

## Socio-Economic Benefits of Backyard Farming: The Experience of Women in South Western Nigeria

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### Abstract

The study analyzed the socio-economic benefits of backyard farming among women in South Western Nigeria, using Ekiti-State as a case study. A total of 180 respondents were randomly selected via multistage sampling techniques. Data were collected through a structured questionnaire and oral interviews. Data collected were analyzed using descriptive statistics of means, frequency counts and percentages for socio-economic predictors, which include: income generating, employment opportunity, food supply for the family, improved standard of living and ability to provide for children needs. The result showed that a high percentage of women farmers were in the age bracket of 30-58years and most of them were educated. Stocking density and caging type were determining factors for backyard farming efficiency. An average women farmer in the area had a mean technical efficiency of 79%. It was recommended that more women should be encouraged to embark on backyard farming for employment, income-generation and enhancement of proteins supply for family at relatively low cost, and at the same time that Federal Government should assist them financially.

**Keywords:** Socio-economic predictors, Backyard farming, Farming efficiency, Women farmers.

### INTRODUCTION

The contributions of Agriculture to socio-economic development of an individual and the nation in general cannot be over-emphasized. The practice of agriculture in different dimensions has been highly embraced by families today, as it becomes a supplement for unpaid salaries that affects virtually all the state of the nation. Observation have shown that agriculture has proved to be the only stable and important tool for reducing the effects of unemployment, poverty, poor health, poor nutrition, household conflicts and food insecurity, which are major problems in rural and in most urban areas in Nigeria and other developing countries across the globe. Backyard farming in particular, has been found to perform several functions that have great influence on the socio-economic status of an individual and in the development of the nation, particularly in the areas of food provision, food security and income generation which help to reduce the poverty level in the country. Backyard farming involves production of vegetables, root/tuber crops, cereals, poultry and small ruminants, mini-livestock, etc, using small pieces of land in the residential areas, in such quantities that will ensure that the immediate needs of the household members are guaranteed. Backyard farming provides food items in fresh form, encourages landless people including tenants and poor people to be involved in food crop production on small-scale basis. It can also enables civil servants, clergymen, judges, political office holders who are interested in farming but are constrained because of the nature of their job or profession to use backyard farming to practice their love for farming. Explaining this, Oke, (2014) had conceived backyard farming to mean a form of microenterprise which is a source of revenue for the unemployed, a supplemental income for the low income earners and at the same time, an income booster for the high income earners.

In every part of the country today, observations have shown that everyone in one form or the other is engaged in agriculture to help improve their income levels and to supplement other needs. The economic meltdown in each state of the Federation presently has proved that most families today cannot conveniently afford the escalating cost of beef meat and this therefore calls for other alternative sources of meat in human diet which are relatively cheaper, easy to manage and more nutritive. Notably among backyard farming that are found to be of great potential for these purposes. Such alternative source could be found in poultry farming, fish farming, grasscutter farming, Snail and pig farming, etc. This study therefore premise on investigating into these farming, particularly by women in Southwestern Nigeria with the aim of achieving socio-economic development and moving their families from poverty level to socio-economic stability.

### **Types and descriptions of backyards farming**

There are different types of farming businesses engaged in by people in Nigeria, particularly in Southwestern Nigeria, which are produced mainly for food and on sustainable basis. The common animals observed in this study to be raised by women include the followings:

**Snail:** Snail farming is an important venture in Southwestern Nigeria. Snail is an animal with special delicacy that has gained widespread popularity for domestication and consumed worldwide. Studies have established the impacts of snail farming in poverty reduction, Aiyelaja & Ogunjinmi, (2010) reported that snail farming constitutes a major part of income of rural farmers who are predominantly women and have limited alternative sources of livelihood. They further confirmed that apart from the sales from direct consumption, the production of snail could boost marketing and income from its farming activities, empowers the rural people economically and reduces their poverty level. In addition, crushed snail shells may be applied in chicken feed or liming to improve the quality of acidic (fish pond) soils. Snails also fit in well with other farming activities, as it helps to fertilize the soil prior to cultivation of other crops. Observation has shown that women in this part of the country have benefited greatly from snail farming business.

**Poultry farming:** Poultry farming is another important component of agriculture activities which is carried out in almost all household, particularly by women in rural communities and in slum urban centers in Nigeria. Poultry production is usually done through backyard and garden raising in small or semi large scale, and has been a source of regular income to most families. Poultry keeping is considered very important for rural people in particular, because it contributes to household nutrition, as many poor households rely on their own poultry production to provide the main part of their animal protein consumption. It provides not only protein but also micronutrients such as iron, vitamin A and others that are of crucial importance for health, especially for children Epprecht, (2008). Moreover, the importance of poultry business has also been emphasized by Weaver, (2009) as that which acts as insurance for rural women in terms of income and employment. Oladunni & Fatuase, (2014) further established that poultry farming has been a great tool in cushioning the effect of poverty syndrome in the rural area. They confirm that village chicken products in particular are the main sources of animal protein for poor household, the eggs serves as source of high quality protein for sick and malnourished children. Poultry meat and eggs was also seen as highly nutritious, the meat is rich in proteins and good source of phosphorus and other minerals and of B – complex vitamins. Poultry meat also contains less fat than most cuts of beef and pork; and poultry liver is especially rich in vitamin A (Dana, 1998, Saha, 2003).

## GRASS CUTTER

Grass cutter is an important backyard farming business in Nigeria. It is one of the animals popularly referred to as bush-meat and widely consumed throughout West Africa, FAO (2008). Grasscutter farming is a major income generating venture. It generates employment opportunities in the rural areas of Nigeria, Adeogun O.A, Ogunbadejo H.K., Ayinla O.A., Oresegun A., Oguntade O.R., Alhaji Tanko and Williams S.B. (2007). In comparing grasscutter meat with other livestock meat, Adeyemo, (2015) posits that grasscutter meat is more nutritious, the meat is very tender, high in protein and low in cholesterol. According to him, their consumption is by far more palatable and healthier than livestock. This is the more reason why consumers are eagerly looking for other sources of meats that are different from the conventional beef meat which is too common with tough connective tissue and with high cholesterol level.

However, capital is one of the important factors of production in grasscutter farming that has been found to limiting the production of grasscutter farming business Fazoranti (2006). Also, production function stipulates the technical relationship between input and output in any production process. It is an imperial method of describing the input and output relationship. Stochastic frontier production involves a production function specified for cross sectional data which had an error term that had two components. On the accounts for random effects, such as measurement of errors in output variable, water, topography, vegetation e.t.c account for technical efficiency.

**Fish farming:** Fish is another good source of meat in human diet throughout the world. Nigeria is one of the largest importers of fish in the developing world (FAO 2010). Fish contribute significantly to food security and seen as an important component of human diet and is very rich in protein, Moehi (2003). Fish farming provides important services including, supporting nutritional well-being, providing feedstock for the industrial sector, making contributions to rural development, increasing export opportunities, providing effective administration of natural resources and conservation of biological diversity (Dagtekin et al., 2007). As a source of protein production, Ayinla (2009) submitted that the most reliable source of protein for many people in the developing countries is and must continue to be fish. Supporting this, WBG, (2011) established that fish provides essential nutrition for over one billion people, including at least 50 percent of animal protein for 400 million people from the poorest countries. Fish farming was further proved to ranked high as an agricultural activity, competing with other livestock and other crops for the same basic inputs, such as land, water, labour, nutrients, management etc.

## METHODOLOGY

This study was conducted in Ekiti State, South Western region of Nigeria. Ekiti state of Nigeria is located between latitude 4.45 to 5.45 east of the greenish meridian and latitudes 7 15 – 18 5 north of the equator. The vegetation is made of evergreen forest savannah in the south and northern region respectively. A multistage sampling technique was used for the selection of respondent. Primary Data were collected from farmers through personal interview and structured questionnaire, while secondary data were assessed from Ekiti State Agricultural Development programme (EKADP) and Ekiti State Development of Farm Service (EKDFS). Variable considered include the socio-economic characteristics of respondents benefits of backyard farming and their production operations. Socio-economic benefits of respondents were determined, using descriptive statistical analysis of means, frequency distribution percentage.

## RESULTS AND DISCUSSION

**Table 1: Analysis of Demographic Characteristics of Respondents. N = 100**

<b>Variable of age (years)</b>	<b>Frequency</b>	<b>Percentage</b>
< 30	4	5.00
31-40	9	11.25
41- 50	21	26.25
<b>51- 60</b>	<b>24</b>	<b>30.00</b>
>60 & above	22	27.50

<b>Level of education</b>	<b>Frequency</b>	<b>Percentage</b>
Non formal	1	1.25
Primary	5	6.25
Secondary	24	30.00
Tertiary	49	61.25

<b>Types of Farming</b>	<b>Frequency (n)</b>	<b>Percent (n %)</b>
Snail	19	15.1
Poultry	75	59.5
Fish	25	19.8
Grass cutter	7	5.6

<b>Sources of income</b>	<b>Frequency (n)</b>	<b>Percent (n %)</b>
Personal saving	34	42.5
Cooperative Services	11	13.75
Government Loan	10	12.50
Family Assistance	8	10.00
Personal savings Family Loan	14	13.75

<b>Source of labour</b>	<b>Frequency (n)</b>	<b>Percent (n %)</b>
Self	5	6.25
Hired	31	38.75
Family	33	41.25
Others	11	13.75

Source: Field Survey, 2015

The demographic characteristics investigated in the study include: age, gender, marital status, types of farming, level of education, primary occupation, years of farming and sources of income. It revealed that 5% of the respondents were below 30 years, 11.25% fell in within the range of 31 to 40 years, 26.23% fell within the range of 41 to 50years, while 30% fell within the range of 51-60 years. The result also indicates that women are majorly found in the business of backyard farming, 86.25%. They sourced their capital from personal savings, 42.5%, only a few sourced it from other means. It was apparent that working capital was majorly from personal savings (Ekaime et al 2012).

Determinants of efficiency of farm business were: level of education, household size, cost of labour and years of farming. Educational status of an individual farmer plays an important role in his or her farm production and income earning capacity. The results revealed that all the sampled farmers had one form of formal education or the other, those with tertiary education in particular was estimated to 61.25%. Thus, the levels of education attained by respondents have positive influence on their economic activities outside their primary occupation. It also revealed that 15.1%, 59.5%, 19.8% and 5.6% of the respondents were Snail farmers, Poultry farmers. Fish Farmers and grasscutters respectively. Poultry farming therefore top the lead of farming business engaged in by women in South-western, Nigeria. Cost of labour was also very important and significant. Family labour had the highest factor which accounted for 41.25% in all. It shows that family labour is a very good source of labour in backyard farming in Nigeria. This supports (Olagunju et al 2007) who reported that labour cost and animal stocking cost are very important in backyard farming business.

**TABLE 2: Socio-economic benefit derived from Backyard farming. N = 100.**

S/N	Items	Strongly agreed	Agreed	Strongly disagreed	Disagreed
1	<b>Backyard farming provides adequate source of income for women farmer.</b>	44 (34.9)	37 (29.4)	33 (26.2)	12 (9.5)
2	<b>Backyard farming provides employment opportunities for women and employee.</b>	38 (30.2)	32 (25.4)	49 (38.9)	7 (5.6)
3	<b>Backyard farming supplies food for the family and the community at low cost.</b>	41 (32.5)	72 (57.1)	10 (7.9)	3 (2.4)
4	<b>Women who engaged in backyard farming business have high self-esteem.</b>	28 (22.2)	62 (49.2)	31 (24.6)	5 (4.0)
5	<b>Backyard farming business improves the standard of living of women.</b>	40 (31.7)	60 (47.6)	0 (0)	26 (20.6)
6	<b>Backyard farming business helps women to cater for the need of their children.</b>	2 (16.7)	59 (46.8)	41 (32.5)	5 (4.0)
7	<b>It helps to see to the upkeep of the entire household need</b>	33 (26.2)	74 (58.7)	10 (7.9)	9 (7.1)

8	<b>It increases the nutritional value of the entire family</b>	56 (44.4)	60 (47.6)	7 (5.6)	3 (2.4)
9	<b>Farm management practices improve educational status of women farmers.</b>	41 (32.5)	49 (38.9)	31 (24.6)	5 (4.0)
10	<b>Backyard farming business assist in the economic development of the nation</b>	44 (34.9)	51 (40.5)	22 (17.5)	9 (7.1)

**Source: Field Survey, 2015**

Table 2 above shows the responses of participants on socio-economic benefits of backyard farming. The first item which states that “Backyard farming provides adequate source of income for farmers revealed that 34.9% and 29.4% of the respondents strongly agreed and agreed to this statement while 26.2% and 9.4% of the respondents strongly disagreed and disagreed respectively. Also, item two shows that 30.2% and 25.4% of the respondents strongly agreed and agreed that “Backyard farming provides employment opportunities for women and the employee” while 38.9% and 5.6% of the respondents disagreed with this.

Furthermore, item three revealed that 32.5% and 57.1% of the respondents strongly agreed and agreed to the statement that “backyard farming supplies food for the family and the community at low cost”, while 7.9% and 2.4% strongly disagreed and disagreed respectively. Item four also state that, “Women who engaged in backyard farming business have high self-esteem of women”. 22.2% and 49.2% of the respondents agreed with the statement while 24.6% and 4.0% disagreed. In addition, item five shows that 31.7% and 47.6% of the respondents agreed that “engaging in backyard farming improves the standard of living of women and their families” while 20.6% on this. Item six which states that, “Backyard farming business helps women to cater for the needs of the children”.16.7% and 46.8% of the respondents agreed with this, while 32.5% and 4.0% disagreed.

Moreover, item seven shows that 26.2% and 58.7% of the respondents agreed that, “Backyard farming helps to see to the upkeep of the entire household’s need, while 7.9% and 7.1% disagreed. In the same vein, findings on item eight revealed that 44.4% and 47.6% of the respondents agreed that “backyard farming increases the nutritional value of the entire family, while 5.6% and 2.4% disagreed. Also from item nine, it was revealed that, “Farm management practices improve educational status of women farmers, 32.5% and 38.9% of the respondents agreed, while 24.6% and 4.0% disagreed with the statement. Lastly, item ten revealed that, 34.9% and 40.5% of the respondents agreed that “backyard farming business assist in the economic development of the nation agreed”, while 17.5% and 7.1% disagreed.

The results of findings, as seen in the above table clearly expressed that socio economic benefits of backyard farming includes:-sources of income, food supply for the family, financial empowerment for women, employment opportunities, increase in healthy nutrient foods, improved standard of living, help to cater for the needs of children and economic development of the nation at large. This confirms the findings of Adeyemo and Koyenikan, (2002) on the food values of micro-Livestock. They opine that livestock animals are use for protein supplies, their protein contents is of higher quality, the meat is more nutritious and contains low cholesterol. Also on the importance of backyard farming business, Adeyemo and Oladeji (2013) encouraged farmers to embark on mini-livestock for employment, income-generation and enhancement of proteins supply at relatively low cost. Also on information derived from the

primary Data indicates that respondents reported the judicious use of their environments in converting them to farm business. For instance, a respondent confirmed thus:

*"I used my backyard to farm; I converted an abandoned concrete tank into a fish pond. I also built a pen for poultry farming. None of this venture was big, but it was fully integrated and supported my family needs and helped to pay other bills".*

In conclusion, backyard farming is a lucrative business in Nigeria, particularly among women in Southwestern part, where a huge percentage of the women are unemployed. It also provides employment throughout the year to famers in the rural and urban centers of the country. It further provides an alternative animal protein to Nigerians in their diets as it supplement beef as a source meat. The business however, limited by inadequate capital, medication, improved breeding stock and feed, it is also limited by diseases and parasites.

### RECOMMENDATIONS

- However, based on the findings of the study, it is recommended that Government should assist the unemployed people particularly women and youth and other low-paid workers to acquire farmland and farm equipments for effective production of their farm business.
- Also, soft loans should be given to farmers, especially women farmers to assist them in their farming businesses
- Women, particularly in the study area should form cooperative groups in order to obtain loans from bank to boost their business.

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