WOMEN'S LIVELIHOOD CHOICE, AND BARGAINING POWER: A CASE OF FARM HOUSEHOLDS IN OGUN STATE, SOUTHWEST, NIGERIA

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Abstract

This study examines how women's participation in multiple income-generating activities influence their decision-making power; it is based on in-depth interviews of 366 rural women in Ogun State, Nigeria. Women's bargaining power was estimated using Principal Component Analysis, and the Herfindahl index was used to estimate their income diversification. Results found that women were better off than men in two decision-making domains, food purchases, and harvest use. Farm income explained 54.4% of women's income in total household income. 70.3% of women have low bargaining power. Their participation in multiple income portfolios results in higher level of bargaining power.

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1. Introduction

Globally, women shuffle work with family responsibilities, and the situation in Nigeria is no exception. Entering marriage at a young age and developing a family play an important role for job access among women and it is a more critical issue for those from rural households (World Bank, 2015). Enfield (2019) stated that, at the age of 20, 4% of men are married, compared to about 50% of women. Women miss out on labour market opportunities since early marriage is followed by early pregnancies and household responsibilities (Egwurube, 2016).

Compared to men, women are being hindered from accessing labour market opportunities of all kinds, and they are more likely to be engaged in the lower level of income-earning livelihood opportunities, such as farming and informal jobs/employment (World Bank, 2015). The proportion of women involved in farming-related activities holds them back in low-paid jobs (World Bank SCD, 2018). Ekerebi and Adeola (2017) highlighted the wide gap in the agricultural harvest value between women and men farmers in Nigeria and stated that the backbone of the agricultural sector is women, since they are more involved in a wide range of farming activities, accounting for 60-80% of all farm labour. However, despite these important roles, women are still limited in terms of access to productive resources and decision-making power over their farm plots (FAO, 2011). As regards farming activities, women are, in general, at a disadvantage (Yigremew, 2005) as they are confronted with limited access to labour markets and are paid lower wage rates than men.

Agriculture has failed to guarantee sustainable livelihood despite being the main source of income for farm households in Sub-Sahara African countries (Babatunde, 2013). Sub-Saharan African agricultural activities are characterised by small farm sizes, low output levels, and a high level of subsistence farming (Jirstrom *et al.,* 2011). This has means that farming cannot provide sustainable means of livelihood, making farm households adopt non-farming and off-farming livelihood coping strategies. Ajani and Igbokwe, (2013) further explained that for household food security and income to be sustainable, there is a need for diversified income portfolios among farm households. According to Ellis (2000), one of the survival strategies for these farmers has been to diversify their household income sources.

World Bank (2019) posited that Nigeria had a working-age population of 110 million and 85 million are active in the labour force of which 45.5% percent were female in 2017. There is a positive development in the participation of women in both formal and informal labour markets and this has been an increasing trend from 1990 to 2009 (Olowa and Adeoti 2014). Oluwagbemiga *et al.,* in 2016, found that the categories of women who are more likely to be empowered are those who are involved in work away from home, especially in a non-familial organization, having formal wage paid jobs, and full-time and permanent paid employment.

Despite the opportunities that paid employment provides, the participation of married women in paid jobs is controlled by men. However, studies conducted in India and Bangladesh found that a positive relationship exists between women's economic involvement and women's resistance against male control and efforts to renegotiate gender power relations (Kabeer 2000; Blomquist 2004). Generally, work outside the home leads to a change in the domestic power balance. The decision moves from norm-based decision-making to negotiated decision-making. Working women report jointness in decision-making rather than men being the sole decision-maker in household matters. Studies conducted in Bangladesh show that regardless of who controls the wages, women's involvement in outside work led to higher levels of savings, mobility, and surprisingly lower levels of domestic violence (Kabeer 2008). The type of work women engage in plays a key role in their overall welfare. Kabeer's (2008) study on Bangladeshi found that women who worked in the formal sector and/or were involved in the productive sector, had more control over household expenditure, were most likely to buy assets, save money, and experience a higher level of mobility and, hence, were more empowered. Egwurube, (2016) defines "women empowerment in the context of Nigeria as the relative ease with which women have access to decision-making roles and can use available legal, social, economic, and political capital to make decisions that affect their own and other people's lives around them".

The 5th Sustainable Development Goals (SDGs) highlighted the mechanism for addressing the gender needs of women and any gender imbalances through women empowerment. Visvanathan *et al.,* (2011) stated that connected to this women empowerment position are intra-household power relations between women and men. Women's rights have also been improved recently through gender equality-oriented programmes and patriarchal structures have to some extent been altered. Studies have been focused particularly on how an increase in women's economic resources leads to greater involvement in household decision-making (Doss, 2013; Buvinic and Furst-Nichols, 2016; Duflo, 2003).

Doss and Senauer (1994), emphasised that increased women's income opportunities improve their bargaining power within households. Women's involvement in paid employment provides an avenue for exiting poverty and for general welfare improvement (Gibb, 2006; Hinton *et al.*, 2003; Yakovleva, 2007). Buvinic and Furst-Nichols, (2016) stated that income is the principal factor leading to increased women's bargaining power, particularly through paid employment and livelihood opportunities that generate income, which eventually empowers women socio-economically.

There are developmental policy and social interventions that provide access to women to capital and training and, thus, change gender disparity in decision-making within the household (Buvinic and Furst-Nichols, 2016; Attanasio and Lechene,

2002). The reason has been that higher economic power often results in greater women's bargaining power, hence, allowing women to improve the allocation of resources in their favour (Antman, 2014). Consequently, the decision of women to be involved in multiple income portfolios provides them with more opportunities to make decisions they previously could not make and to contribute to resource allocation within the household. Current literature has found that, besides income, there are other drivers behind women's bargaining power with their husbands, such as education and pre-marital women's assets (Doss, 2013; De la Briere *et al.*, 2003; Sen, 1990).

Studies in sub-Saharan Africa on income-earning activities of women and their effects have been examined within the agricultural sector, given that most women were employed in the sector in many developing countries (Doss, 2018; Bernard *et al.*, 2020). Therefore, gender inclusion in agricultural policy interventions has been viewed as a means of increasing agricultural productivity and, therefore, the bargaining power of women within households.

World Bank, (2006) opined that "the promotion of empowerment of women and gender equality is 'smart economics'". Therefore, it is important to evaluate rural economy changes from the perspective of gender equality. To understand the role played by women in developing economies, it is important to assess their livelihood outcomes, their control over resources, and their level of engagement in decision-making. Based on theoretical considerations, the objective of this study is to examine the effects of increased women's livelihood diversification on their decision-making power in Ogun State, Nigeria.

Following this introduction, this study briefly reflects on relevant literature. Based on the review, this study develops a theoretical framework on the effects of women's multiple income portfolios on their bargaining power levels. Then, this study describes the database and methods of data analysis applied, followed by the results and discussion.

2. Theoretical Framework of Bargaining Models of Household Decision-Making

Bargaining models of decision-making in households explain the mechanisms by which household resources are allocated between men and women and the results of such decision-making processes (Quisumbing, 2003; Thomas, 1990; Haddad *et al.*, 1997; Doss, 2013). Studies on intra-household resource allocations typically treat the family as if it operates as a single decision-maker whose members' preferences can be easily aggregated (Becker, 1981; Lundberg and Pollak, 1994). This theoretical perspective is referred to as the unitary model, according to which, one person or the couple makes all household decisions jointly and acts as both a consuming and producing unit whereupon incomes or resources are pooled by individuals (Bernard *et al.*, 2020; Safilios-Rothschild, 1988; Haddad *et al.*, 1997).

Unitary model assumptions have been challenged by some social scientists who rely on bargaining models to discuss how individual spousal preferences and their relative economic resources within households are as important in decision-making (Lundberg and Pollak, 1996; Haddad *et al.*, 1997; Bloemen, 2010; Manser and Brown, 1980; Chiappori, 1992). Following the rejection of the household unitary model, subsequent household models have been developed concerning decision-making and bargaining power comprising cooperative, non-cooperative and collective models.

Doss (2013) stated that the cooperative bargaining model employs "a game-theoretical household model in which bargaining power is a function of the outside options of the two bargaining individuals". However, cooperative bargaining models are assumed to achieve Pareto efficiency (Quisumbing, 2003; Udry, 1996; McElroy and Horney, 1981; Seiz, 1995; Manser and Brown, 1980). Individuals can enter into binding contracts in cooperative games with each other (Seiz, 1995). The processes of achieving cooperative game outcomes do not generally involve stating various individual strategic choices. The model, however, specifies which of the possible outcomes based on set criteria should be considered optimal (Seiz, 1995). Therefore, cooperative bargaining models, therefore, provide relevant discussion on how couples negotiate their bargaining outcomes.

Non-cooperative, household bargaining models, do not assume Pareto efficient outcomes (Doss, 1996a, 1996b, 2013; Quisumbing, 2003; Seiz, 1995; Lundberg and Pollak, 1994, 1996; Bernard *et al.*, 2020). These models assume that the players or individuals cannot 'communicate' (Seiz, 1995) or make binding and enforceable contracts or agreements (Lundberg and Pollak, 1993, 1994; Carter and Katz, 1997). There are many variations of these models, such as the one of separate spheres, that does not assume non-Pareto efficiency but, instead, tests for it (Lundberg and Pollak, 1993, 1994; Bernard *et al.*, 2020). Non-cooperative models focus on self-enforcing equilibrium, which may be Pareto optimal (Basu, 2006; Ligon, 2002).

The collective bargaining model, developed by Apps and Rees (1988) and Chiappori (1988, 1992), allows different preferences and only specifies that allocations are such that the outcomes are Pareto efficient (Lundberg and Pollak, 1996; Quisumbing, 2003; Doss, 2013). Under this model, a member within the household can only be made better off by making the other member worse off (Quisumbing, 2003; Doss, 2013). Collective household bargaining models are also referred to as Pareto efficient models since they are based only on the minimal assumption that outcomes of intra-household cooperation and conflict are Pareto efficient.

With over 85% of the farming population depending on agriculture, this sector is clearly crucial for Nigerian economy, providing livelihoods for people, especially in rural areas. The sustainable livelihood approach, by Scoones (1998), assumed that households are endowed with capital or a set of assets utilized to implement

different livelihood strategies and achieve livelihood outcomes. This general context is linked to the main agricultural development pathways, as discussed by Headey *et al.* (2011), i.e., that agricultural food production and income are generated through farm and non-farm activities. Finally, the likely outcomes of women's empowerment are added to the theoretical framework (Herforth and Harris, 2014).

These models provide a framework for how women's work and options for women's work affect their decision-making power within the household. Given that power relations between men and women are complex, it is crucial to understand the nuances of how these behavioural patterns and preferences shape livelihood choices and decision making (Agarwal, 1997).

3. Materials and Methods

3.1 Study Area

This paper was a study of rural communities across Agricultural development zones in Ogun state, Nigeria. The state comprised of four agricultural development zones under the Ogun State Agricultural Development Project (OGADEP), namely Abeokuta, Ikenne, Ilaro, and Ijebu-Ode.

3.2 Study Data and Sampling Techniques

The study made use of primary data collected through a cross-sectional survey of 366 farm households from Ogun State between July and October 2019. Specifically, our respondents were married rural women participants. The selection of the respondents was made using a multi-stage sampling procedure. Randomly, this study selected one (1) block from each of the four (4) zones followed by the selection of five (5) cells making 20 cells. However, 20 households in each of the selected cells make 400 farm households. After clearing the data from potential outlier observations, 366 farm households were used for this study.

3.3 Analytical Techniques

Data were analysed using both quantitative and descriptive techniques. The methods of the data analysis are discussed below:

3.3.1 Measuring Women's Bargaining power

To allow for all household members' participation in decision-making processes, the decision-making index was stated by Sariyey *et al.*, (2020), Sariyev *et al.* (2017), and Loos *et al.*, (2018). Principal Component Analysis was applied to generate an index that aggregates different domains of decision-making within a household. The domains were the most important aspects of household livelihood processes observed

by almost all households in the study area. The ten (10) domains, namely, (i) purchase of assets, (ii) purchase of food, (iii) type of crop cultivated, (iv) use of farm (harvest) produce, (v) income use from the crops, (vi) use of input, (vii) non-food purchases, (viii) livestock rearing, (ix) land use, and (x) agricultural technology adoption, were considered for this study. After the respective decision-making values were generated, weights were assigned to transform this set of correlated decision-making variables into one index (WPDMi).

Principal Component Analysis is a method of dimensionality-reduction often used to reduce large data sets, by transforming a large variable set into a smaller one that will still have most of the information contained in the large set. It, therefore, reduces a larger set of variables into a smaller set of 'artificial' variables, called 'principal components', accounting for most of the variance in the original variables. As used by Loss *et al.,* (2018) and Sariyev *et al.* (2020), the model is specified as:

$$\text{WPDM}_i = \frac{\sum FPDM_i}{PDM_i} \qquad (1)$$

FPDM$_i$ and *PDM$_i$* represent women's decision-maker(s) in the ith decision domain, women's participant, and any gender participant in decision-making in the ith decision domain.

3.3.2 Herfindahl–Hirschman Index: Measuring Women's Livelihood Diversification

Livelihood diversification measurements draw on two approaches. The first is a one-dimensional index derived from counting the number of income-generating activities as stated by Martin and Lorenzen, (2016); Avila-Foucat *et al.,* (2018); Yan *et al.,* (2010). The second is a two-dimensional approach that considers both the number of income-generating activities and their associated income share, such as the Inversed Herfindahl-Hirschman Index by Liu and Lan, (2015), Shannon-Weiner Diversity Index by Liao *et al.,* (2010), and Simpson Index by Johny *et al.,* (2017). Other measures are the Ogive index, the Entropy index, the Modified Entropy index, and the Composite Entropy index. This study used the Herfindahl–Hirschman Index due to its commonly accepted measure of livelihood diversification, as specified by Roy and Basu, (2020); Sharma and Singh, (2019); Adekunle and Shittu, (2014); and Idowu, (2011).

To determine women's livelihood diversification, this study ensured that women provide information on various income-generating activities (IHHI) members of their household engaged in during the 2018/2019 farming season and the income associated with these. The Herfindahl Index equation is specified as follows:

$$D = \left(\sum_{i=1}^{n} S_i^{\,2} \right)^{-1} \qquad (2)$$

D = Herfindahl-Hirschman Index (IHHI) capturing the extent of women's livelihood diversification

S_i = Income-share of source 'i' to total income and 'n' is the number of income sources for a household household's total income.

The Herfindahl–Hirschman Index ranges from 1/n to 1, where n is the number of income sources in the household. According to Sharma and Singh, (2019), the value of D that lies between 0.15 and 0.25 implies moderate diversification, while an HHI score above 0.25 indicates high diversification. However, Idowu, (2011) and Adekunle and Shittu (2014), stated the following levels of livelihood diversification: D=1 no diversification, i.e., only farming activity, (1<D<2) moderately diversified and (D≥ 2) highly diversified.

3.3.3 Tobit Model for the Effects of Women's Livelihood Diversification on their Bargaining Power

Evidence from the levels of women's participation in decision-making within the household, for index figures ranging between zero and one. Zero implying non-involvement, and 1 implying sole decision-maker- indicates that many declared little or no participation in decision-making, and a few that they were the main decision-maker. In econometric regression models, this challenge was addressed by the Tobit regression model (1958).

The Tobit model is a censored regression model applied to data cut off from above or below, indicating there is the likelihood of mass at some point or two points, while the rest is continuous in the data (Wooldridge, 2010). This specification is widely used in econometrics, as it fits many cases encountered with variables that are censored in nature. There is a variable "y', in this case, WPDMi, as the outcome variable describing the participation of women in decision-making, which takes the value of zero in many cases and is continuous over positive values. This implies that a probability mass is present at zero (Wooldridge, 2010). Therefore, because women's decision-making index has data with many zeros and is continuous over positive values, the Tobit regression model is used because it predicts non-negative values and non-constant partial effects.

Tobit model is specified as:

$$WPDMi = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \ldots\ldots\ldots\ldots\ldots + \beta_{11} X_{11} + e_i \qquad (3)$$

Where:

$WPDM_i$ = Women's decision-making index

X_1 = Age (years)
X_2 = Education (years of schooling)
X_3 = Main occupation (Farming =1, others =0)
X_4 =Value of assets owned before marriage
X_5 = Spousal education difference (years)
X_6 = Spousal age Difference (years)
X_7 = Household size
X_8 = Livelihood diversification (Yes =1, No =0)
X_9 = Older household members Present (Yes =1, No =0)
X_{10} = Marriage type (Polygamous =1, others=0)

4. Results and Discussion

4.1 Women's Socio-economic Characteristics of Respondents across Zones

The descriptive results of the women's socio-economic characteristics revealed a mean age of 47 years, implying that most rural women were in their productive years, still active to engage in multiple income portfolios. About 40% of them had formal education. On average, the household size was 5 persons, with mean household farm labour of 2, suggesting that 50% of household members were involved in farm activities.

Besides, 21.4% have access to credit and 20.3% own land, 20.1% reported they pool their income with their spouse, and 44% were Muslim. However, the main crop cultivated in the study area was cassava, followed by maize. This shows that cassava-based farm households dominated the study area.

Evidence regarding women's decision-making involvement within rural households revealed that they were worse off. However, they were better off in two (2) decision-making domains, namely, food purchases and harvest use. Meanwhile, on average, males' participation was seen more in decision domains such as the type of crops grown, purchases and sales of livestock, use of income from animals, use of land, income use from crop production, and purchases of an asset. It is, therefore, evident that, on average, women participate more in decisions regarding food purchases, while men are stronger/involved more in other household decisions.

4.2 Women's Livelihood Sources and their Associated Income

Empirical evidence from the study area suggested that rural women are indeed involved in multiple livelihood activities and, hence, they have diversified income portfolios. The various livelihood activities reported in the study area were categorized into the following two: (i) farm-based livelihood means, such as crop, and livestock production, and (ii) Non/off-farm livelihood, disaggregated into five (5) income earning activities, such as self-employed enterprises, e.g., processing, arti-

sanship, petty trading, and aggregating agricultural commodities, and engagement in paid waged labour. Table 2 shows the distribution of women's livelihood activities and the associated income. Farming contributed 56.9% of the income generated by women while non-farm income accounted for 43.1%. This implies that despite women's involvement in other income activities, women's income from farming contributed more to the household income. Therefore, farming is the dominant occupation of rural women in the study area.

Table 1. Socio-Economic Characteristics of Women Respondents across Zones in Ogun State

	Zones				
Characteristics	**Abeokuta**	**Ilaro**	**Ikenne**	**Ijebu-Ode**	**Mean**
Women's Mean Age	50.16	47.82	46.12	45.11	46.65
% of formally educated	41.14	38.62	40.51	43.16	40.08
Mean Household Size	6	5	6	4	5
Mean Family Labour	3	2	2	3	2
% of women with Access to credit	32.21	20.21	27.94	22.7	21.44
% Land ownership	29.03	24.11	16.92	20.2	20.31
% Income Pool with spouse	26.22	19.93	24.01	18.3	20.11
Major Crop planted					
Cassava	63.41	66.72	72.81	68.26	66.52
Maize	33.16	31.11	34.61	36.11	32.37
Yam	21.86	23.17	22.64	24.22	22.63
Fruits/Vegetables	8.35	7.90	6.01	6.6	6.16
Others	4.04	3.21	3.72	3.1	3.13
Women's Decision-making Participation					
Household asset purchases	0.46	0.41	0.46	0.43	0.44
Agricultural asset purchases	0.43	0.38	0.46	0.42	0.41
Purchases and sales of livestock	0.45	0.45	0.42	0.43	0.44
Crop grown	0.42	0.44	0.46	0.44	0.42
Food purchases	0.55	0.53	0.50	0.51	0.52
Harvest use	0.51	0.50	0.53	0.50	0.51
Usage of Livestock income	0.48	0.40	0.44	0.42	0.44
Usage of crop income	0.44	0.42	0.40	0.41	0.42
Input usage	0.49	0.48	0.50	0.45	0.48
Land usage	0.50	0.45	0.42	0.41	0.47

Source: Field Survey, 2019

Table 2. Distribution of Women's Income Sources

Income Sources	Frequency	Percentage	Annual Income (Mean ₦)	% Share of Income
Farming	199	54.4	155,780.0	56.9
Artisan	103	28.1	53,080.4	19.4
Trading/Marketing	178	48.6	49,055.1	17.9
Other Sources	155	42.3	15,845.4	5.8
All Sources	366	100.00	273,760.9	100

Field Survey, 2019. 1$ = N365 at the survey time

4.3 Level of Women's Livelihood Diversification

Table 3 shows the level of women's livelihood diversification. The table below shows that 31.7% of the women's income-generating activities were not diversified. This implies that, despite the seasonal nature of farming, they did not see any need for themselves to engage in multiple income-generating activities to cope during the off-season period. However, 48.1% were moderately diversified and 20.2% highly diversified. Therefore, 68.3% of rural women have multiple income portfolios and a larger share of household income.

Table 3. Level of Women's Livelihood Diversification

Level	Frequency	Percent
Non-diversified	116	31.7
Moderately diversified	176	48.1
Highly diversified	74	20.2

Source: Field Survey, 2019

4.4 Level of Women's Bargaining Power

Table 4 shows the distributions of women's bargaining power. Women's decision-making power index ranges from 0 to 1. From Table 4, it was clear that most (70.3%) of the index falls below 0.5, indicating a low level of bargaining power of women in the household. A mean score of 0.39 was estimated for women's bargaining power. Besides, 70.3% of women have a low bargaining power, while the remaining 29.7% have high bargaining power. These results suggest that women have a low household-decision power regarding welfare and productive decisions. Therefore, this study observes that women do lag behind in participation decision-making as far as household livelihood is concerned. It is important to mention that men were the main decision-makers in the household. Scholars' consensus on decision-making in the family is that there is an unequal power relationship between spouses within the family (Bammeke, 1999) and that men, being the household heads, act as main decision-makers, while men in compliance roles are friendly with their wife (Oyekanmi, 1999; Isiugo-Abanihe, 1996).

Table 4. Level of Women's Bargaining Power

Level	Frequency	Percentage
Low Bargaining Power	257	70.3
High Bargaining Power	109	29.7
Total	366	100.00

Source: Field Survey, 2019

4.5 Effects of Women's Livelihood Outcomes on Bargaining Power

Tobit regression results of the effects of livelihood diversification on women's bargaining power revealed that seven (7) out of the ten (10) variables examined had a significant effect on women's bargaining power. However, women's marriage type and their main occupation have no effect on their decision-making within the household.

Woman's age ($p<0.05$) at marriage positively influences their bargaining power. In other words, as a woman gets older, she gains more control over households' decision-making. The older they are at the time of marriage, the more empowered they are in participating in household decision-making.

Women's education has a positive effect on their bargaining power. Noureen and Khalid (2012) stated that one of the important factors influencing women's empowerment is education. In the same vein, Samari and Pebley (2015), Fatima (2013), and Zafar *et al.* (2005) concluded that education is one of the strongest drivers of women's empowerment.

However, spousal education difference is significant at a one percent negative coefficient. The spousal education difference exerted a negative influence on women's bargaining in their intra-household decision-making. This suggested that the higher the men's education, the lower the likelihood for their wives to get involved in the household's decision-making. Meier zu Selhausen (2016) found a similar result, i.e., that the wider the gap in education between spouses, the lower the women's ability to make decisions. Spousal age difference also exerts a negative influence on bargaining power.

Furthermore, women's livelihood diversification has a positive effects on their bargaining power. This study suggests that women's involvement in multiple income-earning activities does increase their bargaining power. This, therefore, demonstrates that women's ability to earn additional income provides an avenue for them to participate in household decision-making. The result is compatible with the statement that women's involvement in livelihood economics by earning income is an indicator of their bargaining power. However, their income from multiple income sources empowers them to influence their decision-making within the household. Doss (2013) positioned that the income earned by women is explicitly linked to their decision-making power.

The presence of elderly members of the household has a negative impact on the bargaining power of women. Perhaps the presence of older members, particularly mother-in-law, weakens the female spouse's decision-making role. On the contrary, the study by Bayudan-Dacuycuy (2013) suggests that a wife's bargaining power may be strengthened if there is the presence of a spouse's parents or older family members.

Table 5. Results of the Effects of Women's Livelihood Choices on Women's Bargaining Power

Variables	Coefficients	*t-ratio*
Age	0.412**	2.241
Education	0.304**	2.311
Main Occupation	-0.152	-1.037
Value of assets owned before marriage	0.618***	2.822
Spousal Education Difference	-0.276***	-3.162
Spousal Age Difference	-0.136**	-2.225
Household size	0.211	1.434
Livelihood diversification	0.562**	2.711
Presence of older household members	-0.116*	1.955
Marriage type	0.037	1.136
Constant	0.4141	1.93
Number of Observation	366	
Log-likelihood	-1141.02	
Pseudo R-squared	0.0712	

Field Survey, 2019

5. Conclusion

Through in-depth interviews with 366 rural women in Ogun State, Nigeria, this study examined the participation of women in multiple income portfolios and its effects on their decision-making within the households. Results showed that women do not combine their income with that of their husbands, since they are better off than men in two decision-making domains, namely, food purchases and harvest use out of the specified ten domains studied. Despite women's main involvement in farming activities, this did not provide them with an opportunity to be fully involved in decision-making within the households. However, despite men's dominance in farming activities, women keep working to generate an additional income to support themselves, and their immediate and extended families. Women's participation in multiple income-generating activities offers them an avenue to be economically empowered and, in turn, improves their decision-making in relation to that of their husbands. Hence, women's involvement in multiple income portfolios is not a mere trivial option but, rather, a coping strategy to reduce their vulnerability when faced with different livelihood shocks. Therefore, policy issues aimed at improving the bargaining power of women within households should focus on getting the women to engage in multiple income sources.

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