

**PROBLEM AND PROSPECTS OF DRY LAND FARMING IN INDIA****Mr. Bhosale S. N.****Assistant Professor Head, Department Of Economics****INTRODUCTION**

Agriculture is the single largest livelihood sources in India with nearly two thirds of people depend on it. Rainfed agriculture is as old as agriculture it self. Growing of crops entirely under rainfed conditions is known as dryland agriculture. India has about 47 million hectares of dry lands out of 108 million hectares of total rain fed area. Dry lands contribute 42% of the total food grain production of the country. These areas produce 75% of pulses and more than 90% of sorghum, millet, groundnut and pulses from arid and semi-arid regions. Thus, dry lands and rainfed farming will continue to play a dominant role in agricultural production. Dry lands, besides being water deficient, are characterized by high evaporation rates, exceptionally high day temperature during summer, low humidity and high run off and soil erosion. The soil of such areas is often found to be saline and low in fertility. As water is the most important factor of crop production, inadequacy and uncertainty of rainfall often cause partial or complete failure of the crops which leads to period of scarcities and famines. Thus the life of both human being and cattle in such areas becomes difficult and insecure. Despite all these improvements in agriculture, we have yet not been able evolve an appropriate package of practices for our dry land areas. The income of farmers of dry land regions is still very low land areas. The income of farmers of dry land regions is still very low. To feed our one billion populations that we will have by 2000 A.D., we will require food grains 10 the tune of 240 million tonnes approximately. For achieving this target we will have to harness every inch of our cultivable lands, especially dry lands, with utmost care.

**Definitions**

- a) Dry farming: is cultivation of crops in regions with annual rainfall less than 750 mm. Crop failures is most common due to prolonged dry spells during the crop period. These are arid regions with a growing season (period of adequate soil moisture) less than 75 days. Moisture conservation practices are necessary for crop production.
- b) Dry land farming: is cultivation of crops in regions with annual rainfall more than 750 mm. In spite of prolonged dry spells crop failure is relatively less frequent. These are semi arid tracts with a growing period between 75 and 120 days. Moisture conservation practices are necessary for crop production. However, adequate drainage is required especially for vertisols or black soils.

- c) Rainfed farming: is crop production in regions with annual rainfall more than 1150 mm. Crops are not subjected to soil moisture stress during the crop period. Emphasis is often on disposal of excess water. These are humid regions with growing period more than 120 days.

Objective of the study:

The main objective of this study as follows:

- 1) To study meaning and nature of dry land farming in india.
- 2) To find out problems of dry land farming in india.
- 3) To study the prospects of dry land farming in india.

Research Methodology:

Growing of crops entirely under rain fed conditions is known as dry land agriculture. The study of problem and prospect of dry land farming in india is mainly based on the secondary data. This study tries to analyze the problem and prospect of dry land farming in india. The secondary information has been collected through various sources i.e. reference books, research articles, published and unpublished Government reports etc.

Problems of Dry Land Farming in India

The main problems of dry land farming in india as follows

1) Uncertain rainfall

Uncertain rainfall is the most important problem of dry land farming. The rains are very erratic, uncertain and unevenly distributed. Therefore, the agriculture in these areas has become a sort of gamble with the nature and very often the crops have to face climatic hazards. The farmers also take up farming halfheartedly as they are not sure of being able to harvest the crops. Thus, water scarcity becomes a serious bottleneck in dry land agriculture.

2) Lack of storage of rain water

Lack of storage of rain water is the one important problem of dry land farming. According to characteristics of dry farming, either there will be no rain at all or there will be torrential rain with very high intensity. Thus, in the former case the crops will have to suffer a severe drought and in the latter case they suffer either flood or water logging and they will be spoilt. In case of very heavy downpour, the excess water gets lost as runoff which goes to the ponds and ditches etc. This water could be stored for providing life saving or protective irrigation to the crops grown in dry land areas. The loss of water takes place in several ways namely run-off, evaporation, uptake through weeds etc.

3) Problem of Marketing

In dry farming all the farmers grow similar crops which are drought resistant. These crops mature at the same time and the growers like to dispose off their products soon after the harvest. This results in a glut of products in the market and the situation is badly exploited by the grain traders and middlemen. Therefore, marketing becomes a serious problem in dry farming areas.

4) Economic condition

The farmers take few productions of crops. Because only drought resistant crops namely oil seeds, pulses and coarse grains like jowar, bajra, millets etc. can be grown in dry land areas.

Thus, the farmers have to purchase other food grains and household commodities that create unbalance their economic conditions.

5) Careful and judicious manorial scheduling

In case of irrigated farming the farmers are at a liberty to apply manures and fertilizers according to their availability and facility but in case of dry farming they have to be very careful in fertilizer application. Due to lack of available moisture, broadcasting or top dressing becomes wasteful and meaningless. These can be applied by only deep placement and foliar spray for an improved crop production.

6) Problem of Use of preserved moisture

Problem of Use of preserved moisture is generally showed in dry land farming. Judicious and purposeful utilization of preserved moisture water depends upon soil type, plant type and other factors. The amount of available water to the plants depends upon the depth of plant roots, their proliferation and density. In case of limited moisture condition, the yield directly depends upon the rooting depth. The rooting depth can be desirably increased by mechanical manipulation of the soil. If the planting is very dense and all the plants have same kind of rooting then there will be a tough competition among roots for moisture and scarce moisture condition will result in the wilting of plants. Therefore, utilization of preserved moisture is an art in dry farming. The water collected in ponds or brooks may be used to give protective or life saving irrigation.

7) Low quality of production

The farmers face the problem of low quality of production. The quality of the produce from dry farming areas is often found to be inferior as the grains are not fully developed or they are not filled properly; often mixed with other crop seeds owing to mixed cropping system prevalent in these areas and the fodder become more fibrous. All these factors reduce the market value of produce and the farmers do not get the profit of their labour and investment.

Suggestions:

- 1) Provide financial help to the dry land farmers. Rural and agricultural credit facilities have to be adequately provided to all the needy households keeping in view the growing dependency of farmers and rural artisans on money lenders and private financiers.
- 2) change the cropping pattern in drought prone areas of the regions to prevent further downslide of underground water table.
- 3) Tries to provide water supply to the dry land. There is urgent need to develop the irrigation facility in dry land areas and backward areas.
- 4) Central as well as state Government has to make proper planning about the development of dry lands in various areas of India.
- 5) Distribution of cultivable public lands surplus lands and cultivable waste lands among the rural poor provides some solution to the agricultural labourers.
- 6) It is also necessary to identify backward districts and specific area programmes may be initiated through state and central grants.
- 7) Marketing becomes a serious problem in dry farming areas. Government has to provide suitable, sustainable and reliable marketing facility to the farmers.
- 8) Government has to provide chemical fertilizers and pesticides for increase the quality of production in dry land areas.

Conclusion:

This study concluded that, uncertain rainfall, Lack of storage of rain water, Problem of Marketing, Economic condition, Careful and judicious manorial scheduling, Problem of Use of preserved moisture, Low quality of production these are the main problems of dry land farming in India. For the development of dry land farming government have adequate proper policy for overall the development of agriculture sector in India agricultural scientist, policy formulators and farmers have to play very important role for the future development of agricultural sector.

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