



AGRARIAN WOMEN DEVELOPMENT ENGAGEMENT AND SOCIO-ECONOMIC WELLBEING OF INHABITANTS OF ODUKPANI LOCAL GOVERNMENT AREA IN CROSS RIVER STATE, NIGERIA.

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ABSTRACT

Agrarian women are active agents of economic and social change and environmental protection who are in many ways and to various degrees. The study investigated agrarian women development engagement and socio-economic wellbeing of inhabitants of Odukpani Local Government Area in Cross River State, Nigeria. The specific objectives were: to examine the relationship between women sustainable food system efforts and socio-economic wellbeing; to determine the association between rural women entrepreneurship promotion and socio-economic wellbeing. The study adopted the Endogenous Development Model. The research design adopted was the qualitative and quantitative approaches of survey. Data were collected from 400 respondents selected through multi-stage sampling techniques from communities in Odukpani Local Government Area. The generated data were analyzed using Pearson Product Moment Correlation, and Chi-square. The tested hypotheses revealed that agrarian women development alternative in sustainable food security is significantly related with household wellbeing among inhabitants of Odukpani communities. The other key finding of the study was that a significant association exists between entrepreneurship promotion and improved income among inhabitants of Odukpani communities. Agrarian women development engagement are significant predictors of socio-economic wellbeing in terms of reduction in rural poverty, self-sufficiency, adequate nutrition, improved household income, etc. The key recommendations were that agriculture ensures food security and it is a means of guaranteeing rural livelihoods and overall wellbeing. Since rural women have made immense contributions in food security, supportive infrastructural policies and programmes should be a priority of government at all levels.

KEYWORDS: Agrarian women development, socio-economic wellbeing, food security and entrepreneurship

INTRODUCTION

Academic interest about sustaining human wellbeing and quality of life in agrarian communities has aroused enormous attention.

Thus, a considerable body of research about rural socio-economic wellbeing has been promoted in recent times. An estimated 3.4 billion people-around 45percent of the global population

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–live in rural areas. Most depend on small, family farms for their income and sustenance (IFAD 2023). **The number of women in farming has been slowly increasing in recent years. The most recent data suggests that, on average, 29% of farms across the EU are managed by a woman. But this data masks some considerable differences between countries (European Commission, 2021).**

Socio-economic wellbeing has both the social and economic dimensions. Socioeconomic wellbeing means the mix of social and economic factors that produce the best outcomes for a person's health and well-being. Although a high income is not strictly necessary, a sufficient level of financial security is a significant factor in mental and physical health as well as educational outcomes. Well-being is measured with two indicators: life satisfaction and satisfaction with health. Socio economic wellbeing considers locality components and dimensions or domains where this is a possibility – income, material deprivation, employment, education, health, housing and childcare (Medgyesi, Özdemir & Ward, 2017). Socio-economic wellbeing therefore, translates into indices such as improved literacy level, higher political awareness, increased income level, guaranteed food security etc. Rural socio-economic wellbeing is the outcome of conscious measures leading to improvement in rural lives. Social and economic well-being is committed to building safe, healthy and thriving communities throughout the world.

The UNDP has developed a human development index containing indicators of socio- economic wellbeing. This includes people's ability to live long, healthy and creative lives in an equitable society and in a sustainable way as well as their level of income. Social inclusion, it is argued, needs to be explicitly taken account of along with individual development, though also the local context which affects individual development and their ability to avoid social exclusion. This includes the employment opportunities open to them, their access to basic services and to education and training and the state of basic infrastructure and the local environment, as well as the extent of corruption and cronyism (Medgyesi, Ozdemi and Ward 2017). More specifically, the economic dimension covers deprivation in respect of income and basic needs, access to employment, financial services and material assets, the lack of amenities that the

household needs but cannot afford and housing space. The social services dimension contains indicators on access to, and the affordability of, education and healthcare services as well as public utilities. The civic and social life dimension includes indicators of access to political, cultural and social participation and support networks, as well as the frequency of social and civic participation (Medgyesi et al. 2017).

The rural areas in Nigeria also serve as a base for food production, a major market for domestic manufacturers and sources of capital formation for the country. Despite this importance attached to the rural areas, they are not attractive to live and are mostly characterized by low standards of living, absence of infrastructure such as electricity, good roads and health facilities, illiteracy, malnutrition, wide spread diseases and low life expectancy. The efforts made by Government through various programmes and institutions have not succeeded in bringing about the needed development especially to the rural areas. The condition in the rural areas has continued deteriorating with continued drift to urban areas. This has constricted the drive towards balanced national economic development as such is would not be attained unless there is an efficient improvement in the development of rural areas (Adelabu, 2019).

The current poor condition of rural areas in Nigeria reflects years of cumulative policy neglect, faulty programme planning and halfhearted approach to implementing rural based programmes (Adelabu, 2019). The agrarian economy manifests in low income, subsistence living, poor housing, limited opportunities, absence of road infrastructure, poor source of potable water, decreasing level of food security due to low level of agricultural production (attributed to land fragmentation and land tenure system), low income, high level of illiteracy, inaccessibility to modern inputs for agricultural production; unaffordable health facility, lack of basic infrastructure (warehouse, cold room) and limited markets etc.

It should be noted that governments in Nigeria have initiated programmes and projects to stimulate development at the grassroots such as State Economic Empowerment and Development Strategy (SEEDS) and the Local Government Economic Empowerment Development Strategy (LEEDS). The LEEDS was to focus its effort in keeping the program in contact with the rural areas since it is the closest level of government

to the rural areas (Omah, 2004; Randel 2010 in Adelabu 2019); Integrated Rural Development (IRD) programme later renamed Agricultural Development Project (ADP), River Basin Development Authority (RBDA), and Directorate for Foods, Roads and Rural Infrastructure (DFFRI) etc. Despite several policies of rural development instituted in Nigeria, the condition of poverty has not changed much. The report by the Poverty World Clock in 2018 revealed that Nigeria has the largest extreme poverty population in the world making it the poverty capital of the world (Adelabu, 2019). The result had always been undesirable because these projects and programmes have hardly outlived the regime that brought them. This has given impetus for the search for viable and sustainable development alternatives. Thus, rural women development alternatives may suggest a new direction for rural socio-economic prosperity.

The potentials of rural women have been seriously constrained by their lower level of literacy, lower levels of access to and control over resources (Nkpoyen & Basse, 2012); low rates of female land ownership (less than 20 percent of agricultural landholdings in developing countries are owned by women (FAO, 2016); and lower levels of access to network of people who can assist and support rural women. Despite the cumulative challenges confronting women in agrarian communities, they have substantially contributed towards improving the standard of living through various initiatives. Women account for a substantial proportion of the agricultural labor force, representing two-thirds of smallholders and 60 percent of all farmers. They make significant contributions to agricultural production, food security and nutrition, land and natural resource management, and building climate resilience (Syngenta Group, 2020). Women in Nigeria, as elsewhere in other parts of the world, have been the front liner in socio-economic wellbeing of their communities through active participation in both farm and non-farm activities. They are involved in activities such as livestock production, crafting, weaving, spinning, tie and dye, retail trade, food processing, subsistence farming in fruit, vegetable and cassava production etc.

According to FAO (2016) their development engagement in entrepreneurial activities such as agro-processing, sewing, honey making, processing organic olive oil, artisanal chocolate making, silk production, hair dressing, catering

etc. have become part of a broader livelihood strategy (FAO, 2016). Rural women have consistently been involved in the area of agricultural productivity for food security which has helped to strengthen and promote domestic food production. Their endeavours have promoted self-sufficiency in basic food commodities and increased production of agricultural raw materials as well. The collective efforts of these women have translated into improvement in the quality of life of rural communities (Ebube, 2016).

The paper addressed two basic issues related to agrarian women's development engagement of food system and entrepreneurship promotion. The author defines development engagement as the strategy pursued by indigenous (agrarian) women in the domains of food system and entrepreneurship to ensure socio economic wellbeing in terms of improved household income, health and access to health care, education, employment and better nutrition.

STATEMENT OF THE PROBLEM

Socio-economic wellbeing is a key challenge for rural inhabitants. These communities have not been able to achieve transformational economic, social and environmental changes required for improved standard of living. Thus, the continual poor living condition and quality of livelihood of rural population have negatively affected the wellbeing of individuals, families and communities. The experiences of poor sanitation, disease, hunger, food insecurity, poor literacy status, deprivations are indicators of socio-economic crisis in rural communities. Their earning capacity from the informal sector or non-wage employment is also significantly poor. Additionally, very few assets are owned by households, prevalence of families eating not more than one meal per day; a high proportion of malnourished children, lack of vocational skill acquisition centres to promote self-employment, long distances to nearest produce markets especially during rainy season and all along the year for riverine areas; a huge proportion of children walking long distances to fetch water and to attend school etc.

The inhabitants of these agrarian communities have endured serious socio-economic disadvantages despite the long tradition of Federal, State and local government interventions. These conditions have collectively affected their socio-economic wellbeing in terms

of low life expectancy, literacy, level of employment, health status; also changes in less tangible factors such as personal dignity, freedom of association, personal safety and extent of participation in community governance and civil society. The overall quality of life is poor.

Past successive governments in Nigeria put up programmes such as Operation Feed the Nation (OFN) (1975), National Accelerated Food Production Programme (NAFPP, 1972) etc. posed serious challenges because of adoption of top-bottom development model (Ojonemi and Ogwu, 2013). An observable phenomenon in rural socio economic wellbeing efforts is that most rural programs in Nigeria have failed because they are approached from the top. The programs are formulated and implemented by government officials in league with foreign interest to the neglect of the peasant producers who are knowledgeable in the process of rural production. Consequently, due to the non-involvement of the rural producers in the process of their development, these development programs do not record success. The contention here is that the interest of those who control the machinery of Government do not often confirm to those of the rural poor. As a result, the various attempts to aim at transforming the rural areas has failed to yield positive results (Adelabu 2019).

Therefore, this improper strategy adopted by the past development goals had triggered a rethink which resulted in agrarian women development alternative approach. This being a bottom-top approach conceptualizes and implements development activities from the context of indigenous women. Available literature suggested that women initiatives have successfully enhanced socio-economic wellbeing in several communities globally. However, there is a dearth of studies in Cross River State supporting this particularly when examined within the backdrop of challenges such as patriarchal influence, cultural characteristics, limited income, land fragmentation, unnecessary control, non-tax incentives, localization of activities, limited knowledge of technology etc. The few existing studies concentrated on impediments of rural development particularly from the dimension of government but this present study is from the perspective of the agrarian women. The focus is on development alternatives in food system and

entrepreneurship. Therefore, this study was meant to fill up this gap in literature/knowledge.

Research questions

- I. To what extent is agrarian women guaranteeing sustainable food system related to household wellbeing among inhabitants of Odukpani communities in Cross River State?
- II. 2. How is agrarian women entrepreneurship promotion associated with improved income among inhabitants of Odukpani communities in Cross River State?

Objectives of the study were to:

- (i) Investigate the relationship between agrarian women guaranteeing sustainable food system and household wellbeing among inhabitants of Odukpani communities in Cross River State.
- (ii) Determine the association between agrarian women entrepreneurship promotion and improved household income among inhabitants of Odukpani communities in Cross River State.

Statement of hypotheses

- (i) Agrarian women guaranteeing sustainable food system has no significant relationship with household wellbeing among inhabitants of Odukpani communities in Cross River State.
- (ii) Agrarian women entrepreneurship promotion has no significant association with improved household income among inhabitants of Odukpani communities in Cross River State.

LITERATURE REVIEW

Agrarian women development –centered engagement and socio-economic wellbeing

Rural women are resourceful economic agents who contribute to the income of families and the growth of communities in multitude of ways. They work as entrepreneurs, as farm and non-farm labourers, in family businesses; for others, as self-employed. In 2008, two thirds of employed men and women in sub-Saharan Africa worked in agriculture mainly as contributing (unpaid) family workers or own account workers. In Asia, 44 percent of men and 70 percent of women workers were engaged in agriculture (FAO, IFAD and ILO, 2010).

Rural women are active agents of economic and social change and environmental protection who are in many ways and to various degrees, constrained in their roles as farmers, producers, investors, caregivers and consumers. They play

crucial roles ensuring food and nutrition security, eradicating rural poverty and improving the wellbeing of their families (Women Watch, 2012). Although they continue to face serious challenges as a result of gender-based stereotypes and discrimination that deny them equitable access to opportunities, resources, assets and services, they continue to play crucial roles in combating poverty and hunger in rural areas. As key agents for the transformational economic, environment and social changes, they are important because they are required for sustainable development. Even as rural women experience limited access to credit, health care and education are among the many challenges they face, which are further aggravated by the global food, economic crises and climate change. They have recorded substantial contribution to their wellbeing, families, rural communities and overall economic productivity (UN Women, 2016).

According to the National Gender Profile of Agriculture and Rural Livelihoods, jointly released by FAO and UN Women (2021) in Bosnia and Herzegovina rural women often perform unpaid work, including agricultural work on family farms, and they also represent a significant proportion of the informal, or shadow labour market. Furthermore, rural women are key contributors to the specific agricultural value chains in the country, such as flower-growing, medicinal herb-collection, greenhouse-based vegetable and fruit production among others, where it is the woman taking the lead as key agent and income-earner from these activities. Rural women are also actively involved in livestock care and crop production, as well as in non-farming based activities. Women's participation in on-farm and off-farm activities increases their income-generation capacity and contributes to the overall improvement in their families' livelihoods and well-being.

Guaranteeing sustainable food system and socio- economic wellbeing

Food systems (FS) encompass the entire range of actors and their interlinked value-adding activities involved in the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded. The food system is composed of sub-systems (e.g.

farming system, waste management system, input supply system, etc.) and interacts with other key systems (e.g. energy system, trade system, health system, etc.). A sustainable food system (SFS) is a food system that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised (FAO 2020).

This means that it is profitable throughout (economic sustainability), it has broad-based benefits for society (social sustainability); and it has a positive or neutral impact on the natural environment (environmental sustainability). A sustainable food system lies at the heart of the United Nations' Sustainable Development Goals (SDGs). Adopted in 2015, the SDGs call for major transformations in agriculture and food systems in order to end hunger, achieve food security and improve nutrition by 2030. To realize the SDGs, the global food system needs to be reshaped to be more productive, more inclusive of poor and marginalized populations, environmentally sustainable and resilient, and able to deliver healthy and nutritious diets to all and rural women are playing a significant role here (FAO 2020).

Women occupy a central place in subsistence agricultural production and are accountable for 80% of agricultural production. They are majorly involved in food production, processing, preparation and marketing as their paramount effort towards guaranteeing community food security (FAO 2020). Food security is associated with the availability of sufficient quantities of food of appropriate quality, supplied through domestic production or imports (including food aid); food access by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet.

Utilization of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being where all physiological needs are met. Food security is one of the several necessary conditions for a population to be healthy and well nourished. One important aspect of the wealth of a nation is the ability to make food available for the populace. In this connection, food security therefore becomes an important factor in any consideration of sustaining the wealth of the nations (Ashagidgbi, Orilua, Olagunju and Omotayo, 2020). This is evidenced in the increasing empirical evidences that improvement in women's socio-economic

indicators such as income, educational attainment and living conditions are strongly related to household food security in most countries (Ashagidgi et al, 2020)

Women entrepreneurship promotion and socio- economic wellbeing

Rural women entrepreneurial activities hold the potential to contribute to both economic and social wellbeing by generating personal income among men and women in the economy characteristically means by limiting unemployment growth. It also has a broad economic impact from the perspective of rural job creation, private sector development and wealth creation. Rural females' participation in entrepreneurship can enhance the expansion of these economic assets and simultaneously lead to less inequality in the population (Kabagerayo, Nwambusa, Uyambaji, Olive and Hamenyimana, 2022). Entrepreneurship among rural female is significantly becoming an important resource in which individuals use positive opportunities in the market. argue that entrepreneurship creates jobs and contributes to economic growth, and to national prosperity. According to rural female entrepreneurs are considered as important engine of economic growth for developing countries since it has a leading role in generating productive work, achieving gender equality and reducing poverty. When economically and socially empowered, women contribute significantly to food security and increased incomes for their families and communities (Gah, Nugroho and Arif, 2020).

THEORETICAL FRAMEWORK

Endogenous Development Model

The model is associated with Bassand, Brugger, Bryden, Friedman and Stuckey (1986). The model was put forward in opposition to traditional understanding or in other words the 'modernist' notion of development. Endogenous development model hypothesizes that improvements in the socio- economic wellbeing of disadvantaged areas can best be affected by recognizing and animating the collective resources of the territory itself (Ray, 2000). The main characteristics of endogenous (or participatory) development are threefold: it sets development activity within a territorial rather

than sectoral framework, with the scale of the territory being smaller than the nation state; economic and other development activities are reoriented to maximize the retention of benefits within the local territory by valorizing and exploiting local resources- physical and human; development is contextualized by focusing on the needs, capacities and perspectives of local people, meaning that a local area should acquire the capacity to assume responsibility for initiating economic development.

Based on this model, agrarian women development engagement in food system and entrepreneurship constitute important elements in socio economic wellbeing of the rural inhabitants. The model implies that rural women are empowered as local actresses to unlock local resources as initiatives in the areas of food security, entrepreneurship etc. These agrarian women development engagement are ways of protecting rural values and enhancing socio economic wellbeing. These rural women have been able to improve local food production and entrepreneurial abilities within their local environment. The collective and cumulative impact of these initiatives is improvement in socio-economic wellbeing. Therefore, within these selected agrarian communities in Cross Rivers State, these women initiatives are contextually demonstrating the needs and capacities of the people to assume responsibility for solving their socio-economic wellbeing challenges.

METHODS AND MATERIALS

Study Area

Odukpani Local Government Area was the study area. It is bounded to the North by Akamkpa Local Government Area and Abia State, west by Akwa Ibom State, East by Akpabuyo and South by Calabar Municipality Local Government. It covers an area of 2,624.66sq.km comprising thirteen (13) council wards, forty (40) clans and over five hundred (500) villages. Odukpani Local Government Area is characterized by diseases, ignorance, neglect and exploitations from inception. It has a large youthful population; 13 percent are children within the age bracket of 0-5 years while about 50 percent are within the age bracket of 6-40 years. This create major challenges of childhood care and basic services, education, skill acquisition and employment generation (Ayara 2019).

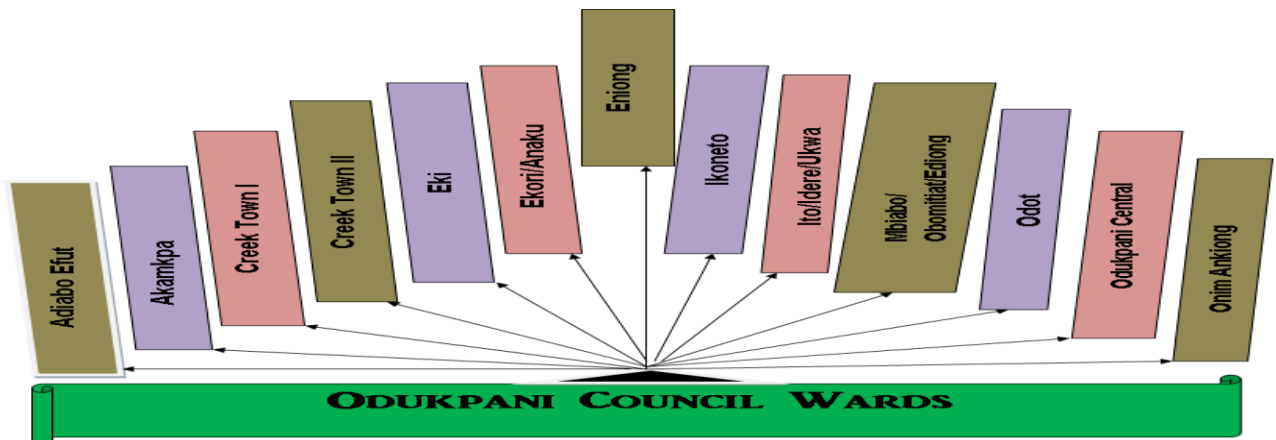


Figure 1: Thirteen Council Wards in Odukpani Local Government Area
 Source, : Ndiyo, 2018.

Odukpani is one of the most populated Local Government Areas (LGA) in Cross River State (CRS). It is located within the rainforest region of South Eastern Nigeria. Regarding the settlement pattern, Odukpani people and community houses are linear, clustered and dispersed. Figure 1 is a map of Odukpani LGA showing the communities and boundaries. The LGA is traversed by two large rivers; Calabar River and Cross River.

Population of the Study

The population of the study comprised all the women inhabitants of the thirteen (13) wards that make up Odukpani Local Government Area. The population is 192,884 (NPC, 2006), projected at 242,985 by 2015. All adult female citizens of all works of life residing in this local government area and comprising those gainfully employed, farmers, fishermen, entrepreneurs, students and the unemployed formed the study population. The assumption is that these women are playing different roles in their various capacities in the enhancement of socio-economic lives of their rural population. Therefore, the people were in a better position to provide reliable information.

Sample size

The sample size for the study was made up of 400 respondents selected from one third (1/3rd) of the wards in the local government. They comprised women from all works of life residing in the study area irrespective of their status in their communities. The sample size also included 13 women leaders. Thus, the total sample size was, 413. To determine the sample size, the simplified procedure recommended by Yamere

(1967) was adopted. The overall sample of the study was made up of 413 respondents selected from four (4) wards (strata).

Sampling Procedure

The multi-stage sampling procedure was adopted. In stage one, the 13 wards constituted 13 major strata. The researcher selected 1/3th of the wards that gave rise to four (4) wards which constituted the 4 minor strata. These wards were selected using the balloting method of simple random sampling. In stage two, the researcher selected 2 communities per stratum using systematic sampling method from the list of communities provided at the Council Headquarters. Only the first two communities in the list of communities per ward were selected. These constituted the clusters of the study. Finally, to select the actual respondents, again systematic sampling was adopted. The households in each cluster were enumerated numerically. Only even numbered households were selected. Adult women literate respondents found in each cluster participated in the questionnaire study. From each cluster, 50 respondents were selected. The overall number of respondents was thus 400. 13 women leaders were purposively selected from each ward, making it a total of 413 respondents. Two instruments were used for data collection. These were: Agrarian Women Development Alternative and Socio- economic Wellbeing of Inhabitants Questionnaire and Key Informant Interview (KII) Guide. The obtained data were analysed using Pearson Product Moment Correlation and Chi-square analytical tool.

Analysis and findings

Table 1: Socio demographic data of respondents

Variables	No of Respondents	Percentages (%)
Age		
35 – 40 years	138	34.5
41 – 45 years	124	31
46 – 50 years	91	17.0
51 – 55 years	40	22.75
56 years and above	7	1.75
Marital Status		
Single	101	25.25
Married	211	52.75
Divorced	34	8.5
Widow	14	3.5
Religion		
Christianity	393	98.25
Islam	1	0.83
African Tradition	6	1.5
Occupation		
Farming	215	53.75
Fishing	112	28
Trading	34	8.5
Civil servant	23	5.75
Unemployed	15	3.75
Others (Specify)	1	0.25
Educational Level		
Primary education	158	31.0
Secondary education	188	51.33
Informal education	14	17.67
Income Level Per Month		
Less than ₦50, 000	155	38.75
Less than ₦100, 000	187	46.75
Less than ₦200, 000	45	11.25
Above ₦300, 000	13	3.25
Source of Income Per Month		
Profit from fishing	42	10.5
Salary	33	8.25
Profit of enterprise	101	25.25
Profit of agriculture	186	46.5
None	38	9.5

Source: Field Data (2022).

Table 1 showed the personal characteristics of respondents. The above description indicated two important issues. Firstly, the highest number of respondents who participated in the study were between the age brackets of 35-40 years. Secondly, the age of respondents was limited to 35 years because in the pre-proposal survey of these communities, majority of the young women had migrated to Calabar town and other cities in Nigeria for employment and to attend tertiary institutions. But the proportion of those from 35 years and above appeared to be the common age bracket present in the communities. This was common to almost all the communities.

From the above description, it showed that majority of women participants in the study were married. It was importantly observed too that some of those in the age brackets of 35-40 were not married. This could have been due to individual shortcomings, a dearth of eligible men, socio-economic conditions such as availability of livelihoods for the adult rural young women; also, for many other reasons rural young women are at a disadvantaged in terms of marriage. From the description, it implies that the majority of

respondents involved in the study were Christians. The above description shows that the majority of participants in the study were farmers. Therefore, majority of respondents had acquired secondary education. The primary school graduates could read and write except a few isolated cases where the research assistants explained certain issues. Those who had not acquired formal classroom education were also guided in filling the questionnaire but for others, it was necessary to translate the questionnaire items verbatim to them.

The above description showed that majority of respondents earned less than ₦100, 000 per month.

The supports Islam, Islam, Fatema and Khanum (2022) study concerning rural women in Bangladesh that despite significant improvements in female labour market retention, women still earn considerably less than men. As a result of personal, family, economic, and social development, rural women today are involved in many productive and economically profitable activities, which are nationally and internationally recognized. However, majority of women in the study have benefitted from agricultural and entrepreneurial activities.

Table 2: Responses on agrarian women sustainable food system efforts and socio-economic wellbeing

S/N	Items	Responses	
		Positive (%)	Negative (%)
1	Women are involved in subsistence food production to meet household consumption and nutrition needs.	346 (86.5%)	13.5 (9%)
2	Women's food production efforts have improved the living conditions of people by making food available and accessible.	248 (62%)	152 (38%)
3	The traditional small land holder's farmers are raising subsistence crops such as maize, cassava, yam, rice etc.	282 (70.5%)	118 (29.5%)
4	The household nutrition has improved .	206 (51.5%)	194 (48.5%)
5	Women's agricultural efforts have helped to reduce hunger and starvation in the community.	292 (73%)	108 (27%)
6	Households have benefited from subsistence food production because they are now able to eat nutritious food	225 (756.25%)	175 (43.75%)
7	Involvement in agriculture has impacted positively on the income of rural people	306 (76.5%)	94 (23.5%)

Source: Field Data (2022).

From table 2, responses on agrarian women food system efforts are indicated. Majority of respondents were positive indicating that agrarian women development alternative of local

food production is beneficial to the rural inhabitants of Odukpani Local Government Area of Cross River State

Table 3: Responses on agrarian women entrepreneurship promotion and socio-economic wellbeing

S/N	Items	Responses	
		Positive (%)	Negative (%)
9	The involvement of women in entrepreneurship has helped to change the living conditions of community dwellers.	224 (56%)	176 (44%)
10	Women who are now entrepreneurs have acquired managerial skills for participation in community development and household management.	312 (78%)	88 (22%)
11	Rural women efforts in entrepreneurship have helped to alleviate poverty by making extra income available for community members.	298 (74.8%)	102 (25.5%)
12	Rural women entrepreneurs are able to identify business opportunities and mobilize resources to create new businesses.	265 (66.5%)	135 (31.25%)
13	Rural women through acquisition of business knowledge and skills are able to make baskets, pottery, cane products, soap, etc.	234 (58.5%)	166 (41.5%)
14	Involvement of rural women in entrepreneurship has helped to diversify rural economy and enhance quality of life.	288 (72%)	112 (28%)

Source: Field Data (2022).

Table 3 showed the responses on rural women development alternative in entrepreneurship in the study objective 2. Majority of the respondents agreed that agrarian women development engagement have impacted on socio economic wellbeing of communities in Odukpani Local Government of Cross River State, Nigeria

Data Analysis

Hypothesis One

Agrarian women sustainable food security effort has no significant relationship with household wellbeing in Cross River State.

Table 4: Pearson product-moment correlation analysis of the relationship between agrarian women efforts in food system and household wellbeing (N=400)

Variables	$\sum x$ $\sum y$	$\sum x^2$ $\sum y^2$	$\sum xy$	r-cal
Agrarian women efforts in food system				
a. Cultivation/steady production of food crops (X_1)	1050	1950	1775	0.878
b. Poultry/livestock production (X_2)	1055	1970	1750	0.614
c. Accessibility/availability of food (X_3)	1040	1945	1780	0.925
d. Adequate nutrition (X_4)	1046	1952	1774	0.860
Household wellbeing	950	1650		
-improved nutrition, access/availability of food dietary diversity, improved health (y)				

Significant at 0.05, critical- $r = 0.195$, $df = 598$

Results of analysis in table 4 show that the calculated r-value of 0.878, 0.614, 0.925, 0.860 are greater than the critical r-value of 0.195 at 0.05 level of significance, with 598 degrees of freedom. By these results, the null hypothesis is rejected and alternate hypothesis upheld. This means that rural women efforts in food security in terms of cultivation of food crops, poultry/livestock production, improved storage facilities and adequate nutrition have significant relationship with household wellbeing in agrarian communities in Cross River State. The result further shows that rural women efforts in food system in terms of improve storage facilities have

positive impacts on household wellbeing of people in the study area.

Hypothesis Two

Agrarian women entrepreneurship promotion has no significant association with household income in Odukpani communities in Cross River state. Entrepreneurship was classified into vocational skills, handicrafts, small retail shops, running of restaurant, snacks bars and catering services while household income was classified into high and low household income. Chi-square (χ^2) analysis was used to test this hypothesis

Table 5: Chi-square (χ^2) contingency analysis of the association between agrarian women entrepreneurship promotion and household income (N =400)

Variables	Household income		Total
	High	Low	
Women in entrepreneurship			
Vocational skills	30	10	40
Handicrafts	42	13	55
Small retail shops	90	30	120
Running of restaurant	60	20	80
Snacks bar	22	43	65
Catering services	30	10	40
Total	274	126	400

Source: Field Data (2022).

Table 6: Contingency table showing the association between rural women engagement in entrepreneurship and household income

Cell	O	E	O - E	(O - E) ²	(O - E) ² /E
1	30	48.67	6.33	40.0689	0.82
2	10	31.33	-6.33	40.0689	1.28
3	42	57.79	-7.79	60.6841	1.05
4	13	37.21	7.79	60.6841	1.63
5	90	91.25	28.75	826.5625	9.06
6	30	58.75	-28.75	826.5625	14.07
7	60	60.83	-0.83	0.6889	0.01
8	20	39.17	0.83	0.6889	0.02
9	22	51.71	-19.71	388.4841	7.51
10	43	33.29	19.71	388.4841	11.67
11	30	54.75	16.75	45.5625	0.83
12	10	35.25	6.75	45.5625	1.29
Total	400				49.24

Source: Field Data (2022).

Calculated (X²) value = 49. 24

Critical (X²) value = 11.1

Level of significance = 0.05

Degree of freedom = 5

Result of analysis in Table 6 show that the calculated (X²) value of 49.24 is greater than the critical (X²) of 11.1 at 0.05 level of significance, with 5 degrees of freedom. This means that agrarian development alternative women in entrepreneurship has a significant association with household income in Communities in Odukpani Local Government Area of Cross Rivers State.

DISCUSSION

The statistical analysis of hypothesis one of this study revealed the fact that agrarian women sustainable food system effort has a significant relationship with household wellbeing. This implied that agrarian women sustainable food security efforts in dimensions of cultivation of food crops especially for household consumption, food availability/accessibility, poultry and livestock production, improved storage facilities etc. have enhanced the socio-economic lives of inhabitants of these communities. These findings are highly in support of Marsden and Smith (2003) and Umoh (2008) that agricultural production is one area in which the significance of socio-economic wellbeing of women in rural districts is especially observed.

The findings agree with Ashagidgbi, Oribua, Olagunji and Omotayo (2020) that subsistence food production is a central vehicle for ensuring the socio-economic wellbeing of rural dwellers.

Women are totally involved in this activity. The most basic one is the production of food and raw materials for consumption. A sustainable food system lies at the heart of the United Nations' Sustainable Development Goals (SDGs). Adopted in 2015, the SDGs call for major transformations in agriculture and food systems in order to end hunger, achieve food security and improve nutrition by 2030. To realize the SDGs, the global food system needs to be reshaped to be more productive, more inclusive of poor and marginalized populations, environmentally sustainable and resilient, and able to deliver healthy and nutritious diets to all and rural women are playing a significant role here (FAO, 2020).

The findings here validate Tambi, Tabi, Atemnkeng and Bime (2017) that women constitute a crucial asset to humanity due to their triple indispensable role in the society. These roles are in the areas of productivity (food security), population growth (constituting the principal source of child bearing and domestic care-cooking, washing, serving, fetching and grooming. In these functions, women working in subsistence agriculture give in more than other occupation. The present study among inhabitants of Odukpani communities has validated this conclusion.

A Key informant, women leader of the Women Organization, Asian Iban Obio, aged 51 years in

response to research question one” Does women development engagement in food security relate with household wellbeing in Odukpani communities in Cross River State?’ reported that: It is clear that without women no community can exist. We are the pillar in all manner of agriculture. Through our activities in the farms, many of our community members have access to nutritious diets. We are sure of eating food as long as we are farming. Our children are no more suffering from kwashiorkor and other health related illnesses because the mothers are eating well. See, now most of us can consume such food as chicken and eat fresh fish because women sell farm produce and have extra money to feed their family well. Let me tell you, without women the entire community here will die of hunger. Our women plant and produce enough cassava for the community.

In the Key Informant Interview (KII), the Secretary of the women fellowship, a middle-aged woman of 47 years, also in Ukwa community in response to study specific objective one, stated thus: Our women are the ones providing money at home through the sale of our farm inputs. Women in my community do not lack job, we work in our farms from morning till night. This community or the environment is blessed with land good enough for farming. Some women keep livestock. Two years ago, my neighbour’s wife was able to make much money from her crops and livestock that her children who were out of school were now able to go back.

In the Key Informant Interview held in Obomiat Odukpani local government area, the President of the Catholic Women Association aged 47 years old, Ekpo, E. in responding to study objective number one asserted that: Our farming activities have made us live well. Two years ago, some women joined together to obtain garri processing machines and oil mill. These facilities are still working. But our problem is accessing fertilizer. Through women cooperative too, most of us are able to receive loan to buy better farm implements. Our agricultural products are both consumed, that is, subsistence and also sold for cash. We want to be the number one agricultural community not only in Odukpani but the entire Cross River State. Why can’t we be the food basket?

The result of statistical analysis of hypothesis two as confirmed that an association exists between rural women in entrepreneurship and socio-economic wellbeing. Chi-square statistical

analysis was used to test the significance of existing association. The findings support (Kabagerayo 2022) that rural women entrepreneurial activities hold the potential to contribute to both economic and social wellbeing by generating personal income among men and women in the economy characteristically means by limiting unemployment growth. It also has a broad economic impact from the perspective of rural job creation, private sector development and wealth creation. Rural females’ participation in entrepreneurship can enhance the expansion of these economic assets and simultaneously lead to less inequality in the population. Their role is to promote prosperity by creating new jobs, reducing unemployment and increase economic growth and development of a region. They also increase productivity by bringing new innovation and speed up structural changes by forcing existing business to reform and increase competition.

Women in poorer countries resort to entrepreneurship to not only generate income and escape poverty but are also motivated by factors that contribute to their well-being, such as the desire for independence and self-fulfillment. For instance, Unilever’s Shakti scheme, widely recognized as a success story for creating employment for women in rural India benefitted women by instilling self-esteem, a sense of empowerment and a place in society, thereby conferring dignity to the women entrepreneurs (Chattegree, Shepherd and Wincent 2022). Indeed, given the adversities and discrimination these women continue to face, wellbeing from entrepreneurship is very significant. The existence of this association is because rural women entrepreneurship promotion is about their ability to create and build something of value from practically nothing; they create or seize an opportunity and pursue it regardless of the resources currently controlled by them. These women entrepreneurs, as confirmed by this study, exhibit innovative behaviours and employ strategic management practices in their businesses. These women are able to produce a combination of ideas, skills, money, equipment and market to make an enterprise successful. One of the Key Informants, aged thirty-eight (38) years, a petty trader, seamstress and subsistence farmer stated: Many of our women are into soap production and are even able to produce fufu without odour. Myself, I have acquired knowledge on bread making. I can

make soda soap. Women own many businesses here; we like business because it gives us daily money. We sell some of our products in Calabar. One important thing is that we are able to compete with the men in doing things in the community.

Another Key Informant, an elderly woman aged 59 years, who has witnessed the activities of the rural farmers and entrepreneurs commended the efforts of women in the areas of both agriculture and small-scale business ownership. According to her: Women here have learned to manage their businesses. They are involved in weaving, sewing, knitting; the wealthy ones have oil palm and cassava processing machines. We sell oil to people from neighbouring states like Akwa Ibom and even people from Calabar come here because they like the taste of our oil.

In another Key Informant Interview session, the leader of the Catholic Women Association Obomitiat, aged 47 years, Ekpo, Ekpo responding to question one stated that: Some of our community women are able to make soap, hat, cake, pomade, some have provision stores. Many would have been involved in cold room business for preserving fish but power supply is the major problem. In fact, most of our young women are engaged in one activity or the other. So, our women activities have helped to reduce the number of jobless women especially those who are below 40 years.

CONCLUSION/RECOMMENDATIONS

Agrarian women development engagement of enhancing food security and entrepreneurship are significant predictors of socio-economic wellbeing in Odukpani communities of Cross River State, Nigeria. Women have become a critical target group in the development process. They perform 66 percent of the world’s work and produce 50 percent of the food, yet earn only 10 percent of the income and own 1 percent of the property (World Bank FAO and IFAD, 2009). For instance, women in rural communities in Cross River State are involved in socio-economic development activities such as garri processing mill, palm kernel mill, fish ponds etc. In riverine communities of Akpabuyo local government area, women have ventured into traditional male fishing activities as sources of livelihoods. Findings revealed that through rural women food security initiative, agrarian communities have physical, social and economic access to sufficient, safe and nutritious food; rural women initiatives in

entrepreneurship have helped change the living conditions of community by diversifying the rural economy and enhancing quality of rural life in the process. Agriculture ensures food security and it is a means of guaranteeing rural families secure livelihoods and overall wellbeing. Since rural women have made immense contribution in food security at subsistence level, the government should encourage them by making improved seedlings and fertilizer for rural farmers; also, these farmers should be exposed agricultural education that has three main area of emphasis which include livestock education, crop production education and agric-business and entrepreneurship. The government should encourage rural entrepreneurship by creating more economic opportunities for rural women through formulating enabling policies that seek to make small and medium enterprises grow. This will facilitate productive employment,

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