ORIGINAL RESEARCH PAPER

Economics

SUSTAINABLE AGRICULTURE : THE CONTEMPORARY NEED.

KEY WORDS: Agriculture, Sustainable, Organic, Research, Renewable Energy, Production.

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ABSTRACT

To meet future needs, we have to emphasize on sustainable agricultural, especially in developing countries where most of the population growth has been anticipated. Small farmers are major part of the solution, and they must be supported to achieve more productivity. When it comes to the question of productivity, agriculture sector tilts towards using chemical fertilizers, new seeds etc in the name of productivity and modernization of agriculture. No doubt, productivity and production increases for short period, but what happens to fertility of the soil in the long run? There might be severe negative change in the climate, other threats and ultimately harmful effects on the livelihood of rural population may be expected. Thus, We are in the midst of two problems, one, population is still growing in all most all the developing countries of the world, so, food supply should match with growing population. At another end as the demand for food increases there is climate change along with ecosystem degradation which imposes new constraints. To increase the food production, we have to go for modern system of agriculture and it will end up with disorder in the whole system. Therefore, we need a sound method to give a concrete solution to both of the above problems. That is, 'Sustainable agricultural practices'.

I. INTRODUCTION:

Sustainable agriculture integrates three main goals environmental economic profitability, health, social and economic equity. Sustainable agricultural development is essential both on the global and local level as it plays a multidimensional role. Because of population growth, More people would need more food, Generally, the agricultural sector can provide nutritious food for all .The farming is a source of food that could help to eradicate poverty from the world. But at the same time over use of land and application of more chemical fertilizer in the process of increasing the production ,may destroy the original fertility of the soil and That will make human being living miserable on the earth. To avoid such conditions, sustainable agriculture is the answer and need of the present world.

But, how, where, and what we need regarding 'Sustainable agriculture' is the priority question in the current world. To meet future needs, we have to emphasize on sustainable agricultural, especially in developing countries where most of the population growth has been anticipated. Small farmers are major part of the solution, and they must be supported to achieve more productivity. When it comes to the question of productivity, agriculture sector tilts towards using chemical fertilizers, new seeds etc in the name of productivity and modernization of agriculture. No doubt, productivity and production increases for short period, but what happens to fertility of the soil in the long run? There might be severe negative change in the climate, other threats and ultimately harmful effects on the livelihood of rural population may be expected. Thus, We are in the midst of two problems, one, population is still growing in all most all the developing countries of the world, so, food supply should match with growing population. At another end as the demand for food increases there is climate change along with ecosystem degradation which imposes new constraints. To increase the food production, we have to go for modern system of agriculture and it will end up with disorder in the whole system. Therefore, we need a sound method to give a concrete solution to both of the above problems. That is, 'Sustainable agricultural practices'.

The paper tries to find the suitable way to implement sustainable agricultural and by which solutions to food problem and environmental degradation by agriculture growth.

III. OBJECTIVES:

1. To understand sustainable agriculture aims.
2. To know practices of sustainable agriculture.
3. To examine the role of people at large and administration in sustainable agriculture.

IV. METHODOLOGY:

This is a descriptive analysis, so it does not use any statistical tools and it is based on some reports and research articles.

V. GOALS OF SUSTAINABLE AGRICULTURE .

The paper brings forth the following goals for sustainable agriculture:

1. Produce Healthy Food: The farmers should produce high quality, safe, secured healthy food.
2. Preserve Natural Resources: The benefits received from nature should be returned it. This is only possible by keeping gifts of nature like water, air, soil etc. in good condition. In addition to that chemical inputs like fertilizers and pesticides should be used carefully.
3. Assured Economic Viability: In reality agriculture generates enough yields to have a sound life. Sustainable farming helps to make stronger the economy and contribute to balanced territorial development. Thus economic viability is definitely assured.
4. Delver Services for the Ecology: Farming which is natural always protects biodiversity. Sustainable agriculture delivers valuable services to ecology such as nutrient retention, soil conservation, amenity, water and carbon storage etc.
5. Create a Certain Animal Welfare: Animals are to be treated with respect and extra care. In reality, they like to live in a natural environment. They should be fed an appropriate natural diet and do not suffer from epizooties

VI. Means and Ways Open to Practice Sustainable Agriculture:

As per the study, there are a number of means, and ways are open to practice and implement sustainable agriculture in India and other countries of the world. It can be listed as follows.

1. ORGANIC FARMING:

No doubt, Organic farming is a method of farm execution thereby food production. It actually brings together the high level of biodiversity, the preservation of natural resources, the application of animal welfare standards and environmental practices. In addition to that it supplies the good quality foods to human beings on the earth. Many governments in the world incorporated the supports to organic farming in their agriculture policies.

2. BIOGAS FROM MANURE AND AGRICULTURAL WASTE:

The on-farm production of biogas by using manure and agricultural waste is a best practice as it is a source of renewable energy and it provides farmers an additional income. The remaining slurry is a valuable source of natural fertilizer, and it can replace mineral fertilizer that reduces greenhouse gas emissions and smells. The investments on farming biogas plants have considerably increased in the developed and developing countries of the world in recent years.

3. WIDESPREAD GRAZING PRACTICES:

The widely spread grazing is the practice that can increase the levels of biodiversity, which creates environments to live birds,

butterflies etc. It implies that more grazing means more habitats. Those habitats are main component of agriculture sceneries. Grazing also helps to improve soil and water quality by reducing the number of livestock grazing per surface area. In addition, it may reduce quantity of chemical inputs used. Permanent meadows are a fundamental part of process of carbon storage. They are often the source of first-class traditional farm produce, such as high-quality labeled cheeses etc. Thus, widespread grazing has to be promoted.

4. INVOLVE IN RENEWABLE ENERGY PRODUCTION:

Now days, farmers are showing interest in renewable energy and their production. Example, Wind power, solar energy etc. are being promoted by the farmers in the interest of farming. Such energy production brings additional income and helps to farmers to implement sustainable agriculture methods. Thus, encouragement to go for renewable energy production by government and the system is very much required.

5. EXACTITUDE FARMING:

As per as possible farmers should go for methodical farming. Example, plan to use such inputs which is the real need of the specific crops. Quality and features of the soils are different from place to place. Thus, while applying fertilizers and other agro-chemicals, farmers should be guided to think about the doses and take correct action. In this process farmers can save money and environment of the country.

6. AGRO-FORESTRY SYSTEM:

The agro-forestry system incorporates trees, shrubs, crops, livestock etc production. They can provide different ecological, agronomic benefits to the farmers and the nation. The control of soil erosion, higher production stability, habitats for insects, birds, life to wildlife, shades to people are the contribution of the agro forestry system. The farmers can live in a better climate resilience condition with high quality agro-forestry system. Thus, for sustainable agriculture robust agro-forestry system is inevitable.

7. PROMOTE RESEARCH ON SUSTAINABLE AGRICULTURE:

The continuous research helps to scale up in bringing new practices in agriculture sustainability. It may be taken up by a government or private funding, but ultimately it should be helpful to all farmers of the country.

VII. Administrators and Publics Care For Sustainable Agriculture:

To advocate sustainable agriculture, It needs to be a political priority. Like in India, recently adopted "Agenda for Change" emphasis the central government role in the development of agriculture and food security in promotion of inclusive and sustainable growth. Thus, all the administrators and public in large should think and support in the following way.

1. To promote Organic farming:
a. Give importance to the capacity building of organic farmer cooperatives.
b. Promote the development and integration of organic markets.
c. Help in developing domestic organic markets.
d. Support the development of participatory guarantee systems.
e. Focus on such countries and regions where organic agriculture has the most potential.
f. support research on organic agriculture in developing countries.
2. Formulate the effective plan to promote and improve the grazing practices.
3. Encourage wind and solar energy in countryside to improve the farmer's economic condition.
4. Growth of the forest has to be given extra priority.
5. Emphasis should be more on research to find out possible measures for sustainable agriculture.

Thus, the policies and the urge of its implementations are always matters in perusing sustainable agriculture.

VIII. CONCLUSION:

In the conclusion, we can summarize that under the changing agricultural scenario, the technologies need a shift from production oriented to profit oriented sustainable farming. The farming sector has to be improved in such a way that the educated youth would consider this sector as one of the first priority sector for being settled without sacrificing the future generation. The sustainable farming addresses Food, environmental, economic, social, medical problems of the present world. Thus, Goals, methods, and execution of sustainable farming is definitely would give solutions to a number of problems of the human being.

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