

Effect of Village Seed Enterprises (VSEs) Project on Women Empowerment and Social Capital in Abia And Akwa Ibom States, Nigeria

Alegieunu Etharu Bridget^{1*}, Olawale Olayide¹, & Hemant Nitturkar¹

Centre for Sustainable Development, University of Ibadan, Ibadan, Nigeria

*Corresponding author: Alegieunu Etharu Bridget, Centre for Sustainable Development, University of Ibadan, Ibadan, Nigeria.

Submitted: 19 May 2025 Accepted: 26 May 2025 Published: 31 May 2025

 <https://doi.org/10.63620/MKSSJER.2025.1080>

Citation: Alegieunu, E. B., Olayide, O., & Nitturkar, H. (2025). Effect of Village Seed Enterprises (VSEs) Project on Women Empowerment and Social Capital in Abia And Akwa Ibom States, Nigeria. *Sci Set J of Economics Res*, 4(3), 01-05.

Abstract

Globally, women empowerment and entrepreneurship issues have been a key factor in the development process and poverty alleviation. Empowerment has different meanings in different socio-cultural and political contexts. In its broadest sense, empowerment is the expansion of freedom of choices and action. Women involvement in agriculture contributes positively to the growth and development of a country. In Nigeria, a significant deficit in food production causes food insecurity and malnutrition, particularly for poor and vulnerable households. A nationwide shortage of certified high-quality seeds is one of the main obstacles keeping farmers from increasing their production. To address the huge gap between the demand and supply of certified seeds, scientists have introduced Village Seed Enterprises (VSEs). The Building an Economically Sustainable Integrated Cassava Seed System (BASICS) aims at contributing to empower and sustain seed system in Nigeria. Its major target is to strengthen all components of the cassava grain value chain, to empower village farmers to increase productivity, income, and supplying farmers with high quality planting materials of new, improved and/ or existing varieties produced from certified basics seeds. Hence, empowerment and social structure of the VSE is to initiate improved production and empower more women. The aim of the study is, to determine the level of women empowerment in Abia and Akwa Ibom states of Nigeria, measure the level of social capital among women and also to analyse the effect of VSE on women empowerment and social capital. The research employs both quantitative and qualitative methods, data presented in the study are obtained directly from the 214 respondents using questionnaires and interviews and focus group discussion. It is hoped that this study will inform farmers and mostly women about the importance of empowerment through agriculture. Preliminary results reveal that VSEs has positive effects on women empowerment and social capital in the study area.

Keywords: Women Empowerment, Cassava, Productivity, Farmers

Introduction

The BASICS which is an acronym for 'Building an Economically Sustainable Integrated Cassava Seed System' project aims at contributing to empower and sustain seed system in Nigeria. Its major target is to strengthen all components of the cassava value chain. BASICS is structured into four components which include the Village Seed Entrepreneurs (VSEs) Model, Breeder Seed Component, Processor Led Model, Quality Seed Component. The Village Seed Entrepreneurs is a model that seeks to empower village level farmers to increase productivity and

income [1]. Village Seed Entrepreneurs are commercial firms supplying farmers with high-quality planting materials of new, improved and/or existing varieties produced from certified basics seeds [2]. Cassava is a major crop in Nigeria, with over 7 million ha under cultivation, production around 55 million tons of cassava roots [3]. Nigeria is the highest producer (consumer) of cassava in Africa [4].

Women involvement in agriculture contributes positively to the growth and development of a country. Hence, empowerment and

social structure of the Village Seed Entrepreneurs will increase production and empower more women, and this will, in turn, make more women independent and also help to improve general living conditions through increase in income generated from VSEs as well as sustainability of the business model.

Efforts at empowering women have encountered setbacks both theoretical and empirical levels particularly due to the seeming vagueness in the definition and analysis of the word 'empowerment' [5]. Many scholars have asserted that because power relations operate at different levels, so does empowerment (Mayoux 2001; Bisnath and Elson 1999). Agriculture has proved to be an important engine of growth and poverty reduction in many countries of the world [6, 7]. Women, who operate at the subsistence, small farm holder level, constitute the major food producers in many of these countries. Rural women participation, more than men, take the lead in agricultural activities, consisting of about 60-80 per cent of the labour force (Sahel, 2014). The prevailing gender inequality that dominates in the sector places rural women farmers at a point of disadvantage, which limits their productivity [8]. In pursuance of empowering women, policies and programs have been initiated globally both by multilateral bodies and national agencies over the years, especially in the last three decades. The paucity of data regarding rural women farmers constitutes a major problem to the empowerment of rural women farmers [9]. Literature is replete with the fact that closing the gender gap in agriculture would generate significant gains not just in the agricultural sector, but also in the larger society as a whole [10].

The notion of clearing the cobwebs of gender bias in culture frees women for genuine empowerment programs and processes. Empowerment of women in history by several organisations and programs had been questioned and challenged as programs that claim public acclaim without making any impact on the lives of the targeted group of women. This claim is buttressed mostly by the expression that evolves from government houses where, the governments pose as champions of women empowerment. They create a huge expenditure profile which is supposedly meant to empower women but, in fact, end up inside the private pockets of Africa's First Ladies (wives of the Heads of Government).

This paper shows the effects of Village Seed Enterprises (VSEs) on Women Livelihood, the changes in income-generating activities and women economic status and evaluation of the effect of household, characteristics on empowerment and social capital among the VSEs in Abia and Akwa Ibom States in Nigeria.

This information is important as a baseline confirm the effect of VSEs models on women empowerment and social capital development.

Materials and Methods

Study Area

The study was conducted in Abia and Akwa Ibom States in Nigeria. Abia and Akwa Ibom States are preferred case studies because just like some other states in the country they are locations for the project village seed enterprise, thus it was obviously easy to get sufficient and reliable data. Also, these regions form part of the southern part of Nigeria, characterized by pleasant climate and high rainfall [11].

Abia is a State in the south eastern part of Nigeria. The capital is Umuahia and the major commercial city is Aba, which was formerly a British colonial government outpost in the region. It is one of the constituent states of the Niger Delta region. Abia State, which occupies about 6,320 square kilometers, is bounded on the north and northeast by the states of Anambra, Enugu, and Ebonyi. To the west of Abia is Imo State, to the east and south-east are Cross River State and Akwa Ibom State respectively and to the south is Rivers State. The southern part of the State lies within the riverine part of Nigeria, it is a low-lying tropical rain-forest with some oil-palm brush, and the southern portion gets heavy rainfall of about 2,400 millimeters (94 in) per year and is especially intense between the months of April through October. The rest of the State is moderately high plain and wooded savanna. The most important rivers in Abia State are the Imo and Aba Rivers which flow into the Atlantic Ocean through Akwa Ibom State.

Akwa Ibom is a State in Nigeria. It is located in the coastal southern part of the country called the Niger Delta, lying between latitudes 4°32'N and 5°33'N, and longitudes 7°25'E and 8°25'E. The state is located in the South-South geopolitical zone, and is bordered on the east by Cross River State, on the west by Rivers State and Abia State, and on the south by the Atlantic Ocean and the southernmost tip of Cross River State. Akwa Ibom is one of Nigeria's 36 states, with a population of over five million people. The state was created in 1987 from the former Cross River State and is currently the highest oil- and gas-producing state in the country. The state's capital is Uyo [12].

Method of Data Collection

The research employed both quantitative and qualitative methods to define concepts, characteristics, descriptions, counts and measures to demonstrate implications of the issue under question. Data presented in the study were obtained through primary data and was collected directly from respondents using questionnaires and interviews and group discussion with focus groups. Sampling frame were mainly women involved in farming, trading, and civil servants. The total number of beneficiaries in Abia is 105 which consist of 30 VSEs and 75 non-VSEs. The total number in Akwa Ibom is 109 which consists of 54 VSEs and 55 non-VSEs. The above summing up to 214 in sample size.

Types of data collected include: socio-economic data, women empowerment, and information on the village seed entrepreneurs (VSEs). Both secondary and primary data were used in this study. The primary data were collected through the use of well-structured questionnaires and administered by well-trained enumerators in the study area. Secondary data were obtained from the records made available by the IITA through relevant reviews and publications, text books and publications of BASICS teams. Stratified sampling method was adopted each stratum was sampled as an independent sub-population.

The quantitative research relies on field data collected using structured questionnaire that included questions on different issues in practice and the role of women in agriculture. Basic information was collected on demographic and socio-economic situation of survey respondents.

The qualitative research mainly focused on the role of women in agriculture in the study area. Information is attained through interviews and focus group discussions by using interview and discussion guides. The discussion was undertaken to collect information from relevant bodies involved on actual implementation of the role of women in agricultural practice by using open and close-ended questions. Focus group discussion was conducted with women in the study area. The focus group discussion was unstructured, thereby allowing participants to open up and discuss freely. Useful information was gathered as a number of issues were raised from participants. The focus group discussion offered in agricultural practice by using open and close-ended questions. Focus group discussion was conducted with rural women in the study area. The focus group discussion was unstructured, thus allowing participants to pen up and discuss freely. Useful information was gathered as a number of issues were raised from participants. The focus group discussion offered opportunity to capture case stories and to direct observations [13].

Analytical Procedure

Qualitative data from FGDs and key informants were transcribed and analysed using content analysis to draw out themes relating to specific questions. In this study, content analysis was carried out manually. Quantitative data were analysed using Statistical Software for Social Sciences (IBM SPSS) Version 21. Percentages and bar graphs were generated from SPSS to depict women's empowerment. Statistical analysis was carried out using a chi-square test to test the relationship between household characteristics and empowerment to achieve the objectives of the study mentioned in chapter one. Due to the nature of the study the researcher deems these analytical methods appropriate.

The formula for the chi-square statistic used in the chi square test is:

$$\chi^2_c = \sum \frac{(O_i - E_i)^2}{E_i}$$

The subscript "c" is the degrees of freedom. "O" is our observed value and E is our expected value. A chi-square statistic is one way to show a relationship between two categorical variables. The chi-squared statistic is a single number that tells us how much difference exists between our observed counts and the counts we would expect if there were no relationship at all in the population. For the purpose of accuracy and conveniences, this study employed the use of chi-square statistical test in SPSS.

Results and Discussion

Effect of Village Seed Enterprises (VSEs) on Women Empowerment

Data on empowerment levels of the women VSEs was gathered for the study. These had to do with ownership of land, access to credit and making decision over production and businesses. Table 1 presents these empowerment indices as pertaining to women empowerment and entrepreneurship. From the Table, it could be observed that after the village seed enterprises, there exist some percentage improvements in the empowerment indices. For instance, access to credit by VSEs increased from 22% to 79.9% and decision on entrepreneurship increased from 39.7% to 83.6%. Many other indices as could be seen from the table experienced some percentage improvement. All these point to the fact that VSEs has had positive impacts on the empowerment level of the women seed entrepreneurs.

Table 1: Empowerment Level of Women

Parameters	Improvement	Before VSEs	After VSEs	% Ranking
Access to credit	22	79.9	57.94	1st
Decision on Entrepreneurship	39.7	83.6	43.93	2nd
Making Decisions On Credit	21.8	44.4	22.59	3rd
Personally Owned Business Premises	47.7	68.7	21.03	4th
Personally Owned House	68.7	82.4	13.71	5th
Access to Land	82.7	90.2	7.48	6th

Changes in Income-Generating Activities and Women Economic Status

Table 2 indicates that a total of 95 representing 45.9% of women respondents experienced a direct increased in their economic

status as a result of VSEs initiative. This translates to about half of the women are economically empowered.

Table 2: Proportion of Women Whose Economic Status and Sources of Income Have Changed Due to the VSE
Has the women's sources of income changed after the VSEs/Has the change directly increased women's economic status?

Response	Total	%
YES	71	85.50%
NO	12	14.50%
Total	83	100%
Response	Total	%
YES	24	19.40%
NO	100	80.60%

Total	124	100.00%
Response	Total	%
YES	95	45.90%
NO	112	54.10%
Total	207	100.00%

Table 3: Descriptive Statistics of the Percentage Difference on Average in Number of Customers' Service/ Week and Gross Income/ Month as a Result of VSEs Initiative

Item	N	Mean	Median	Mode	Std. Deviation	Minimum	Maximum	% Difference on average
Average No. of customers								
service/week before VSEs	177	333.00%	2	1	3.372	1	15	42.69
service/week after VSEs	143	475%	3	2	4.526	1	20	
Gross income/month before VSEs	198	28252.32	23500	20000	21701.963	2000	100000	59.68
Gross income/month after VSEs	141	4511277.00%	32000	25000	40156.97	2900	200000	

Table 3 presents the average number of customer service per week and gross income per month as a result of VSEs initiative, and also the percentage difference before and after the VSEs initiative on the two variables. As it could be observed, before VSEs, the minimum and maximum number of customers' service per week is one and fifteen respectively. On average, an individual services about three customers in a week before the VSEs initiative. This however witness a change after the VSEs initiative as the average number of customers service in a week increased to about 5 customers. This implies about 42.7% difference on the average number of customer service per week. On the other hand, the gross income per month also witnessed some percentage difference on the mean. Before the VSEs initiative, the average income was ₦28,252.32 with minimum and maximum being ₦2,000 and ₦100,000 respectively. However, after the VSEs initiative, the average income increased to ₦45,112.77. This implies about 63.3% increase in the gross income of VSEs per month. All these point to the fact that VSEs has had positive impacts on the livelihoods of women seed entrepreneurs in their respective communities.

The Effects of Household Characteristics on Women's Empowerment and Social capital of VSEs.

Table 4 presents the correlation between monthly income, household number and number of family having bank account. This is done to know the relationship that exists between the variables and if one positively or negatively influenced the other. It could be observed that there exists positive relationship between VSEs monthly income and number of individual in a household ($r = 0.269$, $p < 0.01$), and the correlation is significant at 0.01 level of significance. Also, there exists positive relationship between VSEs monthly income and number of family member having bank account ($r = 0.319$, $p < 0.01$), and the correlation is significant at 0.01 level of significance. This implies that number of household with bank account tends to increase as the household income increases. However, household number and individual with bank account has significant positive relationship at 0.05 level of significance ($r = 0.146$, $p < 0.05$).

Table 4: Descriptive Statistics of the participant VSEs Showing Monthly Income, Number of Family Members and Family Members with Bank Accounts

Variable	N	Mean	Median	Mode	Std. Deviation	Minimum	Maximum
Monthly Income	207	4002946.00%	30000	20000	34151.982	3000	250000
Household Size	210	710.00%	6.5	6	2.455	3	18
Family Member with Bank Account	213	229%	2	2	1.019	1	4

Conclusion

From the findings of the study, it is quite safe to conclude that women involvement in agriculture contributes positively to the growth and development of a country. Hence, empowerment

and social structure of the Village Seed Entrepreneurs should be encouraged as it also seeks to make more women financially independent as discussed in the results of this study.

From the study, it is also safe to conclude that VSEs enables village self-sufficiency in production of quality seed and distribution to farmers, since it operates under peer supervision with utmost transparency, mutual trust and social responsibility towards fellow farmers. The VSEs as a micro seed enterprise at the village level can be efficient as some will have the potential to expand into specialized, small or medium-size local seed enterprises.

Recommendations

Based on the findings of this research, the following recommendations are made:

Based on the challenges such as lack of farm inputs and finances encountered by the VSEs on buying and selling of stems, it is recommended that state governments and NGOs (IITA, NR-CRI) subsidize prices of inputs to enable farmers purchase the required inputs.

Since Village Seed Entrepreneurs is a model that seeks to empower village level farmers (women) to increase productivity and income, the government has a significant role to play in creating an institutional environment that is conducive for this initiative to thrive. Also, there is a need for government and development partners to promote and boost public-private partnerships that will ensure better access to inputs for production of certified seed, provide better access to credit and financial services for VSEs, and increase revenues from certified seed production and village seed enterprises. The government should provide an enabling policy environment and incentives to scale up Village Seed Enterprises. Government, however, should help the farmers acquire land as some of the women still do not have access to land in their community. This will encourage women to expand their farms for increased productivity.

The study also recommends that a good means of transportation is essential for VSEs to carry their stems to other farmers at lower cost as buying and selling of stems is difficult due to the distance of the seller to buyers. Instability in the quantity of cassava seed and prices should also be addressed as there is no uniform price of selling stems and this can constitute major challenges to the VSEs in the community. Finally, farmers should be encouraged to plant improved varieties of cassava seed to ensure increased productivity since improved seeds are disease-free. Doing so will make them patronize the Village Seed Entrepreneurs and thereby improve their income as well.

References

1. CGIAR Annual Report. (2017). www.rtb.cgiar.org.
2. Osunde, C. (2017). Family businesses and its impact on the economy. *Journal of Business & Financial Affairs*, 6(1), 251. doi:10.4172/2167-0234.1000251
3. FAOSTAT. (2014). Retrieved May 18, 2019 from www.fao.org
4. Ogbeh, A. (2016). African Economic Conference in Abuja: Agricultural Transformation on the Agenda. Retrieved 19th May 2019 from www.africa.undp.org
5. Swain, R. B., & Wallentin, F.Y. (2008). Empowerment women through microfinance, evidence from India. In Dag Ehrepreis D. *Poverty in focus gender equality*. International poverty center, 13, 20-21
6. Ashimolowo, O. R., & Otufale, G. A. (2012). Assessment of domestic violence among women in Ogun State, Nigeria. *Greener Journal of Social Sciences*, 2(3), 102-114.
7. George, T. O., Olokoyo, F. O., Osabuohien, E. S., Efobi, U., & Beecroft, I. (2015). Women's access to land and economic empowerment in selected Nigerian communities. *Millennium Development Goals (MDGs) in Retrospect: Africa's Development Beyond 2015*, 45-61.
8. Ogunlela, Y. I., & Mukhtar, A. A. (2009). Gender issues in agriculture and rural development in Nigeria: The role of women. *Humanity & social sciences Journal*, 4(1), 19-30.
9. Olaleye, R. S., Ibrahim, M., & Ojo, M. A. (2009). Probit analysis of women's access to agricultural inputs in Bosso Local Government Area, Niger State, Nigeria. *Journal of Agricultural Extension*, 13(2), 12-20.
10. Iruonagbe, T. (2010). Gender equity and food security: lessons from Ozalla community, Edo State, Nigeria. *African Renaissance*, 7(3-4), 89-110.
11. Mayoux, L., & Mackie, G. (2008). Guide to Gender Integration in Value Chain Development, "Making the Strongest Links". International Labour Organization
12. Khalema, N. E., Andrews, N., & Assié-Lumumba, N. D. T. (2015). Introduction: Millennium development goals (MDGs) in retrospect in Africa. *Millennium Development Goals (MDGs) in Retrospect: Africa's Development Beyond 2015*, 1-15.
13. Yount, K. (2017). A framework for measuring women's empowerment at multiple levels. *Social Indicators Research*. CGIAR, 128(3), 1171.