

**SUBJECT** – Economics,

**CLASS:** M.A. Economics, Semester - II

**PAPER CODE/NAME:** CC – 5, Indian Economy: Issues & Policies – I

**TOPIC:** Land Reforms: Farm Size and Productivity, Agricultural Input, Technological Change, Sustenance of Agricultural Growth

**FORMAT:** Word

**NAME:** Dr. Saroj Sinha,

**CONTACT DETAILS:** Dept. of Economics, Patna University, Patna

Mobile: 7479979900

Mail: sarojsinha67@gmail.com

**Land Reforms: Farm Size and Productivity,**  
**Agricultural Input, Technological Change, Sustenance**  
**of Agricultural Growth**

by

Dr. Saroj Sinha,  
Associate Professor, Department of Economics,  
Patna University, Patna

Land reforms refer to improvement in land tenure system, abolition of intermediaries, fixation of land ceiling, consolidation of land holding, co-operative farming, etc. Nobel Laureate, Prof Gunnar Myrdal observes, “land reforms refers to planning and institutional re-organisation of relationship between individual

and land.” So far as the land tenure system in India is concerned, it is totally defective and it is standing in the way of its agricultural development. Even after the abolition of zamindari system and enactment of tenancy legislations, the position of tenants is still far from satisfactory. The cultivator has to pay high rent to the landlords and are subject to frequent ejection by the landlord. All these have led to lack of incentive and confidence on the part of cultivators to make provision for any permanent development on their land. Further, there are delay in implementation of land reforms and uncertainty about the rights of the farmers of land.

#### **FARM SIZE & PRODUCTIVITY**

Inequality in Land Distribution: The distribution of agricultural land in India has not been fairly distributed. Rather there is a considerable degree of concentration of land holding among the rich landlords, farmers and money lenders throughout the country. But the vast majority of small farmers own a very small and uneconomic size of holdings, resulting to higher cost per units. Moreover, a huge number of landless cultivators has been cultivating on the land owned by the absentee landlords, leading to lack of incentives on the part of these cultivators.

Small size of holdings : The average size of agricultural holdings in India is very small and uneconomic and it is even less than 2 hectares or 5 acres. Besides, the agricultural holdings in India are fragmented too. With such uneconomic and fragmented holding, no scientific cultivation with improved implements, seeds, etc. is ever possible. Small size of holdings leads to waste of time, labour,

capital and cattle power, improper utilization of irrigation facilities, quarrels, litigation etc. All these have resulted low yield in Indian agriculture.

Sub-division and Fragmentation of holdings: In India, the average size of holding is expected to decline from 1.5 hectares in 1990-91 to 1.3 hectares in 2000-01. Thus, the size of agricultural holding is quite uneconomic, small and fragmented. There is continuous sub-division and fragmentation of agricultural land due to increasing pressure of population and breakdown of the joint family system and also due to forced selling of land for meeting debt repayment obligations. Thus the size of operational holdings has been declining year by year leading to increase in the number of marginal and small holdings and fall in the number of medium and large holdings. All these have resulted in continuous sub-division and fragmentation of land holdings in the country. This increasing trend of sub-divisions and fragmentation has resulted in the efficient use of land almost impossible leading to the problem of increasing volume of capital equipment on the farm along with low productivity.

#### **AGRICULTURAL INPUT AND TECHNOLOGICAL CHANGE IN AGRICULTURE**

Orthodox Farming Techniques : Indian agriculture is still characterised by the use of orthodox farming. techniques. Major proportion of the agricultural operations are still depending on biological sources of energy, i.e., human and animal labour, rain water and organic manure (dung). After the adoption of new agricultural strategy in 1966, modern techniques of production

alongwith new HYV seeds were introduced in some states like Panjab, Haryana and Western Uttar Pradesh. This resulted in a significant increase in agricultural productivity in those states. This has also resulted in an inter-regional technological dualism as major portion of the agricultural land continues to follow orthodox methods while only certain regions started to follow modern techniques. Inter-personal technological dualism also started to exist in. Indian agriculture as the new technology being costly continue to be adapted by only large and wealthy farmers and the small and marginal farmers in spite of their awareness, continue to follow old techniques due to financial constraints.

The farmers in India have been adopting orthodox and inefficient method and technique of cultivation. It is only in recent years that the Indian farmers have started to adopt improved implements like steel ploughs, seed drills, barrows, hoes, etc. to a limited extent only. Most of the farmers were relying on centuries old wooden plough and other implements. Such adoption of traditional methods is responsible for low agricultural productivity in the country.

Inadequate use of inputs: Indian agriculture is suffering from inadequate use of inputs like fertilisers and HYV seeds. Indian farmers are not applying sufficient quantity of fertilisers on their lands and even the application of farmyard dung manure is also inadequate. Indian farmers are still applying seeds of indifferent quality. They have no sufficient financial ability to purchase good

quality high yielding seeds. Moreover, the supply of HYV seeds is also minimum in the country.

Inadequate irrigation facilities : Indian agriculture is still suffering from lack of assured and controlled water supply through artificial irrigation facilities. Thus, the Indian farmers have to depend much upon rainfall which is neither regular nor even. Whatever irrigation potential that has been developed in our country, a very limited number of our farmers can avail the facilities. In spite of vigorous programme of major and minor irrigation projects undertaken since 1951, the proportion of irrigated land to total cropped area now comes to about 53 per cent in 1998-99. Therefore, in the absence of assured and controlled water supply, the agricultural productivity in India is bound to be low.

Technological Factors: The following technological factors are also responsible for low agricultural productivity in Indian agriculture :

Traditional methods of cultivation : The farmers in India have been adopting orthodox and inefficient method and technique of cultivation. As they are tradition bound and poor thus they could not adopt modern efficient methods adopted by western countries of the world. These farmers were relying on centuries old wooden plough and other implements. It is only in recent years that the Indian farmers have started to adopt improved implements like steel ploughs, seed drills, harrows, hoes etc. to a limited extent

only. Thus, the adoption of traditional methods is responsible for low agricultural productivity in India.

Lack of high yielding seeds : Indian farmers are still applying seeds of indifferent quality. They have no sufficient financial ability to purchase good quality high yielding seeds. The supply of high yielding seeds is also minimum in the country. Thus, the farmers are mostly applying traditional variety of seeds whose average yield is just half of the yield of improved high yielding variety.

Scanty use of fertiliser : Indian farmers are not applying sufficient quantity of fertilisers on their lands. Constant cultivation of land causes deterioration of the fertility of soil. For the revitalisation of soil fertility and to use fallow land for cultivation, application of various types of fertiliser is urgently required. But the poor cultivators cannot afford to purchase costly chemical fertilisers for its application on their lands. Thus in India, the use of both chemical fertiliser and even farmyard dung manure is totally inadequate.

Inadequate irrigation facilities : Indian agriculture is still suffering from lack of assured and controlled water supply through artificial irrigation facilities. Thus the Indian farmers have-to depend much upon rainfall which is neither regular nor even. Whatever irrigation potential that has been developed in our country, a very limited number of farmers can avail these facilities. As for example before independence, only 19 per cent of the total land was irrigated in India. But inspite of vigorous programme of



