

Focusing Agricultural Education for Better Productivity in Nigeria in the 21st Century

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ABSTRACT The need for increased productivity in Agricultural sector of Nigerian economy through effective agricultural education of the populace, especially the youth and women in the rural areas necessitates that education in agriculture be refocused. This paper suggests among other things that agricultural education be vocationalised, girls/ women empowerment, and productive agriculture seen as a national issue and overhauling of agricultural administrative machineries.

INTRODUCTION

Informal – apprenticeship and exchange of labour between age grades of farmers characterized agricultural education before the arrival of western education. In the main, boys were engaged in practices that were considered manly such as bush clearing, planting of yam and building of farmstead; while the girls were trained in the processing of farm products. This informal educational system/mode of agricultural education was utilitarian – provided food, raw material for industries and encouraged entrepreneurship.

Western education in Nigeria transferred activities hitherto carried out at home to the school. This has its implication as observed by Bergonann (2002) that there have been complaints that education was too academic and not preparing the children for life. Consequently, there has been need for policy makers in education to demand for an education which will prepare the young and adult leaving school for self-employment in agriculture and related occupations.

The role which education should play in developing countries has been variously viewed from different perspectives (Fafunwa 1984; Olaitan 1996; Toby 1997). To some, education should play the key role of assisting individuals to have a comfortable environment for themselves while to others; it should develop abilities and potentials in the citizens of the country, their skills and other forms of behaviour of positive and sometimes of negative value to the society in which he or she lives. The development of abilities and skills in citizenry has been one of the main factors propelling the education policies of developing

countries as they are geared towards making the people comfortable and at the same time enabling them to harness the natural resources for which nature has endowed them.

In Nigeria, agricultural practices have been the main activity of the people, employing about 70% of the populace (Nweke et al. 1991) before the boom in mineral oil. Today about 60% of the population are in agriculture in one form or another (Egbugara 1990) and have consequently influenced the educational policy and practices of the country. The country is endowed with large expanse of land, good coastal region, appreciable area of mangrove, and able bodied human resources capable of producing enough food for the country and even for export. Unfortunately the food import bill has been on the increase (Okeke 2004) and recently, 80 million naira was approved by the federal government for the importation of rice (The Guardian, 18th May). Several steps have been taken to reduce this trend and where possible reverse the trend by different governments, such as Operation Feed the Nation, Green Revolution, and Accelerated Food Production Programmes.

The educational policies of the country and its attendant objectives point towards self-sufficiency in production and raw materials for agro-based industries. The extension arm of the Ministry of Agriculture has been expanded; and agricultural science made compulsory in schools (NPE 1998, revised 2004). With these steps, it is expected that the country will be sufficient in food items such as rice. Okeke (2004) reported that 60% of rice and maize consumed in the country were imported. Igbon (2004), in his study reported that only 3% of those who were trained in agricultural

institution take to agriculture after leaving school. This same view was held by Mama (1991) when he expressed the fact that there was danger that Nigeria might face near extinction of the farming population resulting from incapacitation of her farmers by age or death.

There is the need, therefore, to refocus the methodology and curriculum of Agricultural Education in Nigeria for better productivity in 21st century.

Refocusing of education by implication involves restructuring and reformation. The reforming of education in Africa is not a new phenomenon. Lesotho in 1970 five year development plan reformed education to achieve self-reliant economy with emphasis on agriculture. In 1978, Maseru (Lesotho's capital) conference dubbed "Educational Dialogue" was convened amidst mounting economic problems, with the feeling that education needed to be reformed in line with the ethics of education with production and training for self-reliance. The resolution of the conference was the commitment that learners and people in school should be taught the practical subjects – vocational subjects including agriculture, and the spirit of self-reliance and the fostering of scientific attitudes (Machobare 2000). Realizing the importance of agriculture, Ghana vocationalized secondary school education to prepare the youths in dual capacity of skill acquisition for paid employment and further education (Ahanyampong 2002). Although great measures of success were not much recorded, it provided impetus for further advancement. Ghana and Nigerian have common history of education.

In Nigeria, reforming of education has been an on-going process from the first educational ordinance of 1945 (Fafunwa 1974) to National Policy on Education (NPE 1981, revised 1988, revised 1998 and 2004) – a progressivism of 1969 curriculum conference (Taiwo 1980). There is the need therefore, to refocus the methodology and curriculum of Agricultural Education in Nigeria for better productivity in the 21st century. Essentially, agricultural education should address the following challenges.

AGRICULTURAL EDUCATION

1. Agricultural Education Should be Seen as a Vocation and be Vocationalized Both in Content and Methodology of Instruction

The major aim of agricultural education for

the youth in school is to expose them to various occupations in agriculture and prepare them for the different occupations in agriculture. This calls for vocational course content aimed at the development of skills and competencies in agricultural practices. Currently, Agricultural Education is being taught as one of the art subjects and given orientation as education for citizenship. Agricultural Education should be utilitarian and stimulating bringing theoretical ideals to practical reality. Agricultural topics in school are taught as biology without due translation to practical use for production.

Methods of instruction are lecture based and most of the time devoid of demonstration. This removes first hand experience with reality and eliminates the effective development of competence. Competence can only be developed through appropriate instructional methods applied by a competent teacher as he is the link between curriculum and the learner. Competency-based education remains appropriate for vocations. Competency education has its root in the works of Glaser (1962) and Gayne (1965). Essentially, it is task analysis and performance of the unit components of the defined task. Tyler (1949) upheld this method of instruction when he expressed that the clearest way of defining objectives and using them for assessment was to make them statements of desired behavior.

2. Agricultural Education Should be Seen as a National Problem (Issue)

The role of agriculture in the national economy should be re-emphasized and factors influencing agricultural activities and food security put in place. There is the need for sensitization and enlightenment of the rural areas which accommodate the greater percentage of the populace. The use of media such as the radio, posters and the television could assist in informing the people of the latest developments in agriculture. There is the need for rural roads to feed the rural areas with farm inputs and evacuate farm produce.

Engineering of small unit co-operatives may be ideal; with members agreeing to come together on their own volition rather than imposition. This will engender more self-commitment to the course of the society and mutual respect for co-operators. Through farm co-operatives, farm inputs can be distributed and information disseminated to

farmers; and large farm area cultivation can be encouraged.

3. Empowerment of Women in Agriculture

Girls and women constitute about 49 percent of Nigeria's total population. Unfortunately, 61 percent of the total population are illiterates, as against 37.7 percent illiterate male population (NPC 1992). According to Adebayo (1987), the education of girls/women would not only enable them harness their potential, but also evolve positive attitudes to life and improve their economic well-being (family income) and the health of individual family members and that of the nation. With a great percentage of Nigerian population involved in 70 -80 percent of household food production, the need for the empowerment for better agricultural production/increased productivity cannot be overemphasized (International Fund for Agricultural Development, IFAD, 1985). The World Bank (1996) Cost-Benefit Analysis indicated that investment in the education of females has the highest rate of return of any possible type of investment in developing nations. Such benefits include greater and higher economic production, improved family and child nutrition, better resource utilization, and longer life expectancy for both men and women. Discoveries in science affect agricultural production if properly applied by a great majority of farmers. Findings in science and technology bring about new ways of doing things and are useful if they are adopted by the greater majority of the people.

Uwaka and Uwaegbute (1982) and Egbugara (1990) reported respectively that women have no full access to land, a major factor in agricultural production. It is therefore necessary that the land tenure system be modified to give access to this great percentage of the population. The psychology of intellectual depression in the development of female potentials should be discouraged. There is the sex-stereotyped occupation of the male over the female which has socialized women into believing that it is a taboo to venture into an occupation that is male preserve. Available indices show how participation of girls in the various science subjects of Agricultural Science, Biology, Chemistry and Physics. These are the subjects/requirements for the vocational and technology

courses. This low level participation ultimately has affected the number of females entering into Agriculture (see Table 1).

Table 1: Number of candidates by sex: Application/admission into vocational and technical courses in Nigeria universities/colleges of education for the 2001/2002 session

S. No.	Course	Application		Admission	
		Male	Female	Male	Female
1	Agric. Science	11,582	3,139	3,154	738
2	Engineering/Tech	27,780	2,409	6,801	770
3	Med. Science	44,277	13,493	3,593	930
4	Sciences	21,501	6,606	9,090	1,350
		105,142	25,647	22,638	3,788

Source: Field Work: Egun and Tibi (2002)

4. Increased Opportunities for Training

Agriculture is a composite occupation; having many distinct areas that are interwoven in which individuals can make a living and happy family life. In the 21st century, there is need for government to expose the various occupations in agriculture in training centres where individual can learn about the various occupations. Currently, awareness is restricted to the traditional areas of crop and animal husbandry, while other areas as obtained in the developed countries are silent. This condition agrees with Uwadiae (1991) that vocational technical education programmes in the country need to expand to cover these new occupations and provide training in the new technologies. Exposure of these areas will convert at least 45 percent of able bodied men that roam about either in the motors parks (garage) or the streets into productive labour.

In-school industrial training has been the practice of inducting the youths in school into work realities. This system is fraught with shortness of time period. Egun (1993) proposed a

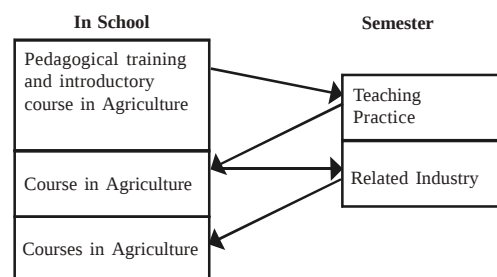


Fig. 1. Occupational preparation flow chart

Source: Field Work: Egun (1993)

model of training which could improve competency of graduates of agricultural schools (Fig. 1).

5. Overhauling of Agricultural Administration

The Administration of Agriculture in Nigeria is still a sole function of Ministry of Agriculture and its agents such as the Agricultural Development Agency and River Basin Authorities and Agricultural Import Procurement Agency. The quality of personnel in these bodies are such that their appointments were either on political or fraternal basis. The bodies are grossly deficient of trained personnel in Agriculture who are capable of translating theoretical ideals into practice. They not only lack the knowledge and love for rural life, but also are deficient in farmer psychology of appreciation for dignity of labour (Egbuara 1990).

CONCLUSION

Agriculture has played a noble role in the economy of Nigeria and will continue to do so for years to come. However, due to little emphasis on the practical (vocational) aspect of the training of the youths in schools, low level of women empowerment in agriculture, poor avenues for training and re-training in agricultural production and poor administration on the part of agricultural agencies, production has remained low with attendant importation of food items. Nigeria is endowed with good agricultural land space; it is therefore necessary to direct its practices in a manner that the ultimate objectives of self-sufficiency in food is attained through gradual but consistent induction of the youth into agriculture and increasing the production capacities of human labour involved in Agriculture.

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