

ACHIEVING NATIONAL FOOD SECURITY AND DEVELOPMENT: THE PLACE OF AGRICULTURAL EXTENSION EDUCATION

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Abstract

The paper focuses on the term National Food Security and Development; and then further discusses the causes of national insecurity problems in Nigeria. It is emphasized that education whether formal or non-formal is the veritable tool in breaking the vicious circle of food insecurity and poverty prevalent in many developing nations including Nigeria. Taking cognizance of their contribution and problems, various extension approaches used in Nigeria for the achievement of national food security are x-rayed. The paper concludes with suggestions aimed at revitalizing extension education so as to make it more functional and goal oriented to enable the nation achieve her national food security and development. Keywords: Food Security, Development, Extension Education.

Introduction

The overall objective of the national plans for developments is to raise the standard of living of the people. Throughout history, to fulfill this noble objective, the role of food cannot be overstressed. Hence, it has been known to have influenced the quality of human life, and also has been the determining factor in the growth and survival of nations (Borgstrom in Igene; Negbenebor; and Nkama, 1991), including Nigeria.

In the recent past, Nigeria has been bedevilled with national food insecurity. According to Idachaba (1991), national food insecurity exists when the majority of Nigerians do not have economic access to domestically produced food that is adequate for decent existence at all times. Idachaba's definition of the national food insecurity situation within the context of national self-reliance and self-sufficiency deviates fundamentally from the World Bank position which sees no national food insecurity as far as domestic food supply shortfalls and shortages can be bridged with food imports or food aid from wealthy countries (World Bank, 1986; and Cleaver, 1993).

For the purpose of this paper, Idachaba's position is adopted. Food security could therefore be described as ensuring that majority of our citizens could have economic access to domestically produced food that is adequate for their decent existence at all times. This economic situation ensures national development.

Meyer (1987), in his own opinion, stated that food security should aim at three specific goals:

- 1) To guarantee adequate production;
- 2) To stabilize the flow of supplies to the utmost; and
- 3) To guarantee access to available foods to those who need them.

In line with the above Idachaba in Abu and Mba (1989), lamented the inability of Nigerians to have access to three decent square meals in a day.

Causes of National Food Insecurity

The national food insecurity problems are as a result of several factors. According to Idachaba (1991), there are five causes and they include:

- 1) Nigeria's overwhelming dependence on rainfed agriculture which makes national food security highly vulnerable to the vagaries of the weather;
- 2) The failure to significantly increase the share of agriculture under irrigation;
- 3) Presence of wide intra- and inter-seasonal variations in stocks and prices in which periods of heavy post-harvest glut and low food prices alternate with periods of pre-harvest scarcity and their starvation

prices. This is due to limited access to rural credit facilities, underdeveloped food processing infrastructure and poor and inadequate storage facilities;

- 4) Failure of the national agricultural research system to breed-varieties that are resistant to severe environmental stresses; and
- 5) The erratic and undesirable fluctuations of food import supplies and food import prices that have their origins in those countries that are the major suppliers of Nigeria's food imports.

To these factors are added inadequate extension services, poor policy formulation and execution, lack of credit facilities to farmers, failure to take advantage of improved varieties of crops and breeds of livestock, indiscipline and irrationality in resources allocation and, above all, absence of effective political will and direction (Nwulia, 1986).

The Role of Agricultural Extension

Agriculture extension is an out-of-school system of education designed to help rural people to satisfy their needs, interests and desires (Obibuaku, 1983).

Williams, Fenley and Williams (1984) stated three basic educational tasks of extension education as:

- 1) Dissemination of useful and practical information related to agriculture and home economics;
- 2) Practical application of such knowledge to help farmers and housewives analyse their problems and bring improvement in a systematic way through carefully planned and organized programmes; and
- 3) To assist them in using the technical knowledge gained to better solve their own problems.

From the foregoing, it could be seen that improved agriculture capable of eradicating national food insecurity and poverty can be achieved through education. This is pertinent because majority of the peasants in the rural communities of Nigeria and many other developing countries are illiterates and conservative and therefore adoption of new technology by them is not easy. Hence, the need for extension education in our rural communities be given paramount attention. Realizing this Uwakah (1986) emphasized the need for increased farmer education in rural parts of Nigeria. Attainment of adequate farmer education brings about national development.

Various Extension Approaches Used for the Achievement of National Food Security in Nigeria

The evolution and subsequent adoption of the national extension system/approaches worldwide over the years have been geared toward achieving national food security in every nation and to improve the living standard of rural people. In Nigeria, the notable extension approaches used so far include the Ministry of Agriculture system, community focus extension, training and visit system, integrated rural development approach and the unified extension system.

The above extension approaches, apart from their various contributions to food security in Nigeria, they on the other hand, have some problems associated with them. They have been reviewed thus;

The Ministry of Agriculture System

In this system, the Nigerian extension services are represented by the agriculture and extension services division (Obibuaku, 1983 and Oguntimehin, 1982) of the Ministry of Agriculture. According to them, the division is charged with the function of teaching the farmers such techniques and practices of modern agriculture as will transform the nation's agriculture from a predominantly subsistence type to a modern one.

Regrettably, this system could not make the country achieve the yearned food security because of some problems. They include the ministry's bureaucratic bottlenecks, inadequate staff to man extension programmes, and worst of all, most of the division staff divert funds meant for extension into personal use.

The Community Focus Extension

The community focus extension approach to agricultural production and extension was commended in Nigeria by the British companies during the colonial period that sought to facilitate production of optimum quantities and qualities of raw materials for European countries and to otherwise

import to colonial economic interest. These reasons gave rise to this extension approach. Commodity Boards like Nigerian Cocoa Board, Nigerian Palm Produce Board, among others were then established.

The main contribution of this approach to food security was to supply all the necessary inputs to farmers for optimum production.

However, the boards faced some problems due to the disparity of incomes between the root-crop farmers and cash crop farmers; and also the disparity of income between food crop farmers on the basis of geographical locations. Both the situations above discouraged production.

Training and Visit System

The training and visit (T+V) system is a system of improving the effectiveness of extension work and extension agents. According to Williams et al (1984), the system has a well-defined organization, mode of operation and provides continuous feedback from the farmers to the extension and research workers. It also allows for continuous adjustment to the farmers' need. This design of special privilege to farmers is geared towards achieving food security in the country.

This system basically has a technique of systematically training programmes of the village extension coupled with his frequent visits to the farmers' fields. Its pivot is efficiency in the use of resources available to the extension service and the farmers. Although this system recorded some apparent success, the country is still food insecure because of the following:

- i) The system is too top down oriented and so makes it difficult for farmers' participation in programme planning;
- ii) Since farmers have other demands on their time, they cannot rigidly observe the timetable of visits as planned;
- iii) The number of the subject matter specialists required for effective operation of the system is too large for the country to afford;
- iv) Supervision by the field functionaries is not sufficiently effective because of the involved bureaucracy and long channels of communication in the extension organization;
- v) On the contrary, all the necessary and essential infrastructural and inputs for the system's operation are assumed to be available and in good working shape; and
- vi) It is capital intensive.

Integrated Rural Development Approach

This approach which also employs the extension education methods, is aimed at putting in place social, economic, institutional and technological change for the positive transformation of human and natural resources in order to improve the standard of living of rural people (FAO, 1978). According to Williams (1985) integrated rural development means a multi-purpose approach, as contrasted with the single purpose rural extension programmes. In this view, programmes of agriculture, education and training, health and nutrition, rural electrification, co-operatives and the like must not be conceived in isolation. Each programme must be considered in connection with every other.

In other, words, integrated rural development is based on the premises that while planning agricultural development for a given area, effort should be made to include the development of other sectors, which support agricultural development (Obibuaku, 1983). This implies that the focus of rural development extends beyond a single sector and encompasses improved productivity, increased employment as well as improved levels of food to make the nation food secured; shelter, education, among others.

This approach however is beset with the problems of being unable to cope with the huge capital improvement and a tool for political victimization/marginalization in terms of project siting and execution.

Unified Agricultural Extension System

This is a system whereby one extension agent is presumed to be zealous and capable enough to disseminate information on so many areas of human discipline that can benefit a given target. In other words, the unified agricultural extension system presupposes that a given extension agent can do everything or provide the necessary information or solutions to the problem of his/her target group. By this system, the extension agent is looked at as somebody who knows everything or has all solutions to farmers' problems. The major advantage with this system is that it cuts down on costs.

However, the system makes the individual (extension agent) "jack of all trade, master of none" due

to lack of basic training in all the facts that are relevant to all round development of the clientele". Also it does not promote effective extension agents - farmer ratio of target population.

Conclusion and Suggestions

The paper has highlighted the basic role of food in human life. Its national security should therefore be vigorously pursued and sustained to ensure national development. The achievement of this, rests squarely on a functional and goal-oriented agricultural extension education. The following suggestions aimed at revitalizing extension education in Nigeria are:

- (i) The scope of extension education component should be made to actually address agricultural production, marketing, distribution and utilization efficiencies as well as conservation, development and wise use of natural resources. Also to be addressed by the scope include management both on the farm and in the home; family living, youth development, community improvement as well as education in public affairs and good citizenship.
- (ii) The issue of poverty on the part of farmers can be redressed through full liberalization of credits to farmers by relevant agencies. Also, overhauling of our marketing system can equally redress poverty.
- (iii) Government should employ more agricultural extension agents to improve the current low ratio of farmer/extension staff.
- (iv) The job of extension agents/staff should be made attractive by providing adequate incentives to them. Through this, they would be more satisfied on their jobs. Equally farmers could be given incentives by extension sub-programme of state ministries of agriculture/agricultural development projects by awards of prizes to deserving farmers e.g. best farmer of the season, etc.
- (v) Basic infrastructural facilities should be provided for rural dwellers to enable the trained extension staff settle in rural areas.
- (vi) Relevant institutions of higher learning should be made to train more extension staff/agents.
- (vii) Researches into agriculture should be well funded and also findings from such researches should be properly communicated to the end users, the farmers.
- (viii) Timely provision of inputs to farmers through extension sub-programme of relevant institutions will help revitalize extension education.
- (ix) Extension agents should be made to adopt and maintain good relationship within their work environment. Also, adequate supervision should be carried out to know the problems of the agents with a view to solving them (Adah, 1999). Good working conditions and satisfactory social relationships on the job can only serve to make the job tolerable (Herzberg, 1959).
- (x) Any counter productive bureaucratic red tape associated with the extension approaches should be removed to enhance free flow of information from extension organizations to farmers*and vice versa. This will further create room for farmers' participation in programme planning-and subsequently high productivity.

In addition to the above strategies, Federal Government of Nigeria (1989) suggested:

- (xi) The establishment of demonstration farms and rural processing demonstration centres for crops, livestock, fisheries and forestry; and
- (xii) Encouragement of the private sector to invest in information dissemination.

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