

Sustainable development in agricultural sector in India

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Key Words

Ecological Sustainability, Biodiversity, Economic Sustainability, Social Sustainability, bio diversity, Water Resources

Abstract

Being the largest private sector 'agriculture' enjoys a very important position in Indian economy. As it is having link from various sectors like production, processing and marketing; agriculture continuously dominate to change in the India. The paper aims to study the significance of the sustainable development in the field of agriculture by using the secondary data. Agriculture is the main occupation in India as large population is living in the rural areas and having agriculture as their livelihood. Sustainable development in the agriculture sector aims to increase the productivity, efficiency and level of employment and further aims to protect and preserve the natural resources by the over utilization. It also provides mechanism to reduce the soil degradation through multiple cropping systems and through the deforestation and much other reason.

Introduction

Being the largest private sector 'agriculture' enjoys a very important position in Indian economy. As it is having link from various sectors like production, processing and marketing; agriculture continuously dominate to change in the India. The role of agriculture in developing an economy can be analyzed by the GDP (Gross Domestic Product) contribution made by it. The agriculture sector also contributes to the sustainable development of a country. Sustainable agricultural development depends upon the availability of the natural resources of the country. India is a country where about two third of the population lives in the rural areas and having agriculture as their livelihood. In few decades because of urbanization a fall in agriculture is recorded and that shows a very bad sign.

The productivity of agricultural sector is improved by two ways- firstly it can increase output by efficiently utilizing the available resources and secondly output can be increased by variation of input. In a country like India productivity is most important to satisfy the need of people as we have a large population.

The issue related to agriculture can be studied through three basic categories. As follows

- Traditional production system
- Modern agricultural system
- Sustainable agricultural system

Naturally much work is needed to grow the agriculture to a level where it is least affected by vagaries of monsoon and needs little from outside the farm, i.e., lesser dependence on chemical fertilizers and waste.

Objectives of the Study

- To analyze the extent of sustainable development in the agricultural sector in India.

- To evaluate the performance of agricultural sector as a part of GDP (Gross Domestic Product) in India.
- To analyze that how and to what extent sustainable development is affecting the production policy in agricultural sector in India.

Significance of Study

The descriptive paper aims to study the extent and importance of sustainable development its impact and effect on the agricultural practices in India, and how the production policies are changing in accordance with changing scenario of the world.

Method of data Collection

The data used to study the impact of globalization on employment is based on the secondary data purely. The journals, article, web links, books have been used as source of information. There is no empirical touch to this paper.

Sustainable Agriculture Development

The issue of sustainable development can be studied under three broad areas farming system which consist- traditional production system, modern agriculture system and sustainable agriculture system. Further we can compare them by three dimensions, ecological, economic and social sustainability.

Ecological Sustainability

Under this we can say that most of the traditional practices are not ecologically sustainable. It does not use natural resources properly, reducing the fertility of soil which causes problem of soil erosion. The sustainable development in agricultural sector has come up to with major advantages to reduce the effect of these causes.

Soil Erosion

Soil erosion is the major problem in the agricultural sector. This can be rectified with the practices of sustainable development.

Water resources

Major percentage of the fresh water is used in the irrigation purpose and fertilizer and pesticides contaminate both surface and ground water. Sustainable agriculture facilitates to increase the quality of top soil, by facilitating to store and retain the rain water.

Biodiversity

The concept of mixed cropping was introduced by which increasing the diversity of crops can be produced and raising the diversity of insects and other animals and plants in and around the fields. Sustainable development facilitate the optimum utilization of the available natural resources

Health & Pollution

Use Chemicals, pesticides and fertilizers adversely affect the total ecology as well as the population. Improper use of pesticides, improper storage etc. may lead to health problems. Sustainable develop of agriculture reduces the use of hazardous chemical and control pests.

Pattern of using land

Now a day the because of multiple cropping system soil (land) is over utilized. This over utilization of land causes degradation of soil quality and further productivity decreases. By the practice of sustainable agriculture we can overcome by this serious issue.

Economic Sustainability

To make agricultural sector sustainable it should be viable over long period. Some time the government also aims to enhance the production of such products which is export oriented. This is not right policy as export involves many cost like transportation, packing, packaging

import duty of other countries, taxes etc are included despite its earning. Production should not be export centered only it should also focuses on domestic supply.

As agriculture is the main source of employment in rural areas. It should focus on specialization of the skills. Specialization will help in enhancing the efficiency level and greater production viz. in other words productivity will increase. It is an illusion that by producing the specific commodity production will contribute to earn more. Cheap products from the developed countries are demanded more as they are good in quality. Sustainable development of agriculture tries to accomplish this objective through the production of quality and environment friendly product.

Social Sustainability

The sustainable development aims at increasing the productivity as well as increasing the level of employment in the country. Development is meaningless if it is not able to reduce the level of poverty. Social sustainability deal with social acceptability and justice. Many modern technologies are failed because of their limitation like complexities in use and are not easily accessible to poor farmers. In old method of agriculture the women's had more burden of work.

Agricultural productivity in India-			
Agricultural productivity in India, growth in average yields from 1970 to 2010			
Crop	Average YIELD, 1970-1971	Average YIELD, 1990-1991	Average YIELD, 2010-2011
	kilogram per hectare	kilogram per hectare	kilogram per hectare
Rice	1123	1740	2240
Wheat	1307	2281	2938
Pulses	524	578	689
Oilseeds	579	771	1325
Sugarcane	48322	65395	68596
Tea	1182	1652	1669
Cotton	106	225	510

Source: http://en.wikipedia.org/wiki/Agriculture_in_India

Conclusion

It has been observed that for a growing country like India the practice of sustainable agriculture is of quite importance as it accelerates the productivity, efficiency, employment, and providing guidance to reduce the practices which affect the quality of soil, water resources and degradation of other natural resources. It basically aims at adopting specialization and using environment friendly tools to protect and preserve the environment as well as to enhance the level of production without harming to the environment.

As we see the performance of agricultural sector of India we will be easily recognize that performance have been increased in a significant manner over the years. Despite of many challenges like urbanization, Growth of secondary sector etc. it has achieved a significant growth.

Bibliography

Dr. Deepashree (2010) , Indian Economy' ,Ane Books Pvt. Ltd.

C.Jeevandam (2006), 'International Economy', Sultan Chand and Sons, New Delhi