AGRICULTURAL ECONOMICS

III BA - ECONOMICS

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UNIT-1

Introduction to Agricultural Economics

Agricultural economics is an applied field of economics concerned with the application of economic theory in optimizing the production and distribution of food and fiber. Agricultural economics began as a branch of economics that specifically dealt with land usage, it focused on maximizing the crop yield while maintaining a good soil ecosystem. Throughout the 20th century the discipline expanded and the current scope of the discipline is much broader. Agricultural economics today includes a variety of applied areas, having considerable overlap with conventional economics. Agricultural economists have made substantial contributions to research in economics, econometrics, development economics, and environmental economics. Agricultural economics influences food policy, agricultural policy, and environmental policy.

Agricultural economics, study of the allocation, distribution, and utilization of the resources used, along with the commodities produced, by farming. Agricultural economics plays a role in the economics of development, for a continuous level of farm surplus is one of the wellsprings of technological and commercial growth. In general, one can say that when a large fraction of a country's population depends on agriculture for its livelihood, average incomes are low. That does not mean that a country is poor because most of its population is engaged in agriculture; it is closer to the truth to say that because a country is poor, most of its people must rely upon agriculture for a living.

Role of Agriculture in Indian Economy (7 Roles)

1. Contribution to National Income:

From the very beginning, agriculture is contributing a major portion to our national income. In 1950-51, agriculture and allied activities contributed about 59 per cent of the total national income. Although the share of agriculture has been declining gradually with the growth of other sectors but the share still remained very high as compared to that of the developed

countries of the world. For example, the share of agriculture has declined to 54 per cent in 1960-61, 48 per cent in 1970-71, 40 per cent in 1980-81 and then to 18.0 per cent in 2008-09, whereas in U.K. and U.S.A. agriculture contributes only 3 per cent to the national income of these countries.

2. Source of Livelihood:

In India over two-thirds of our working population are engaged directly on agriculture and also similarly depend for their livelihood. According to an estimate, about 66 per cent of our working population is engaged in agriculture at present in comparison to that of 2 to 3 per cent in U.K. and U.S.A., 6 per cent in France and 7 per cent in Australia. Thus the employment pattern of our country is very much common to other under-developed countries of the world.

3. Source of Food Supply:

Agriculture is the only major source of food supply as it is providing regular supply of food to such a huge size of population of our country. It has been estimated that about 60 per cent of household consumption is met by agricultural products.

4. Role of Agriculture for Industrial Development:

Agriculture in India has been the major source of supply of raw materials to various important industries of our country. Cotton and jute textiles, sugar, vanaspati, edible oil plantation industries (viz. tea, coffee, rubber) and agro-based cottage industries are also regularly collecting their raw materials directly from agriculture.

About 50 per cent of income generated in the manufacturing sector comes from all these agro-based industries in India. Moreover, agriculture can provide a market for industrial products as increase in the level of agricultural income may lead to expansion of market for industrial products.

5. Commercial Importance:

Indian Agriculture is playing a very important role both in the internal and external trade of the country. Agricultural products like tea, coffee, sugar, tobacco, spices, cashew-nuts etc. are the main items of our exports and constitute about 50 per cent of our total exports. Besides manufactured jute, cotton textiles and sugar also contribute another 20 per cent of the total exports of the country. Thus nearly 70 per cent of India’s exports are originated from agricultural sector. Further, agriculture is helping the country in earning precious foreign exchange to meet the required import bill of the country.

6. Source of Government Revenue:

Agriculture is one of the major sources of revenue to both the Central and State Governments of the country. The Government is getting a substantial income from rising land revenue. Some other sectors like railway, roadways are also deriving a good part of their income from the movement of agricultural goods.

7. Role of Agriculture in Economic Planning:

The prospect of planning in India also depends much on agricultural sector. A good crop always provides impetus towards a planned economic development of the country by creating a better business climate for the transport system, manufacturing industries, internal trade etc.

A good crop also brings a good amount of finance to the Government for meeting its planned expenditure. Similarly, a bad crop lead to a total depression in business of the country, which ultimately lead to a failure of economic planning. Thus the agricultural sector is playing a very important role in a country like India and the prosperity of the Indian economy still largely depends on agricultural sector. Thus from the foregoing analysis it is observed that agricultural development is the basic precondition of sectoral diversification and development of the economy.

AGRICULTURAL DEVELOPMENT UNDER FIVE YEAR PLANS

The agriculture in India during five-year plans has registered a phenomenal growth. At the time of Independence, partition of Indian sub-continent on communal lines, resulted among others in acute shortage of food and raw material for her industries. Therefore, during first five-year plan (1951-56) the highest priority was accorded to increase of agricultural production. Nearly one third or 31 per cent of total plan funds were allocated to agriculture sector. River valley projects were taken up. Irrigational facilities and fertilizer plants were established. Consequently, production of food-grains increased by 36 per cent in a short span of five years.

The second five-year plan (1956-61) was focused on industrial growth and only 20 per cent of plan allocation was devoted to agriculture. Still food-grains production exceeded the target due to extension of irrigation facilities and use of chemical fertilizers.

During the third Five Years Plan (1961-66), the priorities were on self-sufficiency in food grains, meeting the raw material needs of industries and increase in ex-ports. During this period, Green Revolution programme was started on a small scale. But this plan failed to meet the target due to Chinese aggression (1962), Indo-Pak war (1965) and severe and prolonged

drought during 1965-66. There were a great crisis of food that forced the Prime Minister L. B. Shatri to appeal to people to observe fast once a week.

During next three annual plans (1966-69) agriculture recorded 6-9 per cent an-nual growth under the impact of Green Revolution. The production of food grain touched 94 million tonnes.

The Fourth Plan (1969-74) aimed at 5 per cent annual growth in food grains. High Yielding Variety (HYV) of seeds, fertilizer use, new agriculture techniques and irrigation facilities provided to expand area of Green Revolution. The pro-duction of wheat increased sharply but growth in rice, oilseeds and coarse grains were nominal resulting in only 3 per cent annual growth against the target of 5 per cent.

During Fifth Plan Period (1974-79) emphasis were given to self-sufficiency in food production and poverty eradication. Stress was laid on the extension of irri-gation, expansion in cultivated area under HYV seeds and grant of loans and subsidies to farmers. Dry farming was propagated. This plan achieved its target successfully with 4.6 per cent growth. Almost all food grains except pulses wit-nessed increase in production.

The Sixth Plan (1980-85) imphasized on land reforms, use of HYV seeds, chemi-cal fertilisers and groundwater resources and improving post harvest technology as well as marketing and storage facilities. The annual growth rate was 6 per cent, highest ever during plan periods. The food-grain production reached 152 million tonnes.

The highest growth in food-grain, pulses and coarse cereals was recorded during Seventh Plan (1985-90) showing over all annual growth rate of 4 per cent. The areas of Green Revolution were expanded during the period.

The Eighth Plan (1992-97) witnessed a tendency of stagnation in foodgrain pro-duction while oilseed registered a rapid growth.

The Ninth Plan (1997-02) witnessed a mixed success. There were fluctuations in the foodgrain production. During this plan period National Agricultural Policy, 2000, was framed and several measures were announced including, watershed management, development of horticulture, agricultural credits and insurance scheme for crops.

In the Tenth Plan (2002-2007) focus is placed on (i) sustainable management of water and land resources,

(ii) development of rural infrastructure to support agri-culture,

(iii) dissemination of agriculture technology,

(iv) credit flow to agriculture sector, and

(v) agricultural marketing reforms. The New Agricultural Policy The Government of India has announced (28 th July 2000) a new National Agricultural policy, 2000, in the light of changes arising out of economic liberalization and globalization.

The main aims of the polict are

(i) achieving more than 4 per cent per annum growth rate in agriculture sector,

(ii) growth based on efficient use of resources and conservation of soil, water and biodiversity,

(iii) growth with equity-in region and among the farmers,

(iv) growth that caters to domestic mar-ket and maximizes benefits from exports of agricultural products and

(v) techno-logically, environmentally and economically sustainable growth. The main features of this policy are:-

(1) privatisation of agriculture and price protection of produce,

(2) land leasing and contract farming by private companies,

(3) raising the ceiling of land holdings,

(4) involving national livestock breeding strategy to meet requirement of milk, meat, egg and livestock products.

(5) protection of plant varieties and improvement of horticultural crops, live-stock species and agriculture.

(6) liberalization of domestic market by dismantling of restriction on movement of commodities in the country.

(7) improving the domestic and international marketing system.

(8) facilitating the flow of credit to farmers against pledging of their products and providing them most other facilities available to manufacturing sector.

(9) keeping agriculture outside the regulatory and tax collection system.

(10) encouraging consolidation of land holdings and speeding up tenancy re-forms to recognize the right of the tenants and sharecroppers It may be noted that the policy are intentions of Government, thus, its success depends on the commitment of the Government to convert it into reality.

Productivity in Agriculture

Agricultural productivity is measured as the ratio of agricultural outputs to agricultural inputs. While individual products are usually measured by weight, their varying densities make measuring overall agricultural output difficult. Therefore, output is usually measured as the market value of final output, which excludes intermediate products such as corn feed used in the meat industry. This output value may be compared to many different types of inputs such as labour and land (crop yield). These are called partial measures of productivity.

Agricultural productivity may also be measured by what is termed total factor productivity (TFP). This method of calculating agricultural productivity compares an index of agricultural inputs to an index of outputs. This measure of agricultural productivity was established to remedy the shortcomings of the partial measures of productivity; notably that it is often hard to identify the factors cause them to change. Changes in TFP are usually attributed to technological improvements.

Agricultural productivity is an important component of food security. Increasing agricultural productivity, especially amongst small holder farms, is an important way to decreasing the amount of land needed for farming and slow environmental degradation through processes like deforestation.[5] Since agriculture has such large impacts on climate change, Project Drawdown described "Sustainable Intensification for Smallholders" an important method for Climate change mitigation.

Causes of the Low Productivity of Agriculture in India

The main causes for low productivity of agriculture are broadly of three types;

1. Human Factors:

Human favors are those which are related to training and efficiency of the farmers.

(i) Social atmosphere:

Social climate includes customs and traditions. Indian farmer is illiterate and has no knowledge for latest techniques of production. He believes in God and fatalist in thought. He wastes money on customs and traditions. So social climate is not suitable for agriculture.

(ii) Pressure of population on land:

Heavy pressure of population is the main cause of low productivity of Indian agriculture. In 1901, 16.30 crore people were dependent on agriculture. The number has gone up to 58.80 crore. So per capita cultivable land had reduced from 0.43 hectare to 0.23 hectare. Heavy pressure has led to subdivision and fragmentation of land holdings.

2. Technical Factors:

Technical Factors include techniques and methods of production:

(i) Traditional methods of Cultivation:

Traditional methods of cultivation like manual ploughing, two crop pattern and old system of irrigation are mainly responsible for low productivity of agriculture.

(ii) Old implements:

Traditional equipment's like wooden ploughs, sickles and spades are commonly used. Tractors & Combines are not so common in use. Due to the use of these old implements agriculture is backward.

(iii) Insufficient irrigation facilities:

Indian agriculture is mainly dependent on rain. Even after 60 years of Independence only 40% of the agricultural land has permanent irrigation facility. Due to improper irrigation facility, farmer can produce one crop only in a year.

(iv) Problems of soil:

Indian soil has many problems like soil erosion, water logging, nitrogen deficiency and swamps. These are the reasons for low productivity of agriculture.

(v) Problems of pests and diseases of crops:

Plant diseases like rust and smut and rats, insects and pests destroy large portion of crops.

(vi) Feeble cattle:

Due to limited mechanisation of Indian agriculture, cattle has significant place in agriculture. Cattle are generally weak. Farmer has to spent a lot on these Cattle farming is more time consuming and expensive than tractor. So these also increase the cost of agriculture.

(vii) Lack of credit facility:

Credit facilities are inadequate in rural areas. Farmers can not be able to raise credit from rural banks easily. They have to depend on 'Mahajans' and 'Shahukars'. These money

lenders charge heavy rate of interest. Farmers have to sell their produce at low price to these money lenders. So farmers have low Income and thus low productivity.

(viii) Lack of High Yielding Variety (HYV) seeds:

HYV seeds are not commonly used. Farmers do not understand their significance. They cannot afford to buy them and also these seeds are not easily available.

(ix) Improper marketing:

Improper marketing is a significant factor for low productivity of agriculture. Farmers fail to get suitable price for their produce. Inadequate means of transport forces the farmers to sell their produce to local money lenders at low prices. Due to lack of warehousing facilities, farmers can not able to store their produce when prices are low. So these attribute a lot for low productivity of agriculture.

3. Institutional Factors:

Institutional factors include land holdings and land system.

(i) Small size of farms:

Land holdings in India are of very small size. Average size of holding is 2.3 hectare and 70% of the holdings are even less than 2 hectares. These holdings are fragmented. Due to these small holdings, mechanised cultivation is difficult. Implements and irrigation facilities are not properly utilized. It affects Indian agriculture .

(ii) Defective land tenure system:

Zamindari system has been an important factor responsible for the low productivity of Indian agriculture. In this system cultivator is not owner of land. Zamindar is the owner of land and he can evict the tenant any time. So the cultivator does not take interest in the development of land and Zaminder does not take interest in the development of cultivation. Though Zamindari system was abolished after independence yet the position of cultivator has not improved.

UNIT-II

New Agriculture Strategy

The following points highlight the top ten features of new agricultural strategy of India. They are: 1. Consolidation of land holdings 2. Improved Variety of Seeds 3. Greater Intensity of Cropping 4. Extension of Irrigation 5. Modern Farm Machinery 6. Role of Public Institutions 7. Package of Inputs 8. Guaranteed Minimum Prices 9. Agricultural Research and Education 10. Plant Protection Measures.

1. Consolidation of Land Holdings:

Land ownership rights to the tillers and basic forward outlook Punjab farmers was the basic reason for providing ground to the green revolution in the northern India.

2. Improved Variety of Seeds:

Agricultural revolution is primarily due to the miracle of improved varieties of seeds which have increased yields per acre.

Among these, we may mention the new dwarf varieties of wheat PV-18, Kalyan Sona 27, HD 2329, Hybrid Maize, Rice IR-8, PR 106, Padma and Jaya etc.

3. Greater Intensity of Cropping:

The new agricultural strategy is not only concerned with higher yield but also with greater intensity of cropping. Therefore, new crop rotations have been made possible by developing short duration varieties of paddy, jowar, bajra and maize which are suited to different agro-climatic conditions. In the same way, other crops like barley, oilseed, potato and vegetables have also been considered for rotation.

4. Extension of Irrigation:

In the areas, where new agricultural strategy is being applied, irrigation facilities are speedily being expanded to assure the adequate water supply. During the last 10-12 years, there has occurred a remarkable growth of tube-wells, pump-sets etc.

5. Modern Farm Machinery:

Modern farm machinery like tractors, harvesters, pumping sets, tube-well, etc. are being increasingly used and are replacing the bullocks. Being, time saving, use of modern machinery in agriculture is conducive to multiple cropping. Because of accuracy and timelines of use of inputs by machines, the costs have been reduced.

6. Role of Public Institutions:

Several new public institutions like National Seeds Corporation, Agro Industries Corporations, National Co-operative Development Corporation etc. have been set up to promote services to the cultivators at door steps. Moreover, they have been provided with sufficient funds to lend liberal loans to peasants to adopt latest farm technology.

7. Package of Inputs:

The main thrust of the new agricultural strategy is the application of the package of improved practices. In other words, it aimed at making the cultivators to adopt simultaneously all the elements needed for augmenting production. The main constituents of the package practices are improved seed, fertilizers, plant protection measures and water use etc.

8. Guaranteed Minimum Prices:

The guaranteed minimum prices have been given due recognition as an incentive to agricultural production. Support price policy for food-grains was adopted in 1964 throughout the country. In order to advice the govt. for suitable price policies for agriculture, Agricultural Price Commission was set up in the subsequent years. Similarly, Food Corporation of India was also set up to purchase food-grains.

9. Agricultural Research and Education:

A number of measures have been adopted in this direction of facilitate organization and development of agricultural research. The Indian Council of Agricultural Research was reorganized in 1965. Agricultural Universities have been set up in most of the states which were conceived as combining the function of education, research and extension.

States Agro Industries Corporation have been set up to motivate the cultivators for the application of improved inputs and infrastructure and further to Co-ordinate the demand with production, quality control and distribution of supporting services.

10. Plant Protection Measures:

As pests and diseases have been causing severe damage to crops, plant protection has been considered another major component of new agricultural strategy. This programme includes seeds treatment, intensive aerial and ground spraying against insects, weed control and rodent control.

Green Revolution

The Green Revolution started in 1965 with the first introduction of High Yielding Variety (HYV) seeds in Indian agriculture. This was coupled with better and efficient irrigation and the correct use of fertilizers to boost the crop. The end result of the Green Revolution was to make India self-sufficient when it came to food grains.

After 1947 India had to rebuild its economy. Over three-quarters of the population depended on agriculture in some way. But agriculture in India was faced with several problems. Firstly, the productivity of grains was very low. And India was still monsoon dependent because of lack of irrigation and other infrastructure.

There was also an absence of modern technology. And India had previously faced severe famines during the British Raj, who had only promoted cash crops instead of food crops. The idea was to never depend on any other country for food sufficiency.

So in 1965, the government with the help of Indian geneticists M.S. Swaminathan, known as the father of Green Revolution, launched the Green Revolution. The movement lasted from 1967 to 1978 and was a great success.

Features of the Green Revolution

- The *introduction of the HYV seeds* for the first time in Indian agriculture. These seeds had more success with the wheat crop and were highly effective in regions that had proper irrigation. So the first stage of the Green Revolution was focused on states with better infra – like Punjab and Tamil Nadu.
- During the second phase, the HYV seeds were given to several other states. And other crops than wheat were also included into the plan
- One basic requirement for the HYV seeds is *proper irrigation*. Crops from HYV seeds need alternating amounts of water supply during its growth. So the farms cannot depend on monsoons. The Green Revolution vastly improved the inland irrigation systems around farms in India.

- The *emphasis of the plan was mostly on* food grains such as wheat and rice. Cash crops and commercial crops like cotton, jute, oilseeds etc were not a part of the plan
- Increased availability and use of *fertilizers* to enhance the productivity of the farms
- Use of *pesticides and weedicides* to reduce any loss or damage to the crops
- And finally the introduction of *technology and machinery* like tractors, harvesters, drills etc. This helped immensely to promote commercial farming in the country.

Impact of the Green Revolution on Indian Economy

- ***Increase in Agricultural Production***: Foodgrains in India saw a great rise in output. It was a remarkable increase. The biggest beneficiary of the plan was the Wheat Grain. The production of wheat increased to 55 million tonnes in 1990 from just 11 million tonnes in 1960.
- ***Increase in per Acre Yield:*** Not only did the Green Revolution increase the total agricultural output, it also increased the per hectare yield. In case of wheat, the per hectare yield increased from 850 kg/hectare to an incredible 2281 kg/hectare by 1990.
- ***Less Dependence on Imports:*** After the green revolution, India was finally on its way to self-sufficiency. There was now enough production for the population and to build a stock in case of emergencies. We did not need to import grains or depend on other countries for our food supply. In fact, India was able to start exporting its agricultural produce.
- ***Employment:*** It was feared that commercial farming would leave a lot of the labour force jobless. But on the other hand, we saw a rise in rural employment. This is because the supporting industries created employment opportunities. Irrigation, transportation, food processing, marketing all created new jobs for the workforce.
- ***A Benefit to the Farmers:*** The Green Revolution majorly benefited the farmers. Their income saw a significant raise. Not only were they surviving, they were prospering. It enabled them to shift to commercial farming from only sustenance farming.

Meaning of Mechanization of Agriculture

In G. D. Aggarwal's words, "Farm mechanization is a term used in a very broad' sense. It not only includes the use of machines, whether mobile or immobile, small or large, run by power and used for tillage operations, harvesting and thrashing but also includes power lifts for irrigation, trucks for haulage of farm produce, processing machines, dairy appliances for cream separating, butter making, oil pressing, cotton ginning, rice hulling, and even various electrical home appliances like radios, irons, washing machines, vacuum cleaners and hot plates." According to Dr. Bhattacharjee, **"Mechanization of agriculture and farming process connotes application of machine power to work on land, usually performed by bullocks, horses and other draught animals or by human labour."**

Benefits of Mechanization of Agriculture

- Increases production
- Increases efficiency and per man productivity
- Mechanization increases the yield of land per unit of area
- Mechanization results in lower cost of work.
- It contracts the demand for work animals for ploughing water lifting, harvesting, transport etc
- It brings in other improvements in agricultural technique:
- It modifies social structure in rural areas:
- It leads to commercial agriculture:
- It solves the problem of labour shortage:
- Releases manpower for non-agricultural purposes:

Advantages and Disadvantages of the Green Revolution

The Third Agricultural Revolution, which is commonly referred to as the "Green Revolution," refers to a set of initiatives in the field of research technologies that began in the 1950s and finished in the late 1960s. The result of this information transfer to the agricultural industries resulted in a significant increase in production around the world, with an emphasis on heightened productivity in developing countries.

The Green Revolution resulted in the creation of high-yielding crops, with notable improvements in rice and wheat, along with the use of controlled water supplies, chemical

fertilizers, and agriculture-based chemicals to enhance the growing process. There were also new methods of cultivation introduced during this time, including mechanization that superseded the traditional technologies that were used in the past.

List of the Advantages of the Green Revolution

1. It may be helping to reduce the number of greenhouse gas emissions.
2. It allows us to produce more food than traditional growing methods.
3. It provides us with consistent yields during uncooperative seasons.
4. It causes a reduction in food prices for the global economy.
5. It has reduced the issues of deforestation on our planet.
6. It hastened the natural evolutionary process for plant resistance.
7. It reduces the need for fallowing regularly.
8. It allows us to grow crops almost anywhere on our planet.
9. It creates higher income levels and more jobs in the developing world.
10. It allows some croplands to produce multiple harvests in a single year.
11. It reduces the levels of poverty in the countries where it is practiced.
12. It supports other sectors of the economy.

List of the Disadvantages of the Green Revolution

1. It created a lack of biodiversity in the global cropland structures.
2. It can be wiped out with one devastating disease.
3. It reduces the quality of the soil used for growing crops.
4. It requires the use of non-sustainable agricultural methods.
5. It creates health impacts that we must consider with its practices.
6. It has advanced beyond our current distribution networks.
7. It encourages more resistance to pests, chemicals, and other hazards.
8. It can encourage seed sterility.
9. It may not produce enough results to create a profitable outcome.
10. It promotes monocropping.
11. It requires expensive investment which promotes inequality between farmers.
12. It depends on fertilizer subsidies..
13. It has failed on our earth’s second-largest continent: Africa.

Land reform

Land reform (also agrarian reform, though that can have a broader meaning) involves the changing of laws, regulations or customs regarding land ownership.[1] Land reform may consist of a government-initiated or government-backed property redistribution, generally of agricultural land. Land reform can, therefore, refer to transfer of ownership from the more powerful to the less powerful, such as from a relatively small number of wealthy (or noble) owners with extensive land holdings (e.g., plantations, large ranches, or agribusiness plots) to individual ownership by those who work the land.[2] Such transfers of ownership may be with or without compensation; compensation may vary from token amounts to the full value of the land.

Land reform may also entail the transfer of land from individual ownership—even peasant ownership in smallholdings—to government-owned collective farms; it has also, in other times and places, referred to the exact opposite: division of government-owned collective farms into smallholdings. The common characteristic of all land reforms, however, is modification or replacement of existing institutional arrangements governing possession and use of land. Thus, while land reform may be radical in nature, such as through large-scale transfers of land from one group to another, it can also be less dramatic, such as regulatory reforms aimed at improving land administration.

Objectives

- Restructuring agrarian relations to achieve an egalitarian social structure
- Eliminating exploitation in land relations
- Realizing the age-old goal of land to the tiller
- Increasing agricultural production, infusing equality in society.

Measures of Land reforms

- It is an instrument of both direct and indirect **poverty reduction**.
- It results in **greater agricultural asset ownership** and improved income for small farmers.
- It **increases employment opportunities** in the agricultural sector.
- It ensures security and increased **access to credit** for small rural producers.

- It **enhances agricultural incomes** leading to increased demand for tradable commodities and manufactured goods, stemming from both expanded agricultural potential and a general increase in consumer demand.
- It sponsors greater household and national **food security**.
- It protects and **strengthens the rights of indigenous small farmer groups**.
- It strengthens the rights and **well-being of women agricultural labor**, leading to greater **gender equity**.
- It provides **direct support to vulnerable groups**, including the old, the youth and those affected by physical and mental disabilities.
- It encourages the **conservation and management of ecological balance** thus preventing encroachment on common property resources such as forests and pastures.
- It **reduces migration of rural unemployed segment** of the population to urban areas.

Suggestions for improvement of Land Reforms in India

The National Commission on Agriculture is of the opinion that the existing scheme of land reforms shall have to be amended and re-oriented. In the light of these observations, following suggestions are made for the improvement of the system.

1. Breaking up Landlord Tenant Nexus:

It has rightly been observed that tenancy reforms should be directed to the stage of finally breaking up the landlord tenant nexus. Agriculture should be treated as family occupation and not a source of subsidiary unearned income. In a normal peasant proprietor system there is no place for absentee landlordism which should be discouraged and ultimately curbed.

2. Restricted Tenancy should be allowed:

It has been accepted in principle that there should be no leasing in of land. But, the National Commission on Agriculture has stated “under the present circumstances land man ratio, existing tendency as such cannot be totally banned in India.” For example, it has been noticed that where such ban has been imposed it has led to the emergence of concealed tenancy with all its attendant evils. Moreover, leasing out of land should be strictly discouraged from the small land owners. Share croppers should be treated as labourers and protection should be given to them.

3. Distribution of Surplus Land:

The main objective of fixation of ceiling on land holdings is to distribute the surplus land among landless labourers tanants, etc. However, it is argued that it is not only important to fix a ceiling on holdings but also to fix a floor. It will help to distribute the surplus land among many peasants at least small operational holders.

The National Commission on Agriculture has recommended that small owners who get together for joint farming should be given preferential assistance by the State. Moreover, surplus land should be allotted to small cultivators on the condition that they would not further sell or mortgage the land to the private individual.

4. Control on Land held by Trusts and Institutions:

The National Commission on Agriculture has advocated that the land held by trusts or institutions used for religious, charitable purpose should be brought under ceiling law. Furthermore, ceiling should also be made applicable to forests and water areas held by these institutions.

5. Low Results:

The National Commission on Agriculture has observed that despite the fixation of rent in most states on the lines recommended under various plans, higher rents still prevail in many parts of the country. Therefore, it is suggested that such higher rents should be curbed and controlled through the intervention of local authorities.

6. Voluntary System should not be accepted:

Generally, voluntary systems have been used to cover up forcible and illegal eviction of tenants. Such systems should not be accepted as valid unless they are certified as genuine by appropriate authority. The National Commission on Agriculture suggested that even in the case of a genuine surrender the land surrendered should not revert to the landowner but should rest with the state to be allotted to any other eligible person.

7. Simplification of Legal Procedures:

Land have suffered a serious set back on account of political and economic bottlenecks but also due to inadequate and inefficient administrative machinery. To expedite the work at

special court level, the commission suggested that the entire administrative machinery for the enforcement of land-reforms needs restriction and overhauling.

8. Preparation of Land Record:

It is imperative that preparation of land record should be given top priority in the whole scheme of enforcement of land reforms. Existing record is defective. Moreover, the land record is not up to date. All possible efforts should be made in this direction.

UNIT-III

Agricultural finance

"Agricultural finance is the study of financing and liquidity services credit provides to farm borrowers. It is also considered as the study of those financial intermediaries who provide loan funds to agriculture and the financial markets in which these intermediaries obtain their loan able funds." Finance in agriculture is as important as other inputs being used in agricultural production. Technical inputs can be purchased and used by farmer only if he has money (funds). But his own money is always inadequate and he needs outside finance or credit. Agricultural finance capitalizes farmers to undertake new investments and/or adopt new technologies.

The importance of agricultural credit is further reinforced by the unique role of Indian agriculture in the macroeconomic framework along with its significant role in poverty alleviation. Realizing the importance of agricultural credit in fostering agricultural growth and development, the emphasis on the institutional framework for agricultural credit is being emphasized since the beginning of planned development era in India. The paper aims to discuss the history and need of agricultural finance in India, sources and magnitude of agricultural finance and to assess its progress.

Sources of Agricultural Finance

The two major sources of finance in agriculture are

- Institutional and
- Non- institutional sources

Institutional Source

Institutional sources consist of the government and co-operative societies, commercial bank including the Regional bank, Lead bank.

1) Co-operative Societies Indian planners consider co-operation as an instrument for economical development of the deprived farmers, particularly in the rural areas. They see in a village panchayat, a village co-operatives and village school, as the trinity of institution on which a self-reliant and just economic and social order is to be built. The co-operative movement was started in India largely with a view to providing agriculturists funds for agricultural operations at low rates of interest and projects them from the clutches of money lenders.

a) Primary Agricultural Credit Society Primary agricultural credit societies are grass root level arms of the short term co-operative credit structure. PACs deal directly with farmer borrowers, grant short term and medium term loans and also undertake distribution and making functions. The usefulness of PACs has been rising steadily. In 1950-51, it advanced loan worth Rs. 23 crores and Rs. 34,520 crore in 2000-01. The PACs have stepped up their advances to the weaker sections particularly the small and marginal farmers. The progress has been quite spectacular but not sufficient considering the demand of finance by farmers.

b) Central Co-operative Banks There are now 369 (2001-2002) District Central Co-operative Banks. The loan amount of 56,650crore is distributed to the farmers so far. Their main task is to lead Primary Agricultural Credit Societies in village. Central Co-operative Banks functions as intermediaries between the State Co-operative Bank and Primary Agricultural credit society.

c) State Co-operative Banks There are now 30 State Co-operative banks in the country. These Banks are the apex banks of the Co-operative credit structure. It serves as a link between NABARD from which it borrows and lends to the co-operative central bank and primary societies village.

Non – Institutional Source

1) Money Lenders There are two types of money lenders in rural areas. There are rich farmers or landlords who combine farming with money-lending. There are also professional money lenders whose only occupation or profession is to lend money. The cultivators depend upon the money-lenders for their requirements of cash. However, there are many reasons for the preponderance of the village money-lenders in rural area even now.

I. The money lender freely supplies credit for productive and non-productive propose, and also for short-term and long-term requirements the farmers.

II. He is easily accessible and maintains a close and personal contact with the borrowers often having relations with family extending over generations.

III. Their methods of business are simple and elastic.

2) Landlord and others Traders and commission agent supply funds to farmers for productive purpose much before the crops mature. They force the framers to sell their produce at low price

and they charge a heavy commission for themselves. Thus source of finance is particularly important in the case of cash crop like cotton, groundnut, tobacco, and in the case of fruit of chard like mangoes. Traders and commission agent may be bracketed with money lenders, as their lending to farmers is also at exorbitant rates and has other undesirable effects too. Table 1 clearly depicts that over the years, there has been a sharp decline in the percentage of agricultural credit financed by non-institutionalized sources like money-lenders.

Table 1. Sources of agricultural credit (In %)

Source	1952-52	1961-62	1970-71	1981-82	1991-92	2002-03	2010-11
Government	3.3	2.6	3.6	4.0	6.1	3.0	4.0
Cooperative Societies	3.1	15.5	22.7	28.6	21.6	26.0	24.9
Commercial Banks	0.9	0.6	4.0	28.0	33.7	27.0	43.1
Moneylenders	90.9	67.4	68.4	38.8	32.7	41.0	21.9
Others	1.8	13.9	1.3	0.6	5.9	3.0	6.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Report of the all India rural credit review committee 1969, RBI bulletin and NSSO, May 2011, Economic Survey 2010-11

Rural Indebtedness

Poverty is perhaps a major cause for rural indebtedness. The low level of rural incomes, the uncertain and primitive farming of small landholdings makes it impossible to meet the needs required for their living. Often, the rural people take debts to meet these needs.

One of the major problems concerning to the rural society is indebtedness. This problem is just not related to one individual but is passed on from one generation to the next generation. Taking or incurring debt for the purpose of agricultural production is indeed necessary as it contributes to production

Causes of Indebtedness:

Poverty:

Poverty is perhaps a major cause for rural indebtedness. The low level of rural incomes, the uncertain and primitive farming of small landholdings makes it impossible to meet the needs required for their living. Often, the rural people take debts to meet these needs.

Ancestral/Inherited Debt

Most of the rural debts of the present day are inherited from the past and which increases with the passage of time. An inheritor is liable to the repayment of the debt only to the extent of the property inherited by him.

Social and Religious Needs

Villagers are mostly bound by the social traditions and customs, which are considered to be sacred and had to be performed. Some of these ceremonies are marriage, births, deaths, religious occasions, etc. The expenditure is usually very high for the performance of these ceremonies. In order to meet these needs, the villagers take loans. As their incomes are not sufficient enough, they are not able to repay these loans. Thus, they remain unpaid and increase with the passage of time.

Litigation

Generally, the agriculturists in India are involved in various kinds of disputes related to land, property, etc., which force them to go to a court of law. Often, they view it important to win the case as it is related to the family prestige and honour. Such litigations involve heavy expenditure and time. In order to meet these needs, the agriculturists take loans that they are not able to repay and are caught into indebtedness.

Backwardness of Agriculture

Indian agriculture is an uncertain business. It virtually depends on unreliable rains for the supply of water. If there are no rains or untimely rains, the entire crop is lost and the credit invested in the agriculture goes waste. As a result, the loan taken for the productive purposes also becomes a burden, leading to indebtedness of the farmers.

Excessive Burden of Land Revenue and Rent

Land revenue, where it is levied by the government in some states and the rent payable to the landowners is becoming excessive burden on small farmers. In order to pay these land revenue, mid-rent, the farmers take loan. Sometimes, the farmers have to pay these rents and land revenues even during the floods and drought. This make the farmers run into debts.

Defective Money Lending System

The village money lending system is very much defective. The sole aim of the money-lenders is to extract the maximum from the farmers. The moneylenders make wrong entries in their account books, charge very high interest rates and extract high prices for the goods they sell to the farmers but purchase the farmers produce at very low prices.

Consequences of Indebtedness:

There are many economic and non-economic consequences, which are caused by rural indebtedness. They are categorized into economic, social and political consequences. Let us have a look at them in detail.

Measures for the Removal of Indebtedness

The problem of indebtedness can be solved by two means. The first is to take up measure to reduce the burden of present indebtedness and the second is to prevent the evil from rising again in the future.

To reduce the present burden of indebtedness, the following measures have to be taken:

1. Canceling all the debts paid to the moneylenders by the farmers, which are more than the principal amount itself, debts which are already been repaid but still stand in the account books of the moneylenders, debts that are created by the moneylenders by fraud, loans for which repayments have been received in the form of money, produce and other services like labour from the indebted farmers.

2. Debts should be properly scaled down. According to law, the inheritors are liable to pay the debts only to the extent they have inherited. In this way, most of the debts will be reduced. Debts that are so excessive and standing are since a long time, should be settled between the concerned parties or through the village panchayats. Debts, which do not have records or exist with incomplete records, should also be reduced.

3. Apart from the above two steps, the remaining part of the debts should be handled by special institutions such as banks. Such banks pay the amount to the moneylenders on one hand and recover the same from the debtors on easy terms. These banks also collect funds and provide credit facilities to their members.

To control the problem of indebtedness in future, the following steps are recommended:

1. The income of the farmers should increase so that they could meet the unproductive expenses and are not forced to take any loan. In order to achieve this goal, it is necessary that agriculture should be conducted on scientific basis not depending totally on the natural climatic factors. Some other measures have also been undertaken such as the introduction of land reforms providing market for the agricultural produce, etc.

2. The panchayats and such other village level institutions should try to solve the village disputes and try to prevent them from going to the courts of law, which need heavy expenditure.

3. Information regarding the laws and their implementation should be given to the villagers so that they do not get into the clutches of the moneylenders for generations.

4. Adequate credit facilities on reasonable terms should be arranged to the farmers. Co-operative credit is a good solution in this regard. Private lending should be eliminated in this field.

The above-mentioned two types of measures should be carried on simultaneously. Mere prevention without any preventive measures for future would not help the situation; moreover, there is every possibility of this evil to rise again and again. Thus, both these measures should go hand in hand so that the problem of rural indebtedness vanishes completely.

Role of Credit Institutions-Commercial Banks

Besides performing the usual commercial banking functions, banks in developing countries play an effective role in their economic development. The majority of people in such countries are poor, unemployed and engaged in traditional agriculture.

There is acute shortage of capital. People lack initiative and enterprise. Means of transport are undeveloped. Industry is depressed. The commercial banks help in overcoming these obstacles and promoting economic development. The role of a commercial bank in a developing country is discussed as under.

1. Mobilizing Saving for Capital Formation

The commercial banks help in mobilising savings through network of branch banking. People in developing countries have low incomes but the banks induce them to save by introducing variety of deposit schemes to suit the needs of individual depositors. They also mobilise idle savings of the few rich. By mobilising savings, the banks channelise them into productive investments. Thus they help in the capital formation of a developing country.

2. Financing in Agriculture and Industry

The commercial banks finance the industrial sector in a number of ways. They provide short-term, medium-term and long-term loans to industry. In India they provide short-term loans. Income of the Latin American countries like Guatemala, they advance medium-term loans for one to three years. But in Korea, the commercial banks also advance long-term loans to industry.

3. Financing Trade

The commercial banks help in financing both internal and external trade. The banks provide loans to retailers and wholesalers to stock goods in which they deal. They also help in the movement of goods from one place to another by providing all types of facilities such as discounting and accepting bills of exchange, providing overdraft facilities, issuing drafts, etc. Moreover, they finance both exports and imports of developing countries by providing foreign exchange facilities to importers and exporters of goods.

4. Financing Agriculture:

The commercial banks help the large agricultural sector in developing countries in a number of ways. They provide loans to traders in agricultural commodities. They open a network of branches in rural areas to provide agricultural credit. They provide finance directly to agriculturists for the marketing of their produce, for the modernisation and mechanisation of their farms, for providing irrigation facilities, for developing land, etc.

They also provide financial assistance for animal husbandry, dairy farming, sheep breeding, poultry farming, pisciculture and horticulture. The small and marginal farmers and landless agricultural workers, artisans and petty shopkeepers in rural areas are provided

financial assistance through the regional rural banks in India. These regional rural banks operate under a commercial bank. Thus the commercial banks meet the credit requirements of all types of rural people.

5. Financing Consumer Activities

People in underdeveloped countries being poor and having low incomes do not possess sufficient financial resources to buy durable consumer goods. The commercial banks advance loans to consumers for the purchase of such items as houses, scooters, fans, refrigerators, etc. In this way, they also help in raising the standard of living of the people in developing countries by providing loans for consumptive activities.

6. Financing Employment Generating Activities

The commercial banks finance employment generating activities in developing countries. They provide loans for the education of young person's studying in engineering, medical and other vocational institutes of higher learning. They advance loans to young entrepreneurs, medical and engineering graduates, and other technically trained persons in establishing their own business. Such loan facilities are being provided by a number of commercial banks in India. Thus the banks not only help inhuman capital formation but also in increasing entrepreneurial activities in developing countries.

7. Help in Monetary Policy

The commercial banks help the economic development of a country by faithfully following the monetary policy of the central bank. In fact, the central bank depends upon the commercial banks for the success of its policy of monetary management in keeping with requirements of a developing economy.

Thus the commercial banks contribute much to the growth of a developing economy by granting loans to agriculture, trade and industry, by helping in physical and human capital formation and by following the monetary policy of the country.

National Bank for Agriculture and Rural Development

National Bank for Agriculture and Rural Development (**NABARD**) is an apex development finance institution fully owned by Government of India. The bank has been entrusted with "matters concerning policy, planning, and operations in the field of credit for agriculture and other economic activities in rural areas in India". NABARD is active in developing Financial Inclusion policy.

Background of NABARD

NABARD was established on the recommendations of B.Sivaramman Committee (by Act 61, 1981 of Parliament) on 12 July 1982 to implement the National Bank for Agriculture and Rural Development Act 1981. It replaced the Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of Reserve Bank of India, and Agricultural Refinance and Development Corporation (ARDC). It is one of the premier agencies providing developmental credit in rural areas. NABARD is India's specialized bank for Agriculture and Rural Development in India.

The initial corpus of NABARD was Rs.100 crores. Consequent to the revision in the composition of share capital between Government of India and RBI, the paid up capital as on 31 May 2017, stood at Rs.6,700 crore with Government of India holding Rs.6,700 crore (100% share). The authorized share capital is Rs.30,000 crore.

International associates of NABARD include World Bank-affiliated organisations and global developmental agencies working in the field of agriculture and rural development. These organisations help NABARD by advising and giving monetary aid for the upliftment of the people in the rural areas and optimising the agricultural process.

Roles of NABARD

1. Serves as an apex financing agency for the institutions providing investment and production credit for promoting the various developmental activities in rural areas
2. Takes measures towards institution building for improving absorptive capacity of the credit delivery system, including monitoring, formulation of rehabilitation schemes, restructuring of credit institutions, training of personnel, etc.
3. Co-ordinates the rural financing activities of all institutions engaged in developmental work at the field level and maintains liaison with Government of India, state

governments, Reserve Bank of India (RBI) and other national level institutions concerned with policy formulation

4. Undertakes monitoring and evaluation of projects refinanced by it.
5. NABARD refinances the financial institutions which finances the rural sector.
6. NABARD partakes in development of institutions which help the rural economy.
7. NABARD also keeps a check on its client institutes.
8. It regulates the institutions which provide financial help to the rural economy.
9. It provides training facilities to the institutions working in the field of rural upliftment.
10. It regulates and supervise the cooperative banks and the RRB's, through out entire India.