

# The Need For Sustainable Agriculture In Nigeria

Yusufu Kuza

Agricultural Educ Ation Department, College Of Education,  
Nasarawa State, Nigeria

**Abstract:** Sustainable agriculture is the use of improve techniques of crops and animals production for meeting present human needs without compromising the ability of future generation to meet their own agricultural production needs (communities) using the same environment. It is the process of improving the quality of life of the rural poor to meet their present needs without compromising the ability of future generations living in the same rural areas to meet the own needs without harming the environment. This paper also discussed the importance and the dimension of sustainable agricultural development. The paper further highlighted the challenges of sustainable agricultural development in Nigeria. Recommendations has been made for sustainable agricultural development in Nigeria.

**Keywords:** Sustainable, Agriculture, Development, needs

## I. INTRODUCTION

Sustainable agriculture is the ability of a country (farmers) to practice agricultural production to meet her societal food and agro- industrial needs of the present generation without compromising the ability of future generation to meet their needs using the same agro-environmental resources (Wikipedia,2017).It seeks to integrate a healthy environment, economic profitability and social equity. In sustainable agriculture, individuals involved in food production system (that is all stakeholders of agriculture and its related) play an important role in ensuring a sustainable agricultural system. Other factors commonly used by stakeholders of agriculture in sustainable agriculture and food systems may include use of methods that promote soil health, minimize water use and reduce pollution level on the farm.

Sustainable agriculture according to food programme is the production of food crops, fibers, annual products using farming techniques that protect the environment public health, human communities and animal welfare. The primary aim is to produce healthful food without compromising future generations ability to produce her own. The primary benefit of sustainable agriculture according to Age (2017) are as follows:

✓ Environmental preservation: This refers to sustainable farm operation involving producing crops and animals without relying on toxic chemicals and pesticides,

synthetic fertilizers, genetically modified seeds. It means growing a variety of crops plant using techniques such as crop rotation, conservation tillage and pasture-based livestock husbandry, sustainable farms, protect biodiversity and foster the development and maintenance of healthy ecosystems.

✓ Protection of Public Health: this means food production should never come at the expense of human health. It should avoid hazardous farm practices, employ practices that are safer for consumers, farm workers and surrounding communities. In the same way sustainable livestock means farmers should raise livestock animals without using dangerous practices. This can be through careful or responsible management of livestock waste, protection of human beings from exposure to disease pathogens toxins and hazardous pollutants.

✓ Sustaining Vibrant Communities: This means the ability of agricultural practices to remain economically viable, providing farmers, farm workers, food processors and other employed workers in the food system with better wages , safe and fair working condition. It also involves improving local and regional economies, creating good jobs and building strong communities.

Other important concerns of sustainable agriculture include industrial agriculture, industrial crop production, industrial livestock production and sustainable food for future.

Sustainable agriculture must seek to sustain farmers, resources and communities by promoting farming practices and methods that are profitable, environmentally sound and good for people in the communities. This also implies that sustainable agriculture must take care of the following three key areas:

- ✓ Economically Viable: It has to be profitable.
- ✓ Socially Supportive: The quality of life of farmers, farm families and farm communities must be protected and enhanced.
- ✓ Ecologically Sound: Resources must be preserved to sustain present and future generations. The economic, social and ecological viability must be in harmony. (Akele, 2015).

## II. MEANS FOR SUSTAINABLE AGRICULTURE IN NIGERIA

To achieve sustainable agriculture in Nigeria, the following measures have to be adopted as suggested by Jason (2015), include:

- ✓ Organic farming practices: This involves farm practices such as green manure, compost farmyard manuring, crop rotation, bush fallowing, land rotation, alley farming. The above mention organic farming has the advantages of improving soil fertility and soil texture for better sustainable agriculture. This is because it is free from artificial disturbances.
- ✓ Dry Season Farming: To ensure food that would meet the needs of citizens, all year round production by means of irrigation should be adopted. The construction of dams and water canals should be done to achieve this practice. It is profitable and rewarding to producers.
- ✓ Use of Improved Seeds Varieties: For sustainable agriculture, farmers must have to be educated to use improved seeds of different crops varieties which have been known for high yield. This will enable better harvest per area of land cultivated.
- ✓ Integration of Exogenous and Endogenous technologies that ensure environmental health and protect biodiversity. Agricultural extension workers should discourage farmers on overdependence on exogenous technologies to enable sustainable environment and biodiversity.
- ✓ There is the need to strengthen our cultural values and norms which should be internalized by all Nigerians with a view to protecting and conserving natural resources in Nigeria.
- ✓ The rural farmers should be supported by financial institutions through provision of micro-credit facilities low interest rate. This would serve as an economic empowerment that could increase per capita productivity of farmers in Nigeria. In addition, subsidizing farm inputs to boost food production (food security), high annual budgetary allocation (25%) and timely disbursement of the funds to agricultural sector should be done to enable active operations and sustainable agriculture.
- ✓ Provision of improve physical, social, institutional rural infrastructural facilities by the rural development stakeholders. This could reduce mass rural-urban

migration, improve environmental health and the well-being of the rural people.

## III. THE IMPORTANCE OF SUSTAINABLE AGRICULTURE IN NIGERIA

The importance of sustainable Agricultural development is quite enormous that need not to be overlook. This is because continuity in good and progressive survival of present generation and the future generation has to be achieved through careful planning and implementation of sustainable dimensions of agricultural development. The importance of sustainable Agriculture development according to Centre for Sustainable Development (2017) include the followings:

- ✓ It create the sense of ensuring a stable relationship between human activities and the natural world with a view that the future generation would need to use and enjoy natural resources that the present generation are enjoying.
- ✓ It open our understanding and encourage us to conserve and enhance our resources base by gradually changing our attitudes and ways in which we invent, develop and use improved technologies in the present generation.
- ✓ It helps us to control and protects natural resources to avoid destroying and degrading the resources to allow for future generation utilization.
- ✓ It opens our eyes and understanding to avoid over consumption of non-renewable resources beyond the carrying capacity of our nation. Thus, we become careful on utilization of non-renewable resources.
- ✓ It helps us to ensure a balance between environment, economy and the society. This means increasing per capita productivity to reduce absolute poverty, hunger and enhance economic, political and environmental security in a nation.

## IV. DIMENSIONS OF SUSTAINABLE AGRICULTURAL DEVELOPMENT IN NIGERIA

According to National sustainable Agriculture Coalition (2017), sustainable agricultural development can only take place under six basic dimensions. These dimensions serve as the bedrock for which sustainable agricultural development can depend upon. They include:

- ✓ Natural resources and environment.
- ✓ Human resources development.
- ✓ Economic growth and development.
- ✓ Rural infrastructure.
- ✓ Science and technology.
- ✓ Policy and administration.

## V. CHALLENGES OF SUSTAINABLE AGRICULTURAL DEVELOPMENT IN NIGERIA

Idachaba (2006) enumerated some of the challenges of sustainable agricultural development in Nigeria to include the followings;

- ✓ Poor political commitment. Sustainable Agricultural development in Nigeria suffers poor political will/commitment at all the levels of government in Nigeria. Most political leaders do not give attention to Agriculture and rural development in the perspective of proper budgetary allocation as stated in Maputo declaration which prescribe a minimum of 10% of annual budgetary allocation to agricultural sector. Commitment/political will has been too poor for agricultural development in Nigeria.
- ✓ Political instability: Nigeria policy suffer instability, this over time result to instability in policy instrument, violation of rule of law, poor policy implementation, lack of transparency and accountability.
- ✓ Inadequate Infrastructure: Agricultural development lack adequate physical, social, institutional infrastructural facilities. The few ones on ground are at deplorable state, poor annual budget disbursement to execute major infrastructure also account for poor implementation of sustainable agricultural development projects and programmes in Nigeria.

Other challenges affecting sustainable Agriculture in Nigeria according to Sule (2006), include poor finance and risk management, inappropriate technology development to meet the needs of end user and poor access to fund for commercial agriculture. In addition, climate changes, loss of biodiversity, deforestation, desertification, fresh water degradation, depleting and polluting natural resources. Lack of good data, poor priorities by leaders, poor man power/capacity development to address the sustainable development challenges account for the challenges of sustainable agricultural development in Nigeria.

## VI. CONCLUSION

Sustainable agricultural development is the current issue in the world that need collaborative efforts and attention of all levels of government and development stakeholders in Nigeria. Development and use of natural resources in our communities or environment should be used such that the future is not compromised. Whatever dimension of sustainable agriculture one may considered, the policy of a country play significant role in ensuring the achievement. Government should ensure that appropriate policies are formulated through legislation, monitory and evaluation to enable sustainable agriculture in Nigeria.

## VII. RECOMMENDATIONS

- ✓ Nigerian Government should sensitize rural dwellers on sustainable use of natural resources and environment through effective extension services delivery.
- ✓ All the levels of government in Nigeria should by polices jointly and promptly raise funds to support policies, programmes and projects that enhance sustainable agricultural development in Nigeria.
- ✓ There should be manpower development and retraining of extension workers, adequate funding of all research institutions to educate rural people on practices that would help us achieve sustainable agricultural development in Nigeria.
- ✓ Nigerian leaders (political leaders) should show more commitment (political will) towards the issues of sustainable agriculture through sound policy formulation by legislation, carried proper implementation, monitoring and evaluation. In addition, periodic review of the policies to address areas of challenges in sustainable agricultural development in Nigeria.

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