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THE ROLE OF RURAL WOMEN IN ENHANCING COCOA PRODUCTION FOR NATIONAL DEVELOPMENT: A CASE STUDY OF IKOM AGRICULTURAL ZONE, CROSS RIVER STATE – NIGERIA

Eremi, Emmanuel Ohara (Ph.D)
Department of Agricultural Extension and Rural Sociology
University Of Calabar, Calabar – Nigeria

Aya Comfort Felix
Department of Agricultural Extension and Rural Sociology
University Of Calabar, Calabar – Nigeria

Azu Sunday Begianpuye
Department of Vocational Education (Agric. Edu. Unit)
Faculty of Education, University Of Calabar, Calabar – Nigeria

ABSTRACT: *The general objective of this study was to examine the role of rural women in enhancing cocoa production for national development in Ikom Agricultural Zone of Cross River State, Nigeria. The specific objectives of the study were to; ascertain the socio-economic characteristics of the respondents, ascertain the areas of rural women participation in cocoa production, examine the factors affecting rural women participation in cocoa production, and, ascertain the correlation between selected socio-economic characteristics of the respondents and their participation in cocoa production. The population of the study comprised all the rural women involved in cocoa production in the area. The sample consisted of 110 respondents randomly selected from the study area. Data were obtained using a validated semi structured questionnaire and analyzed using frequency count, mean, standard deviation and regression model. The results of analysis revealed that rural women were involved in land preparation for cocoa plantation, promotion of nursery, planting of seeds and seedlings, weeding, spraying of chemical, gathering of cocoa pods and transportation and storage etc. It was also found that women faced challenges like inadequate fund, land tenure, high cost of inputs and poor storage facilities among others. The regression result showed that age, marital status, educational and farming experience were significantly related to rural women participation in cocoa production. It was recommended among others that government should provide credit facilities to rural women.*

KEY WORDS: rural women; cocoa; national development.

INTRODUCTION

Agriculture plays an important role in Nigeria's economy as a major contributor to the country's export earnings and as a source of employment and livelihood. Nigeria is the second largest cocoa producer in West Africa, second to Ivory Coast. Cocoa is an important economic tree and prior to

the oil boom, cocoa accounted for more than 50% of Nigeria's total export. Many countries' economies depends mainly on cocoa export, cocoa-related raw materials are the principal supplies for cottage industries. Cocoa is used in the manufacture of a wide range of beverages and other finished goods. Official records have often underestimated the value of women's work and their overall contribution to national wealth. Food and Agriculture Organization (FAO, 2003) estimates shows that women represent a substantial number of the total agricultural labour force and it further states that around two-third of the female labour force in developing countries is engaged in agriculture. In many parts of the sub-Saharan Africa, there is an increasing trend towards what has been called feminization of agriculture. One of the main causes of this phenomenon is the rural-urban migration of men in search of paid employment in towns and cities. In many rural areas of Nigeria, gender-based land tenure system often limits women access to land. Furthermore, women in Nigeria have limited access to credit required to expand their production capacity, (NAERLS, 2012). Many cultures especially in developing world sees women as bearing the burden for household subsistence which to a very large extent severely curtail their chances of engaging in income generating activities.

Fabiyil, Danladi, Akase and Mahmood (2013) maintains that women, especially in rural Africa, are the invisible farmers and form the backbone of rural development. The underlying fact is that more than half of Nigeria's food is produced by women. Rural women provide up to 80 percent of the food consumed in their own homes.According to FAO (2005), about 70% of agricultural workers, 8% of food producers and 10% of those who process food stuffs are women and they also undertake 60 to 90% of the rural marketing; this make up more than two-third of workforce in agricultural sector. Rural women have traditionally achieved more with less time, in an average day, they plant crops, plough and harvest farms, fish, gather wood, fruit, cook and process food. Notwithstanding, they have limited access to production resources and land tenure right (NAERLS, 2012).

Women cocoa farmers are central to the sustainability of the cocoa supply chain and cocoa growing communities, although too often their contributions are unrecognized. Women make significant contributions to the quantity of cocoa produced and with the increasing demand for cocoa, integrating women farmers into cocoa supply chains by supporting them in their existing roles is something that cannot be ignored. One of the ways to promote women's contribution to cocoa production is to appreciate the challenges that rural women face.Women participate in all stages of cocoa production to varying degrees, the one role that men farmers play almost exclusively is in transport and sales and this limits women farmers' ability to benefit economically from cocoa and prevents them from asserting their rights as cocoa farmers. Ultimately, many rural women cocoa farmers have very little voice in decision making when it comes to cocoa marketing (Oxfam, 2015).Rural women make up a large portion of cocoa labour in West Africa, in Ghana, 25% of cocoa farmers are women, in Coted 'Ivoire. Women own 25% of the cocoa plantations and make up approximately 68 percent of the labour force, but only earn 21% of the income generated. In Nigeria, rural women account for approximately 72% of the labour on cocoa farms, especially those owned by their husbands and family but are often not recognized for their roles in cocoa farming (Africa Development Bank, 2015).

There is a growing consensus that women farmers are critical to the success of initiatives to increase quality and maintain cocoa production. These issues cannot be addressed without looking at women's critical role as cocoa farmers. In cocoa farming, women are involved in activities such as planting seedlings, collecting cocoa pods, fermenting and drying of cocoa beans. Often their role is taken for granted and as such they are merely perceived as household workers and therefore have unequal access for training, inputs and education (Oxfam, 2015).

Women participation in cocoa production is also affected by cultural stereotypes. On a broader scale women engagement in cocoa production is also affected by the general factors such as irregular rainfall, flood, droughts, and erosion among others. Though women play a number of direct roles in cocoa production and also provide support to men, their direct and indirect roles often go without notice. Women perform numerous tasks on cocoa plantations, including establishing new cocoa nurseries, planting seedling's, maintaining plantations, collecting cocoa pods, transplanting, fermenting and drying of cocoa but at the end of the production cycle, men take responsibility for collecting payment for the cocoa, meaning that a woman's compensation for her labour often depends on her relationship with a man. It is therefore imperative to examine the role of women in enhancing cocoa production for national development, they face and establish the determinants of their participation in cocoa production. It is against this background that this study was carried out.

Objectives of the study

The general objective of this study was to examine the role of women in enhancing cocoa production for national development.

The specific objectives were to;

i. ascertain the socio-economic characteristics of respondents in the study area;
ii. ascertain the areas of rural women participation in cocoa production in the study area;
iii. examine the factors affecting rural women participation in cocoa production in the area
iv. ascertain the relationship between relevant socioeconomic characteristics of the respondents and their participation in cocoa production.

Research hypothesis

Ho_1: There is no significant relationship between the socio-economic characteristics of rural women and their participation in cocoa production.

METHODOLOGY

The study was carried out in Ikom Agricultural Zone of Cross River State which consists of Boki, Etung, Ikom, Obubra, Abi and Yakurr Local Government Areas. The study adopted a survey design, the population of the study comprised all the rural women in the study area. The study adopted two main sampling techniques; the study area was purposively selected because it is the main cocoa producing centre in the state. Three local government areas (Boki, Etung and Ikom) were also purposively selected for the study. A total of 110 rural women involved in cocoa production were selected in a multi-stage random sampling techniques. Data were collected with the aid of a validated structured questionnaire and interview schedule. Data obtained were

analyzed using descriptive statistics such as frequency count, percentage, mean and standard deviation as well as multi-nomial logit regression.

RESULTS AND DISCUSSION

Table 1
Distribution of respondents according to socio-economic characteristics

Variable	Frequency	Percentage
Age		
18 – 27	10	9.1
28 – 37	42	38.2
38 – 47	31	28.2
48 – 57	20	18.2
58…	7	6.4
Total	**110**	**100**
Marital Status		
Married	47	42.7
Single	34	30.9
Divorce	17	15.5
Widow	8	7.3
Separated	4	3.6
Total	**110**	**100**
Educational Level		
No formal education	44	40.0
Primary level	6	5.5
Secondary level	38	34.5
Tertiary level	22	20.0
Total	**110**	**100**
Occupation		
Farming	42	38.2
Trading	38	34.5
Teaching	24	21.8
Civil servant	6	5.5
Total	**110**	**100**
Income		
Less than 100,000	58	52.7
100,000 – 150,000	41	37.3
151,000 – 200,000	8	7.3
200,000…	3	2.7
Total	**110**	**100**
Family Size		
Less than 5	52	47.3
6 -10	42	38.2
11 – 15	14	12.7
16 – 20	1	.9
21 ad above	1	.9
Total	**110**	**100**
Extension Contact		
No contact	21	19.1
Weekly	66	60.0
Monthly	11	10.0
Yearly	12	10.9
Total	**110**	**100**
Farm Size		
1ha	28	25.5
2ha	45	40.9
3ha	21	19.1
4ha	12	10.9
5ha and above	4	3.6
Total	**110**	**100**
Farming Experience		
1 – 5yrs	11	28.2
6 – 10yrs	35	31.8
11 – 15yrs	25	22.7
16 – 20yrs	1	0.9
21 and above	18	16.4
Total	**110**	**100**

Result in Table 1 indicates that the respondents varied widely in their socioeconomic disposition. It was observed that the respondents were relatively young women, 42.7% of the women were married, while 30.9% were single. The study further found that a good proportion of the women (40%) had no formal education, 20% of them attended at least a tertiary institution, and largely involved in farming and trading on farm produce. The result also shows that the women were low income earners with average family size.

Table 2
Distribution of respondents according to areas of participation in cocoa production

Activity (V)	N	Mean (X)	SD	Remarks
Building of shade house	110	1.74	0.79	Participated
Filling of bags with soil	110	1.66	0.55	Participated
Planting seeds	110	1.62	0.80	Participated
Carrying water for spraying	110	1.58	0.70	Participated
Spraying water	110	1.66	0.55	Participated
Spraying pesticides	110	2.35	0.71	Participated
Clearing form plots	110	1.97	0.75	Participated
Weeding	110	1.57	0.63	Participated
Transporting seedlings	110	1.78	0.78	Participated
Digging holes	110	1.83	0.66	Participated
Planting	110	1.73	0.73	Participated
Clearing new field	110	1.82	0.71	Participated
Chemical application	110	2.00	0.77	Participated
Clearing of farm under production after harvest	110	1.86	0.72	Participated
Picking pods	110	1.98	0.77	Participated
Collecting pods to make small heaps	110	1.77	0.75	Participated
Gathering of small heaps into mounds	110	1.59	0.60	Participated
Splitting of cocoa pods	110	1.78	0.63	Participated
Pilling wet cocoa beans	110	1.69	0.74	Participated
Preparation of fermentation site	110	2.00	0.84	Participated
Separation of seeds from placentas	110	1.63	0.62	Participated
Transporting fermented seeds to drying place	110	1.69	0.73	Participated
Spreading on dry rack	110	1.74	0.73	Participated
Brewing	110	1.86	0.64	Participated
Sorting	110	2.05	0.72	Participated
Sales of product	110	1.84	0.75	Participated
Custody of revenue	110	1.47	0.81	No participation

Source: Filed survey, 2018

Result in Table 2 show the areas of women participation in cocoa production in the study area. The result revealed that all the variables (except custody of revenue) recorded mean scores above or equal to the cut off mark of 1.50, which suggests the women participated in all the areas identified. Specifically, the study found that women were involved in such activities as land clearing or weeding ($\bar{x}$ = 1.57), building of shade ($\bar{x}$ = 1.74), planting of seeds ($\bar{x}$ = 1.62), spraying of chemicals ($\bar{x}$ = 2.35), clearing of new fields ($\bar{x}$ = 1.82), collection of pods ($\bar{x}$ = 1.86) and sorting

($\bar{x}$ = 2..05) among others. The implication of this result is that women play a wide range of roles in the cocoa production enterprise and they are involved at all levels of the cocoa values chain. The result also revealed that even the traditional and widely perceived exclusive areas of men's responsibilities such as land clearing, spraying of chemicals and transportation of cocoa etc. are now being performed by the women, suggesting that women are key players in the cocoa industry. The study further indicated that women had no control over the revenue generated from the cocoa enterprise, suggesting that the men were the main custodians of the income from cocoa farming. This findings confirms the generally held beliefs that women undertake nearly all the production activities in cocoa sector (as they do in other sectors) but do not benefit economically as the men. This financial deprivation frequently contributes to emansculating women's economic power and autonomy and thus, reinforcing men's domination. These findings agrees with the findings of Ayoola and Odinka (2004) and Ellis, Manuel and Hackden (2006).

Table 3
Distribution of respondents according to factors affecting their participation in cocoa production

Constraint (V)	N	Mean (X)	SD	Decision
Inadequate fund	110	1.50	0.8	Accepted
Inadequate extension agents	110	1.70	0.7	Accepted
Cultural barriers	110	1.80	0.7	Accepted
Transportation problems	110	2.0	0.8	Accepted
Land tenure	110	1.70	0.8	Accepted
Lack of technology	110	2.10	0.8	Accepted
Illiteracy	110	1.80	0.8	Accepted
Poor storage facilities	110	2.20	0.8	Accepted
Lack of market proximity	110	2.00	0.8	Accepted
Lack of social capital	110	1.80	0.8	Accepted
Women discrimination	110	1.80	0.8	Accepted
Negative attitude of women	110	1.50	0.8	Accepted
Poor government support	110	1.50	0.7	Accepted
High cost of inputs	110	1.50	0.8	Accepted

Source: Filed survey, 2018

Table 3 shows the distribution of the respondents according to factors affecting their participation in cocoa production in the area. The result reveled that all the variables recorded mean scores above the cut-off mark of 1.50, which means all the factors identified had effect on women participation in cocoa production. In particular, it was noted that inadequate fund ($\bar{x}$ = 1.50), inadequate extension agents ($\bar{x}$ = 1.70), transportation problems ($\bar{x}$ = 2.00), poor storage facilities ($\bar{x}$ = 2.20), lack of market ($\bar{x}$ = 2.00), cultural and religious barriers ($\bar{x}$ = 1.80), and lack of improved technologies ($\bar{x}$ = 2.10) among others were the factors which hindered women participation in cocoa production in the study area. The implication of this result is that although women are very enthusiastic about being involved in cocoa production, there are a lot of hindrances to their participation. These hindrance or obstacles can be institutional (government-related) such as lack of credit facilities, or personal (farmers-related) such as illiteracy, lack of basic skills; and environmental – such as pest and diseases. This study highlights even cultural barriers associated with discrimination against women and religious and social stereotypes against women. These

factors or challenges, according to Elis *et al.*, (2006), Deere (2005) and Ayoola and Odiaka (2004) are affecting women contribution to cocoa production and national development. The growing concern has almost always being the obvious hesitation of relevant authorities to address these challenges in other to enhance the role of women in cocoa production for national development.

Table 4
Summary of regression result of the relationship between socioeconomic characteristics of the respondents and participation in cocoa production

Variable (V)	Coefficients	Standard Error	t-value	P>/t/
Age	0.146	0.061	2.396	0.018**
Marital Status	0.203	0.052	3.867	0.000*
Educational level	-0.155	0.060	-2.594	0.011*
Occupation	-0.063	0.073	-0.873	0.385
Income	-0.031	0.079	-0.400	0.690
Family size	-0.110	0.068	-1.617	0.109
Extension	0.121	0.067	1.804	0.074
Contact				
Farm size	0.049	0.053	0.916	0.362
Farming experience	-0.107	0.042	-2.538	0.013*

Summary statistics
* = significant at 1%
** = significant at 5%
Prob > F = 0.0000
T-value = 7.652
Critical t-value = 5.258
R – Square = 0.609

Result in Table 4 show the summary of regression analysis of the relationship between selected socioeconomic characteristics of rural women and their participation in cocoa production. The result revealed that the coefficient of variation otherwise known as R^2 was 0.609, which indicates that 61% of the variations in the dependent variables was explained by the explanatory or predictor variables. Specifically, it was found that age was positive and significantly related to participation at 1% level, indicating that as a woman advances in age, her level of participation in cocoa production will equally increased, all things being equal. Similarly, the marital status of the respondents was positive and significant at .5% confidence level, implying that as women gets married, their propensity to engage in cocoa production will also increase. In order words, married women are more likely to participate in cocoa production than single ladies. The educational level of the respondents was negative but significant at 5% level. This suggest that with increase in women education, their participation in cocoa production will decrease. Highly educated women who are probably engaged in well-paid white colar jobs have little or no incentive to take part in cocoa production. Education often leads to the migration of women to the cities in search of paid employment, thus leaving behind women with arguably limited education to oversee cocoa production enterprise. The study also found a negative but significant relationship (5%) between

farming experience and women participation in cocoa production. However, occupation, income, family size and farm size etc. did not influence women participation in cocoa production in the area. The implication of this result is that the participation of women in cocoa production is a function of some of their socioeconomic characteristics. These findings supports the submissions of Doss (2010), and Ezeibe (2012).

CONCLUSION

Cocoa has traditionally plays significant role in the national development of Nigeria and over the years, women have affirmed their place as key players in the cocoa industry. Women undertake a wide range of production and storage operations with great enthusiasm. Their contributions can no longer be ignored even in the face of societal attempts to undervalue women's sacrifices to enhance the cocoa sector. Women face challenges that calls for urgent action, actions that will address the inadequate funding, create credit corridors, stop cultural barriers to women land acquisition, create equal opportunities for access to input, market, and rewards. Additional incentives in the form of zero interest credits can be provided for rural women to mobilize them for cocoa production. Although education was negative in statistical terms, there is a consensus that improving educational opportunities for women in rural areas will facilitate their participation in cocoa production and contribution to national development.

RECOMMENDATIONS

The following recommendations are based on the findings of the study.

- Government should provide zero interest loan and grants to rural women to enhance their capacities for cocoa production.
- Government should also formulate land ownership policies that will make it an offence for women to be discriminated or denied access to land on account of their sex.

REFERENCES

African Development Bank (2015). Annual Report.

Anon, (2006): *National Gender Policy: Federal Ministry of Women Affairs are Social Development.* Amama Printing United Kaduna. 7:14

Ayoola, J. B & Odiaka, E. C. (2004). *Gender perspective on agricultural development, experience from Benue State of Nigeria.* Proceeding of the annual conference of the agricultural society of Nigeria, (ASN) held at College of the Agriculture, Lafia, Nasarawa State, Nigeria. October, 1721st.

CNB, (2006). *Central Bank of Nigeria Statistical Bulletin,* FAO-Gender, Key to sustainability and food security. Ran of action and gender development Rome 2003.

Deere, C. D. (2005). *The feminization of agriculture? Economic restricting in rural Latin America.* United National research Institute for Social Development.

Doss, C. (2010). *If Women hold up that the sky, how much to the Worlds food do they produce? Background Paper* prepared for the state of food agriculture.

Ekong, E. E. (2010). *Rural Sociology: An introduction and analysis of rural Nigeria.* Uyo, Jumak Publisher Ltd.

Ellis, A. Manuel, C. & Hackden, C. M. (2006). *Gender and economic growth in Uganda: University the power of women,* Washington D. C: the World Bank.

Ezeani, A. C. (1997). *The Role of Women in Rural Development in Ideato North Local Government Area of Imo State.* Unpublished B.Sc. Agricultural Economics Project-Abia State University Uturu. 3:25.

Ezeibe, A. A. (2012). *Women Labour Utilization in Crop Production in Abia State, Nigeria* University of Nigeria, Nsukka.

National Agricultural Extension and Research Liaison Services (2012).