

# Agriculture Versus Industry in Economic Development

## Contribution of Agriculture:

- Providing more food to the rapidly expanding population
- Providing productive employment
- Improving welfare of the rural people
- Increasing the demand for industrial products and thus expanding secondary and tertiary industries
- Providing additional foreign exchange earnings for import of capital goods
- Increased rural income available for mobilisation

- Market for manufactured goods is too small
- **Income Elasticity of Demand for food**
- Growth rate of population (declined mortality rate and slow reduction in fertility)
- Increase in farm output and the rate of increase of food demand.

# Agriculture in Economic Development

- Over two-thirds of the world's poorest people are located in rural areas and engaged primarily in subsistence agriculture.
- Agricultural sector is essential for sustainable development of economy.
- Role of agriculture in economic development may be passive and supportive.

# Agriculture in Economic Development

- However, for a developing country the agricultural as well as rural sector must play a bigger role.
- It provides low-price food and manpower to the industry
- Agricultural growth tends to improve income distribution more in favour of small peasants. Urban, industrial sector is characterised by 'skewness' in income distribution, the concentration of income in the hands of a few small business houses. Any effort for rural development would help in reducing the rural-urban gaps. Agricultural development thus helps in improving social welfare, particularly in the rural areas. In the process, the rural masses enjoy a better way of living.

An agriculture and employment based strategy requires three basic complementary elements for economic development. These are:

- i) Accelerated output growth through technological, institutional, and price incentive changes designed to raise the productivity of small farmers,
- ii) Rising domestic demand for agricultural output derived from an employment-oriented urban development strategy,
- iii) Diversified, non-agricultural, labour-intensive rural development activities that directly and indirectly support and are supported by the farming community.

# Key issues related to agricultural and economic development

- How can total agricultural output and productivity per capita be substantially increased in a manner that will directly benefit the average small and the landless rural dweller while providing a sufficient food surplus to support growing urban, industrial sector?
- What is the process by which traditional low-productivity farms are transformed into high-productivity commercial enterprises?

- When traditional family farmers and cultivators resist change, is their behavior stubborn and irrational, or are they acting rationally within the context of their particular economic environment?
- Are economic and price incentives sufficient to elicit output increases among farmers, or are institutional and structural changes in rural farming systems also required?
- Is raising agricultural productivity sufficient to improve rural life, or must there be concomitant off-farm employment creation along with improvements in educational, medical, and other social services?

# Types of farming

- The highly efficient agriculture of the developed countries, where substantial productive capacity and high output per worker permit a very small number of farmers to feed entire nations, and
- The inefficient and low-productivity agriculture of developing countries, where in many instances the agricultural sector can barely sustain the farm population.

This becomes clear from the productivity gap of developed and the developing nations.

- In 1960 the per capita production of agricultural output was US \$680 in developed countries whereas the same was only US \$52 in underdeveloped countries i.e., about 13 times.
- By 2000 the productivity gap has been widened to 50:1.

# Pattern of Agriculture in Latin America and Asia

## Similarities:

1. Rural cultivator and major concern is survival
2. Obtain families minimal need from cultivation
3. Mostly work in small own farm, or in rented land and earn money by selling his/ her labour
4. Depend heavily on climate
5. Debt rather than profit is their normal fate
6. Technology is traditional (use of HYVs, fertilizer are very less to find )
7. Depend heavily on human and animal power rather than machine

8. No effective social security, unemployment insurance, etc.
9. Traditional food crops are the preferred crops for cultivation.

# Latin America

- Latifundios (>12)
- Medium-sized farms (4 to 12)
- Family farms (2 to 4)
- Minifundios (< 2)

Concentration of land among a few Latifundios.

Minifundios comprises about 90% of farms occupy only about 17% of agricultural land.

However, if we look at the productivity, performance of latifundios were poor with respect to

- Poor intensity of cropping
- **Poor utilization of resources**

Minifundios in Argentina, Brazil, and Chile yield more than twice the value of output per hectare under cultivation in comparison to Latifundios.

A few important factors contributed are:

- **Most latifundios used their land holding as a symbol of power and prestige rather their potentiality to contribute to total agril. Output.**
- Cost of supervising hired labour in latifundios is much more than the family labour of minifundios.

# Asia

However, in Asian nations according to Gunnar Myrdal three factors responsible for the present state of fragmented land holdings.

1. The intervention of European rule
2. Introduction of monetized transactions and the rise of moneylenders
3. The rapid growth of population.

# Asian Pattern

- Landlords
- Sharecroppers
- Tenant Farmers
- Money lenders
- Absentee landlords

# Pattern in Africa

- Subsistence farming in the village community,
- Existence of additional land in excess to immediate requirements,
- The rights of each family in a village to have access to land and water in the immediate territorial vicinity.

# Strategy for Agricultural and Rural Development

## Small-Scale Agricultural Progress:

- i) Technological change and innovation
- ii) Appropriate government economic policies
- iii) Supportive social institutions

## Rural Development:

- i) Modernizing farm structures to meet rising food demands
- ii) Creating an effective support system
- iii) Changing the rural environment to improve levels of living

## **Rise in rural purchasing power may results:**

- Raise demand for manufactured goods and extend the size of market
- Demand for agricultural tools, fertilizers, tractors, etc., also increase
- Means of transport and communication also expand to transport the market surpluses
- Secondary and tertiary sectors improve and increase the rate of capital formation through their reinvestment (Market Contribution of Agriculture)

- There is also formation of capital when foreign exchanged earned from agricultural exports used for import of capital goods
- Kuznets called it product contribution of agriculture (Modern Economic Growth, Six Lectures on Economic Growth)
- With development of a country, share of agriculture in countries total export falls.

# Possibilities of Capital formation for a less Developed Country

- Increase marketable surplus from rural sector
- Reduce agricultural prices
- Stabilization of farm product prices

- Taxation of agriculture is important for mobilizing agricultural surplus to accelerate economic development
- Increased agricultural products led to economic welfare through improved standard of living.

There are four ways through which agriculture contributes towards the process of economic development as described by Simon Kuznets. **These are:**

- (i) Product contribution, (ii) Market contribution,
- (iii) Factor contribution, and (iv) Foreign exchange contribution.

### **Product Contribution:**

The product contribution of agriculture refers to its contribution of wage-goods, that is, foodstuffs over the subsistence level to feed the labour force of urban non-agricultural sector. A growing population must be supported with increased food supply. Raising food supply through different ways has thus great importance for economic growth of a country. The annual rate of increase in demand for food in an economy is determined by

$$D = p + \eta g$$

where  $p$  and  $g$  stand for the rates of growth of population and per capita income, and  $\eta$  stands for income elasticity of demand for agricultural goods.

- Poor LDCs experience high population growth rate and a high income elasticity of demand for food. Under the circumstance, an increase in per capita income strongly increases the demand for food-stuffs/agricultural goods in these countries more than the advanced countries of the West.

### **Market Contribution:**

- The market contribution of agriculture to economic growth refers to the fact that the demand from agriculture acts as the source of autonomous demand for industrial goods. As a result of agricultural progress there occurs a market extension for industrial goods. Agriculture thus has linkages with the industrial sector—there is a complementarity between the two sectors.
- A pre-condition for rapid industrial growth is a rapidly expanding agricultural sector. A sluggish growth in agriculture acts as a drag on industrial development.

## **Factor Contribution:**

- The factor contribution, comprising both labour contribution and capital contribution, occurs when there is a transfer of productive factors/resources to other sectors from the given sector. A overpopulated developing economy is characterised by the existence of sur-plus labour or disguised unemployment.
- Agriculture contributes substantially to the sources for capital formation. However, savings may be voluntary or forced. Voluntary saving is made by rich landlords, peasant farmers while savings may be collected by coercion as was done in the erstwhile Soviet Union and China in the past. In addition, government, by taxing away agricultural sector, may collect resources for investment.

- Agricultural sector provides funds for capital formation through (i) transfer of labour and capital from farm sector to the non-farm sectors, (ii) export of surplus agricultural products, (iii) turning the terms of trade against agriculture by imposing price controls on agricultural goods by taxation or by using multiple exchange rates against agriculture, etc.

### **Foreign Exchange Contribution:**

- Agriculture may be a great source of foreign exchange of a country. Foreign exchange is an important source, just like savings. Primary products producing underdeveloped countries earn foreign exchange by exporting these products. As those exports contribute nearly 60% to 70% of their export earnings, the capacity to import capital goods and machinery required for industrial development largely depend on export earnings.

# Role of Industry

- Industrialization is a prerequisite for economic development of any country.
- With development role of industry in economy increase and role of agriculture decrease.
- There may be trickle down effect of the development of industrial sector to other sectors.
- Industrialization is important to provide employment to underemployed and unemployed.

- Industrialization is also important to brings increasing returns and economies of scale.
- Price of primary products may fall or remain constant due to protectionist policy of developed countries and prices of manufactured items usually rise.
- Industrialization is usually followed by urbanization, employment opportunities and income increase.

# Mishandling of industrialization may result

- Rural stagnation
- Mushrooming growth of urban underclass
- Education does not satisfy development needs
- Government bureaucracy
- Excessive high rate of growth of population and labor force

# Interrelationship between agriculture and industry

- In less developed/ developing countries people depend more on agriculture than industry
- Agriculture provide raw materials to different agro-based industries, provide surplus labour to industry
- Saved foreign currencies earn through export of different agricultural product may be utilised for import of capital goods
- Increase in agricultural productivity increases rural income that lead to increase in demand for non-agricultural goods and services

- Increase in agril productivity lead to large marketable surplus and redistribution of income in favour of the rural sector
- Increased rural savings may be made available for industrial use by different financial institutions
- Industrialisation generates demand for products such as milk, vegetables, eggs, poultry, etc., which indirectly may increase agril productivity
- Industrialisation increase availability of capital for agril sector
- Industrialisation followed by urbanisation generates good job opportunity for the rural people

- Urbanisation provides good facility for education, healthcare, communication, and also change the attitude of people for professionalism