultural credit (Long-term operations) fund-1955:
It has started with an initial capital of Rs.10 crores and annual contribution of Rs.5 crores and later this was increased to Rs. 15 crores. This fund was meant to provide long–term loans to various state governments so as to enable them to contribute to the share capital of different types of cooperative societies including Land Mortgage Banks (LMBs). Loans and advances out of this fund are made to state governments for a period not exceeding 20 years.

2. National Agricultural credit (Stabilization fund)-1956:

It was started with RBIs initial contribution of Rs. 1 crore and subsequent annual contribution of Rs. 1 crore. This fund is utilized for the purpose of granting medium-term loans to State Co-operative Banks (SCBs), especially during the times of famines, droughts and other natural calamities when they are unable to repay their loans to RBI.

The functions of RBI in the sphere of rural credit can be dealt seen under three aspects:

1. Provision of finance
2. Promotional activities, and
3. Regulatory functions

_Provision of Finance:_

* Reserve Bank of India provides necessary finances needed by the farmers through the commercial banks, cooperative banks and RRBs on refinance basis.

* It advances long-term loans to state governments for their contribution to the share capital of the cooperative credit institutions like State Cooperative Banks (SCBs) and District Cooperative Central Banks (DCCBs).

* It advances medium-term loans to State Cooperative Banks.

* It extends refinance facility to the RRBs only to an extent of 50 per cent of outstanding advances.

_Promotional activities:_

Reserve Bank of India constitutes study teams to look into the organization and operation of the cooperative credit institutions all over the country. It also conducts number of surveys and studies pertaining to rural credit aspects in the country. The RBI felt that the cooperatives are the major force in the field of agricultural credit and hence following measures were framed for the strengthening of cooperatives.

* Reorganization of the state and central cooperative banks on the principle of one apex bank for each state and one central bank for each district.

* Rehabilitation of those central cooperative banks, which are financially weak due to mounting overdue, insufficiency of internal finances, untrained staff, poor management etc.
* Strengthening of PACS to ensure their financial and operational viability.

* Arranging suitable training programmes for the personnel of cooperative institutions.

**Regulatory functions:**

* Reserve bank of India is concerned with efficiency of channels through which credit is distributed.

* Banking Regulation Act, 1966 makes the RBI to exercise effective supervision over cooperative banks and commercial banks.

* As per the Credit Authorized Scheme (CAS) of 1976, the cooperative banks should get prior authorization from RBI for providing finances beyond a certain limit.

* The cash liquidity ratio (CLR) and cash reserve ratio (CRR) are fixed by RBI for cooperatives, farmer’s service societies (FSS), regional rural banks (RRBs) and agricultural development banks (ADBs) at lower levels than those fixed for commercial banks. For these cooperative banks the bank rate was 3 per cent less than that of commercial banks. They are permitted by RBI to pay 0.5 per cent higher rate of interest on deposits.

The Reserve Bank of India was established in 1935 under the RBI Act, 1934. The bank was set up to regulate the issue of bank notes and keeping up resources with a view to securing monetary stability in the country and operate the currency and credit system to its advantages. The role of RBI in the sphere of agricultural credit, the creation of Agricultural Credit department (ACD) comes to light. The primary functions of ACD were to coordinate the functions of RBI with regards to agricultural credit with other banks and State Co-operative Banks, to maintain expert staff to study all the questions of agricultural credit. Two funds were established after amending the RBI Act, viz., the National Agricultural Credit (Long Term Operations) Fund (1955) and the National Agricultural Credit (Stabilization) Fund (1956).

The role of RBI in the sphere of rural credit can be seen under three aspects viz., provision of finance, promotional activities and regulatory functions.

**1. Provision of Finance:**

Reserve Bank of India provides necessary finance needed by the agriculturists through the commercial banks, co-operatives societies and regional rural banks. It advances long-term loans to State Government for their contribution to the share capital of the co-operative credit institutions, i.e., apex and district banks. Refinancing facility is extended to RRBs only, to an extent of 50 per cent of their outstanding advances.

**2. Promotional Activities:**

The RBI’s can be made appointment of study teams in organizing and running the co-operative credit institutions in the country. The All India Rural Credit Survey and the all India Rural Debt and Investment Surveys can be cited to conducts a number of studies and surveys pertaining to rural credit
aspects in the country. The RBI felt that co-operatives are the major force in the sphere of agricultural credit; the following policies were made for strengthening the co-operatives.

1. Reorganization of the State and Central Co-operative Banks on the principle of one Apex bank for each state and one Central bank for each district.
2. Rehabilitation of those Central Co-operative banks, which are financially and administratively weak for such as mounting overdue, untrained staff, poor management, etc.
3. Strengthening of PACS to ensure their financial and operational viability.
4. Arranging suitable training programmes for the personnel of co-operative institutions.

3. Regulatory Functions of RBI:

Apart from lending aspects, RBI is concerned with efficiency of channels through which credit is given to rural sector. Banking Regulation Act 1966 of RBI enables it to exercise effective supervision over co-operative banks and commercial banks. The Cash Liquidity Ratio (CLR) and Cash Reserve Ratio (CRR) are fixed by RBI for co-operatives, FSSs, RRBs and ADBs at lower level than those fixed for commercial banks. For these banks the bank rate is 3 per cent less than that of commercial banks. They are permitted by RBI to pay $\frac{1}{2}$ per cent higher rate of interest on their deposits.

World Bank

The International Bank for Reconstruction and Development (IBRD) also called as World Bank was established in the year 1945 and started its operations in the year 1946. It is the sister institution of
another international financial agency, International Monetary Fund (IMF) The IBRD/world bank’s main aim is to reduce the poverty by promoting sustainable economic development in member countries. It attains this goal by providing loans and technical assistance for projects and programmes in its developing member countries.

The financial strength of IBRD is based on the support it receives from its shareholders and financial policies and practices adopted by it. The main activity of World Bank is to provide loans to the member- countries.

**Functions of World Bank**

* **Development activities:**

  It provides loans to its member-countries to meet their developmental needs. It also provides technical assistance and other services to the member countries to reduce poverty.

* **Providing Loans:**

  Each loan must be approved by IBRD’s executive directors. Apart from providing loans it also waives the loans under special circumstances i.e. occurrence of natural calamities. After providing loans, the appraisal of the projects is carried out by IBRD’s operational staff comprising engineers, financial analysts, economists and other specialists.

  The loan disbursements are subjected to the fulfilment of conditions laid in the loan agreement. During the implementation, IBRD’s experienced staffs periodically visit the project site to review the progress and monitor whether the execution of project is in line with IBRD’s policies. During these visits the bank staff helps in resolving any problems that may arise during the execution of the project.

  After the completion, the projects are evaluated by an independent body and findings will be reported to the executive directors to determine the extent to which project objectives were fulfilled.

* **Consultancy:**

  In addition to the financial help, IBRD also provides technical assistance to its member countries irrespective of loans taken from it or not. There is a growing demand from borrowers for strategic advice, knowledge transfer and capacity building.

* **Research and Training:**

  For assisting its member countries, the World Bank offers courses and training related to economic policy development and administration for governments and organizations that work closely with IBRD.

* **Trust–Fund Administration:**
IBRD itself or jointly with International Development Agency (IDA), on behalf of donors restricts the use of funds for specific purposes only. The funds so obtained are not included in the list of assets owned by IBRD.

* Investment Management:

IBRD provides investment management services for external institutions by charging a fee. The funds thus obtained are not included in the assets of IBRD.
EXERCISE: 1

PROCEDURAL FORMALITIES IN SANCTION OF FARM LOANS

The financing bank is visited with the powers either to accept or reject the farmer’s loan application. This is an equal to an objective appraisal of farm credit proposals and procedures and formalities followed in the processing of loans. Here an attempt is made to explain the set of procedures and formalities required in processing of a farm loan application. The processing procedure is detailed under the following sub-heads.

1. Interview with the farmer;
2. Submission of loan application by the farmer;
3. Scrutiny of records;
4. Visit to the farmer’s field before sanction of loan;
5. Criteria for loan eligibility;
6. Sanction of loan;
7. Submission of requisite documents;
8. Disbursement of loan;
9. Post-credit follow-up measures; and

(1) Interview with the farmer

A banker studies the farmer-borrower in the interview regarding his credit characteristics such as honesty, integrity, frankness, progressive thinking, indebtedness, repayment capacity etc. The banker explains to the farmer the terms and conditions under which the loan is going to be sanctioned. Interview helps the banker to understand the genuine credit needs of the farmer. So interview is more than a mere formality, as it facilitates the banker to study the farmer in detail and assess his credit requirements.

(2) Submission of loan application by the farmer

After getting satisfied with the credentials of the farmer, the banker gives a loan application form to him. Details regarding the location of the farm, purpose of the loan, cost of the scheme, credit requirements, farm budgets, financial statements etc. as required in the form are filled in by the farmer. Certificates such as ownership of the land, statement showing cropping pattern adopted by the farmer-borrower, farm map, no objection certificate from the co-operatives, and affidavit from the borrower regarding his non-mortgage of land elsewhere are appended to the loan application. A passport size photograph is fixed to the loan application form.

3. Scrutiny of records

Verify the ownership of land and the acerage held by the applicant through title deeds 7/12, 8-A etc.

4. Visit to the farmer’s field before sanction of loan
After verifying the records the Field Officer of the bank pays a visit to the farm to verify the particulars given by the farmer. The pre-sanction visit is expected to help the banker to identify the farmer and guarantor, locate the boundaries of land as per the map and assess the managerial capacity of the farmer in farming and allied enterprises and the farmer’s attitude towards latest technology. Thus, pre-sanction visit of the bank officials is very important to verify credit-worthiness and trust-worthiness of the borrower. While appraising different types of loans, different aspects should be verified. For example, to advance loan for well-digging, the location of proposed well, ground water availability, distance from the nearby well, rainfall command area of the well etc., are verified in the pre-sanction visit. All these aspects are included in the report submitted to the Branch Manager for taking up final decision in the sanction of the loan.

5. Criteria for loan eligibility

The following aspects are considered in judging the eligibility of a farmer-borrower to receive loan.

1. He should have sound character and financial integrity,
2. His dealing with friends, neighbours, financial institutions etc., must be proper (He should not be defaulter in the past),
3. He must have progressive outlook and be receptive to modern technology,
4. He should sincerely implement the proposed scheme and ensure proper use of credit,

6. Sanction of loan

After examining all the aspects presented in the pre-sanction farm inspection report, the Branch Manager takes a decision whether to sanction the loan or not. Before sanctioning, the Branch Manager considers the technical feasibility, economic viability and bank ability of proposed projects including the repayment capacity, risk-bearing ability and sureties offered by the farmer-borrower. If the loan amount is beyond the sanctioning power of the Branch Manager, it is forwarded to the regional manager or Head office of the bank, incorporating his recommendations.

7. Submission of requisite documents

After sanctioning the stipulated amount to the farmer-borrower the following documents are obtained.

1. Demand promissory note;
2. Deed of hypothecation;
3. Guarantee letter;
4. Installment letter;
5. Authorization letter regarding the payment of loan from the marketing agencies or intermediaries on behalf of the farmer.

Title deeds are examined by the legal officer of the bank and his opinion with regard to clear, marketable and unlitigated title is sought.

8. Disbursement of loan
As soon as the execution of documents is completed, the loan amount is credited to the borrower’s account. The loan amount is disbursed in a phased manner, that too after ensuring that the loan is used by the farmer-borrower properly. A realistic repayment plan is farmed and given to the farmer keeping in view the income flow of the proposed project.

9. Post-credit follow-up measures

The Branch Manager or Agricultural Officer pays a visit to the farmer to ascertain the proper use of the credit. This also benefits the farmer for; they can get the technical advice if any needed from the Agricultural officer in the implementation of the scheme. These visits are also meant for developing a close rapport between the farmer and the banker. Such visits also facilitate in assessing any further requirement of supplementary credit to complete the scheme.

10. Recovery of loan

The bank reminds the farmer-borrower in advance about the repayment of loan in time. If needed recovery camps, special drives, village meetings etc. are organized at an appropriate time. All appropriate measures are taken to persuade the farmer-borrower to repay the loan in time. In the case of failure, the reasons for the same are ascertained to find out whether the borrower is deliberate defaulter or not. If the reason is genuine, the borrower is further helped by extending finance to accelerate farm production. In such situations, a close supervision is necessary. If the bank officials find that the borrowers are willful-defaulters stringent measures are initiated to recover the loans through court of law. In all possible cases the bank officers make tie-up arrangements, i.e., the recovery of the loan is linked with marketing. Rephasing of repayment plan is allowed in the case of justifiable cases.

REPAYMENT PLAN
For term loans which are characterized by partially liquidating nature, the loan repayment plan is not as similar as that of short term loans. These loans are recovered through a given number of installments depending upon the nature of asset and the amount advanced for the asset. Various repayment plans, in vogue are listed and briefly explained here.

1. Straight-end payment plan or single repayment plan or lump sum repayment plan;
2. Partial repayment plan;
3. Amortized repayment plan;
   (a) Amortized decreased repayment plan;
   (b) Amortized even repayment plan;
4. Variable repayment plan;
5. Optional repayment plan;
6. Reserve repayment plan.

1. **Straight-end payment plan or single repayment plan or lump sum repayment plan**

The entire loan amount is to be cleared off after the expiry of loan period stipulated. More clearly in this method, the principal component is repaid by the farmer at a time in lump sum when the loan matures, while the interest component is paid each year.

2. **Partial repayment plan**

The farmer is expected to settle the entire loan amount in quarterly, half-yearly or annual installments (principal + interest). It implies that repayment of loan will be done partially over the years. Usually, the installment amount will be decreasing as the years pass by except in the maturity year (final year) during which the investment generates sufficient revenue for liquidation.

Example: Loan amount: Rs. 10,000
       Time period: 6 years
       Rate of interest: 12%

This is also known as balloon repayment plan, as the large final payment is made at the end of the loan period following a series of smaller partial payments.

**Table: 1 Partial repayment Plan**

<table>
<thead>
<tr>
<th>Year</th>
<th>Principal (in Rs.)</th>
<th>Interest (in Rs.)</th>
<th>Installment (in Rs.)</th>
<th>Remaining Balance amount (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,000</td>
<td>1,200</td>
<td>2,200</td>
<td>9,000</td>
</tr>
<tr>
<td>2</td>
<td>1,000</td>
<td>1,080</td>
<td>2,080</td>
<td>8,000</td>
</tr>
<tr>
<td>3</td>
<td>1,000</td>
<td>960</td>
<td>1,960</td>
<td>7,000</td>
</tr>
<tr>
<td>4</td>
<td>1,000</td>
<td>840</td>
<td>1,840</td>
<td>6,000</td>
</tr>
<tr>
<td>5</td>
<td>1,000</td>
<td>720</td>
<td>1,720</td>
<td>5,000</td>
</tr>
<tr>
<td>6</td>
<td>5,000</td>
<td>600</td>
<td>5,600</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>10,000</td>
<td>5,400</td>
<td>15,400</td>
<td>-</td>
</tr>
</tbody>
</table>

3. **Amortized repayment plan**
It is an extended version of partial repayment plan. Amortization means the repayment of the entire loan amount in a series of installments. Here we have two types of amortization plans, viz., amortized decreasing repayment plan and amortized even repayment plan.

(a) Amortized Decreased Repayment Plan

In this repayment plan, the principal component remains constant over the entire repayment period, while the interest part decreases continuously. With the principal amount remaining fixed and interest amount decreasing, the annual installment amount decreases over the years. The advance made for the purchase of machinery does not demand much repairs in the initial years of loan payments enabling the farmer to repay a large amount of installments in the initial years. The diagrammatic representation of the repayment schedule is shown in figure 1:

![Diagram of Amortized Decreased Repayment Plan]

**Figure 1: Amortized Decreased Repayment Plan**

Example: Loan amount: Rs. 10,000  
Time period: 6 years  
Rate of interest: 12%

**Table: 2 Amortized Decreased Repayment Plan**

<table>
<thead>
<tr>
<th>Year</th>
<th>Principal (in Rs.)</th>
<th>Interest (in Rs.)</th>
<th>Installment (in Rs.)</th>
<th>Balance amount (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,666.67</td>
<td>1,200</td>
<td>2,866.67</td>
<td>8,333.33</td>
</tr>
<tr>
<td>2</td>
<td>1,666.67</td>
<td>999.99</td>
<td>2,666.66</td>
<td>6,666.67</td>
</tr>
<tr>
<td>3</td>
<td>1,666.67</td>
<td>799.99</td>
<td>2,466.66</td>
<td>5,000.00</td>
</tr>
</tbody>
</table>
(b) Amortized even repayment plan

This is called equated annual installment method. The annual installment over the entire loan period remains the same in this method. The principal portion of the installment increases continuously, while the interest part declines gradually. This method is mostly adopted for term loans. Loan granted for farm development, digging of wells, construction of godowns, dairy, poultry etc., are the examples. This is depicted diagrammatically in figure 2.

![Diagram of Amortized Even Repayment Plan](image)

The annual installment is arrived at through the formula given below:

\[
I = \frac{B \cdot i}{1 - (1+i)^{-n}}
\]

Where,
- \(I\) = Annual installment in Rs.
- \(B\) = Principal amount borrowed in Rs.
- \(n\) = Loan period in years
- \(i\) = Annual interest rate in fraction

The plan is shown in table: 3

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1,666.67</td>
<td>600.00</td>
<td>2,266.67</td>
<td>3,333.33</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1,666.67</td>
<td>399.99</td>
<td>2,066.66</td>
<td>1,666.67</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1,666.67</td>
<td>199.99</td>
<td>1,866.67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10,000</td>
<td>4,199.96</td>
<td>14,199.96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Example:
Loan amount: Rs. 10,000  
Time period: 6 years  
Rate of interest: 12%

\[
I = B \cdot \frac{i}{1 - (1+i)^{-n}} = 10,000 \cdot \frac{0.12}{1 - (1.12)^{-6}}
\]

\[
= 10,000 \cdot \frac{0.12}{1 - 0.5066} = 10,000 \cdot 0.243225 = \text{Rs 2,432.25}
\]

Table: 3 Amortized Even Repayment Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Installment (in Rs.)</th>
<th>Principal (in Rs.)</th>
<th>Interest (in Rs.)</th>
<th>Balance amount (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2,432.25</td>
<td>1,232.25</td>
<td>1,200.00</td>
<td>8,767.75</td>
</tr>
<tr>
<td>2</td>
<td>2,432.25</td>
<td>1,380.12</td>
<td>1,052.13</td>
<td>7,387.63</td>
</tr>
<tr>
<td>3</td>
<td>2,432.25</td>
<td>1,545.73</td>
<td>886.52</td>
<td>5,841.90</td>
</tr>
<tr>
<td>4</td>
<td>2,432.25</td>
<td>1,731.22</td>
<td>701.03</td>
<td>4,110.68</td>
</tr>
<tr>
<td>5</td>
<td>2,432.25</td>
<td>1,938.97</td>
<td>493.28</td>
<td>2,171.71</td>
</tr>
<tr>
<td>6</td>
<td>2,432.25</td>
<td>2,171.64</td>
<td>260.61</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>14,593.50</td>
<td>9,999.93</td>
<td>4,593.57</td>
<td>-</td>
</tr>
</tbody>
</table>

4. Variable repayment plan

As the very name indicates, **variable levels of installments are paid by the borrower over the loan period. In times of good harvest a higher installment is paid, while in periods of low yields lesser amount is credited towards installment to the lender. According to the convenience, the borrower effects the repayment.** This method is not found with institutional borrowings.
5. Optional repayment plan

In this method provision is made for the borrower to make payment towards the principal amount in addition to the regular interest annually.

6. Reserve repayment plan

This type of repayment is made by the borrowers in areas which are subject to high income variability of farms. The impending problem here is that the farmers are haunted by the fear that they may not be able to keep up their promise of repaying crop loans or installments towards term loans at scheduled time. To overcome such situations, the farmer makes advance payments of the loan realized from the saving of the previous year. This type of repayment is advantageous to the banker as the institutional agency need not worry regarding loan collection during the periods of crop failure.
The co-operative movement in the country in the pre-independence are can be categorized into four phases viz., initiation stage (1904-1911), modification stage (1912-1918), expansion stage (1919-1929) and restructuring stage (1930-1946).

**Initiation Stage (1904-1911)**

In olden days the rural credit service was replete with the dominance of non-institutional agencies particularly moneylenders who were charging high rates of interest from the helpless peasants. The farmers were forced to even to sell their belongings to clear the debts. This situation triggered a sort of agitation and in some parts of the country; the farmers started revolting against the moneylenders. The revolts that were found in Poona and Ahmednagar areas even attracted the attention of the Government which having understood the precarious situation of the farmers passed there acts viz., Deccan Agriculture Relief Act (1879) and later Land Improvement Loan Act (1883) and thereafter Agriculturists Loan Act (1884).

During 1892, the Madras Government appointed Frederick Nicholson to study the village banks organized on co-operative lines in Germany. On his return he submitted a report and raised a slogan “Find Raiffeisen”.

Indian Famine Commission in 1901 also supported the idea of Frederick Nicholson for the formation of credit societies on Raiffeisen model. Another committee in 1901 headed by Sir Edward Law also favored the credit societies to be started on Raiffeisen model. These recommendations resulted in the enactment of co-operative credit societies Act of 1904.

**Salient Features of 1904 Act**

1. Rural-urban classification of societies was made. Rural Societies are those having four-fifths of farmers, while urban societies are those with four-fifths of their members representing non-agriculturists.
2. Registrar was supposed to organize and control the societies.
3. Loans could be given to members on personal or real (immovable) security, and,
4. One-man one vote was specified in the Act.

**Modification Stage (1912-1918)**

The shortcomings of the Act of 1904 were rectified by enacting another co-operatives societies Act of 1912. The new act provided legal protection to all types of co-operatives including central financing agencies and supervising unions. The distinction between rural and urban societies was given a new focus. The liability was limited in the case of primary societies and unlimited for central societies. Since this act gave provision for the registration of all types of co-operative societies, it led to the emergence of rural co-operatives both on credit front and non-credit front, but this growth was uneven spatially. As a consequence of this observation in 1914, the Government appointed a committee under the chairmanship of Sir Edward Mac Lagan to probe into the performance of the societies. The report of Mac Lagan committee came out in 1915. The Mac Lagan committee’s recommendations and
Act of 1912, introduced co-operative planning process in India. The observations of Mac Lagan committee were,

1. Illiteracy among the members,
2. Misappropriation of funds,
3. Rampant nepotism,
4. Delays in sanction of loans and
5. Irregular repayment of loans.

The observations prompted Mac Lagan to offer the following suggestions for effective functioning of the societies.

1. All members should be made aware of the co-operative principles,
2. Dealings should be strictly confined to the members only.
3. Honesty should be the main criterion for one to take loan,
4. Applications should be carefully scrutinized before advancing loan and there should be careful follow up for effective utilization of loan,
5. Loans should not be given for speculative purposes,
6. Ultimate authority should be with all the members but not with the office bearers
7. Thrift should be encouraged so also building up of reserve fund,
8. One member-one vote should be strictly followed,
9. Capital should be raised as far as possible from the savings of the members only, and
10. Punctual repayment should be insisted.

Expansion stage (1919-29)

Under the Montogue-Chelmsford Act of 1919, co-operation became a provincial subject which gave further impetus to the movement. The economic prosperity during the period between 1920-29, contributed to further growth of the movement. The same period also witnessed the birth of co-operative land mortgage banks first in Punjab and subsequently land mortgage banks were registered in Madras (1925) and Bombay (1926). The Indian Central Banking Enquiry Committee (1931) also highlighted the glaring lacunae, particularly with reference to undue delays and inadequacy of credit. Meanwhile Madras Co-operative Societies Act of 1932 and Madras Co-operative Land Mortgage Bank Act of 1934 came into force with the former aiming at the growth of co-operative movement, while the latter for developing the long term credit.

Restructuring Stage (1930-46)

The economic depression in early thirties and abnormal fall in prices of agricultural commodities led to the collapse of the co-operative movement. Various enquiry committees viz., Vijayaraghava Charya Committee in Madras, Rehabilitation Enquiry Committees of Travancore and Maysore, Kale Committee in Gwalior, Mehta and Bhansali Committee in Bombay and Wace Committee in Punjab etc., were appointed for examining the possibilities of restructuring and reorganization of societies. The movement picked up momentum during the period of Second World War, when there was a rise in the
prices of agricultural commodities. This resulted, in the recovery of over dues of the societies and betterment of financial condition of the co-operative institutions. Prof. D. R. Gadgil, heading the Agricultural Finance Sub-Committee appointed by the Government of India, recommended in 1944, the adoption of limited liability to the co-operatives, assessing credit-worthiness based on repayment capacity of the farmer, subsidizing the cost of administration of small co-operative societies, linking of credit with marketing, etc. The Co-operative Planning Committee in 1945, under the chairmanship of R. G. Saraiya attributed the limited progress of co-operatives to the laissez-faire policy of the State, the literacy of the people, etc.

II Post-Independence Era

Planning commission which was set up in March, 1950 prepared his first five year plan in 1951. The main objectives with regard to co-operative were follows.

1. Involvement of co-operatives in rural development programmes
2. Development of a well organized credit system
3. Extending co-operatives to the fields of industry, housing, marketing, farming, etc.
4. Training of higher personnel engaged in co-operatives.

The All India Rural Credit Survey Committee (AIRCSC) appointed by the Reserve Bank of India in 1951 under the chairmanship of shri A. D. Gorwala brought out that the co-operative credit was unevenly distributed, inadequate and mostly lent to the asset-oriented large cultivators. The committee recommended an integrated scheme as a remedy to the existing situation, the salient features of which were

1. State partnership in co-operative institutions at all levels
2. Coordination between co-operative credit, marketing and processing
3. Development of warehousing and
4. Training of co-operative personnel at all levels.

All India Rural Credit Survey Committee (1954), National Co-operative Development and Warehousing Board (NCDWB) in 1956 was established by Government. Thus, in second five year plan (1956-61) the establishment of warehousing co-operatives was stressed. Apart from these, the second five year plan also initiated the setting up of co-operative processing and producer’s co-operatives. The committee on Co-operative Credit under the chairmanship of shri V. L. Mehta in 1959 observed that the co-operative aspect was important as that of viability. The membership should not be too large or the area too extensive. No village included in a society should be at a distance of more than 3 or 4 miles from the headquarter village. Later the committee on taccavi loans and co-operatives credit under the chairmanship of shri B. p. Patel in 1961-62 felt that the co-operatives should provides loans to the farmers for the agricultural operations and land improvements and taccavi loans should be confined to the farmers only under distress conditions. During the third five year plan (1961-66), stress was given to revitalize dormant societies apart from increased emphasis on co-operative credit and co-operative farming. National Co-operative
Development Corporation (NCDC) was also established during this plan period. The All India Rural Credit Review Committee (AIRCRC) which was constituted in July, 1966 under the chairmanship of shri B. Venkatappaiah, in its final report submitted in July, 1969 recommended the setting up of Small Farmers Development Agency (SFDA), the creation of Rural Electrification Corporation (REC), the reorganization of primary societies into viable units, rehabilitation of weak central co-operative banks, active administrative and policy measures to check overdues, greater flexibility in the conversion of short term loans into medium terms loans, simplification of application form etc. A new concept of fertilizer co-operatives was started and the Indian Farmers Fertilizers Co-operative Ltd. (IFFCO) was established at Kandla. National Bank for Agriculture and Rural Development (NABARD) was formed during sixth five year plan to strengthen the credit for agriculture and other economic activities. Strengthening of dairy co-operatives was also given importance. Seven five year plan emphasized on special recovery camps, retail sale of fertilizers by co-operatives, strengthening National State Consumer Federation (NSCF) and introduction of Single Window System for credit.

**Assignments**

Example 1

Loan amount 12000, Rate of interest 8 %, Time period 8 years

**Amortized Decreased Repayment plan**

<table>
<thead>
<tr>
<th>Year</th>
<th>Principal (in Rs.)</th>
<th>Interest (in Rs.)</th>
<th>Installment (in Rs.)</th>
<th>Balance amount (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1500</td>
<td>960</td>
<td>2460</td>
<td>10500</td>
</tr>
<tr>
<td>2</td>
<td>1500</td>
<td>840</td>
<td>2340</td>
<td>9000</td>
</tr>
<tr>
<td>3</td>
<td>1500</td>
<td>720</td>
<td>2220</td>
<td>7500</td>
</tr>
<tr>
<td>4</td>
<td>1500</td>
<td>600</td>
<td>2100</td>
<td>6000</td>
</tr>
<tr>
<td>5</td>
<td>1500</td>
<td>480</td>
<td>1980</td>
<td>4500</td>
</tr>
<tr>
<td>6</td>
<td>1500</td>
<td>360</td>
<td>1860</td>
<td>3000</td>
</tr>
<tr>
<td>7</td>
<td>1500</td>
<td>240</td>
<td>1740</td>
<td>1500</td>
</tr>
<tr>
<td>8</td>
<td>1500</td>
<td>120</td>
<td>1620</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12000</strong></td>
<td><strong>4320</strong></td>
<td><strong>16320</strong></td>
<td>-</td>
</tr>
</tbody>
</table>

Example: 2 Amortized Even Repayment Plan

\[
\text{Loan amount: } \quad \text{Rs. 12,000} \\
\text{Time period: } \quad 8 \text{ years} \\
\text{Rate of interest: } \quad 8 \% \\
\]

\[
i \quad = \quad \frac{0.08}{1} \\
I = \frac{B}{1 - (1+i)^{-n}} = \frac{12,000 x}{1 - (1+0.08)^{8}} \\
= \frac{12,000 x}{1 - (\quad \quad)}
\]
\[
(1.08)^8 \\
0.08 \\
= 12000 \times \frac{1}{\frac{1}{1 - (\frac{1}{1.8509})}} \\
0.08 \\
= 12000 \times \frac{1}{\frac{1}{1 - 0.5043}} \\
= 12,000 \times 0.174027 \\
= Rs. 2088.32
\]

Table: 3 Amortized Even Repayment Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Installment (in Rs.)</th>
<th>Principal (in Rs.)</th>
<th>Interest (in Rs.)</th>
<th>Balance amount (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2088.32</td>
<td>1128.32</td>
<td>960.00</td>
<td>10871.68</td>
</tr>
<tr>
<td>2</td>
<td>2088.32</td>
<td>1218.59</td>
<td>869.73</td>
<td>9653.09</td>
</tr>
<tr>
<td>3</td>
<td>2088.32</td>
<td>1316.07</td>
<td>772.25</td>
<td>8337.02</td>
</tr>
<tr>
<td>4</td>
<td>2088.32</td>
<td>1421.36</td>
<td>666.96</td>
<td>6915.66</td>
</tr>
<tr>
<td>5</td>
<td>2088.32</td>
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<td>553.25</td>
<td>5380.59</td>
</tr>
<tr>
<td>6</td>
<td>2088.32</td>
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<td>430.45</td>
<td>3722.72</td>
</tr>
<tr>
<td>7</td>
<td>2088.32</td>
<td>1790.50</td>
<td>297.82</td>
<td>1932.22</td>
</tr>
<tr>
<td>8</td>
<td>2088.32</td>
<td>1933.74</td>
<td>154.58</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16706.56</td>
<td>12001.52</td>
<td>4705.04</td>
<td></td>
</tr>
</tbody>
</table>

Partial Repayment Plan:

Example: Loan amount: Rs. 12,000  
Time period: 8 years  
Rate of interest: 8%

Table: 1 Partial repayment Plan

<table>
<thead>
<tr>
<th>Year</th>
<th>Principal (in Rs.)</th>
<th>Interest (in Rs.)</th>
<th>Installment (in Rs.)</th>
<th>Balance amount (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,000</td>
<td>960</td>
<td>1,960</td>
<td>11,000</td>
</tr>
<tr>
<td>2</td>
<td>1,000</td>
<td>880</td>
<td>1,880</td>
<td>10,000</td>
</tr>
<tr>
<td>3</td>
<td>1,000</td>
<td>800</td>
<td>1,800</td>
<td>9,000</td>
</tr>
<tr>
<td>4</td>
<td>1,000</td>
<td>720</td>
<td>1,720</td>
<td>8,000</td>
</tr>
<tr>
<td>5</td>
<td>1,000</td>
<td>640</td>
<td>1,640</td>
<td>7,000</td>
</tr>
<tr>
<td>6</td>
<td>1,000</td>
<td>560</td>
<td>1,560</td>
<td>6,000</td>
</tr>
<tr>
<td>7</td>
<td>1,000</td>
<td>480</td>
<td>1,480</td>
<td>5,000</td>
</tr>
<tr>
<td>8</td>
<td>5,000</td>
<td>400</td>
<td>5,400</td>
<td></td>
</tr>
</tbody>
</table>
Time Value of money

Future Value of Present money:

A rupee today worth more than a rupee in future. This is primarily due to its opportunity cost, i.e. interest. Interest will be added to the principal over time and hence its value increases. Future value of present sum is an important concept in financial analysis and this is called compounding. In the compounding process, the interest is added to the principal at the end of each time period. Compounding factor enables calculation of future value of present money. The future value of present investment is calculated by using the formula of compound interest.

\[ A = P \times (1+i)^t \]

Where,

- \( A \) = Future value of present sum invested
- \( P \) = Principal amount invested
- \( i \) = Interest rate, and
- \( t \) = Number of years

Present Value of Future Money:

The present value of future sum is the current value of investment to be received in the future at a specific date. This present value is worked out through discounting process in which future sum is discounted back to the present time to find out its current or present value.

A present sum is compounded to know the future value and future sum is discounted to know the present value.

\[ PW = \frac{P}{(1+i)^t} \]

Where,

- \( PW \) = Present value or worth of future money
- \( P \) = money value in future
- \( i \) = Interest rate, and
- \( t \) = project life period in years.

Example:

What is the future value of the following investment?

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Initial amount Rs.</th>
<th>Compounding rate of</th>
<th>Period (years)</th>
<th>Compounding factor</th>
<th>Future value Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total | 12,000 | 5440 | 17,440 |
What is the present worth of future value of the following investment?

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Amount to be received Rs.</th>
<th>Future period in years</th>
<th>Rate of interest</th>
<th>Discounting factor</th>
<th>Present value Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24,276</td>
<td>10</td>
<td>15</td>
<td>0.2471</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>9244</td>
<td>16</td>
<td>20</td>
<td>0.054</td>
<td></td>
</tr>
</tbody>
</table>

**Pay Back Period:**

It is defined as the number of years required to recover the original cash outlay invested in a project.

**Merits:**

1. Easy to understand and calculate.
2. It costs less than most of the sophisticated techniques.
3. A company can have more favourable short-term effect on earning per share by setting up a shorter P. B. P.
4. The riskiness of the project can be tacked by having a shorter.

**Limitations:**

1. It fails to take into account of the cash flows evaluated after the P. B. P.
2. It is not an appropriate method of measuring the profitability of an investment project as it does not consider the entire cash inflow yielded by the project.
3. It fails to consider the pattern of cash inflows.
4. Administrative difficulties may be faced in determining the maximum PBP.
5. This method is not consistent with the objective of maximizing the market value of firms.

**Discounted Cash Flow Method:**

One great limitation of the traditional method is their inability to consider the timing of cash flow. The P. b. P. method considers all cash flow’s received before the PBP and all cash flow received after the PBP are ignored. This method does not recognize the time value of money. While NPV recognize the timing of cash flows into analysis.

**Net Present Value Method:**

The NPV method is the classic economic method of evaluating the investment proposal. It is discounting cash flow technique explicitly recognizing the time value of money.

\[
NPW = \frac{P_1}{(1+i)^1} + \frac{P_2}{(1+i)^2} + \ldots + \frac{P_n}{(1+i)^n} - C
\]

Where, \(P_1 = \text{Net cash flow in first year,} \)
\( i \) = Discount rate,  \\
\( t \) = Time period, and  \\
\( C \) = Initial cost of the investment.

**Merit:**

1. It recognizes the time value of money.  
2. It considers all cash flows over the entire life of the project in its calculation.  
3. It is consistent with the objective of maximizing the welfare of owners.

**Limitations:**

1. Difficult to use.  
2. It may not give satisfactory answer when project investment being compared.

\[
NPW = \frac{P_1}{(1+i)^1} + \frac{P_2}{(1+i)^2} + \ldots + \frac{P_n}{(1+i)^n} - C
\]

Where, \( P_1 \) = Net cash flow in first year,  \\
\( i \) = Discount rate,  \\
\( t \) = Time period, and  \\
\( C \) = Initial cost of the investment.

Project with positive NPWs are given weightage in the selection compared to those with negative present values. Table 1 presents the particulars of NPV calculations for two projects.

**Benefit-Cost Ratio:**

We compare the present worth of costs with present worth of benefits. Absolute value of the benefit-cost ratio will change based on the interest rate chosen. While ranking the projects depending upon the B-C ratio, the most common procedure of selecting a project is, to choose the project, having B-C ratio of more than one, when discounted at opportunity cost of capital.

\[
B:C \text{ Ratio} = \frac{\text{Present worth of cost}}{\text{Present worth of benefit(return)}}
\]

**Co-Operation:**
**Meaning:** Co-operation derived from Latin word “Co-operari” Co- means with and operari- mean to work. In other words co-operation means working together for a common purpose.

**Definition of Co-operation:** Co-operation is a form of organization wherein persons voluntarily associate together as human beings on a basis of equality for the promotion of economic interest of members.

**Co-operative Principles:**

The principles of co-operation may be considered as broad guidelines for Co-operative societies in the conduct of their various activities. The principles of co-operation have changed from time to time to suit the changing environment and situations so that the co-operative movement may become more meaningful and purposeful.

International co-operative Alliance (ICA) held in the year 1934-37 and the present classification of the Rochdale principles consists of the following:

**(A) Primary Principles:**

1. **Open membership or Voluntary association:**

   It is chief characteristics of co-operation organization. It means that co-operative should only comprise persons who have joined it voluntary. Co-operative organization must be open to everybody who desires and able to employ their services without any discrimination on political, religious and racial grounds.

   However there is some restriction on admission. If a person doing harmful activities against the interest of the society, can be expelled or debarred from the society.

2. **Democratic Control:**

   This means that each member has only one vote and no more irrespective of member of share held by him.

   The organizations of co-operatives must be democratic at all levels, that is to say, they must have the right to elect their committees or other governing bodies without intervention or pressure from outside, and all members of society must have the same rights and be able to form and express their opinion freely.

   **The democratic idealism is practical in Co-operative organization in the following ways:**

   1. The limit of one vote per member irrespective of the number of share held.
   2. Elimination of voting by proxy.
   3. Requirement of regular reports from the executives.
   4. Constant education to keep members informed.
   5. The accessibility of co-operative account books for inspection by members.
3. Distribution of surplus on patronage dividend basis:

As society's main aim is not profit, in co-operative societies profit considered as surplus. Surplus is distributed on such a manner as would avoid any member gaining at the expenses of other. The members have generally full freedom to decide as to how this surplus is distributed. While distributing the surplus following points are considered.

1. Provision for development of the business of society.
2. Provision of common service.
3. Distribution of surplus among the members in proportion to their transactions with the society means patronage dividend.

4. Limited interest on capital:

One of the important principles of co-operative enterprise is the payment of limited interest on capital.

The main purpose of limited interest is, of course, to safeguard the non-profit character of the co-operative. But it has another meaning that within the co-operative economy capital has to serve, not dominate it has to satisfied with a fixed wage at a limited interest so as not to obtain an unfair return from the business operations.

(B) Secondary Principles:

1. Political and religious neutrality:

In co-operatives political or religious influence on working may be strictly avoided for smooth functioning of the organization.

2. Cash trading:

To make co-operative movement efficient and successful, trading must be done on cash basis. Rochdale pioneers Co-operative societies had adopted these principles of cash –trading and co-operatives become most successful.

3. Promotion of education or promotion of co-operative education:

It has been acknowledged on all hands that the strength and success of the co-operative movement depend upon the existence of a vast and enlightened membership and without co-operative education; enlightened membership does not become a reality. Rochdale in 1953 introduced in to the rules that 2.5 percent of surplus should be devoted to co-operative education.

Other Principles of co-operation:

1. Self-help through mutual help.
2. Co-operation among co-operatives or principles of growth.
4. Principle of Service.
5. Principle of Equity

**Market:**

Market implies the whole area over which buyers and sellers are in such touch with each other, directly or through middlemen, that the price of the same goods/commodity in one part influences it in the other part of it.

Market refers not to a place but commodity or commodities and buyers and sellers are in free intercourse with one another.

**Components of Market:**

1. The existence of a good or commodity for transactions. (physical existence not necessary)
2. The existence of buyers and sellers.
3. Business relationship or intercourse between buyers and sellers.
4. Demarcation of area such as place, region, country or the whole world.

**Regulated Market:**

A regulated market is one which aims of the elimination of the unhealthy and unscrupulous practices, reducing marketing charges and providing facilities to producers-sellers in the market. Any legislative measure designed to regulate the marketing of agricultural produce in order to establish, improve and enforce standard marketing practices and charges may be termed as one which aims at the establishment of regulated markets.

**Objectives:**

1. To prevent the exploitation of farmers by overcoming the handicaps in the marketing of their products,
2. To make the marketing system most effective and efficient so that farmers may get better prices for their produce and the goods are made available to consumers at reasonable prices,
3. to provide incentive prices to farmers for a better production programme, both in quantitative and qualitative terms, and
4. To promote an orderly marketing of agricultural produce by improving the infrastructural facilities.

**Important Features of Regulated Markets:**

1. Method of sale
2. Weighment of produce
Export – Import

To understand the meaning of Export and Import, we have to understand the meaning of international trade first. The term international trade refers to the exchange of goods between citizens of different countries. This kind of trade across national frontiers has grown in size with improved means of transportation and development of technology. Export and Import are two aspects of International Trade.

Meaning of Export:

When one country sells any commodity or manufactured items, goods or services to another country, it is known as Export. Export means goods and services sold abroad.

Meaning of Import:

When one country purchases any commodity or manufactured items, goods or services from another country, it is known as Import. Import means goods and services bought from abroad.

Definitions of Globalization:

1. Globalization has been defined as the process by which the development of a “global ideology” has begun to transcend national boundaries, with far-reaching consequences for both; the conduct of business transactions and the theory and practice management.

2. Globalization is the process of a growing similarity in what citizens of different countries want to buy.

Meaning of Liberalization:

Liberalization in reference to Economic refers to the liberalization in Trade and Economics. This is one financial policy which is adopted by different countries with the objective to accelerate the economic growth. This policy is related with the open market. Restriction on production, prices, permission for manufacturing goods or services, distribution, exchange, consumption, import, export and other economic are liberalized or abolished. Market forces are allowed to operate freely. Foreign investment is also welcomed with the objective of improving the existing technology and infrastructure facilities in the country. Globalization has made significant changes in economical and social environment.

PROBLEMS OF AGRICULTURAL FINANCE
In recent years, various steps have been taken by the Government of India to raise the flow of credit in the agricultural sector. But still, there are certain problems of agricultural finance. They are as follows:

1. **Limited Coverage:** The foremost problem of agricultural credit is that its coverage is very limited. In co-operative, universal membership has been accepted as a policy but people from 'weaker sections of the society are not being given proper representation in administration of co-operative societies. Consequently, they are intended to depend upon money lenders and landlords to meet their basic requirements.

2. **Complicated Procedures of Loans:** It has been observed that number of formalities is to be completed to avail credit facilities. Majority of farmers are illiterate and are unable to furnish requisite information. Therefore, farmers prefer to borrow from money lenders and pay higher rate of interest. Moreover, there is large time gap between submission of loan application and sanction of loans.

3. **Wastage of Time and Man Power:** Most of the financial institutions like Commercial Banks, State Cooperative Banks are situated in cities. Farmers have to visit the bank offices for a number of times to fulfill many formalities leading to the sanction of loans. Thus, results in wastage of time and man power.

4. **Miss utilization of Loans:** It has been observed that there is a gap between disbursement and requirement in the farm sector. The situation becomes more pitiable when the granted loans are being miss utilized by the farmers. In other words, the loans are utilized for unproductive purposes in rural areas of the country.

5. **Inefficient Administration:** Still another problem faced is that co-operatives and commercial banks are managed by inefficient and incapable persons. These organizations possess inadequacies which are difficult to handle easily. There is no second opinion that they do not work for the betterment of farming community. Rather, they are keen for their personal benefits.

6. **Regional Imbalances:** An acute problem has been noticed that there are regional imbalances in the supply of agricultural credit. For example, five states, Gujarat, Andhra Pradesh, Punjab, Tamil Nadu, and Maharashtra availed 52 per cent of the total agricultural credit. This had led to rapid growth in crop productivity. On the other hand, agriculture in other states continues to be low productive and cultivators of these states lag behind in the adoption of new technology; it is only due to the lack of credit facilities in these areas of the country.

7. **Mounting over dues:** The stagnation of agriculture has caused mounting over dues. The efforts to wipe off loans in some parts of the country can be seriously viewed. In fact, it has set an undesirable precedent and will hamper the development of agricultural sector in future.

8. **No Provision of Consumption Loans:** Due to the seasonal nature of farm incomes, peasants need credit both for production purpose of durable consumption goods but this facility is limited to urban
areas. Therefore, farmers are compelled to borrow from money lenders for consumption needs who suck their blood by using malpractices.

10. Low Rate of Share in Development: Since there is low productivity in agriculture, so it has led to a low share in the economic development. This is due to non-adoption of latest technology. This evidence shows that commercial banks still prefer industry and trade safest field to invest rather the agricultural sector. Moreover, large amount of the total credit facilities are pocketed by rich farmers, leaving poor cultivators at the mercy of unscrupulous money lenders.

11. Lack of Saving: There is lack of rural savings in the country. Whatever rural savings exist fall short of rural needs and that is why there is a greater need for outside finance in the rural areas of the country. What is needed is not the mobilization of rural savings but the efforts to make rural savings possible.

12. Predominance of Private Agencies: In India, there exist the private agencies. There is an urgent need for the substitution of private agencies as we have been able to do in the sphere of industrial finance, in the country. Institutional credit may be private or otherwise, but the continuance of professional money lenders as the major source of finance to cultivators cannot solve the problem of rural finance "Where larger production is the aim, the money lenders credit is obviously unsuitable. The alternative is institutional credit, private or otherwise but this tends more than ever to confine itself to the bigger cultivators if it is not channeled through some form of co-operative association of the borrowers.

SUGGESTION TO IMPROVE AGRICULTURAL FINANCE

There is urgent need to increase institutional credit-flow to agricultural sector and to modernize it. In this direction, few suggestions have been made to improve the agricultural finance.

They are discussed as follows:

1. Reduction in Regional Imbalances: To reduce the regional imbalances, new bank branches should be opened in rural areas liberally. In addition, regional rural banks should be set up in districts so that credit flow to the agricultural sector may be stepped up. They should also be directed to provide loan to only small and marginal farmers at cheaper rate of interest.

2. Provision of Consumption of Loans: To check the exploitation made by money lenders, cooperatives and commercial banks should come forward to extend the facility of consumption loans to rural people. Once they are freed from the clutches of money lenders, they would think to sell their produce at market price. Hence, it will help to raise their farm income.

3. Repayment of Loans: The Government should take strong and meaningful measures to ensure appropriate repayment facilities and provide all assistance to institutional credit agencies for recovery of loans. It would increase the loan capacity of credit institutions to supply more loans to farming community.
4. **Rationalization of Money Lending Business:** Since money lenders play a dominant part in agricultural finance, it is the urgent need of the hour to rationalize their business activities such as maintaining proper accounts and other requisite record properly.

5. **Co-ordination among Credit Agencies:** Sincere efforts should be made to co-ordinate the functioning of various institutions of co-operative societies and commercial banks. These agencies may supplement each other to meet the requirements of rural agricultural community. This process will certainly lead farmers to adopt moderate and latest farm technology.

6. **Proper Utilization of Loans:** Proper utilization of loans leads, to enhance crop productivity. To ensure the proper utilization of loans by cultivators, special cell should be created in all credit institutions. They should keep close watch to see whether the loans are being utilized for the purpose for which such loans are granted.

7. **Suitable Representation:** The proper representation to small and marginal farmers in the management of cooperative institution will give the feeling of responsibility. Moreover they themselves watch the interests of their community for the purpose of granting of loans.

8. **Lack of Co-ordination:** Another problem of agricultural finance is that the co-operatives and commercial banks - lack of co-ordination in respect of credit planning. This result in overlapping as commercial banks credit flows to those areas where due credit structure is strong and areas of low credit availability remain deprived. Therefore, paucity of funds has been greatly responsible for low production of agriculture, thus, poverty of the cultivators.

### Recent Trends in Agricultural Credit

Since the nationalisation of commercial banks in 1969, India had strongly pursued a policy of “Social and Development Banking” in the rural areas. As a result, formal institutions of credit provision, mainly commercial banks, emerged as important sources of finance to agriculture displacing usurious moneylenders and landlords. The policy of social and development banking was a supply-led policy; it aimed at augmenting the supply of credit to rural areas, and that too at an affordable interest rate.

Commercial banks fail to achieve their aim. As a result, the decade of the 1990s was a period of the reversal of the achievements of social and development banking. The situation of the 1990s however, changed in the 2000s. Beginning from the early 2000s there was a revival of agricultural credit in India. Between 2002 and 2011, agricultural credit grew by 17.6 per cent per annum, which was significantly higher than the growth rate of 2.6 per cent recorded for the 1990s. From 2004 onwards the flow of agricultural credit has been increasing. **There are three distinct features of the growth in agricultural credit.**

**First**, a significant portion of the increase in total bank credit to agriculture in the 2000 was accounted for by indirect finance to agriculture. Indirect finance does not go directly to cultivators but to institutions that support agricultural production in rural areas. Of the total increase in credit supply to
agriculture between 2000 and 2011, about one third was contributed by indirect finance. The reason for growth in indirect finance to agriculture credit attributes to the new definition in the official agricultural policy, which states that from 1993 onwards, indirect finance should be considered as part of priority sector advances.

**Secondly,** much of the increase in total advances to agricultural credit (direct + indirect finance) in 2000s were on account of a sharp increase in the number of loans with size of Rs. 10 crore and above, and particularly of Rs. 25 crore and above.

**Thirdly,** there was an increased provision of agricultural credit from bank branches in urban areas in the 2000s. Much of these large-sized advances were made towards financing large agri-business oriented enterprises. There is little evidence to argue that major beneficiaries of the revival in agricultural credit in the 2000s have been the small farmers and marginal farmers.

**Kisan Credit Card**

Kisan Credit Card Scheme (KCC) was introduced in 1998-99 to provide credit to farmers. The Indian commercial banks have been providing Kisan credit (also called cash credit or revolving fund) to farmers for more than a decade now. **The base of fixing Kisan credit limit is land holdings, crops cultivated and crop duration.** The consumption needs of the farming family have also been taken into consideration while computing the limits. The Kisan credit card provides a lump sum loan released to the farmer to meet his crop needs like purchase of seeds, manure, pesticides, labour, irrigation etc. The farmer is expected to draw from this account based on his needs on different occasions. He is expected to pay back the entire amount within one year mostly after the proceeds of the crops are realised so that he can apply for fresh Kisan credit limit.

**Self Help Groups (SHGs)**

A self-help group has been defined as a small and formal association of poor having preferably similar socio-economic background and who have come together to realise some common goals based on the principle of self-help and collective responsibility. The Self Help Group movement in India has gained a momentum in recent years. **The promotion of self-help groups in India began more formally in 1992 with the launch of the SHG-Bank Linkage Programme by National Bank for Agriculture and Rural Development.** The programme’s main aim was to improve rural poor’s access to formal credit system in a cost effective and sustainable manner by making use of SHGs.

The invention of Self-Help Group is a boon for the small farmer in general and village women in particular. It has been responsible for bringing in a qualitative change in the lives of thousands of people. Under Self-Help Group, banks are expected to provide credit to the SHGs against group guarantee and members of the group stand as collective guarantors. Banks allow the members of the SHGs to decide on which members of the group shall borrow, how much and the methodology of repayment. Normally, SHGs loans are term loans wherein the members are expected to repay the loans in regular instalments over a period of time. In India most farmers, especially small farmers and
marginal farmers neither have title of the land nor have any collateral security. As a result, they fail to get credit from commercial banks. In this situation, SHGs help them to get credit without any hassles.

South based NGO, Sri Kshetra Dharmasthala Rural Development Project (SKDRDP) has been promoting SHGs of the small farmers for more than two decades and helping them with credit facilities for their farming operations. This movement popularly known as pragathibandhu groups in Karnataka state has helped more than one and half million farmers directly or through their family members who are members of the SKDRDP promoted SHGs. SKDRDP sources bulk loans from commercial banks and lends them to SHGs for undertaking their farming operations. The unique feature of the SKDRDP is that SHGs members have to repay in weekly installments. This uniqueness encourages farmers to go for subsidiary activities like dairy farming, vegetable cultivation, floriculture or pure daily wage labour so that they can earn money every week to repay loan.

This scheme of repayment has not only helped farmer to repay loan easily but also help them in thinking innovative. Realising the potentiality of the SHGs, the National Bank for Agriculture and Rural Development Bank (NABARD) is now actively facilitating promotion of Joint Liability Groups (JLGs) of farmers for providing necessary credit through JLGs. Commercial banks and Non-Government Organisations (NGOs) are given incentives for promoting JLGs and for credit linking them with bank. Department of Financial Services, Ministry of Finance, Government of India issued a directive in November 2011, wherein advising banks to provide cash credit or revolving fund to SHGs instead of term loans. This will act as a twin edged sword. On the one hand, members of the SHGs will get loan easily and on the other hand it can give freedom to the group to decide on the priorities of the members and lend to them on its own terms without having to take guidance from the banker.

**The Gramin Bank Model**

The Gramin Bank model, developed originally in Bangladesh, is one of the most popular models of micro finance institutions and has been replicated in various parts of the world. Under this model, Non-Government Organisations (NGOs) form and develop self help groups (SHGs). Gramin Bank has reversed conventional banking practice by obviating the need for collateral. It has created the need for a banking system based on mutual trust, accountability, participation and creativity. It offers credit for creating self-employment, income generating activities and housing for the poor as opposed to consumption. In India, three main models of micro credit are being followed and they are different from the Gramin Bank model. Under the first model, bank themselves assumes the role of Self Help Promoting Institutions (SHPIs) by promoting formation of SHGs and extending loans to them. Under the second model, groups are formed and nurtured by NGOs, Government Agencies or other community based organisations. These agencies act as facilitators. Banks open saving accounts of the SHGs formed and nurtured by the NGOs and provide them credit in due course of time. This is the most popular and wide spread model of micro credit in India. Under third model, the NGOs (SHPIs) promote formation of SHGs. Banks provide bulk assistance to these SHPIs for undertaking financial intermediation. NGOs, here, thus act as both facilitators and micro finance intermediaries.

**Microfinance**
The concept of micro finance is understood as providing poor families with very small loans (micro credit) to help them engage in productive activity or grow their tiny business. The importance of micro finance lies in the fact that the formal/institutional banking sector has not lived up to its social responsibility of meeting the financial needs of the poor due to various reasons such as: (a) lack of branch network in the rural area, (b) lack of collateral security of farmers and poor people, and (c) lack of education and awareness among the poor.

Micro finance scheme in India has emerged as major avenue for bringing the poor within the purview of the organised financial sector. The access to credit for the poor from conventional banking is often constrained by lack of collaterals, information asymmetry and high transaction cost associated with small borrower accounts. In operational terms micro credit involves small loans, up to Rs. 25000, extended to the poor without any collateral for undertaking self-employment project (RBI, 2007-08). Realising the importance of credit in the development process, Government and Reserve Bank of India have taken various steps in this regard and have encouraged banks to make timely and adequate finance available to poor for agricultural credit as well as allied activities making institutional credit to the poor.

PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)
1. OBJECTIVES:

- To provide insurance coverage and financial support to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases.

- To stabilise the income of farmers to ensure their continuance in farming.

- To encourage farmers to adopt innovative and modern agricultural practices.

- To ensure flow of credit to the agriculture sector.

2. IMPLEMENTING AGENCY (IA):

The Scheme shall be implemented through a multi-agency framework by selected insurance companies under the overall guidance & control of the Department of Agriculture, Cooperation & Farmers Welfare (DAC&FW), Ministry of Agriculture & Farmers Welfare (MoA&FW), Government of India (GOI) and the concerned State in co-ordination with various other agencies; viz Financial Institutions like Commercial Banks, Co-operative Banks, Regional Rural Banks and their regulatory bodies, Government Departments viz. Agriculture, Co-operation, Horticulture, Statistics, Revenue, Information/Science & Technology, Panchayati Raj etc.

3. DAC&FW has designated/empanelled Agriculture Insurance Company of India(AIC) and some private insurance companies presently to participate in the Government sponsored agriculture /crop insurance schemes based on their financial strength, infrastructure, manpower and expertise etc. The empanelled private insurance companies at present are 1) ICICI-Lombard General Insurance Company Ltd. 2) HDFC-ERGO General Insurance Company Ltd. 3) IFFCO-Tokio General Insurance Company Ltd. 4) Cholamandalam MS General Insurance Company Ltd. 5) Bajaj Allianz General Insurance Company Ltd. 6) Reliance General Insurance Company Ltd. 7) Future Generali India Insurance Company Ltd. 8) Tata-AIG General Insurance Company Ltd. 9) SBI General Insurance Company Ltd. 10) Universal Sompo General Insurance Company Ltd. The selection of insurance company from amongst the empanelled insurance companies to act as IA shall be done by the concerned State Government for implementation of the scheme in their State. Such selection of IA shall be done from amongst the designated / empanelled companies which shall be be initially pre-qualified , strictly on the basis of, experience, existence of infrastructure in the area and quality of services like coverage of farmers & area, pay-outs in terms of quantum & timely
settlement thereof, willingness to do publicity & awareness campaigns etc. The final selection of IA from amongst the pre-qualified insurance companies shall be done based on the lowest weighted premium quoted by a pre-qualified company for all notified crops within the cluster of districts

4. MANAGEMENT OF THE SCHEME:

The existing State Level Co-ordination Committee on Crop Insurance (SLCCCI), Sub-Committee to SLCCCI, District Level Monitoring Committee (DLMC) already overseeing the implementation & monitoring of the ongoing crop insurance schemes like National Agricultural Insurance Scheme (NAIS), Weather Based Crop Insurance Scheme (WBCIS), Modified National Agricultural Insurance Scheme (MNAIS) and Coconut Palm Insurance Scheme (CPIS) shall be responsible for proper management of the Scheme. IA shall be an active member of SLCCCI and District Level Monitoring Committee (DLMC) of the scheme.

5. UNIT OF INSURANCE:

The Scheme shall be implemented on an 'Area Approach basis' i.e., Defined Areas for each notified crop for widespread calamities with the assumption that all the insured farmers, in a Unit of Insurance, to be defined as 'Notified Area' for a crop, face similar risk exposures, incur to a large extent, identical cost of production per hectare, earn comparable farm income per hectare, and experience similar extent of crop loss due to the operation of an insured peril, in the notified area.

Defined Area (i.e., unit area of insurance) is Village/Village Panchayat level by whatsoever name these areas may be called for major crops and for other crops it may be a unit of size above the level of Village/Village Panchayat.

In due course of time, the Unit of Insurance can be a Geo-Fenced/Geo-mapped region having homogenous Risk Profile for the notified crop.

For Risks of Localized calamities and Post-Harvest losses on account of defined peril, the Unit of Insurance for loss assessment shall be the affected insured field of the individual farmer.

6. CROPS AND NOTIFIED AREA:

6.1. CROPS: The Scheme can cover all the Crops for which past yield data is available and grown during the notified season, in a Notified Area and for which yield estimation at the Notified Area
level will be available based on requisite number of Crop Cutting Experiments (CCEs) being a part of the General Crop Estimation Survey (GCES).

6.2. NOTIFIED AREA: Notified Area is the **Unit of Insurance** decided by the State Govt. for notifying a Crop during a season. The size of the Unit of Insurance shall depend on the area under cultivation within the unit. **For major crops, the Unit of Insurance shall ordinarily be Village/Village Panchayat level and for minor crops may be at a higher level** so that the requisite number of CCEs could be conducted during the notified crop season. States may notify Village / Village Panchayat as insurance unit in case of minor crops too if they so desire.

7. FARMERS TO BE COVERED: All farmers growing notified crops in a notified area during the season who have insurable interest in the crop are eligible.

7.1. COMPULSORY COVERAGE: The enrolment under the scheme, subject to possession of insurable interest on the cultivation of the notified crop in the notified area, shall be compulsory for following categories of farmers:

7.1.1. Farmers in the notified area who possess a Crop Loan account/KCC account (called as Loanee Farmers) to whom credit limit is sanctioned/renewed for the notified crop during the crop season.

AND

7.1.2. Such other farmers whom the Government may decide to include from time to time.

7.2. VOLUNTARY COVERAGE: Voluntary coverage may be obtained by all farmers not covered in 7.1 above, including Crop KCC/Crop Loan Account holders whose credit limit is not renewed.

8. RISKS TO BE COVERED & EXCLUSIONS:

8.1. RISKS: Following risks leading to crop loss are to be covered under the scheme :-

8.1.1. YIELD LOSSES (standing crops, on notified area basis): Comprehensive risk insurance is provided to cover yield losses due to non-preventable risks, such as

(i) Natural Fire and Lightning

(ii) Storm, Hailstorm, Cyclone, Typhoon, Tempest, Hurricane, Tornado etc.

(iii) Flood, Inundation and Landslide
(iv) Drought, Dry spells
(v) Pests/ Diseases etc.

8.1.2. PREVENTED SOWING (on notified area basis):- In cases where majority of the insured farmers of a notified area, having intent to sow/plant and incurred expenditure for the purpose, are prevented from sowing/planting the insured crop due to adverse weather conditions, shall be eligible for indemnity claims up to a maximum of 25% of the sum-insured.

8.1.3. POST-HARVEST LOSSES (individual farm basis): Coverage is available up to a maximum period of 14 days from harvesting for those crops which are kept in "cut & spread" condition to dry in the field after harvesting, against specific perils of cyclone / cyclonic rains, unseasonal rains throughout the country.

8.1.4. LOCALISED CALAMITIES (individual farm basis): Loss / damage resulting from occurrence of identified localized risks i.e. hailstorm, landslide, and Inundation affecting isolated farms in the notified area.

8.2. EXCLUSIONS: Risks and Losses arising out of following perils shall be excluded:-

War & kindred perils, nuclear risks, riots, malicious damage, theft, act of enmity, grazed and/or destroyed by domestic and/or wild animals, In case of Post-Harvest losses the harvested crop bundled and heaped at a place before threshing, other preventable risks.

9. SUM INSURED / LIMIT OF COVERAGE:

In case of Loanee farmers under Compulsory Component, the Sum Insured would be equal to Scale of Finance for that crop as fixed by District Level Technical Committee (DLTC) which may extend up to the value of the threshold yield of the insured crop at the option of insured farmer. Where value of the threshold yield is lower than the Scale of Finance, higher amount shall be the Sum Insured. Multiplying the Notional Threshold Yield with the Minimum Support Price (MSP) of the current year arrives at the value of sum insured. Wherever Current year's MSP is not available, MSP of previous year shall be adopted. The crops for which, MSP is not declared, farm gate price established by the marketing department / board shall be adopted.
Further, in case of Loanee farmers, the Insurance Charges payable by the farmers shall be financed by loan disbursing office of the Bank, and will be treated as additional component to the Scale of Finance for the purpose of obtaining loan.

For farmers covered on voluntary basis the sum-insured is upto the value of Threshold yield i.e threshold yield x (MSP or gate price) of the insured crop.

10. PREMIUM RATES:

10.1 The Actuarial Premium Rate (APR) would be charged under PMFBY by IA. DAC&FW/States will monitor the premium rates considering the basis of Loss Cost (LC) i.e. Claims as % of Sum Insured (SI) observed in case of the notified crop(s) in notified unit area of insurance (whatsoever may be the level of unit area) during the preceding 10 similar crop seasons (Kharif / Rabi) and loading the expenses towards management including capital cost and insurer's margin taking into account non-parametric risks and reduction in insurance unit size

Charges payable by the farmer will be as per the

<table>
<thead>
<tr>
<th>S.No</th>
<th>Season</th>
<th>Crops</th>
<th>Maximum Insurance charges payable by farmer (% of Sum Insured)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kharif</td>
<td>Food &amp; Oilseeds crops (all cereals, millets, &amp; oilseeds, pulses)</td>
<td>2.0% of SI or Actuarial rate, whichever is less</td>
</tr>
<tr>
<td>2</td>
<td>Rabi</td>
<td>Food &amp; Oilseeds crops (all cereals, millets, &amp; oilseeds, pulses)</td>
<td>1.5% of SI or Actuarial rate, whichever is less</td>
</tr>
<tr>
<td>3</td>
<td>Kharif &amp; Rabi</td>
<td>Annual Commercial / Annual Horticultural crops</td>
<td>5% of SI or Actuarial rate, whichever is less</td>
</tr>
</tbody>
</table>

10.2 The difference between premium rate and the rate of Insurance charges payable
by farmers shall be treated as Rate of Normal Premium Subsidy, which shall be shared equally by the Centre and State.

10.3 AIC shall calculate LC premium rates (till an Independent Agency/TSU takes over) based on latest available yield data in month of February for Kharif crops and August for Rabi crops as per requirement of the States and shall provide to DAC&FW/Concerned States before invitation for premium bidding.

10.4 State Govt. would invite all the empanelled insurance companies to quote their actuarial premium rates for the notified crop(s) in the notified insurance unit area, Indemnity Level, Threshold Yields, Sum Insured etc. as indicated by the State for the season.

10.5 For more effective implementation, selection of Implementing Agency (IA) may be made through adopting the cluster approach under which bunch of about 15-20 good & bad districts / areas with reference to risks will be bid out. This will facilitate the uniform distribution of the risks among the participating insurance companies and will avoid selection of districts / areas according to company's choice. In case of smaller States, the whole State shall be assigned to one IA. This is also expected to take care of districts which have traditionally had high actuarial premiums for crops due to high risk. Selection of IA may be made for at least 3 years.

10.6 The designated / empanelled companies participating in bidding have to bid the premium rates for all the crops notified / to be notified by the State Govt. and non-compliance will lead to rejection of company's bid.

10.7 The insurance coverage in terms of number of farmers & hectare-age should be at least at the previous season's level.

11. SHARING OF RISK:
Risk will be shared by IA and the Government as follows:

The liability of the Insurance companies in case of catastrophic losses computed at the National level for an agricultural crop season, shall be upto 350% of total premium collected (farmer share plus Govt. subsidy) or 35% of total Sum Insured (SI), of all the Insurance Companies combined, whichever is
higher. The losses at the National level in a crop season beyond this ceiling shall be met by equal contribution (i.e. on 50:50 basis) from the Central Government and the concerned State Governments.

12. ESTIMATION OF CROP YIELD: The State/UT Govt. will plan and conduct the requisite number of Crop Cutting Experiments (CCEs) for all notified crops in the notified insurance units in order to assess the crop yield. The State / UT Govt. will maintain single series of Crop Cutting Experiments (CCEs) and resultant Yield estimates, both for Crop Production estimates and Crop
Crop Cutting Experiments (CCE) shall be undertaken per unit area /per crop, on a sliding scale, as indicated below: from Indian Agricultural Statistical Research Institute (IASRI), National Sample Survey Organization (NSSO), Ministry of Agriculture & Farmers Welfare (GoI) and implementing agencies shall dispose/decide the issues relating to CCEs and all other technical matters. Inputs from RST/satellite imagery would also be utilized in optimizing the sample size of CCEs.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>INSURANCE UNIT and Insurance.</th>
<th>Minimum no. of CCEs required to be done</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>District</td>
<td>24</td>
</tr>
<tr>
<td>2.</td>
<td>Taluka / Tehsil / Block</td>
<td>16</td>
</tr>
<tr>
<td>3.</td>
<td>Mandal/Hobli/ Phirka / Revenue Circle</td>
<td>10</td>
</tr>
<tr>
<td>4.</td>
<td>Village / GramPanchayat/Patwar-Mandal/Patwari-Halka</td>
<td>4 for major crops, 8 for other crops</td>
</tr>
</tbody>
</table>

However, a Technical Advisory Committee (TAC) comprising representatives will be shared between Central Government and State/U.T. Governments on 50:50 basis, wherever necessary, subject to a cap on total funds to be made available by Central Government for this purpose based on approximate cost of procuring hand held devices/Smart phones and other related costs.

**Use of Mobile Phone Technology to improve Yield-data Quality & Timeliness**

It has been felt that process of CCEs currently being conducted for estimating yield is lacking in reliability and speed which affects the claims settlement. There is a need to have good quality, timely and reliable yield-data. For addressing this problem, video/image capture of crop growth at various stages and transmission thereof with CCE data on a real time basis utilizing mobile communication technology with GPS time stamping, can improve data quality, / timeliness and support timely claim processing and payments. States and insurance companies shall utilise this technology for the purpose.

13. **INDEMNITY LEVEL (IL) and THRESHOLD YIELD (TY)**:

13.1. Three levels of Indemnity, viz., 70%, 80% and 90% corresponding to crop Risk in the areas shall be available for all crops.

13.2. The Threshold Yield (TY) shall be the benchmark yield level at which Insurance protection shall be given to all the insured farmers in an Insurance Unit.
13.3. The Threshold Yield for a crop in an Insurance Unit shall be based on average yield of last seven years excluding two years of declared calamity if any, multiplied by the level of indemnity of the area.

\[
\text{threshold Yield} = \frac{\text{Sum}\{\text{Last 7 Years of Yield (minus two notified calamity years if any)}\}}{5 - 7 \ (as \ the \ case \ may \ be)} \times \text{Level of Indemnity}
\]

14. CALENDER OF ACTIVITY:
The time-lines for coverage, submission of yield data, price data etc. shall be decided by the SLCCCI strictly keeping in mind the onset of monsoon, sowing period, crop cycle. The seasonality discipline shall be same for loanee and non-loanee farmers. The cut-off date is uniform for both loanee and non-loanee cultivators. Keeping in view the prevailing agro-climatic conditions, rainfall distribution/irrigation water availabilities, sowing pattern etc. the SLCCCI, in consultation with the insurance company shall fix seasonality disciplines of the coverage and other activities in such a way that it doesn't encourage adverse selection or moral hazards. Broad seasonality discipline is given in the chart below. State wise details of seasonality will be provided in the Operational Guidelines to be issued by DAC&FW.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Activity</th>
<th>Kharif</th>
<th>Rabi</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Issuance of Administrative Instructions by Government of India</td>
<td>February</td>
<td>August</td>
</tr>
<tr>
<td>2</td>
<td>Conduct of SLCCCI meeting to decide for notification of Crops and Notified areas, limits of Sum Insured and adoption of Level of Indemnity etc.</td>
<td>March</td>
<td>September</td>
</tr>
<tr>
<td>3</td>
<td>Loaning period (loan sanctioned) for Loanee farmers covered on Compulsory basis.</td>
<td>April to July</td>
<td>October to December</td>
</tr>
<tr>
<td>4</td>
<td>Cut-off date for receipt of Proposals of farmers (loanee &amp; non-loanee).</td>
<td>31st July</td>
<td>31st December</td>
</tr>
<tr>
<td>5</td>
<td>Cut-off date for receipt of Declarations of Loanee farmers covered on compulsory basis &amp; non-loanee farmers covered on Voluntary basis from Bank branches to Respective Nodal Offices.</td>
<td>Within 15 working days for loanee farmers and seven working days for non-loanee farmers after cut-off date</td>
<td>Within 15 working days for loanee farmers and seven working days for non-loanee farmers after cut-off date</td>
</tr>
<tr>
<td>6</td>
<td>Cut-off date for receipt of Declarations of farmers covered on Voluntary basis from designated Insurance Agent(s) to Insurance Companies</td>
<td>Within two working days after receiving declaration/ premium.</td>
<td>Within two working days after receive declaration/ premium.</td>
</tr>
<tr>
<td></td>
<td>Cut-off date for receipt of Declarations of Loanee farmers covered on compulsory basis &amp; non-loanee farmers covered on Voluntary basis from Respective Nodal Offices of Banks to Insurance Company</td>
<td>Within seven working days from receipt of Declarations by the Respective Nodal Offices of Banks.</td>
<td>Within seven working days from receipt of Declarations by the Respective Nodal Offices of Banks.</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>7</td>
<td>Cut-off date for receipt of yield data</td>
<td>Within a month from final harvest</td>
<td>Within a month from final harvest</td>
</tr>
</tbody>
</table>

15. PROCEDURE FOR ASSESSMENT, PROCESSING AND APPROVAL OF CLAIMS:
15. PROCEDURE FOR ASSESSMENT, PROCESSING AND APPROVAL OF CLAIMS:

15.1. **Yield losses at Notified Area level:** Once the Yield Data is received from the prescribed Format as per Govt. Approved and settled and cut-off dates, claims will be processed.

15.1.1. If the ‘Actual Yield’ (AY) per hectare of the insured crop for the defined area [on the basis of requisite number of Crop Cutting Experiments (CCEs)] in the insured season, falls short of the specified threshold yield (TY) Yield’ (RY), all the insured farmers growing that crop in the defined area are deemed to have suffered shortfall in their yield.

15.1.2. The Scheme seeks to provide protection against such contingency to all insured farmers of an Insurance Unit.

15.1.3. **Claim Pay-outs** based on Yield losses shall be calculated as per the following formula:

\[
\text{Claims Payout} = \frac{\text{Shortfall in Yield}}{\text{Threshold Yield}} \times \text{Sum Insured}
\]

Where,

\[
\text{ShortFall in Yield} = (\text{Threshold Yield} - \text{Actual Yield})
\]

15.2. **Assessment of prevented Sowing:** The adverse weather conditions shall be defined in the notification and shall be captured by notified weather station/s in the District. The extent of claims payable will be decided on the basis of weather data recorded at the notified weather station/s for the purpose. The crop-wise scale of payment, up to a maximum of 25% of Sum Insured shall be worked out by IA based on a notified pay-out structure on the occurrence of pre-declared events such as month-wise deficit in aggregate rainfall during a specified period assessed through Reference Weather Stations tagged for the Notified / Group of Notified Area. The insurance coverage shall cease to operate for the crop in the notified area. The cover is available during Kharif season for recognised rain-fed areas and crops. The data provider will be notified by the SLCCCI.

15.3.1. Loss assessment and modified indemnity procedures in case of occurrence of localized perils, such as hailstorm, landslide, flood, and inundation shall be for a cluster of affected farms or affected village and the settlement of claims, if any, will be each insured farmer covered under assessment.

15.3.2. The District Administration will assist IA in assessing the extent of loss.

15.4. **Post-Harvest Loss Assessment:**
15.4.1. Loss assessment and indemnity procedures in case of occurrence of Post-Harvest Loss shall be for a cluster of affected farms or affected village and the settlement of claims, if any, will be each insured farmer covered under assessment.

15.4.2. The District Administration will assist IA in assessing the extent of loss.

15.5. **On-Account Payment of Claims due to Mid-Season Adversity:**

15.5.1. In case of adverse seasonal conditions during crop season viz. floods, prolonged dry spells, severe drought, unseasonal rains, IA in consultation with concerned State Government/UT based on agro meteorological data/ satellite imagery or any other proxy indicator will decide about crops/areas for which on account payment will be made, not exceeding 25% of likely claims.

15.5.2. Appraisal of mid-season adversity and quantum of on-account payment will be established jointly by Government of India/concerned State Government/UT and IA.

15.5.3. On account payment will be implemented only in those districts/notified areas where such proxy indicators can be established and will be considered for payment and only if the expected yield during the season is likely to be less than 50% of normal yield.

15.6. IA shall process the claims liability assessed as per above mentioned methodology and approve the claims.

16. **PROCEDURE FOR SETTLEMENT OF CLAIMS:**

16.1. **For coverage through Banks:** The claim amount along with particulars will be released to the individual Nodal Banks. The Banks at the grass-root level, in turn, shall credit the accounts of the individual farmers and display the particulars of beneficiaries on their notice board. The Banks shall provide individual farmer wise details claim credit details to IA and shall be incorporated in the centralised data repository.

16.2. **For coverage through other insurance intermediaries:** The claim amount will be released electronically to the individual Insured Bank Account.

**Acreage discrepancy**

Some areas in the past have reported excess insurance coverage vis-a-vis planted acreage, leading to 'over' insurance. Ideally the discrepancy should be handled at farm level to protect the interest of farmers with genuine insurance coverage. However, in the absence of digitized farm records on a
GIS platform, it would be cumbersome to physically verify each farm. For the time-being, it is to be addressed as follows:

Wherever the 'acreage discrepancy' is likely, the acreage insured at IU level shall be compared with average planted acreage of past three years, and the difference will be treated as 'excess' insurance coverage.

Sum insured may be scaled down in the ratio the average of three years' actual planted acreage bears to the insured acreage for the given crop. Claims shall be calculated on the scaled down sum insured.

Premium shall be retained by the insurance company for the portion of sum insured scaled down.

Hence the individual farms (plots / survey numbers) are digitized and available on a platform, it is possible to overlay the crop cover as derived using satellite imagery on the GIS platform to identify the crop and estimate the cropped area on each farm. This should lead to identifying the acreage discrepancy at individual farm level.

17. MANAGEMENT OF THE SCHEME AND REVIEW:

17.1. Government of India shall issue operational guidelines and modalities, which may be appended from time to time, for implementation of the scheme provisions with detailed steps and processes involved, terms and condition applicable, roles and responsibilities of various agencies involved in execution of the scheme and roles and responsibilities of other related stakeholders.

17.2. These operational modalities shall be considered as part of the scheme.

17.3. The scheme may be reviewed periodically and additions, deletions and modifications of the provisions may be done as deemed necessary.

17.4. During each crop season, the agricultural situation will be closely monitored in the implementing States / Union Territories. The State / UT Department of Agriculture and district administration shall set up a District Level Monitoring Committee (DLMC), who will provide fortnightly reports of Agricultural situation with details of area sown, seasonal weather conditions, pest incidence, stage of crop failure (if any) etc.

17.5. The operation of the Scheme will be reviewed annually, and modifications as may be required would be introduced. Periodic Appraisal Reports on the Scheme would be prepared by Ministry of Agriculture, the Government of India / Implementing Agency.

18. PUBLICITY & AWARENESS:
18.1. Adequate publicity needs to be given in all the villages of the notified districts/areas. All possible means of electronic and print media, farmer’s fair, exhibitions including SMS messages, short films, and documentaries shall be utilized to create and disseminate awareness, benefits and limitations among the cultivators and the agencies involved in implementing the Scheme. Agriculture/Cooperation Department of the States in consultation with IA shall work out appropriate Plan for adequate awareness and publicity three months prior to the start of coverage period.

18.2. IA shall also assist the State Government/UT in capacity building for effective implementation of the scheme and organize training workshops/sensitization programme for various stakeholders.

19. SERVICE TAX:
19.1. PMFBY is a replacement scheme of NAIS/MNAIS, and hence exempted from Service Tax liability of all the services involved in the implementation of the scheme.

20. USE OF INNOVATIVE TECHNOLOGY:
DAC&FW shall carry out pilots in select areas, in collaboration with various States/UTs, national and international research organisations/institutes, IMD, insurance companies, reinsurers etc. to make use of available technology in the fields of remote sensing, aerial imagery, satellites etc. that can help in acreage estimation, crop health/loss estimation, quicker yield estimation etc. with reduced manpower & infrastructure. With development of number of satellites with high resolution images orbiting the Earth, there have been great improvements in satellite imagery products. It has been reasonably proven the satellite imagery can help in demarcating the cropped areas into clusters on the basis of crop health. This feature can be successfully used to target the CCEs within the Insurance Unit (IU). Thus satellite imagery can help in 'smart sampling' of CCEs. While an IU with heterogeneous crop health may need standard sample of CCEs, for eg. 4 CCEs per Village/Village Panchayat for major crops, the more homogenous IU may need a lower sample size, say 2 CCEs. This is expected to minimize the total CCEs needed by about 30-40%. States should progressively adopt this technique in generating yield estimates.

After proven strong correlation between / satellite imagery results and yield estimates through CCEs, States may use the technologies in estimating the crop yields at IU level, subject to the satisfaction of Central and State Governments and insurance companies with the accuracy of the yield estimates to service the claims.
20.1. The integrity of CCEs will be verified by use of GPRS enabled Mobile phones with cameras/smart phones. These phones will also help in addressing the problem of area discrepancy by capturing pictures of standing crops and will also help in quicker, accurate estimation of yields.

20.2. Such technologies, after due consideration of pilot results by the Government shall be included in the Scheme.

20.3. All state government shall use technology initiatives in the conduct and supervision of CCEs to provide the yield data with minimum delay to IA for quick processing of the claims. The state governments shall also use technology initiatives in the reporting of loss reports for on-account claim settlement, Claim intimations for Localized calamity and Post-Harvest losses.

20.4. A centralized repository shall be maintained. Appropriate application (web based, app based etc.) would be developed by NIC. The State Government, IA, Banks, Insurance Intermediaries shall use this applications for inputting various operational data like notification related data, individual farmer wise insurance coverage and etc. claims details, crop loss details

21. REVIEW OF THE SCHEME

State Governments will review the performance of the scheme after one year and point out corrections, if any, required in any of the provisions of the scheme to Govt. of India.
Amul

Amul Milk Union Limited or Amul is an Indian dairy cooperative, based at Anand in the state of Gujarat. Formed in 1948, it is a brand managed by a cooperative body, the Gujarat Cooperative Milk Marketing Federation Ltd. (GCMMF), which today is jointly owned by 3.6 million milk producers in Gujarat. Amul spurred India's White Revolution, which made the country the world's largest producer of milk and milk products. The white revolution was spearheaded by Tribhuvandas Patel under the guidance of Sardar Patel and Verghese Kurien. As a result, Kaira District Milk Union Limited was born in 1946. Tribhuvandas became the founding chairman of the organization and led it until his death. He hired Dr. Kurien three years after the white revolution. He convinced Dr. Kurien to stay and help with the mission. Kurien, founder-chairman of the GCMMF for more than 30 years (1973–2006), is credited with the success of Amul. Amul has become the largest food brand in India and has ventured into markets overseas. Amul products are now available in more than 20 countries.

The main aim of the formation of Amul was to stop the exploitation by middlemen. The exploitative trade practices followed by the local trade cartel triggered the cooperative movement. Angered by unfair and manipulative practices followed by the trade, the farmers of the district approached the great Indian patriot Sardar Vallabhbhai Patel for a solution. He advised them to get rid of middlemen and form their own co-operative, which would have procurement, processing and marketing under their control. In 1946, the farmers of this area went on a milk strike refusing to be cowed down by the cartel. Under the inspiration of Sardar Patel, and the guidance of leaders like Morarji Desai and Tribhuvandas Patel, they formed their own cooperative. This co-operative, the Kaira District Co-operative Milk Producers Union Ltd. began with just two village dairy co-operative societies and 247 litres of milk and is today better known as Amul Dairy. Amul grew from strength to strength thanks to the inspired leadership of Tribhuvandas Patel and the committed professionalism of Dr Varghese Kurien, who was entrusted the task of running the dairy from 1950.

The then Prime Minister of India, Lal Bahadur Shastri decided that the same approach should become the basis of a National Dairy Development policy. He understood that the success of Amul could be attributed to four important factors. The farmers owned the dairy, their elected representatives managed the village societies and the district union, they employed professionals to operate the dairy and manage its business. Most importantly, the co-operatives were sensitive to the needs of farmers and responsive to their demands.

At his instance in 1965 the National Dairy Development Board was set up with the basic objective of replicating the Amul model. Dr. Kurien was chosen to head the institution as its Chairman and asked to replicate this model throughout the country.
The Amul Model

The Amul Model of dairy development is a three-tiered structure with the dairy cooperative societies at the village level federated under a milk union at the district level and a federation of member unions at the state level.

- Establishment of a direct linkage between milk producers and consumers by eliminating middlemen
- Milk Producers (farmers) control procurement, processing and marketing
- Professional management
The Amul model has helped India to emerge as the largest milk producer in the world. More than 15 million milk producers pour their milk in 1, 44, 500 dairy cooperative societies across the country. Their milk is processed in 184 District Co-operative Unions and marketed by 22 State Marketing Federations, ensuring a better life for millions.

GCMMF

Gujarat Cooperative Milk Marketing Federation Ltd. (GCMMF), is India's largest food product marketing organisation with annual turnover (2017-18) US$ 4.5 billion. Its daily milk procurement is approximately 18 million litres per day from 18,554 village milk cooperative societies, 18 member unions covering 33 districts, and 3.6 million milk producer members.

It is the Apex organisation of the Dairy Cooperatives of Gujarat, popularly known as 'AMUL', which aims to provide remunerative returns to the farmers and also serve the interest of consumers by providing quality products which are good value for money. Its success has not only been emulated in India but serves as a model for rest of the World. It is exclusive marketing organisation of 'Amul' and 'Sagar' branded products. It operates through 56 Sales Offices and has a dealer network of 10000 dealers and 10 lakh retailers, one of the largest such networks in India. Its product range comprises milk, milk powder, health beverages, ghee, butter, cheese, Pizza cheese, Ice-cream, Paneer, chocolates, and traditional Indian sweets, etc.
GCMMF is India's largest exporter of Dairy Products. It has been accorded a "Trading House" status. Many of their products are available in USA, Gulf Countries, Singapore, The Philippines, Japan, China and Australia. GCMMF has received the APEDA Award from Government of India for Excellence in Dairy Product Exports for the last 16 years. For the year 2009-10, GCMMF has been awarded "Golden Trophy" for its outstanding export performance and contribution in dairy products sector by APEDA. In 2013-14, GCMMF took giant strides in expanding its presence in International markets. Amul’s presence on Global Dairy Trade (GDT) platform in which only the top six dairy players of the world sell their products, has earned respect and recognition across the world. By selling milk powders on GDT, GCMMF could not only realize better prices as per market demand but it also firmly established Amul in the league of top dairy players in world trade.

GCMMF is the first and only Indian organisation to win topmost International Dairy Federation Marketing Award for probiotic ice cream launch in 2007. For the innovations, GCMMF has received AIMA-RK Swamy High Performance brand award 2013 and CNN-IBN Innovating for better tomorrow award in 2014.

The Amul brand is not only a product, but also a movement. It is in one way, the representation of the economic freedom of farmers. It has given farmers the courage to dream. To hope. To live.

Source: [https://en.wikipedia.org/wiki/Amul](https://en.wikipedia.org/wiki/Amul)  
[www.amul.com/m/gcmmf](http://www.amul.com/m/gcmmf)
SWOT Analysis - Definition, Advantages and Limitations

SWOT is an acronym for Strengths, Weaknesses, Opportunities and Threats. By definition, Strengths (S) and Weaknesses (W) are considered to be internal factors over which you have some measure of control. Also, by definition, Opportunities (O) and Threats (T) are considered to be external factors over which you have essentially no control.

SWOT Analysis is the most renowned tool for audit and analysis of the overall strategic position of the business and its environment. Its key purpose is to identify the strategies that will create a firm specific business model that will best align an organization’s resources and capabilities to the requirements of the environment in which the firm operates.

In other words, it is the foundation for evaluating the internal potential and limitations and the probable/likely opportunities and threats from the external environment. It views all positive and negative factors inside and outside the firm that affect the success. A consistent study of the environment in which the firm operates helps in forecasting/predicting the changing trends and also helps in including them in the decision-making process of the organization.

An overview of the four factors (Strengths, Weaknesses, Opportunities and Threats) is given below-

1. **Strengths** - Strengths are the qualities that enable us to accomplish the organization’s mission. These are the basis on which continued success can be made and continued/sustained.
   
   Strengths can be either tangible or intangible. These are what you are well-versed in or what you have expertise in, the traits and qualities your employees possess (individually and as a team) and the distinct features that give your organization its consistency.
   
   Strengths are the beneficial aspects of the organization or the capabilities of an organization, which includes human competencies, process capabilities, financial resources, products and services, customer goodwill and brand loyalty. Examples of organizational strengths are huge financial resources, broad product line, no debt, committed employees, etc.

2. **Weaknesses** - Weaknesses are the qualities that prevent us from accomplishing our mission and achieving our full potential. These weaknesses deteriorate influences on the organizational success and growth. Weaknesses are the factors which do not meet the standards we feel they should meet.

   Weaknesses in an organization may be depreciating machinery, insufficient research and development facilities, narrow product range, poor decision-making, etc. Weaknesses are controllable. They must be minimized and eliminated. For instance - to overcome obsolete machinery, new machinery can be purchased. Other examples of organizational weaknesses are huge debts, high employee turnover, complex decision making process, narrow product range, large wastage of raw materials, etc.

3. **Opportunities** - Opportunities are presented by the environment within which our organization operates. These arise when an organization can take benefit of conditions in its environment to plan and execute strategies that enable it to become more profitable. Organizations can gain competitive advantage by making use of opportunities.

   Organization should be careful and recognize the opportunities and grasp them whenever they arise. Selecting the targets that will best serve the clients while getting desired results is a difficult task. Opportunities may arise from market, competition, industry/government and
technology. Increasing demand for telecommunications accompanied by deregulation is a great opportunity for new firms to enter telecom sector and compete with existing firms for revenue.

4. **Threats** - Threats arise when conditions in external environment jeopardize the reliability and profitability of the organization’s business. They compound the vulnerability when they relate to the weaknesses. Threats are uncontrollable. When a threat comes, the stability and survival can be at stake. Examples of threats are - unrest among employees; ever changing technology; increasing competition leading to excess capacity, price wars and reducing industry profits; etc.

**Advantages of SWOT Analysis**

SWOT Analysis is instrumental in strategy formulation and selection. It is a strong tool, but it involves a great subjective element. It is best when used as a guide, and not as a prescription. Successful businesses build on their strengths, correct their weaknesses and protect against internal weaknesses and external threats. They also keep a watch on their overall business environment and recognize and exploit new opportunities faster than its competitors.

SWOT Analysis helps in strategic planning in following manner-

a. It is a source of information for strategic planning.
b. Builds organization’s strengths.
c. Reverse its weaknesses.
d. Maximize its response to opportunities.
e. Overcome organization’s threats.
f. It helps in identifying core competencies of the firm.
g. It helps in setting of objectives for strategic planning.
h. It helps in knowing past, present and future so that by using past and current data, future plans can be chalked out.

SWOT Analysis provide information that helps in synchronizing the firm’s resources and capabilities with the competitive environment in which the firm operates.

**SWOT ANALYSIS FRAMEWORK**

**Limitations of SWOT Analysis**

SWOT Analysis is not free from its limitations. It may cause organizations to view circumstances as very simple because of which the organizations might overlook certain key strategic contact which may occur. Moreover, categorizing aspects as strengths, weaknesses, opportunities and threats might be very subjective as there is great degree of uncertainty in market. SWOT Analysis does stress upon
the significance of these four aspects, but it does not tell how an organization can identify these aspects for itself.

There are certain limitations of SWOT Analysis which are not in control of management. These include-

- Price increase;
- Inputs/raw materials;
- Government legislation;
- Economic environment;
- Searching a new market for the product which is not having overseas market due to import restrictions; etc.

Internal limitations may include-

- Insufficient research and development facilities;
- Faulty products due to poor quality control;
- Poor industrial relations;
- Lack of skilled and efficient labour; etc.

**Role of Different Organisations**

**International Co-operative Alliance (ICA)**

International Cooperative Alliance is a non-profit international association established in 1895 to advance the cooperative model. The Alliance is the apex organisation for cooperatives worldwide, representing 318 cooperative federations and organisations across 110 countries (figures of September 2018). The members of the Alliance are national level cooperative federations, individual cooperative organisations and government offices concerned with cooperatives. One in every six people on the planet are cooperators. Through its membership, the Alliance represents 1.2 billion members of cooperatives from any of the 3 million cooperatives worldwide.

The International Cooperative Alliance works with global and regional governments and organisations to create the legislative environments that allow cooperatives to form and grow.

Towards the public, the International Cooperative Alliance promotes the importance of the cooperatives’ values-based business model. Yearly, the International Cooperative Alliance publishes the World Co-operative Monitor, the index of the world’s largest cooperative and mutual enterprises. The Monitor demonstrates the economic impact of cooperative enterprises worldwide. The sixth edition of the World Co-operative Monitor has revealed a **global turnover of 2.1 trillion USD** for the world’s top 300 cooperatives. Cooperatives generate partial or full-time employment for at least 280 million individuals worldwide, either in or within the scope of cooperatives, making up almost 10% of the entire employed population.

Operating from a global office in Brussels, Belgium, the Alliance is organised with four Regional Offices.

The Alliance further has eight sectoral organisations:

- Banking
- Agriculture
• Fisheries
• Insurance
• Health
• Housing
• Consumer Co-operatives
• Industry and Services

Vision

The Alliance is the reference organisation for the co-operative movement, acting as an effective and efficient global voice and forum for knowledge, expertise and co-ordinated action for and about co-operatives.

Mission

The Alliance unites co-operatives worldwide and is the custodian of the co-operative values and principles. It makes the case for their distinctive values-based economic business model, providing individuals and communities with an instrument of self-help and influence over their development.

The Alliance advocates the interests and success of co-operatives, disseminates best practices and know-how, strengthens their capacity building, and monitors their performance and progress over time.

Structure

The International Cooperative Alliance consists of a governing board, a General Assembly, four regions (one each for Africa, Europe, Asia-Pacific, and Americas), eight sectoral organisations and several thematic committees and networks:

• Committee on Cooperative Research
• Communications Committee
• Gender Equality Committee
• Youth Network
• Cooperative law committee

Work

The starting point of the International Co-operative Alliance’s Blueprint for a Co-operative Decade, is that co-operatives have a way of doing business which is both better and brings a more effective balance to the global economy. The 2020 Vision, embedded within the Blueprint strategy, aims for the co-operative form of business – by 2020 – to become:

• The acknowledged leader in economic, social, and environmental sustainability
• The model preferred by people
• The fastest growing form of enterprise

The publications of the Blueprint are created by the Alliance’s thought leadership. They serve to guide co-operatives in conducting business in line with the co-operative principles, and cover the Blueprint’s five pillars: Participation, Sustainability, Identity, Legal Framework and Capital.
The International Co-operative Alliance advances the interests of the co-operative movement through work with international policymakers. The Alliance’s advocacy work helps create a more supportive political, legal and regulatory environment in which co-operatives can thrive. The Alliance’s Co-operative Law Committee also advises on matters related to creating an enabling environment for co-operatives. At the United Nations, the Alliance participates in high-level discussions of relevance to co-operatives through its consultative status with the United Nations Economic and Social Council (ECOSOC), which it has had since 1946, the first non-governmental organisation to do so.

Since 2014, the Alliance has been actively engaged in the Business 20 (B20), a forum of business leaders that makes recommendations to G20 governments for strong, sustainable and balanced growth in the global economy. The Alliance delegation of co-operative leaders works to ensure that the co-operative voice is heard in the B20 Taskforces and represented in outcome documents. The Alliance also has individual partnership agreements with the Food and Agriculture Organization of the United Nations (FAO), the International Labour Organization (ILO) and the International Trade Centre, and participates in the UN Inter-Agency Task Force on Social and Solidarity Economy.

Since 1971, the Alliance has been a founding member of the Committee for the Promotion and Advancement of Co-operatives (COPAC), a multi-stakeholder partnership of global public and private institutions that promotes and advocates for people-centred, self-sustaining cooperative enterprises, guided by the principles of economic, social and environmental sustainable development.

In March 2016, the International Co-operative Alliance entered into a partnership with the European Commission, ushering in a new phase of collaboration on strengthening the co-operative movement as development actors. The ICA-EU partnership aims to bring the co-operative model to the next level within international development policies and programs. It is built around activities focused on increasing visibility, enhancing advocacy, sharing capacity building, strengthening co-operative development networking, and supporting all these with evidence from exhaustive research. Acting as partners, the regional and global offices of the ICA are driving the actions, in collaboration with members, civil society organisations, international institutions and the EU.

Source: www.ica.coop

National Cooperative Union of India (NCUI)

National Cooperative Union of India, (NCUI) is an apex organisation representing the entire cooperative movement in the country. It was established in 1929 as All India Cooperative Institutes Association and was re-organised as Indian Cooperative Union through the merger of Indian Provincial Cooperative Bank’s Association with All India Cooperative Institute Association and later in 1961 as National Cooperative Union of India. Ever since then NCUI has been acting as torchbearer of cooperative movement in the country. Of late, it has diversified its activities and programmes to address the emerging issues affecting the movement.
Objectives

- Expresses opinion on matters of cooperative policy and acts as the accredited representative of the Indian Cooperative Movement in the national and international spheres;
- Organises cooperative education and training programmes and popularises the principles and practices of cooperation
- Organises, conducts, collaborates and assists in carrying out research and analysis of cooperative problems and formulation of projects for cooperative development
- Arranges for the production and publication of literature and audiovisuals aids including films, filmstrips on cooperation and allied subjects
- Lends publicity to the activities of cooperatives through periodicals, journals, newspapers, pamphlets, brochures, books, films, broadcasts, T.V. for creating favourable opinion for the development of the cooperative movement
- Convenes and holds the National Cooperative Congress, Zonal Conferences, Cooperative Seminars, Meetings, Conferences, Exhibitions etc.;
- Select delegates, representatives and observers on behalf of the union for participation in International, National and State Conferences
- Promotes international cooperative institutions and assists member societies in resolving their problems and difficulties and formulation of programmes and their implementation while preserving and safeguarding the democratic character of the cooperative movement in the country
- Promotes international cooperative relations through active collaboration with ICA, UNO, FAO, ILO, UNDP, UNIDO and other international agencies involved in cooperative development
- Promotes international marketing on cooperative-to-cooperative basis by documenting necessary information and acts as nodal agency for the benefit of Indian Cooperative Movement
- Provides consultancy services to the cooperatives

Functioning

The working of NCUI reflects the democratic yearning of the cooperators and the cooperative institutions involved in cooperative development. The membership of NCUI is broad-based comprising of cooperative institutions at national level, state level and multi-state cooperative societies representing all sectors of the Indian cooperative movement. At present, there are 242 institutions which are members of NCUI.

The supreme authority of NCUI vests with its General Body which meets once a year to decide the policy and programmes for cooperative development and also elects the Governing Council of NCUI once for a period of five years. The Governing Council meets once in every quarter and functions through the Executive Committee and other functional committees.

The President is the head of the organisation and is supported by the Chief Executive who operates through various functional divisions of the NCUI Secretariat.

Cooperative Congress

One of the notable activities of the NCUI is to formulate policies and programmes which not only highlights the achievements of cooperatives but also sets the direction for future growth of the cooperative movement in India. The cooperative congress is the mega event of the cooperative movement which reviews the trends of the movement and provides future projections.
Publicity and Public Relations

As a major image-building exercise, NCUI undertakes various activities for publicity and public relations. The notable activity in this regard is the celebration of all India Cooperative Week throughout the country from 14 to 20 November every year. The week-long celebrations based on a particular theme galvanises the states to organise cooperative awareness activities/programmes in every nook and corner of the country. In the memory of late Vaikunth Bhai Mehta, The doyen of Indian Cooperative Movement, NCUI organises lecture from a distinguished personality regularly. Besides, NCUI provides timely information to the member institutions, maintains strong liaison with the press, sensitises the mainstream press through regular press releases and organises conferences and seminars for building opinion in favour of cooperatives.

Publications

The NCUI has been publishing journals of repute with a national perspective. "The Cooperator" is an illustrated monthly journal of topical issues which carries articles, features, interviews, success stories and reports on the areas concerning cooperative sector. "Indian Cooperative Review" a quarterly published by NCUI which contains research articles and case studies on various segments of the cooperative movement. NCUI has a rich in house store of publications comprising of books on success stories, legal aspects and major cooperative trends. The Statistical Profile updates policy makers and planners with changing trends in cooperative movement in various sectors.

International Cooperative Relations

Being the apex organisation of the Indian Cooperative Movement, the NCUI collaborates with ICA, UNO, FAO, ILO, UNDP, UNIDO and other international agencies involved in cooperative development. The Union takes active part in various Standing Committees/Regional Assembly of ICA, particularly the Regional Office for Asia and Pacific, New Delhi. In furtherance of the inter-cooperative relations, the NCUI deputes a number of staff working in cooperative institutions for training and for attending conferences/seminars abroad.

Under the MoU signed with selected countries, NCUI encourages exchange of information to improve bilateral cooperation with other countries/organizations through international study exposure visit. This enables the participants to learn about the best practices adopted by the cooperatives in other countries. NCUI also facilitates the visit of fraternal delegates to the different cooperative institutions/organizations to share the experience of Indian cooperatives in order to promote professional, social & cultural bonding.

To commemorate the occasion of International Cooperative Day celebrated on the first Saturday of July every year, NCUI organises Symposium on a prescribed theme. On this occasion, Children's Paintings contest is organised in which the children in the age group of 6-15 years are invited and the paintings are sent to IE NO HIKARI Association of Japan for the Annual World Children's Picture Contest.

Source: www.ncui.coop

NATIONAL AGRICULTURAL CO-OPERATIVE MARKETING FEDERATION (NAFED)

It is the apex body constituted with co-operative principles existing at the national level. It deals with procurement, distribution, export and import of selected agricultural commodities. It promotes inter-state as well as foreign trade of farm commodities. The main export commodities are onions, chillies, ginger, garlic, cardamom etc. Export of pulses, groundnut, onion and potatoes is mainly canalized through NAFED in the country. It further undertakes the movement of essential commodities from surplus areas to scarce areas. In the co-operative sector, NAFED is the central nodal agency for operating price support operations for pulses and
oilseeds. It undertakes market intervention operations for horticultural products like onions, potatoes, grapes, black pepper, red chilies, etc. In 1995-96 its turnover was more than Rs.870 crore. NAFED is exercising a healthy influence on market operations in stabilizing the market prices for favour of producers and consumers.

Other organizations working in co-operative sector at the national level are (1) National Co-operative Tobacco Growers Federation (NCTGF) (2) National Consumers Co-operative Federation (NCCF)(3) Tribal Co-operative Marketing Development Federations of India Ltd.(TRIFED).

NATIONAL CO-OPERATIVE DEVELOPMENT CORPORATION (NCDC)

It was set up in 1973 with a prime aim of planning and promoting programmes for production, processing and marketing of agricultural produce through co-operative societies. Of course, these commodities should be notified by the corporation before they are being marketed. The corporation supports various marketing programmes for which financial assistance comes from the respective state Governments. Co-operative marketing and processing activities are being developed under the supervision of NCDC with a provision of requisite financial assistance and expertise and training. NCDC is now extending its activities to the various areas of co-operative dairies, fisheries, minor forest produce, etc., which are basically aimed at economic development of the rural poor. Since its inception i.e., from 1963 up to 1996, it has provided financial assistance to the tune of Rs. 2,800 crore besides striving hard for the development of co-operative marketing, storage. Processing and distribution of consumer goods viz. Food grains, sugar, edible oils, kerosene, salt, soft drinks etc., through services co-operative.

NAFED
Natioonal Agricultural Co-operative Marketing Federation

At the national level the Natioonal Agricultural Co-operative Marketing Federation(NAFED) was established in October 1958. The state level marketing federations and National Co-operative Development Corporation are its members. The head branch office are located at Mumbai, Calcutta and madras. NAFED are operation extends to the whole country. It has established branches in all major part town and capital cities of the country.

Objects:

1. To coordinate and promote the marketing and trading activities of the affiliated co-operative institutions
2. To make arrangement for the supply of Agricultural input required by member institutions.
3. To promote inter state and inter national trade in Agricultural and other activities.
4. To act as an agent of the Government for the purchase, sale, storage and distribution of agricultural products and inputs.

Activities;

1. Inter state trade
2. Export of Agric. Product
3. Import Agric. Product
4. Maintain expert staff which conduct market studies.
NCUI
National Co-operative Union of India

The National Cooperative Union of India, (NCUI) is the apex organisation representing the entire cooperative movement in the country. It was established in 1929 as All India Cooperative Institutes Association and was re-organised as Indian Cooperative Union through the merger of Indian Provincial Cooperative Banks’ Association with All India Cooperative Institutes Association and later in 1961 as National Cooperative Union of India. The National Cooperative Union of India has travelled a long way since then to now emerged as the sole representative of the Cooperative movement in the country. Being the apex organisation of the Indian cooperative movement in the country, the NCUI is committed to lend dynamism and vibrancy to the cooperative sector in the twenty first century. To make the voice of cooperation as strong as ever is NCUI’s supreme motto.

Objectives

The objectives of the Union are “to promote and develop the cooperative movement in India, to educate, guide and assist the people in their efforts, to build up and expand the cooperative sector and to save as an exponent of cooperative opinion in accordance with cooperative principles”. In furtherance of these objectives, the Union may either by itself or in collaboration with other cooperative institutions:

- Express opinion on matters of cooperative policy and act as the accredited representative of the Indian Cooperative Movement in the national and international spheres;
- Organise cooperative education and training programmes and popularise the principles and practices of cooperation;
- Organise, conduct, collaborate and assist in carrying out research, investigations of cooperative problems and formulation of projects for cooperative development;
- Arrange for the production and publication of literature and audio-visual aids including films, filmstrips on cooperation and allied subjects;
- Give publicity to the achievements of cooperatives through periodicals, journals, newspapers, pamphlets, brochures, books, films, broadcasts, T.V. and the like for creating favourable atmosphere for the development of the cooperative movement;
- Maintain an information bureau and a library;
- Convene and hold the National Cooperative Congress and Co-operative Seminars, Meetings, Conferences, Exhibitions etc.;
- Select delegates, representative and observes on behalf of the Union for participation in the International, National and State Conferences;
- Facilitate the promotion of cooperative institutions and assist the member societies in resolving their problems and difficulties and formulation of programmes and their implementation and preserve and safeguard the democratic character of the cooperative movement in the country;
- Confer/honour on the eminent cooperators;
- Promote international co-operative relations through active collaboration with ICA, UNO, FAO, ILO, UNDP, UNIDO and other international agencies involved in cooperative development;
- Help, promote international marketing on cooperative to cooperative basis by documenting necessary information and to act as nodal agency for the benefit of Indian Cooperative Movement; and
- Provide consultancy services to the cooperatives.

The Functioning
The working of NCUI reflects the democratic yearnings of the cooperators and the cooperative institutions involved in cooperative development. The membership of NCUI is broad-based comprising of cooperative institutions at national level, state level and multi-state cooperative societies representing all sectors of the Indian cooperative movement. At present, there are 207 institutions which are members of NCUI.

The supreme authority of NCUI vests with its General Body which meets once in a year to decide the policy and programmes for cooperative development and also elects the Governing Council of NCUI once for a period of five years. The Governing Council meets once in every quarter and functions through the Executive Committee and other functional committees. The President is the head of the organisation and is supported by the Chief Executive who operates through various functional divisions of the NCUI Secretariat.

ICA
International Co-operative Alliance

The International Co-operative Alliance is a non-profit international association established in 1895 to advance the co-operative model.

The Alliance is the apex organisation for co-operatives worldwide, representing 313 co-operative federations and organisations across 109 countries (figures of June 2018). The members of the Alliance are national level co-operative federations, individual co-operative organisations and government offices concerned with co-operatives.

One in every six people on the planet are co-operators. Through its membership, the Alliance represents 1.2 billion people from any of the 2.6 million co-operatives worldwide.

The International Co-operative Alliance works with global and regional governments and organisations to create the legislative environments that allow co-operatives to form and grow. Find out more about our global advocacy here.

Towards the public, the Alliance promotes the importance of the co-operatives’ values-based business model. The Alliance has made available its global strategy for co-operatives to become the fastest growing form of enterprise by 2020, in the Blueprint for a Co-operative Decade.

Yearly, the Alliance publishes the World Co-operative Monitor, the index of the world's largest co-operative and mutual enterprises. The Monitor demonstrates the economic impact of co-operative enterprises worldwide. The sixth edition of the World Co-operative Monitor has revealed a global turnover of 2.1 trillion USD for the world’s top 300 co-operatives. Co-operatives generate partial or full-time employment for at least 280 million individuals worldwide, either in or within the scope of co-operatives, making up almost 10% of the entire employed population.

Alliance regional offices

Operating from a global office in Brussels, Belgium, the Alliance is organised with four Regional Offices:
Alliance sectoral organisations

The Alliance further has eight Sectoral Organisations:

- Banking
- Agriculture
- Fisheries
- Insurance
- Health
- Housing
- Consumer Co-operatives
- Industry and Services

Strategic plan 2010-2020

The **Blueprint for a Co-operative Decade** is the Alliance's global strategy for co-operatives across sectors and regions to make co-operatives:

1. the acknowledged leader in economic, social and environmental sustainability;
2. the model preferred by people;
3. the fastest growing form of enterprise by 2020.

The Blueprint rests on 5 Pillars where game-changing strategies are necessary in order to meet the goals of the decade. These are:

- Participation
- Sustainability
- Identity
- Legal Frameworks
- Capital

Each Pillar has its own specific objective, which co-operatives should aim to achieve if the global co-operative movement is to achieve the goals of the decade. The Alliance continuously establishes initiatives that facilitate meeting these goals:

- Elevate participation within membership and governance to a new level;
- Position co-operatives as builders of sustainability;
- Build the co-operative message and secure the co-operative identity;
- Ensure supportive legal frameworks for co-operative growth;
- Secure reliable co-operative capital while guaranteeing member control.

**NCDC**

**National Co-operative Development Corporation**

National Cooperative Development Corporation राष्ट्रीय विकास प्रशिक्षण निगम

| Formed | 1963 |
**Jurisdiction** | **India**
---|---
**Headquarters** | New Delhi
**Minister** | [Radha Mohan Singh](http://www.ncdc.in/ www.n), Minister of Agriculture
**Managing Director** | Shri Sundeep Kumar Nayak, IAS (2017-incumbent)
**Ministry** | Ministry of Agriculture & Farmers Welfare

[website](http://www.ncdc.in/ www.n)

### Contents

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2 Organisation & Management
3 References
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**Functions[edit]**

Planning, promoting and financing programmes for production, processing, marketing, storage, export and import of agricultural produce, food stuffs, certain other notified commodities e.g. fertilisers, insecticides, agricultural machinery, lac, soap, kerosene oil, textile, rubber etc., supply of consumer goods and collection, processing, marketing, storage and export of minor forest produce through cooperatives, besides income generating stream of activities such as poultry, dairy, fishery, sericulture, handloom etc.

NCDC Act has been further amended which will broad base the area of operation of the Corporation to assist different types of cooperatives and to expand its financial base. NCDC will now be able to finance projects in the rural industrial cooperative sectors and for certain notified services in rural areas like water conservation, irrigation and micro irrigation, agri-insurance, agro-credit, rural sanitation, animal health, etc.

**Organisation & Management[edit]**

The Management vests in 51 member widely represented General Council to give shape to its policies and programmes and Board of Management with 12 members to cater to day-to-day activities. Besides its Head Office, NCDC functions through 18 Regional/State Directorates. The Managing Director is the Chief Executive. Various
functional divisions look after the programmes. The field offices play an important role in project identification/formulation and oversee its implementation. NCDC is endowed with in-house technical and managerial capabilities in the areas of Cooperation, Organisation & Methods, Financial Management, Management Information Systems, Sugar, Oilseeds, Textiles, Fruits & Vegetables, Dairy, Poultry and Live stock, Fishery, Handlooms, Civil Engineering, Refrigeration and Preservation to help cooperatives to identify/formulate projects and successfully implement them.

Currently it has eighteen Regional Directorates at Bengaluru, Bhopal, Bhubaneswar, Chandigarh, Chennai, Dehradun, Gandhinagar, Guwahati, Hyderabad, Jaipur, Kolkata, Lucknow, Patna, Pune, Raipur, Ranchi, Shimla and Thiruvananthapuram to provide the financial assistance to Cooperatives/Societies/Federations.[1]
Q.1 Define Co-operation. Explain Co-operative principles in detail.
Q.2 Define Credit. Give the classification of credit in detail.
Q.3 Credit institution in agriculture.
Q.4 Explain 3 Rs of credit.
Q.5 Explain 7 Ps of credit.
Q.6 Explain rural indebtedness in detail.

Short notes:

1. Single window system 2. NABARD
3. RRB 4. RBI
5. Payback period 6. KCC
7. Nationalization of bank 8. Amortized decreased or even R. P.

Do as directed:

1. Write the objectives of Nationalization of bank.
2. List out the factors influencing the scale of finance.
3. List out the advantages and limitations of crop insurance.
4. Functions of PACS under single window system.
5. List out the primary and secondary principles of Co-operation.
6. Give the suggestions made by the Mac Lagan for effective functioning of co-operative societies.
7. List out the objectives of RRB/NABARD.
8. List out the characteristics of good agril. Credit.
9. Give the malpractices followed by Money Lenders.
10. Give the functions of PLDs.
11. Enlist the causes for poor repayment capacity.
12. Enlist measures to strengthen the repayment capacity.
14. List out the measures to strengthen the risk bearing ability of farmers.
15. Enlist five Cs of credit & explain any one in detail.
16. List out the name of the banks nationalized during second phase.
17. List out the four phases of Co-operative movement during pre-independence era.
18. Give the formula of NPW, IRR and Payback period.
19. List out the merits and de-merits of NPW.
20. List out the merits and de-merits of Payback period.

Define / Explain


Give the full form of the following:

1. During first phase of nationalization fourteen banks were nationalized each having deposits of more than 50 Crorers on 19th July, 1969.
2. During second phase of nationalization six banks were nationalized each having deposits of more than 200 Crores on 15th April, 1980.
3. RRBs came into existence on 2nd October, 1975.
4. The operational areas are to be covered by each RRB varies from one to two districts for efficient functioning.
5. The main function of RRB is to grant the loans and advances particularly to small and marginal farmers, agril. Labourers etc. within the operational area of the RRB.
6. The RBI was established in the year 1935.
7. World Bank (IBRD) was established in the year 1945.
8. NABARD came into existence on 12th July, 1982.
9. The single window system is a three tier structure in co-operative credit and two tier structure in co-operative marketing.
10. GIC first introduced the crop insurance scheme in 1973 in selected centers of Gujarat and it implemented for only cotton H4.
11. In the year 1985, Comprehensive Crop Insurance Scheme (CCSI) was introduces by GIC in all the states.
12. Eighty percent of the average annual yield of the crop in a given area over the last previous five years is considered as a threshold yield of the crop in the area.
13. RKBY was introduced in the year 1999 under the NAIS.
14. Under the NAIS, premium rates are 3.5 per cent of sum insured for Bajra and Oilseeds, 2.5 per cent for other Kharif crops, 1.5 per cent for wheat and 2.0 per cent for other Rabi crops.
15. In Amortized Decreased Repayment Plan, the principal component remains constant over the entire repayment period, while interest part decreases continuously.
16. In Amortized Even Repayment Plan, the annual installment over the entire loan period remains the same, while the principal portion of the installment increases continuously.
17. In variable repayment plan various level of installments are paid by the borrower over the loan period.
18. Repayment of loan is made by the borrowers in areas which are subject to high income variability of farms through a reserve repayment plan.
19. RRB is also called Gramin Bank.
20. Initially five RRBs first opened in the country.
21. The Government of India introduced Kisan Credit Card scheme by banks during 1998-99 and it was designed by NABARD.
22. The aim of KCC is to provide adequate and timely support from the banking system to the farmers for their short term production credit needs in cultivation of crops.
23. The KCC should normally valid up to three years and subject to annual review.
24. World Bank was established in the year 1945.
25. The Deposit Insurance Corporation came into existence on January 1, 1962.
26. Demand for credit in industry is directly related to the output.
27. Loan advances towards agriculture sector is increased as a result of nationalization of banks.
28. A slogan “Find Raiffeissen” was given by Frederick Nicholson.

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Chapter – 4
Introduction to Higher Financing Institutions

Reserve Bank of India (RBI)

The Reserve Bank of India (RBI) was established in 1935 under the Reserve Bank of India Act, 1934. Its headquarters is located at Mumbai.

The RBI was set up to
- Regulate the issue of bank notes
- Secure monetary stability in the country
- Operate currency and credit system to its advantage

The role of RBI in agricultural credit was found in the establishment of Agricultural Credit Department (ACD).

The primary functions of ACD are

- To coordinate the functions of RBI with other banks and state cooperative banks in respect of agricultural credit.
- To maintain expert staff to study all the questions of agricultural credit and be available for consultation by central government, state governments, scheduled commercial banks and state cooperative banks.
- To provide legislations to check private money lending and checking other malpractices.

All India Rural Credit Survey Committee (AIRCSC) under the chairmanship of Sri. Gorwala in 1954 suggested several recommendations with regard to the activities of RBI in the sphere of rural credit. Based on this, two funds were established after amending RBI act, 1934.

1. National Agricultural credit (Long-term operations) fund-1955:

It has started with an initial capital of Rs.10 crores and annual contribution of Rs.5 crores and later this was increased to Rs. 15 crores. This fund was meant to provide long-term loans to various state governments so as to enable them to contribute to the share capital of different types of cooperative societies including Land Mortgage Banks (LMBs). Loans and advances out of this fund are made to state governments for a period not exceeding 20 years.

2. National Agricultural credit (Stabilization fund)-1956:

It was started with RBIs initial contribution of Rs.1 crore and subsequent annual contribution of Rs.1 crore. This fund is utilized for the purpose of granting medium-term loans to State Co-operative Banks (SCBs), especially during the times of famines, droughts and other natural calamities when they are unable to repay their loans to RBI.

The functions of RBI in the sphere of rural credit can be dealt seen under three aspects:

1. Provision of finance
2. Promotional activities, and
3. Regulatory functions

**Provision of Finance:**

- Reserve Bank of India provides necessary finances needed by the farmers through the commercial banks, cooperative banks and RRBs on refinance basis.
- It advances long-term loans to state governments for their contribution to the share capital of the cooperative credit institutions like State Cooperative Banks (SCBs) and District Cooperative Central Banks (DCCBs).
- It advances medium-term loans to State Cooperative Banks.
- It extends refinance facility to the RRBs only to an extent of 50 per cent of outstanding advances.

**Promotional activities:**

Reserve Bank of India constitutes study teams to look into the organization and operation of the cooperative credit institutions all over the country. It also conducts number of surveys and studies pertaining to rural credit aspects in the country. The RBI felt that the cooperatives are the major force in the field of agricultural credit and hence following measures were framed for the strengthening of cooperatives.

- Reorganization of the state and central cooperative banks on the principle of one apex bank for each state and one central bank for each district.
- Rehabilitation of those central cooperative banks, which are financially weak due to mounting overdue, insufficiency of internal finances, untrained staff, poor management etc.
- Strengthening of PACS to ensure their financial and operational viability.
- Arranging suitable training programmes for the personnel of cooperative institutions.

**Regulatory functions:**

- Reserve bank of India is concerned with efficiency of channels through which credit is distributed.
- Banking Regulation Act, 1966 makes the RBI to exercise effective supervision over cooperative banks and commercial banks.
- As per the Credit Authorization Scheme (CAS) of 1976, the cooperative banks should get prior authorization from RBI for providing finances beyond a certain limit.
- The Cash Liquidity Ratio (CLR) and Cash Reserve Ratio (CRR) are fixed by RBI for cooperatives, Farmer’s Service Societies (FSS), Regional Rural Banks (RRBs) and Agricultural Development Banks (ADB) at lower levels than those fixed for commercial banks. For these cooperative banks the bank rate is 3 per cent less than that of commercial banks. They are permitted by RBI to pay 0.5 per cent higher rate of interest on deposits.
Asian Development Bank (ADB)

Asian Development Bank was conceived in the early 1960s as a financial institution that would be Asian in character and foster economic growth and cooperation in one of the poorest regions in the world. A resolution passed at the first Ministerial Conference on Asian Economic Cooperation held by the United Nations Economic Commission for Asia and the Far East in 1963 set that vision on the way to becoming reality. The Philippines capital of Manila was chosen to host the new institution, which opened on 19 December 1966, with 31 members that came together to serve a predominantly agricultural region. Takeshi Watanabe was ADB’s first President.

A major landmark was the establishment in 1974 of the Asian Development Fund to provide low-interest loans to ADB’s poorest members. By the end of the decade, some Asian economies had improved considerably and no longer needed ADB's assistance.

Asian Development Bank envisions a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty in the region. ADB in partnership with member governments, independent specialists and other financial institutions is focused on delivering projects in developing member countries that create economic and development impact.

As a multilateral development finance institution, ADB provides:

- loans
- technical assistance
- grants

The clients of ADB are member governments, who are also the shareholders. In addition, ADB provide direct assistance to private enterprises of developing member countries through equity investments and loans.

ADB maximizes the development impact of its assistance by

- facilitating policy dialogues,
- providing advisory services, and
- mobilizing financial resources through cofinancing operations that tap official, commercial, and export credit sources

To achieve its vision, ADB focus on seven operational priority areas. Support in these areas are delivered through both public and private sector operations, advisory services, and knowledge support. The areas are:

- addressing remaining poverty and reducing inequality
- accelerating progress in gender equality
- tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability
- making cities more livable
- promoting rural development and food security
- strengthening governance and institutional capacity
- fostering regional cooperation and integration

ADB raises funds through bond issues on the world’s capital markets. ADB also rely on members’ contributions, retained earnings from ADB’s lending operations, and the repayment of loans. ADB also provide loans and grants from a number of special funds.
From 31 members at its establishment in 1966, ADB has grown to encompass 67 members—of which 48 are from within Asia and the Pacific and 19 outside. ADB’s highest policy-making body is the Board of Governors, which comprises one representative from each member nation – 48 from the Asia-Pacific and 19 from outside the region. The Board of Directors is responsible for the direction of the general operations of the Bank. The Board (i) takes decisions concerning policies of the Bank, and loans, guarantees, investments and technical assistance by the Bank, (ii) approves borrowings by the Bank, (iii) clears the financial accounts of the Bank for approval by the Board of Governors, and (iv) approve the budgets of the Bank.

The 12 Directors of the ADB Board of Directors are elected by the Board of Governors. Eight of the 12 are elected from within Asia and the Pacific and four others are elected from outside the region. The Board of Directors performs its duties full time at the ADB headquarters in Manila, Philippines. The President of ADB chairs the Board of Directors.

(Source: https://www.adb.org/about/main)

**International Monetary Fund (IMF)**

It was established on 27 December, 1945 as an independent international organisation and began its operations on 1 March, 1947 with headquarters in Washington D.C. Its relationship with the UN is defined in an agreement of mutual co-operation which came into force on 15 November 1947. The capital resources of the Fund come from Special Drawing Rights (SDRs) and currencies that the members pay under quotas calculated for them when they join the Fund.

The Fund is authorised under its 'Articles of Agreement' to supplements its resources by borrowing. In January 1962, a four year agreement was concluded with 10 industrial members (Belgium, Canada, France, Federal Republic of Germany, Italy, Japan, Netherlands, Sweden, UK and USA) which undertook to lend the Fund up to $6,000 million in their own currencies. Switzerland subsequently joined the group. These arrangements, known as the General Agreement to Borrow (GAB) have been extended several times and the most recent five-year renewal ended in December 1993.

**Purposes:**
(1) to promote international monetary co-operation, the expansion of international trade and exchange rate stability;
(2) to assist in the removal of exchange restrictions and the establishment of a multi-lateral system of payments, and
(3) to alleviate any serious disequilibrium in members, and international balance of payments by making the financial resources of the fund available to them.

**Activities:**
Each members of the Fund undertakes a broad obligation to collaborate with the Fund and other members to ensure the existence of orderly exchange arrangements and promote a system of stable exchange rates. In addition, members are subject to certain obligations relating to domestic and external policies that can affect the balance of payment and the exchange rates. The Fund makes its resources available, under proper safeguards to its members to meet short-term or medium-term payment difficulties.
World Bank

The International Bank for Reconstruction and Development (IBRD) is an international organization established in 1945 and started its operations in the year 1946. It is the sister institution of another international financial agency, International Monetary Fund (IMF). The IBRD/world bank’s main aim is to reduce the poverty by promoting sustainable economic development in member countries.

It pursues this goal primarily by providing loans, guarantees and related technical assistance for projects and programmes in its developing member countries. IRBDs objective is not to maximize profit, but to earn adequate net income to ensure its financial strength and to sustain its financial activities. The financial strength of IBRD is based on the support it receives from its shareholders and financial policies and practices adopted by it. The main activity of World Bank is to provide loans to the member- countries.

Functions of World Bank

Development Activities:

IBRD offers loans to its borrowing member countries to help meet their development need. It also provides technical assistance and other services to support poverty reduction in these countries.

Providing Loans:

Each loan must be approved by IBRD’s executive directors. Apart from providing loans it also waives the loans under special circumstances i.e. occurrence of natural calamities. After providing loans, the appraisal of the projects is carried out by IBRD’s operational staff comprising engineers, financial analysts, economists and other specialists.

Loan disbursements are subject to the fulfillment of conditions set out in the loan agreement. During the project implementation, IRDB staff with experience in the sector or the country involved periodically visit project sites to review progress, monitor compliance with IBRD policies and assist in resolving any problems that may arise.

After completion, projects are evaluated by an independent unit and the findings reported directly to the Executive Directors to determine the extent to which the projects major objectives were met.

Consultancy:

In addition to the financial help, IBRD also provides technical assistance to its member countries irrespective of loans taken from it or not. There is a growing demand from borrowers for strategic advice, knowledge transfer and capacity building.

Research and Training:

For assisting its member countries, the World Bank offers courses and training related to economic policy development and administration for governments and organizations that work closely with IBRD.
Trust–Fund Administration:

IBRD itself or jointly with International Development Agency (IDA), on behalf of donors restricts the use of funds for specific purposes only. The funds so obtained are not included in the list of assets owned by IBRD.

Investment Management:

IBRD provides investment management services for external institutions by charging a fee. The funds thus obtained are not included in the assets of IBRD.

Deposit Insurance and Credit Guarantee Corporation of India (DICGC)

The failure of two scheduled banks, viz., Palai Central Bank Ltd. (Kerala) and Laxmi Bank Ltd. (Maharashtra) in 1960 gave a rude shock to the stability of the banking system in the country. This forced RBI to frame legislative measures so as to arrest bank mortality and create confidence in depositors. In 1961, RBI formulated proposals for the establishment of Deposit Insurance Corporation (DIC) on the model of the Federal Deposit Insurance Corporation in USA. The Deposit Insurance Corporation bill was passed and the Corporation came into existence on January 1, 1962.

In order to provide safety to the banking system from risks involved in lending to priority sectors, the Government of India established Credit Guarantee Corporation of India limited (CGCI) in 1971. The CGCI is associated with Credit Guarantee Organization (CGO), set up in 1960 to provide guarantee in respect to lending to small-scale industries. Subsequently, in 1978 CGCI and CGO were merged with Deposit Insurance Corporation of India (DIC) and new institution by the name of Deposit Insurance and Credit Guarantee Corporation of India (DICGC) was established.

Role of the Corporation:

- The Corporation gives protection to the depositors particularly the small depositors, from the risk of loss of their savings in the event of a bank’s failure; such protection increases the confidence of the depositors in the individual banks and reduces the occurrence of panicky withdrawals of deposits;
- The corporation contributes to the stability and orderly growth of the individual banks as well as collectively of the banking system; and
- It plays an active role in developing the banking habits of the people and ensures a larger mobilization of their savings.

DICGC is a wholly owned subsidiary of RBI with a paid up share capital of Rs. 50 crore, contributed entirely by RBI. The corporation maintains three funds viz., general fund, deposit insurance fund and credit guarantee fund. The share capital of the Corporation is held in the general fund and the administrative expenses are met from the interest from this fund. The deposit insurance fund is built up by the premium received from the insured banks and augmented by the interest earned on the fund investment. The deposit insurance fund is utilized exclusively for meeting the deposit insurance claims.

The credit guarantee fund is used for meeting the credit guarantee claims, among the guarantee schemes introduced by the Corporation. The small loan guarantee scheme, 1971, covers among others, the credit facilities granted by commercial banks and RRBs to farmers. The scheme covers advance granted to borrowers, undertaking various types of agricultural
and allied activities such as raising of crops, poultry farming, dairy farming and animal husbandry. The guarantee cover has been varying from time to time. Currently the guarantee is provide at 60 per cent of the amount in default.

In 1982, the small loan (Co-operative Credit Societies) Guarantee Scheme was formulated with a view to providing guarantee cover for advance granted by co-operative credit institutions at the primary level for agriculture and allied activities.

**Cost of Credit**

The cost of credit is the additional amount, over and above the amount borrowed, that the borrower has to pay. It includes interest, arrangement fees and any other charges. Some costs are mandatory, required by the lender as an integral part of the credit agreement. Other costs, such as those for credit insurance, may be optional; the borrower chooses whether or not they are included as part of the agreement.
Microfinance

If one takes into account the definition, then microfinance means the provision of broad range of financial services such as deposits, loans, payment services, money transfers, and insurance to poor and low-income households, and their micro-enterprises.

There are three types of sources:

1. **Formal institutions, such as rural banks and cooperatives;**
2. **Semiformal institutions, such as non-government organizations; and**
3. **Informal sources such as money lenders and shopkeepers**

The target groups for microfinance are generally marginalised sections of the society. They can be: poor women (widows, Scheduled castes/ scheduled tribes), women having low skill, women who want to start up (in group) with their own small scale enterprises such as soap industry, agarbatti etc. Microfinance initiatives can also target men.

The importance of trust *(which is an 'institutional' problem)* is of paramount importance in initiatives taken for microfinance. Often peer pressure acts as pressurising element to block the members from theft. However, agencies taking initiatives in microfinance can be more successful if they have taken community outreach programmes. Group discussions/ interface with the community becomes vital to 'know' the type/ kind of 'community', and their needs. Agencies can start with membership with token amount of donation. Work/ occupational pattern and income levels of the members should be known. Strategizing the goals for microfinance initiatives is vital.

**Bank (commercial/ cooperatives)-----** > **NGOs--** > **Target population (or SHGs)**

**NGOs (with support from donor agencies)---** > **Target Population (or SHGs)**

**Banks (commercial/ cooperatives)-----** > **SHGs**

For maximum impact, microfinance initiatives by NGOs can generally be taken in backward areas *(rural areas with low per capita income, areas with poor infrastructure, areas with high level of malnutrition among women and children, areas from where emigration takes place due to socio-economic distress, areas where people highly depend on primary sector for their livelihoods, urban slums)*. Such NGOs can work in co-operation with the community based organizations, political organizations, panchayats, govt. officials *(such as District Rural Development Agency)* etc. However, chances for effective intervention are high for those NGOs who have been attached to the ground/ grassroots since a long duration. This does not mean that new entrants cannot succeed. For effective intervention, knowing the economic demands and occupation of the community members is of high importance. This can be done by going though group discussions, Participatory Rural Appraisals (PRAs) with the members. Area specific information on human development indicators from census, state
Human Development Reports (HDRs), past studies can help in this regard. Instead of facilitating finance linkages only, there is need for building up strategies for social cohesion and empowerment. To prevent defaults, focusing not only on peer pressure but also generating mutual trust and respect is important, in the long run.

Lessons can be learnt from microfinance initiatives taken in other countries like Bangladesh. Monitoring and evaluation of initiatives can be done to check leakages of funds, corruption, and blurring of objectives.

One can go through case studies to know what kind of organization would be effective in microfinance. Some of the indicators can be looked at to cross check the success of microfinance initiative:

1. Reduction in poverty level of the household/members – movement from a Below Poverty Line (BPL) to Above Poverty Line (APL) household.
2. Rise in real income
3. Gender equality: literacy rate of female members, increase in child sex ratio of the intervened areas.
4. Rise in profits of the enterprises etc.
5. Sustainability of the MFIs in the long run—profits/capital accumulated; reach of the MFIs etc.

According to researchers, there exists lack of stable medium and long-term credit resources, which inhibit enterprises from investing in the productive and technological conversions for making them competitive. Microfinance can play a crucial role here. In many of the countries from South Asia formal financial system is plagued by inefficiency, ineffectiveness, and market failures. But there also co-exists the problem of moral hazards, which are mostly faced by the banks while lending. It is considered that microfinance institutions should target the poor since they have little or no access to credit and savings. However, the critiques say that microfinance does not have the ability to reach ‘the poorest of the poor’. There exists lack of consensus as to whether reaching the poorest should be ultimate goal of microfinance institutions since reaching out to the poor is a costly affair. The poorest of the poor need small individual loans with flexible repayment schedules, services, which are considered costly by the microfinance institutions. Instead of microfinance, there is need for delivery of basic social services such as food, shelter, and sanitation to the poor, according to the critiques. Microfinance institutions can serve the poor in a better way only when their basic needs are taken care of by either a government service, or international relief and development organizations. Microfinance can serve the women who lack access to credit,
skill and information to start up their own businesses. Capacity-building of women is needed before they are provided credit so that they become empowered and fight back gender injustice. According to feminists, the Structural Adjustment Programs (SAPs) initiated by the World Bank and the International Monetary Fund (IMF) for rescuing the heavily indebted countries have adversely affected the lives of women from the third world. SAPs consist of a set of policies and programs that include:

- **Severe cuts in government spending to balance federal budgets and reduce debt (both internal and external);**
- **Restrictive monetary policies created to control inflation (currency devaluations etc.);**
- **Privatization (de-industrialization) of government enterprises to increase the productivity and efficiency of private sector businesses;**
- **A heavy emphasis on the export sector (agriculture and manufacturing) to foster international balances and increase foreign exchange reserves.**

It has been argued by the feminists that poverty alleviation models have overemphasized the importance of private funding and support. A shift has taken place from development as the responsibility of nation-states to development as the responsibility of the global community, including international markets, financial institutions, and private corporations and organizations. Microfinance industry is nowadays governed by the corporate barons and not by the government that relies upon the model of decentralization, self-employment, and individual entrepreneurship. Such a model relies on the strengths of individual women to help themselves, rather than focusing on structural changes in the economy.

**Some pertinent questions:**

(i) Is HIV/ AIDS given more prominence over other diseases like malaria, typhoid, TB, cancer, hepatitis? Why?

(ii) How far government and non-govt. programmes and organisations have helped in curbing the spread of HIV/ AIDS? Has there been enough evaluation and monitoring of the programmes done in this area to check the effectiveness and reach?

(iii) Should family planning techniques like the use of condoms be delinked with the awareness generation campaign that using condoms reduces the risk of HIV/ AIDS, in order to provide a more rational model of capacity building? If there is such a link between the above, why is it so? Does this mean killing two birds with one bullet?

(iv) Should there be more focus on capacity building or pricing of ARV drugs?
There are three specific paradigms that link microfinance to women’s empowerment:

I. Financial Self-Sustainability Paradigm: This paradigm is backed by international donor agencies such as USAID and CGAP. Its focus is to encourage and support financially self-sufficient microfinance programs with the goal of reaching the greatest number of end borrowers. This paradigm targets women since it assumes that women tend to have the highest repayment rates. It focuses on economic empowerment, the encouragement of self-employment and self-reliability, and individual initiative.

II. Poverty Alleviation Paradigm: This paradigm is inspired by interdisciplinary community development programs that are targeted at reducing poverty. The major policy focus is to use microfinance as one part of an integrated approach to alleviate poverty and improve the livelihoods of the poorest households. This paradigm targets women based on the belief that there are higher levels of poverty within the female population and women take part in unpaid domestic activities. This paradigm focuses on empowerment in terms of increased well-being, self-sufficiency, and community development.

III. Feminist Empowerment Paradigm: This paradigm is rooted in the international women’s movement and is commonly found underlying the policies of many gender-oriented NGOs, which are run by feminists from elite backgrounds. It is the foundation for some of the earliest microfinance programs such as SEWA and WWF in India. This paradigm focuses on microfinance as a stepping stone for women to enter into social, economic, and political empowerment. Such NGOs target women in the name of gender equality and human rights. This paradigm focuses on empowerment in terms of a transformation of relationships of power throughout a society.