

Impact of Environmental Changes and Technology on Agriculture

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ABSTRACT

The research paper presented discussed the factors affecting farming. This research paper is based on secondary facts as well as an attempt has been made to present solutions to the environmental conditions that occur in the development of farming in the research paper.

Article Received: 10 August 2020, Revised: 25 October 2020, Accepted: 18 November 2020

INTRODUCTION

The relationship between agriculture and humans is the oldest and the deepest. India has been an agricultural country since ancient times. Initially, man hunted and lived his life and fulfilled many of his needs from the environment, which had the possibility of many kinds of uncertainties in human life. To overcome those uncertainties, humans started farming by growing seeds and started animal husbandry. Change over time is the law of nature. Due to the migration of men from the village to the city, the participation of women in agriculture is increasing. Because of this, women are appearing in agriculture in various roles. At the global level, it is seen that women have played an important role in ensuring food security and in securing local bio and agriculture. Recognizing the important role of women in

agriculture, the Ministry of Agriculture and Farmers Welfare has declared Women's Farmers Day on 15 October every year. Keeping in mind the important role of women in agriculture, the Ministry of Agriculture and Farmers Welfare established the Central Agricultural Women Institute in Bhubaneswar in 1996 under the Indian Council of Agricultural Research. This institute works on various dimensions related to women in agriculture. Apart from this, more than 100 institutes of the Indian Council of Agricultural Research have created many technologies so that women can be empowered by reducing their difficulties. Considering the situation in India, rural women need to be trained and empowered for agriculture, whose government has taken many steps. For example, the

share of women in peasant entrepreneurs and labor has increased.

Today, 70 percent of the world's population is engaged in agricultural work, of which 32 percent women contribute and agriculture is also the mainstay of the entire world economy. There is so much land on our earth that it is capable of fulfilling the need of agriculture, but in this also due to lack of favorable conditions for agriculture, agricultural work is not being done properly.

The word 'agriculture' is not used only in the sense of growing crops. By direct it means all the functions of crop production, plantation and animal husbandry which is based on land and soil production capacity.

The changing nature of agriculture is also called 'modernization'. The concept of modernization was born in the second decade of the 20th century to curb the influence of the growing communist ideology in the world.

At this time, the third countries of the third world gradually started coming under Soviet influence, the western country especially the United States was highly concerned and gave a slogan of modernization to end communist influence. The United States argued that communist ideology is an old and old-fashioned ideology based on worn-out values, in which there is no possibility of development. On the

other hand, American ideology is based on new values, in which science and technology have importance in every field. Through this, you can grow beyond hope. If the communist ideology is progressive, then it is expected that new experiments are being done in every field for the economic development of America. There was a race for economic development in the world due to this duality of ideologies. Every developing and underdeveloped country started using new technologies. This trend has been called 'modernization'.

Due to the increasing convenience of maintenance during the agricultural period, while one more population has grown at a rapid rate, the other is to expand the population to new areas and to increase human needs. This process has given a new dimension to agricultural development by distributing mass load. Mankind's struggle for management of pasture for agricultural development, construction of roads for transporting land and goods, agricultural produce and equipment to the population and other cultural works started. Until this era, in the context of the vast earth, agricultural development and population was so low that nature was able to easily compensate for this human intervention. As a result, the environmental conditions remained favorable.

The impact of the level of agricultural development on the natural environment is as follows-

Agricultural waste

Waste materials are also generated from agricultural activities in rural areas. Many wastes occur during the processing of crops in the fields. Agricultural waste levels are also increasing from the agricultural development level in the district. 8 land records inspector circles located in the most northerly, north-eastern and southern part of agricultural waste materials have been included. These include Khandeep, Sukara, Khadeli, Kunkata Kalan, Baar Kalan, Batoda, RavanjanaDungar, and Bahraavan Khurd land records inspector circles in the category of modernization of this highly developed agricultural development level. (Map 7.1). The collective index of this class is more than \$ 0.51. This class is highly developed in terms of proportion of tenant area, dupaj area, use of chemical fertilizers, area under improved seeds, tractors. In areas where irrigated area is high, there has been agricultural development. Agricultural waste contains leaves, stems, roots, sawdust, cow dung etc. When the water falls on the stack of these waste materials, the organic sewage starts to rot like sugarcane bagasse and causes air pollution. The risk of ozone gas being destroyed by waste from agro-based industries is increasing.

Soil erosion

The main reason of land degradation is excessive harvesting of trees to increase the level of agricultural development by humans. Due to this, the rain water in the district has reduced and the fast water of the fields is fertile soil of the fields which will take several hundred years to be shed in minutes. On one hand, it has been continuously affected by agricultural production and on the other side it is impacting the natural environment. This soil decreases the fill capacity of water reservoirs by consolidating on the banks of river, pond, puddle, dams. In the district, agriculture is being done by cutting down trees of Banas, Morale and Analala river basins and hill slopes. It also causes land erosion to flood with less water.

Incompatible use of land

Inconsistent use of land leads to immediate and very high environmental problems in the natural environment. Whether that work is done by the state development officer or the farmer himself uses the land in various ways at his level, for example, the agricultural work near the base of the hill slopes, the downward movement of the upper part due to the construction of dams, canals, roads etc. Or it is normal to have a rapture. Due to the weak rocky (eg rock-rock) hills and ranges, the agricultural work, due to the construction of roads across it, often happens. This type of landfill

and breeding is made up of rock rocks of the Vindhyan ranges and the upper part of the Kaimur hills. 4 Used for agricultural work in Chambal, Morale, Banas river basin and lower part of Aravalli and Vindhyan mountain ranges in Jaipur district.

Impact on natural environment due to increase in technology and technology in agriculture

Agri-work and technical techniques of agriculture affect the processes of the soil and the properties and characteristics of the soil. Due to the use of modern technology in agriculture (such as the use of heavy and large-sized machines), the soil structure undergoes substantial changes through certain conditions (eg, wet, silted soils) through compaction. There has been an increase of 20 percent in the number of tractor and lecturers, threshers in the district in 10 years. Its maximum impact is in the northern, north-eastern and southern part, while the lowest is in the western part. This has led to increase in air pollution, noise pollution, water pollution in the district.

Impact on the natural environment from animal feed

Pastures are needed for animals. But due to over-grazing of large animals, there is a loss in the structure of the level soil. Due to the grazing of grass by the animal to a low level, soil erosion occurs due to low rain water. "It is known that by

increasing the amount of organic matter in the soil, the stability of the soil mass increases. Due to increase in agricultural growth in the district, there has been a decrease of 2.50 percent in the pasture pastures. It has a low impact in the western part.

Land pollution

The flow of food and energy in each ecological system is initiated by self-sustaining plants growing on the soil. The impact of soil pollution only affects the quality of soil. But it also falls on living and human life. The impact of land pollution also causes water pollution and air pollution. Its side effects in the district -

(A) Lack of soil fertility due to soil pollution reduces their fertility. There has been an impact of land pollution in the north-eastern and western parts. Due to which there is a huge reduction in agricultural productivity and production.

(B) Due to the increasing trends of the agricultural development level, the soil pollution from soil pollution causes many diseases to reach the human species through vegetation. Among these diseases in the district are heart disease, diabetes, premature graying of hair, stomach related diseases, cholera, smallpox, quick ripening of hair, etc.

Expansion of agricultural land impacts on natural environment

Agricultural areas are being expanded to get more agricultural production. In this longing,

indiscriminate deforestation is being done. To expand the cultivation of sev by clearing the forests in the Himalayan regions of India and the hilly parts of Uttar Pradesh. In this way, forests are being developed on a growing scale to increase the agricultural sector for agricultural development.

The forest area has decreased by 6.5 percent in the last 20 years. The main reason for this has been largely agricultural expansion.

1. Soil erosion due to forest destruction.

2 rainfall decrease,

3 outbreaks of dryness,

4 diffusion of many organisms elsewhere,

5 Extinction of certain animals, due to expansion of agricultural land in the district, wildlife is facing hardships. In particular, tiger, chital, rods, deer etc. are causing problems and the natural environment degradation crisis is increasing.

To maintain agricultural development and to prevent environmental conditions from being affected, the following actions should be taken

1 Controlled use of chemical fertilizers and biocidal chemicals, using insecticidal chemicals that can keep the organic decomposition in the soil for a long time.

2 To maintain soil fertility, manipulate crops, planting legume crops and grasses, mixing micro-

nutrients with fertilizers in the soil to maintain soil fertility.

3 If environmental conditions are more affected (polluted) by any chemical fertilizers and pesticides, then it should be banned as well as substitute agricultural agricultural fertilizers and pesticides.

4 Public and farmers should be made aware of the hazards on environmental conditions. For this, the government should organize programs and limitations.

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