



SUSTAINABLE AGRICULTURE DEVELOPMENT IN INDIA: AN OVER VIEW

KEYWORDS

Sustainable, Agriculture, Development, Agricultural Farming and Economic Sustainability

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ABSTRACT *Agriculture is a critical sector of the Indian economy. It forms the backbone of development in the country. 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:

Agriculture occupies the most important position in Indian economy, as it is one of the largest private enterprises in India, which continues to dominate the change in economy through its links of various sectors of production and markets. The role of agricultural sector in Indian economy can be seen through its contribution to GDP (Gross domestic Product) and employment. This sector also contributes significantly to sustainable economic development of the country. The sustainable agriculture development of any country depends upon the judicious mix of their available natural resources. In fact agriculture determine the fate of a country like India where about two-thirds of the population still lives in rural India with agriculture as its livelihood, in spite of the increasing urbanization that has been taking place since many decades. Therefore if agriculture goes wrong, it will be really bad for the economy as the falling of agricultural growth not only affects employment but GDP too (thus increasing poverty). The larger objective for the improvement of agriculture sector can be realized through rapid growth of agriculture which depends upon increasing the area of cultivation, cropping intensity and productivity. But for a country like India, increasing productivity is more important than the rest of the two. This is simply because of increasing urbanization, industrialization and the limited land size of the country. The productivity can be increased by two ways. First, increasing output by efficient utilization of available resources. Second, increasing output by variation of input. The first method is better with respect to productivity and sustainability. But due to increasing population, this method cannot provide a permanent solution. Thus we can go for the second method which may potentially cause environmental degradation in the economy and affect its sustainability. Therefore there is need to tackle the issues related to sustainable agriculture development.

Sustainable Agriculture Development:

The issues of sustainable development can be discussed under three broad types of farming systems viz. traditional production system, modern agriculture system and sustainable agriculture system. Further we can compare them across three dimensions, ecological, economic and social sustainability.

OBJECTIVES OF THE STUDY:

Objectives of this Research Paper are as follows:

1. To study of meaning of sustainable Development.
2. To analyze the extent of sustainable development in the agricultural sector in India.
3. To observe the need of sustainable agriculture.
4. To find out the way of sustainable development about Agriculture.

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.

METHODOLOGY:

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.

DEFINITION OF SUSTAINABLE DEVELOPMENT

The concept of sustainable development formed the basis of the United Nations Conference on Environment and Development held in Rio de Janeiro in 1992. The summit marked the first international attempt to draw up action plans and strategies for moving towards a more sustainable pattern of development. It was attended by over 100 Heads of State and representatives from 178 national governments. The Summit was also attended by representatives from a range of other organizations representing civil society. Sustainable development was the solution to the problems of environmental degradation discussed by the Brundtland Commission In 1987, the United Nations Released the Brundtland Report, Which included what is now one of the most widely recognized definition:

"Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs."

The concept of need in particular the essential needs of the world poor, to which overriding priority should be given.

The idea of limitations imposed by the state technology and social organization on the environment 's ability to meet present and future needs.

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. Sometime 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.

SUSTAINABLE AGRICULTURE IN INDIA:

Sustainable Agriculture can be simply defied as environmentally friendly methods of farming that allow the production of crops or livestock without damage to the farm as an ecosystem. A part from this, it also prevents the adverse effect on soil, water supplies, biodiversity, or other surrounding natural resources. The concept of sustainable agriculture is an intergenerational one in which we pass on a conserved or improved natural resource base instead of one which has been depleted or pollution.

Since the dawn of civilizations agriculture is one sector that impacts and in turn is impacted the most by environment. Hence sustainability of the human race and this world depends a lot on the environmental friendliness of our agriculture.

India is facing a food crisis thanks to the systematic destruction of farmlands and food production systems over the last five decades through uncontrolled use of chemical fertilizers, pesticides, monocropping and other intensive agricultural practices. Instead of looking at the real problem the government is favouring false solutions like genetically engineered (GE) food crops.

Ecological farming is the answer to the problems being faced by

agriculture in our country today. It will also keep agriculture sustainable. This form of agriculture conserves our soil and water resources, protects our climate, enhances agro-diversity, ensures biodiversity, meets the demand for food and safeguards livelihoods. In short, it ensures that the environment thrives, the farm is productive, the farmer makes a net profit and society has enough nutritious food.

India has a long history of agriculture. Over centuries, farmers in this country devised practices to keep our farms sustainable. Practices like mixed cropping, crop rotation, using organic manure and pest management kept our agriculture sustainable. But things changed for the worse with the onslaught of a chemical intensive model of agriculture, imposed through the so called Green Revolution in 1965.

It was therefore not surprising when the International Assessment of Agricultural Science and Technology for Development [IAASTD], an initiative of the United Nations and World Bank, concluded that small-scale farmers and agro-ecological methods are the way forward if the current food crisis is to be solved. This initiative involved a three year review of all the agricultural technologies in the past 50 years by around 400 scientists across the world.

The IAASTD said that to meet the needs of local communities, indigenous and local knowledge need to be declared as important as formal science. This is a significant departure from the destructive chemical-dependent, one-size-fits-all model of industrial agriculture. The report also acknowledges that genetically engineered crops are highly controversial and will not play a substantial role in addressing the key problems of climate change, biodiversity loss, hunger and poverty.

Social Sustainability:

Social sustainability in farming techniques is related to the ideas of social acceptability and justice. Development cannot be sustainable unless it reduces poverty. The government must find ways to enable the rural poor to benefit from agriculture development. Social injustice is where some section of the society is neglected from development opportunities. But having robust system of social sustainability can bridge the gap between "haves" and „have-nots". Many new technologies fail to become applicable in agriculture sector due to lack of acceptability by the local society. Sustainable agriculture practices are useful because it is based on local social customs, traditions and norms etc. Because of being familiar the local people are more likely to accept and adopt them .Moreover, sustainable agriculture practices are based on traditional know-how and local innovation. Local people have the knowledge about their environment crops and livestock.

Traditional agriculture is more gender oriented, where woman bear the heaviest burden in terms of labor. Sustainable agriculture ensures that the burden and benefits are shared equitably between man and woman. While conventional farming focuses on a few commodities, sustainable agriculture improves food security by improving quality and nutritional value of food, and also by producing bigger range of products throughout the years. Traditional farming was also driven by the caste and wealth oriented people. The rich and higher castes benefitted more, while the poor and lower castes are left out. Sustainable agriculture attempts to ensure equal participation which recognizes the voice and speech of every people.

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.

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