

**RESEARCH ARTICLE**

**Extension Roles and Community Development Projects on Building Nutritional Food Basket Program using Orange Flesh Sweetpotato Varieties in Nigeria**

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**ABSTRACT**

Community-based organization refers to a group aimed at making desired improvements to a community's social health, well-being, and overall functioning. It is seen as the ability of people to apply their traditional institutions and creativity to initiate self-help projects aimed at responding positively to the problems of their environment. Community development offers individuals and groups the opportunity to take action and address issues concerning communities. It is a continuous effort to find solutions that benefit the community and enact collective action to empower individuals and agencies to support and improve the lives of disadvantaged communities. Building Nutritious Food Baskets (BNFB) project is a project implemented in Nigeria and Tanzania and funded by the Bill and Melinda Gates Foundation. The project mainly targets rural populations, especially young children under the age of five and women of reproductive age in Nigeria and Tanzania, respectively. Sequel to the above, this paper used available literature to assess the extension roles and community development projects on BNFB Program using orange flesh sweetpotato varieties in Nigeria.

**Key words:** Community development, extension roles, nutrition, orange fleshed sweetpotato, program

**INTRODUCTION**

More than 75% of the Nigerian population resides in rural areas and the areas serve as the base for the production of food and raw materials because agriculture which is the back bone of the economy is rooted there. Therefore, agriculture is the major sources of capital formation for the country and principal markets for domestic manufactures (Ikwuba, 2010).<sup>[1-5]</sup>

In Nigeria, 30% of pre-school aged children are deficient in vitamin A, while 36% of children fewer than 5 years are stunted in growth. Vitamin

A deficiency (VAD) is considered a major public health problem that requires appropriate nutrition interventions. VAD causes morbidity, poor cognitive development, nutritional blindness, reduced immunity, and in some cases, death in children especially under the age of 5 years and poor productivity in adults (Maru, 2017).

Orange-fleshed sweetpotato (OFSP) is a special type of biofortified sweetpotato that contains high levels of beta-carotene. Beta-Carotene is an organic, red-orange pigment abundant in plants, and fruits. Beta-carotene is what gives OFSP an orange color and is converted to vitamin A in the body after consumption to provide additional nutritional benefits. Biofortification enhances the nutritional value of staple food crops by increasing the density of vitamins and minerals in a crop through either

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conventional plant breeding, agronomic practices, or biotechnology. Examples of these vitamins and minerals that can be increased through biofortification include pro-vitamin A Carotenoids, zinc, and iron (Maru, 2017).<sup>[6-9]</sup>

Orange fleshed sweetpotato (OFSP) is a staple food in Nigeria that can serve as a cheap and sustainable source of vitamin A, especially for vulnerable populations. The two OFSP varieties available before are UMUSPO3 locally referred to as “*Mothers Delight*” and UMUSPO1 commonly referred to as “*King J.*” *Mothers Delight* is more preferred and highly promoted in Nigeria because it contains high levels of beta-carotene. King J was released in December, 2012, while mothers Delight was released in June 2013 (Maru, 2017). Solo Gold (UMUSPO4) was later released in July 2018 making the total number of OFSVs in Nigeria to three (Udemezue *et al.*, 2021).

The United Nations Organization (1962) cited in Filani (2000) defined community development as the process, in which the efforts of the people themselves are united with those of the government authorities to improve the economic, social, and cultural conditions of communities to integrate those communities into the life of the nation and to enable them contribute fully to national progress.”

A community is a group of individuals that share a common space, set of beliefs, and set of practices. They are viewed as being entwined (twisted two things) in a web of relationships that fosters commonality and a sense of cooperation. They are viewed as homogeneous units that exhibit a certain degree of relationship, which is viewed as the fundamental essence of community (SOCIALWORKIN, 2022).

Community organization or Community-Based Organization refers to organizing aimed at making desired improvements to a community’s social health, well-being, and overall functioning. Community organization occurs in geographically, psychosocially, culturally, spiritually, and/or digitally bounded communities. It is a process by which a community identifies needs or objectives, takes action, and through this process develops cooperative and collaborative attitudes and practices within a community. Community organization includes community work, community projects, community development, community

empowerment, community building, and community mobilization. It is a commonly used model for organizing community within community projects, neighborhoods, organizations, voluntary associations, localities, and social networks, which may operate as ways to mobilize around geography, shared space, shared experience, interest, need, and/or concern (Michael, 2007). According to Okonkwo (2010), community development is seen as the ability of people to use their traditional institutions and creativity to initiate self-help projects aimed at responding positively to the problems of their environment. Although the onus for initiating such projects lies with the members of the community, they do not necessarily have to conclude them alone. The idea is that in initiating the project, a particular community must have pin-pointed its most pressing needs.

Community development gives individuals and groups the opportunity to take action and address issues within communities. This is a continuous effort to find solutions that benefit the community and enact collective action to empower individuals and agencies to support and improve the lives of disadvantaged communities (NET IMPACT, 2021). In view of extension roles to community development, this paper used available literature to assess the extension roles and community development projects on Building Nutritional Food Basket Program (BNFB) using orange flesh sweetpotato varieties in Nigeria.

## **OBJECTIVES OF COMMUNITY DEVELOPMENT**

According to Gamber *et al.* (2016), the specific objectives of community development were as follows:

1. To improve the living conditions of the local community as far as the available human and materials resource can go.
2. To ensure equitable distribution of resources available so that one area is not developed at the expense of another.
3. To make families economically strong so that they can live above poverty line.
4. To cooperate with the state and national development plans.

5. To reduce poverty and unemployment in the communities.
6. To bring about agricultural development rural industrial development, rural sanitations, disease control and health program, rural education, rural cooperation, and development of communication among others.
7. To bring essential governmental services to communities.
8. To provide a link between the services of Non-governmental Organizations (NGOs), donor agencies and other related groups/organizations.
9. To give orientation to the community members and stimulate them to raise their production potentials for their own benefit.
10. Provide equality. It gives equality to all people living in a territory. It gives equal chances and opportunities to bring the resources for their utility. Hence, it provides equality in education, health, and also other facilities provided to them.
11. Help the people to motivate their selves. Such programs are interested in the people to enable them to help one another and of their own. It makes them to stand on their own feet. They have to use their resources and make their lives comfortable.
12. Change thinking. One of the objectives of community development programs are changing of pattern and style of community people. It gives new directions to the changing life style. It helps to create the acquaintances among them, to following the positive thinking about the people.
13. To bring reforms. Such programs aim to bring social reforms in a community. It helps them in eradication of social evils which are the gross roots of bring social disorder in community. Hence, one of them aim of community development provides them better opportunities to solve the problematic situation through reforms.
14. To keep people abreast. The main objective of community development is working to make the people aware from various problems in a community. It helps them to provide knowledge and to know about the main causes affects their social life.

## **CHARACTERISTICS OF COMMUNITY DEVELOPMENT**

According to SOCIALWORKIN (2022), the following Characteristics can be identified in a community:

### **Human Scale**

Communities are made up of individuals who interact face to face. In that sense, they are primary groups that have a direct contact with one another. Individuals are aware of one another and hence exact an influence over the variety of interactions they engage in. Social structures are sufficiently compact for individuals to possess and control.

### **Identification and Belongingness**

There is a sense of belonging and acceptance of one another, as well as a sense of security. In this case, one experiences a sense of belonging to or membership in a community. Membership entails acceptance by others, as well as dedication or loyalty to the group's objectives. This sense of belonging is critical and highly valued. The community can morph into a person's notion of self. Identity also plays a part in the individual experiencing not only a sense of belonging to one community but also a sense of distinction from other communities. Institutions and common practices within communities can contribute to identity formation and build a sense of belonging. This also implies that individuals may experience a shift in their sense of belonging to shifting institutions. These can be regarded as eroding a community's cohesiveness.

### **Obligations**

Obligation of every member entails certain rights and responsibilities assigned to each member in the social system. Mutuality of trust and reciprocity are first and foremost involved in maintaining communal life through participation in collective activities, sharing, and engaging with others. Participation in community events while adhering to customs and traditions is prescribed by the members' collective desire.

## **Culture**

Each community has its own culture, which is perpetuated and shaped by its people through its social structures, economic systems, and power interactions. In that sense, a culture encompasses and embraces the way of life of a group of people.

## **COMMUNITY-BASED ORGANIZATION USING ORANGE FLESH SWEETPOTATO PROGRAM INITIATIVE**

Micronutrient malnutrition is rampant in Nigeria, especially vitamin A deficiency, which affects at more than 30% of the population. Women of reproductive age, infants, and young children mostly are vulnerable to micronutrient malnutrition. Many of them suffer multiple deficiencies of essential micronutrients such as vitamin A, iron, and zinc, which can result in an array of health problems and even early death. Most of the people affected by micronutrient malnutrition do not show the physical symptoms usually associated with malnourishment; hence, the deficiency is commonly referred to as “hidden hunger.” Based on this, Nigeria, together with partners such as the Building Nutritious Food Baskets Project (BNFB) and community support”used” innovative approaches to championing efforts to scale up nutritious using vitamin A rich orange-fleshed sweetpotato (OFSP) in Rivers state and other remaining 35 states in Nigeria.

According Maru (2018), Building Nutritious Food Baskets (BNFB) project is a 5-year project (November 2015–October 2018) implemented in Nigeria and Tanzania and funded by the Bill and Melinda Gates Foundation. The project mainly targets rural populations, especially young children under the age of five and women of reproductive age, in Nigeria and Tanzania (Maru, 2017). The goal of the project is to accelerate and support scaling up of biofortified crops for food and nutrition security to help reduce hidden hunger by catalyzing sustainable investment for the utilization of biofortified crops (OFSP, PVA maize, high iron beans, and vitamin A cassava) at scale. BNFB develops institutional, community, and individual capacities to produce and consume biofortified crops. The objectives of the project are to strengthen the enabling environment

for increased investments in biofortified crops and to develop institutional and individual capacities to produce and consume biofortified crops.

In March 2017, to make the project a community participatory project, the farmers were given a 10-day training course on “Everything you ever wanted to know about sweetpotato,” supported by BNFB. The course was organized and hosted by the Agricultural and Rural Management Training Institute (ARMTI), in Ilorin, in collaboration with the International Potato Center (CIP) since 2012. It was done first through the Reaching Agents of Change (RAC) Project, then the Jumpstarting (revitalized) OFSP through Diversified Markets in West Africa Project and most recently BNFB. The course adopts adult learning methodology emphasizing learning by doing and discovery. It covers 14 topics on the sweetpotato value chain, including production, utilization, and investment (Maru, 2018).

The training equipped the few participated farmers to be secondary facilitators and champions for OFSP in various states of the country. They shared their skills and knowledge with extension workers, food processors, farmers, and other stakeholders in the sweetpotato value chain for wide impact. By March 2018, the trained people had reached more than about 5000 agents of change with training, with little support from BNFB. At present, more than 1500 households in Nigeria are now growing, processing, and accessing OFSP (Maru, 2018).

## **ROLES OF EXTENSION AGENTS ON COMMUNITY DEVELOPMENT PROJECT**

The roles of extension agents as regards to community development are numerous and multi-dimensional, apart from being a problem solver, motivator, and resource linker, he/she undertake the following depending on the specific area of operation, culture of the community, values, and aspirations. The role of extension worker while living among rural people is to bring necessary change in individual and collective behavior and motivating them. For this, extension worker is required to have knowledge about psychological factors, extension related training, and technological knowledge. In performing his duties, an extension

worker according to Gamber *et al.* (2016) has to perform work enumerated as follows:

### **To Create Motivation and Feeling**

By motivating rural people for the development of programs, so that they may become anxious to improve their standard of living and make new programs and implement them for their upliftment.

### **Knowledge of Local Felt Need**

Development program should be based on local felt needs. For this extension, worker should be aware of requirements and problems of local people.

### **Precedence of Instant Needs**

In preparing program, precedence should be given to that work which fulfills instant requirement of people.

### **To Create Self-belief in Rural People**

Till now, rural people have no faith upon their own power. They still depend on government assistance for the development work. Hence, it is important to make them understand or convince them that they can do most of the work through mutual cooperation.

### **Emphasis on Self-dependence**

Our villages were self-dependent before British rule. Their needs such as food, clothing, and housing were fulfilled in villages itself, but now they have to go outside to fulfill their basic needs and still they are unable to earn enough for themselves. Therefore, it is necessary to bring change in this situation and to teach lesson of self-independence to the villagers.

### **To Develop the Close Relations between Research Center and Agricultural Farm**

A close coordination is to be developed between research center and agricultural farm. So that scientific information can be given to the farmers and their problems can be addressed to the scientific institution for solution.

### **Full use of Present Local Resources**

To enhance the extension work and rural industries such as agriculture and cottage industries, it is necessary to efficiently utilize the available local resources so that people can become self-dependent.

### **Plan for All-round Development**

Extension worker should organize social, economic, and educational development programs for all round development of the society.

### **Reconstruction of Village**

Work should be done for the development of education, health, transportation, electricity, water, etc., in villages, so as to encourage educated people to stay in villages. Arrangement should be made for providing security to the people in villages.

### **Change in Social Attitude**

The rural environment in India is filled with jealousy, hatred, ill feeling, and conflicts. Selfishness is increasing day by day and it is harmful for the society and the country. Extension worker should try to bring change in this mental attitude of people so that they can sacrifice their selfishness for the welfare of the society and country and may become partners in the reconstruction of the country.

## **CONCLUSION**

Community development is a concept that is as old as any community itself. It has its own assumptions, characteristics, and objectives which are derived from the theories of development. All the efforts made by the first man and woman on earth to maintain the immediate environment where they found themselves. Based on this, the paper discussed the meaning of community development, objectives, and its characteristics. It also discussed Community-Based Organization using orange flesh sweetpotato program initiative and the roles of extension agents on community development project. Therefore, for a community to develop and achieve its desired objectives,

human development indices should be encouraged and maintained.

## REFERENCES

1. Gamber SY, Suandi TR, Ismail IA, Omar Z. Extension education's role towards community empowerment in Nigeria: Issues, challenges and prospects. *J Educ Soc Policy* 2016;3:1-8.
2. Ikwuba A. Community based organisations (CBOS) as an alternative vehicles for rural development practice in Nigeria. *Niger J Rural Sociol* 2010;11:1-7.
3. Maru J. Newly Launched Orange-Fleshed Sweet Potato (OFSP) Platform to Fight Hidden Hunger in Nigeria; 2007;4:69-83.
4. Maru.J. Championing vitamin A-rich orange-fleshed sweetpotato in Nigeria. A working paper presented at international food nutritional conference, 2018, Abuja.pp 320-390.
5. Michael JB. *Building Powerful Community Organizations*. Chicago: Long Haul Press; 2007.
6. Okonkwo PC. *Community and Rural Development Strategies (Principles and Practice)*. Enugu: Impressium Publications; 2010.
7. SOCIALWORKIN. 5 Characteristics of Community. Available from: <https://www.socialworkin.com/2021/12/5-characteristics-of-community.html> [Last accessed on 2023 Jan 25].
8. Stehr A, Tailor DR editor. *Development from Above or Below*. New York: John Wiley and Sons.
9. Udemezue JC, Eluagu CJ, Azodo NT, Odia FN, Onwuneme NA. Economic benefits and adoption of orange-fleshed sweetpotato production enterprise among farmers. *Agric Ext J* 2021 5:1-8.