Contributions of Compound Farming Practices to Household Food Security in Niger Delta, Nigeria

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Abstract. The paper focused on the contributions of compound farming practices to households food security in Niger Delta, Nigeria. Data were collected with the aid of structured questionnaire from 76 selected households in the study area using snowballing technique. Data were analyzed using frequency, percentage, and mean scores. Findings revealed that compound farm produces food almost at all seasons of the year; compound farms help in income generation. It also supplies household with nearly all the food crops. Based on the findings of this study, the following recommendations were made: Sensitization Program on the relevance/importance of compound farming as a means of improving the livelihood of household should be embarked upon by change agents. Intensive compound farming should be popularized through various extension methods.

Keywords: Compound Farming Practices, Households Food Security.

1. Introduction

A compound farm can be regarded as the farm located around the homestead for the production and rearing of varieties of food crops and livestock for consumption, income generation and environmental sustainability. It was observed that [1] compound farmers are those individuals who cultivate or plant crops behind their houses or close to their houses. This is why it is sometimes called backyard farming. The ease of access to food crops is one of the overriding factors responsible for this practice [2]. It was also observed that farms in the vicinity of the houses which are distinguishable from ordinary fields or distant farms [3]. Compound farm/homestead farm requires little capital, low risk, utilization of waste, and it is easy to manage. However these benefits are not being optimally exploited. Every possible avenue is being employed globally to address the indices of underdevelopment and strive towards attainment of the Millennium Development Goals (MDG's) by the year 2015 [4]; Compound farming takes relevance in the MDG's target of food Security, nutrition, health and environmental sustainability.

A well-developed compound farm makes a vital contribution to household food supply with substantial quantities of a variety of food all year round. First, compound farms can produce food for meals and secondly products from the farms can be sold for income to buy other essential things [5]. Young children especially need a sufficient quantity and variety of food, the household also needs the right food in all season of the year. Developing a compound farm for food production is very important part of attaining an adequate food supply for the household. Growing one's own food as much as possible makes best economic sense. Fortunately, if properly developed, the compound farm can supply a significant proportion of a household daily food needs. In every community, there are examples of compound farms which are well-managed and these compound farms produce a wide variety of food crops and livestock which supply the families with fruits and vegetables, root and tuber crops, meat and fish throughout the year. The compound farm is

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therefore an important land unit for households, as it is usually the centre of family lives. A well developed compound farm is a complete farming system; it is the most direct means of supplying families/households with most of the non-staple food they need year round [5].

A well developed compound farm contributes significantly to daily food needs. It can also supply households with nearly all non-staple food they need, such as fruits, vegetables, legumes, coconut, flowers for ornamental purposes or for sale. Food items that cannot be produced in the compound farm can be purchased from the sales of other items produced [5]. The problem of food insecurity arises basically due to variation in access to productive resource, the extent of food insecurity in the world is reported to remain high (especially in Developing Countries) as one sixth of the world's population do not have access to sufficient food [6]. This leads to the world wide effort to address the problem. Food security is said to depend on the availability, accessibility, adequacy and acceptability of food at all time [7] which the urban dwellers are making efforts to achieve through the adoption of compound farming practices.

According to recent projection from Food and Agriculture Organization of the United Nation (FAO), the world submit goal of halving the number of food insecure people from 800 million in 1995 to 400 million by 2015 will not be achieved until 2030, unless stringent steps are taken towards the adoption of compound farming/home gardening among households. Household food security which involves a situation in which all members of a household have access to sufficient, safe and nutritious food at all times to meet their dietary needs and food preference for an active and healthy life is a very important phenomenon in poverty alleviation [8]. Several efforts are thus made by household members to ensure food security in their homes. The efforts range from income as well as non-income generating activities. One of those activities is compound farming.

Compound farming is an agricultural production system based on a fixed plot of land, which is worked by household members. Compound farms are variously known as backyard garden, Home gardens or homestead gardens. They are specialized agricultural production or farming system usually not more than few kilometers from the homes of the operators. Compound farms are considered as legitimate agro-forestry subdivision and they vary considerably in size, shape, intensity of cultivation and complexity in the number of species grown [8]. This consists of horticulture, vegetables, fruits, spices and rearing of animals. Relatively the products are intended primarily for household consumption.

Problems of food security arise basically due to variation in access to productive resources. Two kinds of states of food insecurity were indentified; acute insecurity which is caused by seasonal fluctuations in food availability, while chronic insecurity which occur through transitory period of food insecurity [9]. The extent of food insecurity in the world is reported to remain high (especially in developing countries) as one sixth of the world's population does not have access to sufficient food [6]. This leads to a world-wide effort to address the problem. Food security is said to depend on the availability, accessibility, adequacy and acceptability of food at all times [6] which rural dwellers make effort to achieve through home compound farming. According to recent projections from Food and Agriculture Organization of the United Nation (FAO), the world summit goal of halving the number of food insecure people from 800 million in 1995 to 400 million by 2015 will not be achieved until 2030 unless stringent steps are taken. It is necessary that the role that compound farming can play in achieving this is assessed. Compound farms have been reported to be used to ensure that the food needs of homes are taken care of at little cost while the varieties required for healthy living are catered for. One important and widely accepted idea is to avoid undesirable consequences, compound farming that is usually close to the house can help in family nutrition improvement programme [10]. Compound farming development and improvement are commonly linked to nutrition improvement programmes; it affords rural farmers the opportunity of realizing the multiuse potential of plants for food, feed, useful products, environmental protection and for landscaping. Increasing food production and productivity is essential to achieving food insecurity in households. The policy that the fertility of compound farms which are usually more intensively cropped than other farm systems, is usually maintained with farm yard manure, household refuse, kitchen waste, crop residues and sometimes toilet waste is a basic fundamental for household increased food production [6].

It is therefore important that in efforts at achieving food security in developing countries, the contribution of home gardening that is increasing from being only a rural practice to also becoming a normal occurrence in most peri-urban and urban centers' is assessed.

2. Methodology

The study was conducted in Obio/Akpor Local Government Area of Rivers State, Niger Delta, Nigeria, one of the major centres of economic activities in the state. Two communities from each of the clans were being randomly selected, making a total of 4 communities. A snowball sampling technique was adopted in the sampling. The technique was used in identifying a compound farmer and requesting him/her to link up another compound farmer and the process continues [11]. This technique was used to select 20 households from each of the 4 communities, making up a total of 80 households heads, out of which 76 was usable for analysis. Data were collected using structured questionnaire and direct observations. The questionnaire provided background information on general socio-economic index, arable crops as well as livestock. The questionnaire was administered by the researcher to the household heads and other relevant information were obtained through observation of the study environment. Data were analyzed using frequency, percentage, and mean scores.

3. Results and Discussion

Table 1 shows that the entire respondents (100%) agreed that compound farms produces food almost at all seasons of the year. This implies that compound farm can sustain the household all year round with adequate management practice. As shown in the table, majority of the respondents (97.4%) agreed that they generate income from the sales of produce in their farm with a mean score of 3.61 which confirms the agreement. This suggests that they consume what they produce and sell part of it to use the proceeds to purchase other food needs. This is a good contribution to the much desired household food security, since compound farms can be used to ensure household food security.

S/N	Statements	SA	Α	D	SD	Mean
1	A compound farm produces food almost at all seasons of the year.	61(80.3)	15(19.7)	0(0)	0(0)	3.80*
2	I generate income from the sales of produce from my farm.	49(64.5)	25(32.9)	2(26)	0(0)	3.61*
3	Family/household can improve their livelihoods through compound farming practice.	52(68.4)	24(31.6)	0(0)	0(0)	3.68*
4	Compound farming can help household generate income.	55(72.4)	21(27.6)	0(0)	0(0)	3.72*
5	Compound farm contribute significantly to daily family food need.	57(75.0)	19(25.0)	0(0)	0(0)	3.72*
6	Compound farm can supply household with nearly all the food crops.	61(80.3)	15(19.7)	0(0)	0(0)	3.80*
7	Income from sales of compound farm produces can help the family in buying daily	26(34.2)	4(5.3)	4(5.3)	0(0)	3.55*
	essentials.					
8	Compound farming helps in attaining the MGDs of food security, nutrition, health	51(67.1)	25(32.9)	0(0)	0(0)	3.67*
9	Growing one's own food as much as possible makes best economic sense.	58(76.3)	18(23.7)	0(0)	0(0)	3.76*

Table 1: Contributions of compound farming to households

Source: Field Survey (2011); Figures in parenthesis are percentages * agree

Midpoint = 2.50

Any mean score < 2.50 suggest – disagreement

Any mean score ≥ 2.5 suggest – agreement

The respondents also indicated that compound farming activities/practice makes substantial contribution to meeting household food security needs. They also agreed that compound farm contributes significantly to daily family food needs and can supply household with nearly all the food crops needed, such as vegetables, fruits, coconut etc. It was observed that respondents have preference for several vegetables among compound farmers [12].

The fact that compound farming practices/activities are not considered by some as a regular source of income indicates that most of the produce are not sold but are used to provide for food need of the home to ensure food security. Hence, efforts at ensuring food security should therefore help people to strengthen their compound farming practice. The table, also shows that all the respondents agreed that compound farming will help in attaining the millennium development goals (MGDs) of food security, nutrition, health and environmental sustainability, and that growing one's own food as much as possible makes best economic sense. When a compound farm/home garden is well managed, a small plot of 100m² can make a substantial contribution to household food needs and nutritional well-being [13].

4. Conclusion and Recommendations

It is concluded from the study that compound farm produces food almost at all seasons of the year; compound farms help in income generation. It also supplies household with nearly all the food crops. Based on the findings of this study, the following recommendations were made: Sensitization Program on the relevance/importance of compound farming as a means of improving the livelihood of household should be embarked upon by change agents. Intensive compound farming should be popularized through various extension methods.

5. References

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