

Microeconomic Analysis of Women's Contribution to alleviating Household Poverty in Ekeremor Local Government Area of Bayelsa State, Nigeria

**OWUTUAMOR, Zechariahs Benapugha¹ OWUTUAMOR, Kate Bokie²
UKPONG, Inibehe George³**

Department of Agricultural Extension & Management, Federal Polytechnic Ekowe, Bayelsa State.

Phone No.: +234 0803 222 5083

Email: ilsignorzax@gmail.com

Department of Accountancy, Federal Polytechnic Ekowe.

Email: kateowuts13@gmail.com

Department of Agricultural Extension & Management, Federal Polytechnic Ekowe.

Email: inibeheukpong@gmail.com

Abstract

Women bear the brunt of the household economy especially in alleviating rural poverty; as they play multiple roles including social, financial and psychological roles. This fact has not been thoroughly backed up by examining empirical data in riverine rural areas. In giving direction to the gender income debate, this paper, in carrying out a microeconomic analysis of women's contribution in alleviating household poverty, empirically examined socioeconomic characteristics, gender roles, average amount of money women contribute and the effect of certain variables on the financial contribution of women to the household in Ekeremor Local Government Area, Bayelsa State. Primary data collected using structured questionnaires in a modified multistage random sampling procedure from 60 households, were analyzed using descriptive (frequencies and percentages tables) and inferential (multiple regression) statistics. The respondents were all married women with an average age of 36 years, married for about 12 years, with formal education, living in an average household of 6 persons, mostly self-employed and worked for an average of 9 years. Results reveal that in terms of roles, men earn more, provide for major expenses, food, security and represent the family outside the home, while women clean, cook, care for children and carry out maintenance in the home, however, both genders provide care for extended family. Although, most of the women are married to husbands that earn income, they (women) also earn their own income and contribute to the household financially. The estimated model revealed a significant positive relationship between the amount of money the woman contribute and the income she earns at the $p > |t| = 0.05$ probability level. It is thus recommended that rural women should be empowered to earn more income in order to help alleviate rural poverty.

Keywords: Bayelsa State, gender roles, rural household, rural poverty, women's income,

JEL Codes: Q12

Introduction

Poverty in Africa has not only grown widespread but intense, compared to any other region of the world, with this, redistribution towards the poor will definitely not require only increased income but importantly needs an evolution of policies, plans and framework that will address the acute income inequality by transforming and improving the sources of livelihood and the space where the poor live (Ogundipe, Oggunniyi, Olagunju, & Asaleye, 2019), especially in the rural areas. There is no gainsaying, according to Olawuyi and Adetunji (2013) that Nigeria has experienced a high incidence of poverty in the last two decades.

Olawuyi and Adetunji (2013) noted that poverty is a topical issue in developing countries, especially Africa and Nigeria in particular. And, according to Ogundipe *et al* (2019), poverty has continued to

deepen in its incidence and severity. Rural transformation, as suggested by Bishop (2019), is often seen as a driver for positive change, presenting new opportunities for economic growth and should be 'inclusive', such that everyone needs to exercise their rights, develop their abilities and take advantage of the opportunities that arise. With women being one of the most vulnerable groups in the rural society (Food and Agriculture Organization (FAO), 2013) (Thi, Kappas, & Faust, 2019), the IFAD (2019) suggested that there should be investments to empower young rural women to gain agency in making their livelihood choices.

Recent times have also witnessed more emphasis on distributive and shared income rather than exclusive income growth (Babatunde, 2008) (Ogundipe, Ogunniyi, Olagunju, & Asaleye, 2019). Even though, it is established that most of the efforts women put in maintaining the household are not economically valued because it is traditionally considered a duty and responsibility for them as women, it is indicated that such activities and efforts have a wide reaching impact in household sustenance and reducing household economic burdens (Takyi, Opoku-Asare, & Anin, 2014). Rural household transformation can be brought about by increased incomes for household members (Fox, Wiggins, Ludi, & Mdee, 2018), including the women.

It is women that bear the brunt of the household economy, as such the roles they play, whether social, financial, psychological, etc., all have bearings in the alleviation of poverty in rural communities. Empirical evidence by Takyi, Opoku-Asare and Anin (2014) revealed that 75% of women commit the income they earn to the provision of household daily needs, while 22.5% of women deploy their incomes to the household only when there are emergency situations and only 2.5% of women did not contribute their incomes to household, because it was not even sufficient for their own needs. With the foregoing, it has become evidentially clear that the financial contributions of women to the household income, increases the household income, thereby raising the standard of living of the household and by extension, the community.

The main objective of this paper is to carry out a microeconomic analysis of women's contribution in alleviating household poverty, by looking at the following specific objectives in EKELGA: determination of the socioeconomic parameters of households; different gender roles in the household; average amount of income women contributes to the household and the effect of certain variables on the financial contributions of women to the household.

Hypothesis of the study

H₀: The income women earn from their economic activities does not have any significant effect on the amount they contribute to the household income.

H₁: The income women earn from their economic activities has significant effect on the amount they contribute to the household income.

Research Methodology

The study area

This study was conducted in Ekeremor LGA (EKELGA), headquartered in Ekeremor Town. It is one of the 8 LGAs in Bayelsa State, with an estimated coastline of 60km, covering a total area of 1,810 km², with a population of 270,257 people (53% male and 47% females) according to the 2006 census (Oparah, 2018), having a growth rate of 3.2% (National Bureau of Statistics, NBS, 2018). But, the Shell Petroleum Development Company of Nigeria Limited, SPDC(2015) estimated the population to be about 310,883.5, with a growth rate of 2.553 %, comprising 57 % (179048.5) males and 43 % (173130.5) females as at 2012. EKELGA is located on 5°02'N and 5°48'E (Ebenezer, Noutcha, Agi, Okiwelu, & Commander, 2014) and have climate and vegetation that is not much different from other parts of Bayelsa State, as it falls within the tropical rainforest belt, having mangrove forests and brackish water, with lots of fresh water creeks meandering southwards to the Atlantic

ocean(NigeriaGalleria.com, 2017). Apart from working in government employment and the oil and gas industry, the SPDC (2015) reported that majority of the people in the area are involved in fishing, trading, crop farming, local gin (*ogogoroor kaikai*) production and water transportation activities.

Data Collection and Analysis

Every household in EKELGA is a sampling unit, with all households making up the population of the study. Primary data used for the study was collected by administering structured questionnaires. The questions were given to those who can read and write to fill, while those who could not, were interviewed based on the questions in the questionnaire and the answers filled-in accordingly.

A sample size of 60 households were selected as respondents in a modified multi-stage random sampling procedure. Since all of EKELGA is rural and can be accessed only by water and air, 4 towns were first selected based on accessibility and openness to receiving visitors, secondly, 15 households were then selected randomly from each town, based on whether they are willing to offer information or not. Thus, giving a total of 60 respondents. The respondents were all married women living together with their families.

Data was analyzed using descriptive statistics such as frequency counts, percentages and means, displayed in tables. Inferential statistics in the form of multiple regression was also used to empirically determine the effect of certain variables such as: duration of marriage in years (*durmar*), size of the household (*hholdsiz*), highest level of education attained (*edulev*) by the woman, working husband (*wrkhusb*), and the woman's income earned from productive activities (*womincm*), as independent variables; on the amount of income the woman contributes to the household income (*womncont*), as the dependent variable; The student's t-test was used to test the significance of the various independent variables on the dependent variable, while the F-test was used to determine the significance of the overall model.

Using the method applied by Ahmed, Siwar and Idris (2011) and Roy, Haque, Jannat, Ali and Khan (2017), this study adopted the multiple regression model to determine the variable(s) that were significant in effecting changes on the amount of money women contribute to the household income, as defined in equation (1).

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon \quad (1)$$

Where:

Y = amount of money woman contributes to the household income in Nigerian Naira (₦) (*womncont*)

β_0 = Intercept

β_1, β_2, \dots = Coefficients of the independent variables

X_1 = duration of marriage in years (*durmar*)

X_2 = size of household (*hholdsiz*)

X_3 = highest education level attained (*edulev*)

X_4 = working husband (*wrkhusb*)

X_5 = woman's income in Nigerian Naira (₦) (*womninc*)

ε = Stochastic error term

Results and Discussions

Socioeconomic features of households in EKELGA

The socioeconomic features of the households in EKELGA are presented in table 1.

Table 1: Socioeconomic characteristics of households in EKELGA

S/N	Socio-economic variable		Frequency (N)	Percentage (%)	Mean
1.	Age of the woman	20 years old and below	0	0.0	36.3
		21-60 years old	60	100.0	
		61 years old and above	0	0.0	
		Total	60	100.0	
2.	Duration of marriage	10 years and below	31	51.7	11.7
		11 – 20 years	20	33.3	
		21 years and above	9	15.0	
		Total	60	100.0	
3.	Level of education	No-formal education	2	3.3	
		Primary	31	51.7	
		Secondary	20	33.3	
		Tertiary	7	11.7	
		Total	60	100.0	
4.	Household size	Small family (6 persons and below)	41	68.3	5.7
		Large family (7 persons and above)	19	31.7	
		Total	60	100.0	
5.	Occupation	Work for private organizations	8	13.3	
		Work for Government	16	26.7	
		Self employed	36	60.0	
		Total	60	100.0	
6.	Duration of occupation	5 years and below	21	35.0	8.8
		6-35 years	39	65.0	
		36 years and above	0	0.0	
		Total	60	100.0	

Source: Field survey, 2020.

The results as seen in table 1 indicates that the whole respondents (100%) fall within the age bracket of 21-60 years, with an average of 36 years, thus suggesting that there is a high number of productive women in EKELGA. This corroborates the SPDC (2015) report, which revealed an age composition, where persons below the 26 years' age bracket constituted an overwhelming percentage of approximately 63%. Although, the survey revealed that majority (51.7%) of the marriages were 10 years and below, there was an average of 12 years, suggesting that most of the families in EKELGA are young. Most of the respondents (51.7%) have primary school education, with a good proportion (45%), having at least secondary school education. This suggests that the people of EKELGA are educated enough to make rational decisions of their own. With an average of 6 persons per household, most of the families (68.3%) have household sizes that are not more than 6 persons, suggesting that the families are small and within the Government's advice of man, wife and 4 children. This is at variance with the SPDC (2015) field survey, which reported an average of 8 persons per dwelling unit with about 37% households having between 7 and 10 persons in a family. Majority of the respondents (60.0%) are self-employed, suggesting that their incomes are not pegged but can fluctuate, depending on the prevailing economic situation. Many of the respondents (65.0%) have worked for over 5 years,

suggesting that the respondents have been earning income over time and are now financially stable, knowing what to expect at the end of each earning cycle.

Gender roles in households

Table 2 shows the various roles played by different gender in the household in EKELGA.

Table 2: Gender roles in the household

S/N	Role		Frequency	Percentage (%)
1.	Earns more money	Man	45	75.0
		Woman	4	6.7
		Both	11	18.3
		Total	60	100.0
2.	Provides money for major expenditures	Man	53	88.3
		Woman	2	3.3
		Both	5	8.4
		Total	60	100.0
3.	Provides food for the home	Man	36	60.0
		Woman	7	11.7
		Both	17	28.3
		Total	60	100.0
4.	Cleans the house	Man	3	5.0
		Woman	53	88.3
		Both	4	6.7
		Total	60	100.0
5.	Cooks in the house	Man	4	6.7
		Woman	50	83.3
		Both	6	10.0
		Total	60	100.0
6.	Care for children	Man	7	11.7
		Woman	33	55.0
		Both	20	33.3
		Total	60	100.0
7.	Maintenance/repair works in the house	Man	20	33.3
		Woman	24	40.0
		Both	16	26.7
		Total	60	100.0
8.	Responsible for securing the home	Man	43	71.7
		Woman	5	8.3
		Both	12	20.0
		Total	60	100.0
9.	Represents family in the community	Man	45	75.0
		Woman	3	5.0
		Both	12	20.0
		Total	60	100.0
10.	Care for extended family	Man	25	41.7
		Woman	3	5.0

Both	32	53.3
Total	60	100.0

Source: Field survey, 2020

In table 2, the survey results show that men earn more than women in 75% of households, provide money for expenses in 88% of the households, provide food in most of the households (60%), responsible for securing the home (72%) and represents the family in the community (75%). While women were responsible for cleaning (88%), cooking (83%) and caring for children (55%) in the household. In many of the homes, maintenance/repair works are being done mostly by the women (40%) and a good proportion of the men (33%), while extended family members are being cared for, by both genders. This indicates that there are clear cut roles for each of the gender in EKELGA, where men perform certain roles and others are left for the women. However, some roles, like maintenance/repair works and care for extended family members were jointly carried out or performed by both gender. The case here is not different from what obtains in a traditional African society, as suggested by Leith (1967) and Afisi (2010), where each gender had its role and responsibility which helped in the formation and upkeep of the family.

Women's contribution to household income

From the money women make as a result of engaging in economic activities, they make financial contributions to the household purse, which are captured in table 3.

Table 3: Contributions of women to household income

S/N	Variable		Frequency	Percentage (%)	Mean(₦)
1.	Women earning income	Yes	39	65.0	576,151.70
		No	21	35.0	
		Total	60	100.0	
2.	Contribution to household income	Yes	43	78.2	211,672.70
		No	12	21.8	
		Total	55	100.0	
3.	Have husband that earns income	Yes	58	96.7	
		No	2	3.3	
		Total	60	100.0	

Source: Field survey, 2020

It can be seen in table 3 that most married women in EKELGA earn an income (65%), averaging the sum of about ₦576,151.70 per annum or ₦48,012.64 monthly from their participation in economic activities. Most of the women (78%) contribute an amount from their income to the household income, averaging the sum of ₦211,672.70 per annum or ₦17,639.40 monthly, even though almost all of them have husbands that work and earn income (97%). This suggests that the women in EKELGA do not depend entirely on their husbands for money to incur expenses and support the family in their own way, in line with the findings of Opoku-Ware(2014), who posited that women make substantial contributions to the household income.

Effects of selected variables on the amount of money women contribute to household income (results of the multiple regression analysis)

The results displayed in table 4 from the multiple regression analysis has an R^2 of 0.419, with a Prob>F of 0.002, indicating that the variables considered in the model were significantly responsible for 42% of the financial contributions made by women to the household income in EKELGA. With a Durbin-Watson d-statistic of 1.963, falling between 1.5 – 2.5 indicating that the explanatory variables

in the model have normal values, which are not autocorrelated, hence, they are BLUE, as such, the model does not suffer from specification errors and spurious regression, as suggested by Owutuamor and Arene (2018). It can be seen that only the income women earn from their economic activities was significant in causing changes to the amount women contribute to the household income, while all other variables were not significant.

Table 4: Results of the multiple regression analysis

Variable	Coefficient	Standard error	t-statistic	P > t
Constant	127006.852	210953.106	0.602	0.550
MARDUR	-5828.753	5107.167	-1.141	0.260
FAMSIZ	17727.478	15070.059	1.176	0.245
LVLEDU	50947.617	36748.094	1.386	0.172
DURWORK	-1748.329	5894.636	-0.297	0.768
WOMNINC	0.167	0.036	4.685	0.000*
HUSWRK	-160841.649	156304.395	-1.029	0.309
R ²		0.419		
Adjusted R ²		0.345		
F-statistic value	(6, 47)	5.66		
Prob> F		0.002		
Durbin-Watson d-statistic		1.963		

Source: Computation from field survey data, 2020

Note: * significance at the 5% probability level

Effect of the income women earn on the amount they contribute to the household

As shown in table 4, the money women earn from their productive activities has a positive coefficient of 0.167 and P > |t| of 0.000. This indicates that the income women earn has a positive significant relationship with the amount they contribute to the household and vice versa, *ceteris paribus*. That is to say that, a woman in EKELGA contributes ₦0.17 from every naira (₦) she earns, even though she is married to a husband who also earns an income. Women may be making these contributions probably due to the fact that, as explained by Afisi(2010) and Ahmed, Siwar and Idris (2011), the woman is often the backbone of the family in traditional Africa and the survival of the family depends to a great deal on the African woman.

Conclusion

This paper looked at the need for women to earn income and how they contribute part of that income to the household in offsetting expenditures in the home front. Several researchers have alluded to the fact that it is necessary for women to earn incomes, since they bear the brunt of the family, especially in the rural areas. Using primary data collected through a modified multistage random sampling procedure from 60 households in Ekeremor Local Government Area of Bayelsa State, Nigeria (EKELGA); where women were the respondents, descriptive and inferential data analysis were done to determine the socioeconomic features of households, different gender roles, average amount of income women contribute, effect of certain variables on the financial contributions of women, factors that affect women's contribution and problems caused by women's financial contribution to the household. Findings by this study established that most married women in EKELGA are young, have had at least one form of formal education, live in households averaging 6 persons and have been engaged in economic activities long enough to be able to make financial decisions of their own. It was revealed that, like in the traditional African society, men earn more, provides money for major expenditures, food, security and represent the family outside the home. While, women clean the house, cook, provide care for children and carry out maintenance works in the household, however, it is the

responsibility of both genders to care for extended family members. Even though, most of the women are married to husbands that work and earn incomes, majority of them (women) also work and earn incomes, independent of their husbands and contribute parts of that money to the household. Inferential data analysis, in the form of a multiple regression modelling indicates that the amount of money contributed by the woman had a positive significant relationship with the woman's income. Thus, the woman will increase her financial contributions to the household as her income increases and reduces her financial contributions to the household as her income decreases. In trying to alleviate rural poverty, it is only responsible to fashion out programmes that would enable women increase their income either from their primary or supplementary economic activities, with a view to increasing her financial contributions to the household, since it is clear that she bears the brunt of the household economy. Hence, empowering the woman is empowering the family.

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