

Impact of Modern Agricultural Techniques on Production (With special reference to Sakti district of Chhattisgarh)

Dr. Abha Choubey

Principal (Sukhnandan College, Mungeli, C.G.)

Abstract- Presented research paper has been written keeping in view the agricultural condition of sakti district in chhattisgarh state. Under this research paper, the effect of modern agricultural techniques on production and development in agriculture development in sakti district has been made. In view of the shortage of food grains, the Intensive Agriculture District Program (IADP) was done in the first five-year plan in 1951-56. After this, the program of High Yielding Varieties was started by I.A.D.P. Was linked with and the goal of expanding this development method across the country was fixed. In a way, this can be said to be the beginning of modernization of Indian agriculture. Traditional agriculture mostly depends on indigenous inputs. Under which organic, manure, ordinary plows and other primitive agricultural tools, bullocks etc. have been used. Against this, modern technology has started using chemical fertilizers, pesticides, advanced varieties of seeds, agricultural machinery, extensive irrigation, diesel and electric power etc. in large quantities.

Keyword- Economics, Food grain development, Agriculture

INTRODUCTION

Since the beginning of human civilization development, agriculture has been the main sources of livelihood of the people. Today this agriculture is the main occupation and main source of income for most of the population of the world. Being the main business in developing countries, agriculture is the biggest source of national income, employment and main means of livelihood, industrial development is the basis of commerce and foreign trade.

More than half of India's population resides in villages whose main source of livelihood is agriculture and animal husbandry. The contribution of agriculture and allied sectors in the Gross Domestic Product (GDP) of our country is about 20-24 percent at present. The contribution of agriculture in the economic development of the country has been important. About 70 percent of the total population of India is

engaged in agriculture, but still the progress in Indian agriculture is slow. Indian population is increasing rapidly in proportion to food grains. Therefore, the burden of population on agriculture is continuously increasing. Due to low agricultural productivity, food grains are not being produced as much as they should be. When compared with other countries of the world, it is clear that the agricultural productivity of almost all the countries of the world is much higher than India, the main reason is that they have started producing more by using modern agricultural techniques instead of traditional agricultural techniques, but Most of the areas in India were being cultivated by traditional methods.

Modern agricultural technology such resources i.e. fertilizers, agriculture sector which is based on pesticides, agricultural machinery etc. are generated outside. As a result modern at a rapid pace development has taken place. As a result of the great programs of farm mechanization and irrigation, in the consumption of electricity and diesel have increased in rural areas. The first Prime Minister of the country Pandit Jawahar Lal Nehru asked for special emphasis on the progress of agriculture sector, due to which high quality agricultural research, extension of agriculture and structure of agricultural education have been developed in India. And without any delay, all-round development plans were made for the development of agriculture sector.

During World War II, experts from the Rockefeller Foundation, most notably Norman Borlaug, In Mexico, work was done to find new varieties of wheat, on the basis of this, chemical fertilizers and new types of seeds were used in the United States, due to which agriculture has become completely mechanized.

OBJECTIVES

1. To assess the actual production of the farmers of Sakti district with modern agricultural technology.
2. Agriculture of the farmers of Sakti district towards modern technology. Awareness Detection.

For the collection of primary data, considering Sakti district as a whole in Chhattisgarh, tehsil Sakti, Dabhra, Jaijaipur, Malkharoda, Naya Baradwar was selected and ten farmers were selected from each tehsil out of five villages by random sampling method has been chosen. Interview schedule has been used for carrying out the appropriate tasks. The sample size is to be 200 farmers.

RESEARCH METHODOLOGY

1. Primary and Secondary data have been compiled by researcher to know the impact of modern agricultural techniques on farmers.
2. The figures provided by the Directorate of Statistics, Raipur Chhattisgarh, have been used to study modern agricultural techniques.

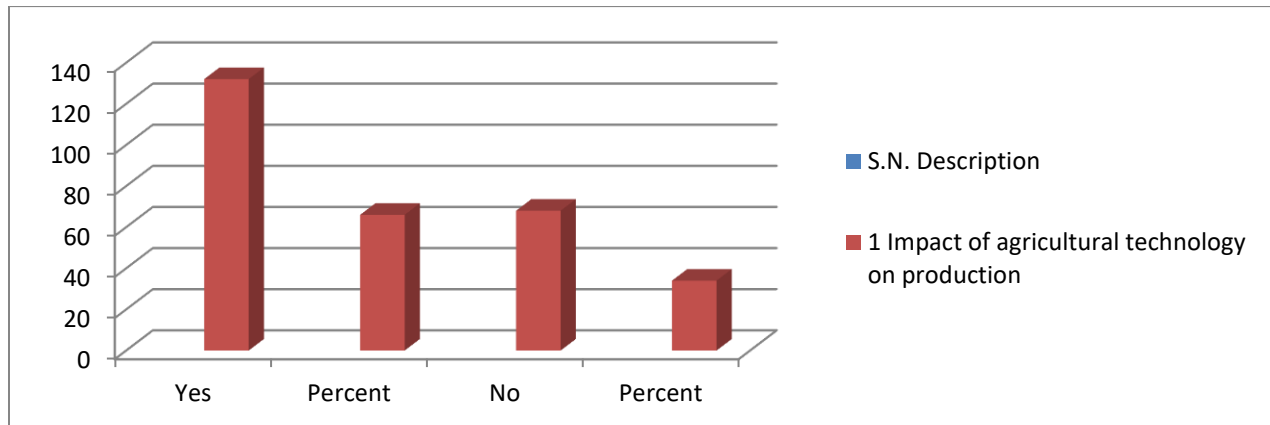
IMPORTANCE AND NEED OF STUDY

Sakti district in chhattisgarh to study the impact of agricultural modern technology on the income and production of farmers and to what extent agricultural modern technology has been successful, keeping the above reasons in mind; the proposed research topic has been selected to study the impact of modern agricultural technology on farmers in Chhattisgarh.

OBSERVATION AND SAMPLING

Table – 1- Factors Affecting Agriculture

S.N.	Description	Yes	Percent	No	Percent
1	Impact of agricultural technology on production	132	66	68	34



Hypothesis-

1. The use of modern techniques in agriculture would have changed the total real production of the farmers.
2. There is no change in the total actual production of the farmers by the use of modern techniques in agriculture.

The chi-square test has been carried out on the basis of the results of table number 1 to test the above hypothesis. The results of chi-square test are analyzed as follows -

Chi-Square Test

Chi-Squarea	df	Asymp. Sig.
28.880	1	0.000

The table value of χ^2 for an independent number at the above hypothesis 5 percent significance level is $\chi^2_t = 3.841$ And the estimated value of χ^2 at 0.000 percent significance level is $\chi^2_c = 28.880$.

Means $3.841 < 28.880$ or $\chi^2_t < \chi^2_c$ both the properties are not independent but both the properties are related, hence null hypothesis is rejected. It is clear that with the use of modern techniques in Ha2 agriculture, the total actual production of the farmers Change

happens." It is accepted. Therefore, it can be said that human labor is saved by the use of various agricultural machines. Increase in production has become possible through the use of modern improved seeds, use of pesticides, fertilizers, etc.

CONCLUSION

In conclusion, it can be said that agricultural efficiency and production completely depend on the agricultural inputs and methods used in the production process. It is necessary to improve agricultural inputs and methods suited for developing agriculture. Under technical changes, all the factors which increase the capacity of agricultural land are included. Technological change shifts agricultural production crop cycles towards higher production. Technological changes can be seen in two forms. Achieving greater output from an amount of agricultural inputs or at a lower cost than the same amount of agricultural output. Technological change is an element in increasing the productivity of land and labor, so it can be seen as a land-saving factor. Land-saving factors include high-yielding improved varieties of seeds, chemical fertilizers, pesticides, expansion of irrigation facilities and changes in cropping pattern.

On the other hand, tractors, power threshers, means of transport and other innovative agricultural machines are labor-saving components. As a result of agricultural mechanization, multiple cropping systems can be adopted in the total agricultural area. The increasing use of warehouses to make the produce profitable is also included in the technological changes. Modern machines make production faster and more efficient and reduce the cost of production. There are many works in agriculture, which are very difficult to be accomplished efficiently by humans, such as cleaning the forests and making the land arable, leveling the high and low land, moving the soil from one place to another and digging deep, etc. Heavy tasks can be completed more easily and efficiently by mechanization.

REFERENCE

- [1] Chhattisgarh State Agriculture Marketing (Mandi) Board, Raipur. gov. of Chhattisgarh.
- [2] Chhattisgarh state report from <http://www.ibef.org/download/Chhattisgarh-260912.pdf>

- [3] Krishna M, Deshmukh KV, Chavan RV, Ritesh Arvind Chand. Constraints in the Production and Marketing of Maize in Karimnagar District of Telangana, India. *Int. J Curr. Microbiol. App. Sci* 2018;7(9):1786-1788
- [4] Modern Agriculture and Its Benefits – Trends, Implications and Outlook by Dr. William C. Motes.
- [5] Project report on RKVY, Department of Agriculture Cooperation & Farmers Welfare MoA&FW | Government of India.
- [6] Ranawat Yogita, Ram H, Bareth LS, Sisodia SS. Knowledge of trained and untrained farmers about improved maize cultivation. *Progressive Agriculture* 2012;3(2):57-59
- [7] State Agriculture Plan for Rashtriya Krishi Vikas Yojana (SAIDP) Eleventh Five Year Plan Period; Government of India Ministry of Agriculture New Delhi Submitted by Government of Madhya Pradesh Department of Farmer's Welfare & Agriculture Development, Bhopal 2019.