

WOMEN EMPOWERMENT THROUGH AGRICULTURE EDUCATION: A GATEWAY TO FOOD SECURITY AND NATIONAL DEVELOPMENT IN NIGERIA.

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Abstract

In Nigeria and other developing third-world countries, women have traditionally participated actively in farming and food production. Despite all the efforts women put into food production, Nigeria is food insecure. This paper, "Women Empowerment Through Agriculture Education: A Gateway to Food Security and National Development in Nigeria, examined food security and insecurity and looked at women, especially rural women and empowerment. Today's families face many problems ranging from hunger, poverty, high food prices, unstable markets, and climate change that affect household food and security. This paper aims to ensure sufficient food for the household and maintain a stable food supply for consumers, among others. With the roles

played by women in food production, there is a need to empower them educationally as many are educationally disadvantaged. Food insecurity, contributing factors as well as strategies for improvement were discussed. To enhance food security, the paper enumerated education of women, especially rural women and the provision of credit facilities, among others, as the strategies to improve food security in Nigeria for sustainable development. In conclusion, the paper emphasized the importance of women's empowerment through agricultural education by providing them with enabling environment that will not interfere with agriculture. Recommendations, among others, were the need for the women to be exposed to modern methods of agricultural education using extension agents that will teach them practically to enhance food production and security.

Keywords: Food Security, Women Empowerment, Agriculture and National Development.

Introduction

Women are key players in food systems, from their participation in the agricultural workforce to making decisions on how to distribute income and ensuring proper nutrition for all household members. However, there are significant gaps regarding access to productive resources and asset ownership by women, which often negatively affect empowerment and, consequently, household food security. Women are of vital importance to agriculture and rural economics. Igbuzor (2012) says that women are involved in rearing poultry, small livestock, and growing food crops and are responsible for some 60% to 80% of food production in developing countries. Igbuzor added that in many farming communities, they are the main custodian of knowledge on crop varieties.

In Nigeria, women have traditionally participated actively in farming and food production. Osaikhuwuomwan and Omoruyi (2013) state that women are involved in bush clearing, stumping, tillage, weeding, planting, fertilizer and pesticide application and harvesting. Women's empowerment in agriculture is very important as they contribute to developing countries. Their roles vary considerably between and within regions and are changing rapidly in many parts of the world where economic and social forces are transforming.

Empowerment is a set of measures designed to increase the degree of autonomy and self-determination in people and communities to enable them to represent their interests in a responsible and self-determined way, acting in their authority. Women in agriculture need to be empowered to make food production simpler for them. According to Nnadozie and Ibe (1996), women are crucial to a nation's growth since they do jobs like raising children, keeping the family, working under difficult conditions, and engaging in agricultural activities.

The vast majority of food production attributable to women makes them principal agents of food security and household welfare in rural areas. Aghimien and Ojo (2007) view women's empowerment for effective participation in food production and other agricultural commodities to form the major occupation of the people living in rural communities. A well-trained woman in agriculture with zeal and commitment can use the knowledge and skills acquired to be self-reliant.

Food is essential to the survival of all humans and plays a paramount role in one's life. In Nigeria, as in other parts of the world, the need for food as an essential and exceptional commodity has become a policy issue. There is a need for individuals to eat well and stay healthy. The food eaten must be safe and free from ill-health. Achieving a well-fed nation means improving what people eat in terms of quantity, quality and variety.

Anene-Okeakwa (2007) opined that any factor that prevents one from eating well could constitute food insecurity. As a result of neglect in food production in Nigeria due to oil becoming the major export product, there is a high level of food insecurity. Food is an essential need in every country for the wellbeing of everyone, and as such, there must be food security. Food security goes beyond having enough food. It is the situation that exists when people at all times have physical, social and economic access to sufficient, safe and nutritious food that meets their food preferences and dietary needs for an active and healthy life.

Food security is needed and very essential in a country to ensure that food is available at all times and to avoid starvation. The people living below the poverty line might be food secure all the time, while better-off people might turn food insecure during famine, calamity or disaster. When there is hunger, children are at high risk since they depend on adults for their care. At the core of food security is access to healthy food and optimal nutrition for all. Food access is closely linked to the food supply, so food security depends on a healthy and sustainable food system. The food system includes the production, processing, distribution, marketing, acquisition and consumption of food. Food banks, school lunch programmes and other programmes that provide food to people in need must be made available at all times.

The objectives of this paper are to look at ways to solve the problems of food and nutrition insecurity, empower women through education on food security, ensure that sufficient is available to end hunger and maintain a stable food supply chain to get to consumers.

Today, families face numerous problems associated with poverty, such as hunger. World Food Programme (WFP, 2018) maintained that food insecurity and hunger are caused by many factors often intertwined, ranging from poverty, conflict, climate and weather, lack of investments in agriculture and unstable markets. Anene-Okeakwa (2007) states that food insecurity may include inadequate control and quality of assets, including land, unemployment or inadequate wages, high food prices, insufficient access to the market and other factors. So many families are struggling to make ends meet. Igba (2009) opines that families face numerous problems occasioned by poverty, such as hunger, lying, cheating, stealing, drug abuse, armed robbery, ritual killings, raping, sex abuse, and acquiring money through fraud

malpractices. These problems Igba added are attributed to a lack of physical and economic access to sufficient, safe and nutritious food to meet the family's dietary needs. Food insecurity has made many family members such as children, the elderly vulnerable, ethnic minorities, and low-income households food insecure.

The Concept of Food Security

According to United States Agency for International Development (USAID, 1995), food security is the ability of every citizen to have regular access to enough food to meet the daily nutritional requirement for a healthy and productive life. A home is deemed food secured if none of its members is hungry or in danger of being hungry. This means that each home must always have the skill, knowledge and resources to produce or purchase the meals required to meet all of the household members' nutritional needs. According to Clay (2002), food security is a situation that assumes food availability, price and stability of fundamental foodstuffs at the local, national and international levels. This implies that the basic food requirement should be available at all times to sustain a steady expansion of food consumption and prices. To Ayalew (1997), food security is a broad concept dealing with production, distribution and consumption vis-a-vis food entitlement.

In Nigeria, the need for food security is essential. In as much as there is the need for ensuring access to adequate quantities of food, it assures adequate quality and the safety of foods and water. Since food security is the ability of every citizen to have regular access to enough food to meet daily nutritional requirements for a healthy and productive life, women have roles to play in this regard. Women empowerment through agricultural education will go a long way in ensuring adequate food for the family and society.

Women Empowerment through Agricultural Education

The term empowerment comes from the word: "power." To empower means to give authority, to enable someone or a group of persons to gain power. Empowering is to allow someone to take charge and control an act to overcome obstacles that stand in their way. Education as a very important tool does not only empower but also gives one the courage to stand out and face challenges in life, confidently speak out what is true from a professional viewpoint and provide a good voice on what is realistic.

The significance of education for humans cannot be over-emphasized. Igbuzor (2012) states that education is a human right that should be accorded to all humans. Igbuzor added that there is a strong relationship between education and development. This is so because schooling improves productivity and health and reduces negative features of life such as; child labour, ignorant behaviour, and empowerment. For this reason, there are agitations and a lot of emphasis in recent times for citizens of the world to have basic education. Therefore, investing in education to enhance economic, sociological and human resources is paramount if we grow as a nation. When women are trained, much development will arise. Training a woman is training a nation. Efedo (2014) opines that for any fundamental change or reconstruction to be achieved in the intellectual and social sphere of any society, it has to be preceded by an educational construction in women who are the mothers of the nations, mothers and trainers of our children who are the leaders of tomorrow.

According to Ojo (2002), women in Nigeria are harder hit than men by poverty due to the lack of emphasis placed on female education and the prevalence of early marriage, which

tend to impoverish women and subject them to statutory discrimination. Educating the girl-child is a key to educating the entire family because women's education is about empowerment. It is critical to assist them in understanding the need for food self-sufficiency and the hazards of relying on food imports and food aids.

Abimiku and Duktur (2008) state that empowerment is the ability to overcome a structured obstacle that hinders someone from excelling. Women need to be empowered to excel in all their undertakings in the family and the larger society. According to Ovwido and Okocha (2016), women empowerment means granting them their ability or right to participate in policy and decision-making processes in whatever field of life they may find themselves in for self-fulfilment, self-reliance and dignity. The empowering of women via agricultural education will result in long-term development.

Food and agriculture are the main pillars of any economy because of their many significant roles. Agriculture, as a major source of food for the population, provides employment opportunities, foreign exchange earnings, and industrial raw materials for the nation's industries. Nnoyelu and Gadzara (1991) observe that women are found working all year round, producing food crops, while men perform only pre-planting tasks that occupy a small part of the agricultural year. In developing nations, rural women have been shown to play an important role in agriculture. As their job has developed, they are now in charge of more responsibilities. To assist Nigerians in achieving food security, women must be educated and empowered.

Agriculture has been the basis and foundation of many of the world's industrialized nations. To reduce poverty in Nigeria, there is a growing third-world nation. Women require high-quality agricultural education.

Concepts of National Development

The challenges of development have been a pre-occupation of all countries of the world. Most scholars and practitioners agree that every nation can develop even though some develop better than others. Openjuru (2004) defines development as the general improvement in the whole society's economic, social and political conditions in terms of reduction or elimination of poverty, inequality, insecurity, and employment within the context of a growing economy. Development involves politics, commerce, education and agriculture, among others. Women are agents of development and should be given opportunities to grow, especially in agriculture. Women are deeply involved in rural development, and their involvement sees this in gathering firewood, rearing animals and birds, and food production and storage processes.

National development is the ability of a country to improve social amenities such as education, infrastructure and social services. National development is synonymous with economic development. Todaro (1992) sees national development as a multidimensional process involving the provision of basic needs, acceleration of economic growth, reduction of inequality and unemployment, eradication of absolute poverty, as well as changes in attitudes, institutions and structures in the economy. Education is a tool for change and nation-building all over the world. There is hardly any nation that developed and became secure without education.

Food Security and Insecurity, Where do we belong as a Developing Country?

Although a little had been discussed earlier in this write-up on food security, this section will look at food security and insecurity. According to Food Agricultural Organization (FAO, 2005), food security is a scenario in which people have physical, social and economic access to enough, safe and nutritious food that meets their dietary needs and food preference for an active and healthy life at all times. In addition, it includes a reasonable degree of sustainability in food supply during a given year and all year round. It demands access by each household to sufficient food to meet the needs of its members. Kennes (2002) defines food security as lacking hunger and malnutrition. Households, villages and countries must have enough resources to produce or get food for this to be possible. Edo (2002) reports that less than 5% of Nigerians have attained the food security state, 65% semi food secured, while 20% are still in the insecure food zone.

Factors Responsible for Food Insecurity

Food security may be seasonal, transitory (short term and temporary), and chronic (long term and persistent). The following are the factors that are responsible for food insecurity.

1. Poverty

Poverty is generally considered one of the major causes of food insecurity, and eradication of poverty is essential to improve access to food. Poverty is defined by the World Bank (2000) as a multifaceted phenomenon that includes the inability to meet basic needs, a lack of education and skill, poor health, malnutrition, lack of shelter, poor access to water and sanitation, shock vulnerability, violence and crime, and a lack of political freedom and voice. Food is a basic human requirement, and every household needs access to a decent meal. Some homes, on the other hand, are destitute and powerless. Poverty and food insecurity are inextricably intertwined. Poverty reduction is a critical component of a food security strategy since low-income families spend most of their money on food, making them susceptible, especially when prices are high and their income is low.

2. High Rate of Population Growth

Population and economic growth result in a doubling of demand for food globally. Overpopulation worsens numerous environmental and social factors such as pollution, malnutrition, overcrowded living conditions, vulnerability to infectious diseases such as tuberculosis, malaria, HIV, dysentery etc. Food production depends on croplands and water supply, which are under strain as the human population increases. Some factors affect population growth, such as high birth rate and immigration which are responsible for food insecurity due to scarcity and non-availability of food. According to Osaigbovo and Uwagboe (2007), migration and influx of people from farming to non-farming activities in urban areas have been largely responsible for the low level of agricultural output and food scarcity and insecurity in Nigeria.

3. Climatic Conditions, Drought and Conflict

The key causes that have aggravated the problems of food production, distribution and access are drought and violence. Drought threatens agricultural production and, subsequently,

farmers' income, livelihood, and food security. In Nigeria and sub-Saharan Africa, drought is a major challenge for agricultural production. Since most rural families in Africa depend on agriculture for their food and income, drought can have devastating effects on these families, especially on poor farming communities with less diversified livelihood and few economic alternatives. Okwori (2012) maintains that weather changes, intensity and frequency, rainfall and drought would affect food utilization at the community and global levels. Increased risk exposure resulting from climate change reduces people's access to food and undermines their food and nutrition sufficiency.

4. Decline in Food Supply Chain

The food supply chain is a complex network consisting of small and medium-sized enterprises (i.e. farms, department of processing companies) that interact with multinational companies providing input to the supply chain and doing its retail. Ensuring the quality of foods and food security is a topmost requirement of consumers when it comes to the food, drinks and beverages supply chain. The food supply chain concerns the distribution of food from manufacturers to the final consumers.

In Nigeria, inefficient and ineffective transport systems compromise effective delivery and increase the price of food, thus limiting utilization. Ayoade (2004) states that there is the problem of difficulty in the distribution chain due to poor road networks and underdeveloped communication channels. Thus, food distribution to people living in rural and informal urban areas is a barrier to proper nutrition at household and community levels.

Strategies for Enhancing Food Security in Nigeria

Since agriculture is a tool to solve the problems of food insecurity in Nigeria, the following strategies should be adopted. These strategies are as follows:

- **Education and Literacy**

Women who focus on this write-up should be educated on the importance of agriculture and food security. Enlightenment on land use, planting, processing and storage of crops should be taught. The education of women should go beyond reading and writing. Nutrition education is very important for food security. According to Okpoko (2002), nutrition education and household food consumption are variables that can help Nigerians overcome hunger and poverty. Okpoko stresses that sound knowledge of nutrition is essential for rural people to help to improve the food preparation method to avoid losses and improve food values. Extension agents should be sent to work with the women in educating them. At the household level, knowledge should be placed on selecting safe food, production, processing, storage and handling techniques.

2. Tackling Climate Change

A policy framework for broadening the coverage of climate change interventions should be established, particularly at the household and community levels, where understanding of climate change and global warming is currently quite low. Women, particularly rural women with a limited understanding of improved farming, should be trained in crop rotation and irrigation to enable greater agricultural output. In flood-prone areas, crop beds should be alleviated to redirect and convey water away from the crops and plants, preventing erosion.

3. Improved Technology Adoption

To ensure increased output and the sustainability of the production base, technologies such as integrated nutrient management, integrated pest control and management must be made available for adoption. A sophisticated storage system should be installed to ensure that food is ready for consumption whenever required. Women should also participate in post-harvest processes.

4. Provision of Basic Rural Amenities to Make Rural Areas Lively

To aid in the delivery of products, access roads should be constructed. Water is essential for irrigation, cooking and animal husbandry during the dry season. Physical infrastructure such as decent road networks, power and other parts of the economy, according to Idachaba (2004), are critical aspects of the economy that directly influence food availability.

5. Access to Productive Lands for Cultivation

There should be an improvement to land and other natural resources by introducing and implementing agrarian reforms through the effective implementation of tenancy reforms. Since operations cannot be carried out on fragmented land, the amount of land available for agriculture should be increased. Women should be entitled to buy land alone or in a group. Women can join cooperatives by banding together and obtaining lands for farming, particularly if the property belongs to the government and is available for little money or hire.

6. Credit Facilities

The government should make credit available through financial institutions for purchasing farming tools, insecticides, seedlings and storage facilities when such products are not easily available to farmers. Access to and repayment of the loan scheme should be made easier.

Conclusion

Empowering women via agricultural education and providing them with an enabling environment that does not interfere with agriculture is the most effective and efficient strategy to ensure food security in Nigeria. Although women have played an important role in traditional agriculture, their education should be viewed as a valuable and necessary component of human and national development. Food production is hampered by various factors, including poverty, drought and climate change, all of which should be addressed by government policies. However, favourable policies and the political will to create an enabling environment are needed to make technological efforts achievable. Achievement of national food security requires a joint effort, consolidation of efforts, continuity and the building of a future generation of leaders with vision and passion for change. Many solutions for improving food security were reviewed, including access to land, pest management, irrigation and transportation, and sustained food security and development in Nigeria would remain a fantasy until these strategies are implemented.

Recommendations

The following recommendations are made for women's empowerment through education and agriculture, food security and sustainable development:

1. The government should develop literacy programmes aimed at illiterate women in rural communities and educate them through adult education classes and lead extension agents.

2. Agricultural extension agents should be there to teach women modern methods of agricultural production that will enhance food production and security. This can be done on their farms practically.
3. Microcredit financing programmes of government should not only be made available to women. However, they should focus on providing productive credit to rural women that will enable them to increase food production.
4. Women should have easy access to agricultural loans, and banks should be encouraged by the government to establish branches in rural areas where women who engage in food production can obtain loans. Such loans must be soft enough for repayment.
5. Access to land, improved varieties of seedlings, farm tools, water, electricity, access roads, and storage facilities should be provided for women from production to harvest and storage of food.
6. Women should be encouraged to form cooperative societies to work together and speak with one voice.

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