

## **Sustainable Agricultural Education as a Tool for Training Youths for Achieving the Millennium Development Goals (MDGs) in Nigeria**

<sup>1</sup>Stella N. Asiegbu & <sup>2</sup>Charles U. Ugwoke

<sup>1</sup>Government Girls College, Makurdi

Department of Vocational Teacher Education, University of Nigeria, Nsukka

[asiegbuesther726@gmail.com](mailto:asiegbuesther726@gmail.com)

### **Abstract**

*The need for increased productivity in Agricultural sector of Nigerian economy through effective agricultural education of the populace especially the youths' necessitates that education in agriculture be sustained. Every individual and society strives to improve their economic status by engaging in a self-sustaining activity that is intended to uplift him/her from poverty and hunger. The purpose of this paper is to view sustainable agricultural education as self-sustainable. It also views agricultural education as a continuing educational process, which is geared towards increasing the standard of living of youths and the society at large. Purpose problems that inhibit sustainable agricultural education were identified and recommendations to overcome the problems were proffered, if success is to be achieved as outlined in the Millennium Development Goals (MDGs).*

**Keywords:** Sustainability, Agricultural Education, Millennium Development Goals, Youths.

### **Introduction**

Despite its plentiful resources, poverty is widespread in Nigeria. The situation has worsened since the late 1990s, to the extent that the country is now considered one of the 20 poorest countries in the world. Over the 70% of the population is classified as poor, with 35% living in absolute poverty (World Bank, 2003).

Poverty is especially severe in rural areas, where social services and infrastructure are limited or non-existent. The majorities of those who live in rural areas are poor and depend on agriculture for food and income. About 90% of the country's food is produced by small-scale farmers cultivating tiny plots of land who depend on rainfall rather than irrigation systems. Surveys show that across the country 44% of male farmers and 72% of female farmers cultivate less than 1 ha per household (IFAD, 2007).

World poverty can decrease significantly by 2020 if developing nations like Nigeria and other industrialized countries implement their commitments to attack the root causes of poverty. The challenge lies in implementing a common vision for achieving the targets set by the world conferences of the past decade which suggested that we work for sustainable growth that favours the poor and provides more resources for health, education, gender equality and environmental sustainability worldwide. Against the background that Nigeria is very far from achieving the poverty alleviation through its previous programs like Family Economic Advancement Program (FEAP), National Poverty Eradication Program (NAPEP) etc; there is therefore the need for concerted efforts by all: Governments at all levels, Educators, Civil Society Organizations, Donors and Individuals, if Nigeria is not to miss out.

In order to address the problem of poverty and promote sustainable development, the United Nations Millennium Declaration was adopted in September 2000 at the largest ever gathering of Heads of State and Government committing countries both rich and poor to do all they can to eradicate poverty, promote human dignity and equality and achieve peace, democracy and environmental stability (U. N., 2004). The goals include those dedicated to eradicating poverty, achieving universal primary education, promoting gender equality and empowering youths especially women, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria and other diseases, ensuring environmental sustainability and developing a global partnership for development.

### **Agricultural Education**

Various people have defined Agricultural Education in different ways but common among those definitions is the fact that it is an area of study that enquires into the different activities involved in the production of food and fibre for use by man and animals (NPE, 2014).

Agricultural Education was described by Asuquo (2005) as a systematic program of instruction for public school enrollees, out of schools, post-high school youths and established farmers, organized for the purpose of improving methods of production and rural living. The aim of Agricultural Education is the provision of teachers with adequate skills and pedagogy needed for imparting agricultural skills, knowledge and attitude to large scale, small scale and subsistent farmers, and to pupils of primary, secondary and tertiary institutions.

Secondary and post secondary courses such as crop production, animal husbandry, fishery, horticulture, agricultural economics and extension and the likes provide knowledge, skills which enables individuals to secure initial employment in agriculture, which may serve as background for further study and advancement in the world of agriculture and as a means of achieving self sufficiency and food security.

### **Relationship between MDGs and Agricultural Education**

To enable all people to live in dignity, the eight MDGs goals to be achieved by 2015 are:

To eradicate extreme poverty and hunger, achieve universal primary education, promote gender equality and empower women, reduce child mortality, improve maternal health, combat HIV/AIDS, malaria and other diseases, ensure environmental sustainability and developing a global partnership for development. These goals are all indispensable and they require complex, coordinated action. The most effective strategy for making steady, sustainable progress on the Millennium Development Goals is to serve all the goals in an integrated way. However, each goal will need a well-defined package of technologies and services for success at the field level.

In pursuing the MDGs, we should seek ultimately the elimination of hunger, poverty and maternal and child malnutrition. In this regard, particular attention should be paid to averting maternal and fetal under and malnutrition, which lead to the low birth weight that damages health, reduces cognitive ability and robs nations of healthy and productive adults. An emphasis on healthy, productive individuals means that we must attend not simply to food security at the aggregate level, but to nutrition security (economic, physical, social and environmental access to a balanced diet and clean drinking water) at the individual level of child, woman and man.

### **Eradicate extreme hunger and poverty**

Of the eight Millennium Development Goals, eradicating extreme hunger and poverty depends on agriculture the most. Eradicating hunger and poverty requires an understanding of the ways in which these two injustices interconnect. There are strong, direct relationships between agricultural productivity, hunger and poverty. Three quarters of the world's poor live in rural areas and make their living from agriculture. Increased agricultural productivity would be achieved if greater emphasis is given to Agricultural Education. Agriculture led economic growth will also have a broader impact by creating non-farm jobs in food-related industries for the skilled and educated. As agriculture develops, farmer will produce more high-value products, including animal products such as milk, thereby increasing the demand for skilled labor in this sector because these products have specialized production and marketing requirements. This outcome will be particularly important for improving child welfare.

### **Achieve universal primary education**

The aims of Agricultural Education is the provision of teachers with adequate understanding of production agriculture and pedagogy needed for imparting skills, knowledge and attitudes to children's in the basic primary and junior secondary schools. Agricultural Education graduates will therefore be capable of increasing the manpower needed to cater for the increased enrolment of children's towards achieving universal primary education as advocated that education for all the responsibility of all.

### **Promote gender equality and youths' empowerment**

Many women are farmers. But unlike men, who have greater opportunities for non agricultural work, women depend mainly on agriculture to secure food or earn money for their families. Improvements in Agricultural Education therefore, can contribute in a fundamental way to increasing incomes and economically empowering women. Research shows that girls' education and overall improvement in women's status contribute significantly to improving the nutritional status of children.

### **Reduce child-premature death**

The links between agriculture and child premature death are indirect but important. About half of all child deaths occur because of malnutrition, which prevents children from fighting off even common childhood ailments. Boosting food production and improving the quality of children's diets through Agricultural Education will help reduce child malnutrition and child death, especially in rural areas.

### **Ensure environmental sustainability**

The Millennium Declaration targets a variety of environmental issues, including biodiversity, critical natural habitats, energy use, global climate change, safe water and sanitation, and urban slums. A productive agricultural education can reduce pressure in all of these areas but that outcome is not automatic. In fact, many agricultural practices that push productivity tend to do so at the expense of the environment. Pressures to increase agricultural production with inappropriate policies in the past have resulted in soil degradation, greater concentration of greenhouse gases in the atmosphere, marine pollution, overexploitation of fisheries, and loss of valuable habitats. For agricultural development programs to be environmentally

sustainable, their long-term environmental costs and benefits have to be taken into account. Sound water management in agriculture is critical for safe drinking water, as well as for prevention of water-borne diseases and wasting of water.

### **Develop a global partnership for development**

The final MDG attempts to capture this need and has many different targets. One of these involves creating jobs for young people. Jobs in rural areas and small towns are particularly important, and the economic, political and institutional conditions that facilitate agricultural development can make a strong contribution here. Although initially the jobs created will be within agriculture, once general economic growth kicks in as result of agricultural growth, employment opportunities will arise in other sectors. Agriculture needs to be taken into account when addressing the other targets of MDG 8 as well. Priority should be given to Agricultural Education in harmonizing and rationalizing global agricultural trade because of the direct, positive impact this will have on poor farmers. Such efforts are essential for strengthening the domestic capacity of developing countries and achieving the MDGs.

### **Poverty**

Hornby (1998) defines poverty as a state of being poor, existing in too small amounts, scarcity or lack, state of inferiority and or poor quality. In Nigeria, Family Economic Advancement Program (FEAP) was launched in 1997 as Poverty Alleviation Program (PAP) was later changed to National Poverty Eradication Program (NAPEP) with relevant programs and projects aimed at eradicating absolute poverty among the people of Nigeria. These include programs on food, shelter, employment, health care, water supply, transport, education, gender development etc. which are also related to, the objectives, of the Millennium Development Goals (MDGs) which are set to achieved in Africa generally and Nigeria in particular by 2015. Viewed critically, poverty inhibits an individual from realizing or attaining greater heights in his chosen career. This is not in consonance with the Nation's educational aims and objectives as contained in the National Policy on Education (1981).

### **Reducing Poverty through Sustainable Agricultural Education**

In line with the overall nation education aims and objectives, Agricultural Education offers specific training for self reliance. Self sustenance is connected with individual's ability to establish and manage an enterprise (farm) to improve his living standard or picking a paid employment. Agricultural Education training may be used to alleviate poverty and promote economic life of the individual in some of the following ways:-

- A. Crop production:** - Agricultural crop production which involves mainly rain-fed and irrigation systems are common features. Agricultural Education graduates are provided with adequate skills to engage in agricultural production. It is therefore obvious that sustainable Agricultural Education can lead its graduates to set up/engage in productive agricultural production enterprise like arable, vegetables etc. to mention but a few and therefore rise above poverty line. As crop production now accounts for 98% of agricultural output and the output of staples have increased from 69.4% in 1970-1985 to 85.4% in 1999-2003 (World Bank, 2007).
- B. Livestock production:** - Expansion in production in animal husbandry in Nigeria is characterized by extensive grazing practice, using mainly free range land and crop residue. Poultry rearing also has however changed tremendously to modern intensive commercial production. The recent ban on the importation of poultry products has added great impetus to the sub-sector hence, creating room for production and

markets. Agricultural graduates are suitably fit to undertake production and marketing activities and hence could earn a living and sustain his/her household. The products from this sub-sector in terms of poultry and animal production accounts for 3.4, 1.9 and 1.7% respectively during these three periods of 1982-1985, 1986-1998 and 1999-2003 (World Bank, 2007).

- C. Fish production:** - Agricultural Education graduates can sustain their livelihood by engaging in fishery production now; as peasant artisan fish mongering in creeks and coastal waters with the modern fish farming equipment which in the past have remained relatively underdeveloped is gradually gaining prominence. Hence agricultural graduates can sustain their livelihood by engaging in this venture. Though the contribution of this sub-sector has remained the least over time, but though it is now promising, as reported by Amao; Oluwatayo and Osuntope. For Nigerians, fish demand is high compared to poultry or beef because it is an important cheap source of protein use in many local dishes.
- D. Consultancy services:** - Agricultural graduates have very wide knowledge of production agriculture. This knowledge could be applied in the provision of consultancy services to various individuals in the rural areas and even corporate bodies in search of solution to their needs and problems. Graduates of agriculture can also offer tangible extension services, feasibility studies/reports which in-turn can yield a reasonable income to them thereby removing them from below the poverty level.
- E. Educational services:** - Agricultural Education provides the individual opportunity for competence needed to engage in production agriculture and classroom activities. Asuquo (2005) adds that the aim of Agricultural Education is the provision of teachers with adequate understanding of production and pedagogy needed for imparting skills, knowledge and attitude to students in the primary, secondary and/or tertiary institutions. Agricultural Education graduate is capable of establishing education centres or schools where learning activities are undertaken. He can equally sustain livelihood by providing remedial lessons. Opportunities also abound for such graduates to organize regular training session tailored towards the needs of individuals who cannot afford the normal classes.

## Conclusion

Sustainable Agricultural Education involves the development of abilities, skills and understanding in the area of occupational information, efficiency and appreciation which can be applied to earn a living either as an employee or employer in order to lift out an individual from poverty level and hunger; which is one of the objectives of the MDGs.

## Recommendations

- The Poverty Alleviation Program (PAP) of by the Federal Government is very much commendable. However, more should be made for technical education graduates to enable them set up a self-sustainable production/business venture if desired is to be achieved.
- Agricultural Education graduates should endeavor to suppress unnecessary fear and learn to venture into creative, risk-taking innovation with a view to establishing/engaging in a productive enterprise.
- Government should create more job opportunities for the unemployed agricultural graduates like farm settlement schemes programmes, and also, provide a favourable environment for active private sector enterprises to grow.

- Government should create an atmosphere of law and order as necessary incentive for sustainable production/business practice as poverty leads to civil unrest and violence. Hence, provision of necessary infrastructure and a peaceful environment guarantees flourishing production which can bridge gap between the rich and the poor.
- Training and retraining of Agricultural Education teachers should be encouraged to improve their capacity in providing a sustainable Agricultural Education.
- Sufficient instructional materials such as land laboratories, tools equipments/machines etc should be provided in schools in order to enhance teaching and learning in practical sense.
- Ensure that the right caliber of students was admitted for the course based on available resources.
- National Board for Technical Education (NBTE) in collaboration with other supervisory commissions should ensure that the newly introduced entrepreneurship courses in technical education emphasize more on practical orientation rather than theory, which will be geared toward production and performance.
- Individuals, philanthropists and other corporate organizations should endeavour to give their contributions (inform of scholarships, donations etc) in the training of agricultural students/graduates in order to achieve the objectives of self reliance, which reduces poverty.
- Banks should be encouraged to give loans to graduates of Agricultural Education to enable them establish medium/large scale agricultural businesses with a view to become self reliant and employment of others.

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