Education

Impact of Taraba Vegetables Limited (greenhouse) on the livelihood income of the women in Jalingo local government area of Taraba state, Nigeria

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Abstract

The study was conducted on impact of Taraba vegetables limited on the livelihood income of the women in Jalingo local government area of Taraba State, Nigeria. The specific objective was to; describe the socio-economic characteristics of the respondents, determine the impact of greenhouse on the livelihood income of the respondents (retailers and hawkers) and identify the problems militating against marketing of the greenhouse products in the study Area. Data were collected from 75 respondents randomly selected using structural questionnaire and the data were analyzed using frequency, percentage and t-test analysis. The results on socio-economic characteristics of the respondents indicated that majorities (93.3%) of the respondents were youth, majorities (80%) of the respondents were female and majorities (80%) of the respondents were married. Most of the respondents attended only primary and secondary education. Majority (93.3%) of the respondents had household size less than 11 persons and most (86.7%) of the respondents earned less than N50, 000 as their monthly income. This also implies that the business is profitable venture. The result on the impact of greenhouse on the livelihood income indicated that the Greenhouse have impacted positively on the livelihood income of the women. This was based on the result obtained from T-test analysis the T-calculated value (5.32) was greater than T-tabulated value (3.18). It also implies that their standard of living has been improved as their income increases, they acquired assets like; land, motorcycle, tricycle, and paid their children school fees etc. Recommendations: Government or well to do individuals should assist the women with finance and the women should also have cooling items for proper storing of their products.

Keywords: impact, vegetable, greenhouse, livelihood, retailers and hawkers

1. Introduction

Taraba state is a major Agricultural state which prides itself as the "Nature's Gift to the nation "it experienced a turnaround in Agriculture, thereby boosting its economic and supply the required nutrients for its teeming population. The gigantic green house was established by his Excellency Governor Darius Ishaku Dickson in 2017 at cost of over N2billion through Zenith Bank loan (Gai, 2017) [5]. The aim of establishment of the green house was to It was sited in between the premises of the Taraba state university and the state college of Agriculture in Jalingo for easy conduct of research and Technology transfer. The Greenhouse is the first of its kind in the North east region and the largest in the country with fifteen greenhouses (Dugba, 2017) [3].

A greenhouse is a structure with walls and roof made chiefly of transparent material, such as glass, in which plants requiring regulated climatic conditions are grown (Robert 2015) [9]. These structures range in size from small sheds to industrial-sized buildings. It is believed that with greenhouse technology, Nigeria can meet her food sufficiency and export to other countries (Aliu, 2021) [1]. The Netherlands has some of the largest greenhouses in the world. Such is the scale of food production in the country that in 2000, greenhouses occupied 10,526 hectares, or 0.25% of the total land area (Goldbat and Watson, 2012) [6]. Greenhouses began to be built in the Westland region of the Netherlands in the mid-19th century The Netherlands has around 4,000 greenhouse enterprises that operate over 9,000 hectares of greenhouses and employ some 150,000 workers, producing €7.2 billion worth of vegetables, fruit, plants, and flowers, some 80% of which is exported (Goldbat and Watson, 2012) [6].

According to the General Manager of Taraba vegetables limited Mr. Avon Gil, revealed that the company employed a total of 871 staff, 111 were direct staff while 760 were indirect staff who were paid from the company's purse. He said that the produce from the farm were very high quality and were transported to retail outlet in Lagos, Abuja and Port Harcourt, which generates a lot of revenue for the state and provide direct and indirect employment to Tarabans. The major exotic crops produce include; cucumber, lettuce, pepper, tomatoes among others.

Rural Nigeria is characterized by agrarian livelihood as well as other primary production activities. Studies have shown that agricultural-based livelihood in rural Nigeria has a higher level of poverty than other occupational groups. Rural agriculture is subjected to local variations in weather condition and thus expected variations in income levels and thus access to food (FAO, 2014) [4]. Therefore, there is need to diversify sources of

income into multiple agricultural and/or non-agricultural income-based livelihood systems. Livelihoods comprise "the capabilities, assets (including both natural and social) and activities required for means of living: a livelihood is sustainable which can cope with and recover from stresses and shocks, maintains or enhances its capabilities and assets, both now and in the future, while not undermining the natural resource base" (Chambers and Conway, 1992) [2]. Livelihoods are typically understood in terms of the assets that a social group holds frequently, but not always; the activities or strategies that social group employs, and the multiple outcomes its members seek to achieve-such as adequate food, adequate shelter, good health and nutrition, education for the future, and, critically (especially in conflict situations), safety and security. Livelihood must also be analyzed in terms of the policies or institutions that shape or impinge on access to natural resources, labor markets, education, social relations, and myriad other factors that shape livelihood opportunities (Maxwell *et al.,* 2017) [7].

According to the state commissioner for Agriculture, Dr. David Ishaya kassa, stated that over 200 youths were gainfully employed in the greenhouse and over 250 women were hawking and retailing the products in the town (Jalingo). They solely depend on it as a driven force for their livelihood. With this business of hawking and retailing the products some were able to pay their children school fees, acquired assets like; land, motorcycle, tricycle, etc. According to one of the hawkers Mrs. Paulina Yani said that the business has helped her to sponsor her son in Taraba State university also she is now living in her own apartment no longer a tenant. She further said that the greenhouse has impacted positively in their livelihood and have alleviated poverty among the youths mostly the women.

The specific objectives were to;

a) Describe the socio-economic characteristics of the respondents
b) Determine the impact of greenhouse on the livelihood of the women (retailers and hawkers)
c) Identify the problems militating against marketing of the greenhouse products in the study Area.

2. Methodology

The study area

Jalingo Local Government Area lies between latitude 8° 47' and9°01 North and between longitude 11° 90' and 11° 30'east. Jalingo is the state head quarter with an estimated population of about 193, 392,500 people (NPC, 2006) [8]. It shares common boundaries with Ardo-kola, Lau and Yorro to the North, to the South by Gassol, to the East by Bali and to the West by Karim-lamido Local Government Area. The study Area occupies landmass of approximate 3, 871km^2. The ethnic groups are: Jukum Kona, mumuye, fulani among others. The people have a rich heritage and predominately farmers. The study Area has a tropical type of climate marked a distinct dry and raining season, the dry season commences in November and end in March while raining season starts in April and ends by late October. It has an average annual rainfalls of 1219mm.The wettest months are August and September while the driest months are January and February, with a relative humidity of 13% (Taraba State Dairy, 2018). March and April record the highest temperature of 35-40c while December and January record the lowest temperature of 21-25c.

Method of data collection

Both primary and secondary sources of data collection were used for this study.

Sampling techniques

The retailers and hawkers of greenhouse products constituted the population of the study. Simple random sampling techniques were used for this study. The registered members were 250 (both the retailers and hawkers), out of the 250 we took 30% of the population which make up a sample size of 75 respondents for this study.

Method of data analysis

Descriptive statistics and inferential statistics were used for the analysis of the study. Descriptive statistics such as frequency and simple percentage were used to analyze objectives I and III while inferential statistics such as T- test was used to analyzed objective II.

T- Test is express as follows;

$$t = (\bar{X}_1 - \bar{X}_2) / \sqrt{[(S^2_1 / N_1) + (S^2_2 / N_2)]}$$

Where,

$\bar{X}_1$ = Observed Mean of 1st Sample
$\bar{X}_2$ = Observed Mean of 2nd Sample
S_1 = Standard Deviation of 1st Sample
S_2= Standard Deviation of 2nd Sample
N_1 = Size of 1st Sample
N_2 = Size of 2nd Sample

3. Results and discussion

Socio-economic characteristics of the respondents (retailers and hawkers of the products)

The Result from Table: 1 shows that (53.3%) were between the ages of 20-29, (40%) were between the ages of 30-39 while (6.7%) were between the ages of 40-49 years. This implies that majority (93.3%) of the respondents were youth. The result from Table: 1 shows that (20%) were male while (80%) were female. This indicated that majority (80%) of the respondents were female. The results from Table: 1 shows that (80%) were married while (20%) were single. This revealed that majority (80%) of the respondents were married. The result from Table: 1 shows that (13.3%) didn't attend formal education, (60%) attended primary education, (20%) attended secondary education while (6.7%) attended tertiary education. This indicated that majority (80%) attended only primary and secondary education. The result from Table: 1 shows that (13.3%) had household size below 5, (80%) had household size between 6-10 and (6.7%) had household size 11 and above. This implies that majority (93.3%) of the respondents had household size less than 11 persons; therefore, they have to be hard working in order to sustained themselves and family. The result from Table: 1 shows that (86.7%) earned between N30000-40000 while (13.3%) earned between N40000-50000.

This indicated that most (86.7%) of the respondents earned less than N50,000 as their monthly income. It also implies that the business is profitable.

Impact of the greenhouse on the livelihood of the women

The Results from Tables: 2 show the T-calculated was 5.32 and T-tabulate**d** was 3.18 under 3 at 0.05% degree of freedom. This indicated that the Greenhouse have impacted positively on the livelihood of the women. This was based on the result obtained from T-test analysis the T-calculated value (5.32) was greater than T- tabulated value (3.18). It also implies that their standard of living has improved as their income increases, they acquired assets like; land, motorcycle, tricycle, and paid their children school fees etc.

Problems militating against marketing of greenhouse products

The Result from table 3 shows that the problems affecting the marketing of the greenhouse products: (40%) of the respondents opined on lack of financial support from government/individuals, (33.3%) opined on lack of storage facilities, (20%) opined on delay in supply of the products by the producers, (4%) opined on unstable price of the products by the producer and (2.7%) opined on unfair attitude of some staff. This indicated that lack of financial support from government /individuals and lack of storage facilities were the major problems.

Table 1: Socio-economic characteristics of beneficiaries (n=75)

Variables	Frequency	Percentage (%)
Age (years)		
20 – 29	40	53.3
30 – 39	30	40
40 – 49	05	6.7
50 and above	-	-
Gender		
Male	15	20
Female	60	80
Marital status		
Married	60	80
Single	15	20
Educational status		
Non – formal education	10	13.3
Primary education	45	60
Secondary education	15	20
Tertiary education	05	6.7
House hold size		
Below 5	10	13.3
6-10	60	80
11 and above	05	6.7
Monthly income (Naira)		
30000-40000	65	86.7
40000-50000	10	13.3
50000 and above	-	-

Source: Field Survey, 2023

Table 2: Impact of greenhouse on livelihood of the women in the study Area (n=75)

Variation	Calculated t -value	Tabulated t-Value	DF = at 0.005%	Decision Rule
Greenhouse has no Significant impact on livelihood of the women	5.32	3.18	3	Reject the Ho and Accept the Ha

Source: Field Survey, 2023

Table 3: Problems militating against marketing of greenhouse products in the study Area (n=75)

Variable	Frequency	Percentages %
Lack of financial support	30	40
Lack of storage facilities	25	33.3
Delay in supply of the products by producer	15	20
Unstable price of the products from producer	03	4.0
Unfair attitudes of some of the staff	02	2.7
Total	75	100

Source: Field survey, 2023

4. Conclusion and recommendations

Based on the findings of this study revealed that the Greenhouses have impacted positively on the livelihood of the women and also their standard of living have been improved as their income increases, they acquired assets like: land, motorcycle, tricycle, and paid their children school fees. But the major challenges were; lack of financial support from government/individuals and lack of storage facilities. Recommendations: Government or well to do individuals should assist the women with finance and the women should also have cooling items for proper storing of their products.

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