Empirical Study of Livelihood Assets of Rural Women across Two Vegetation Zones in South-Western Nigeria

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Abstract

Livelihood assets are basic resources through which individuals' livelihoods are being built. The study assessed the five core assets (physical, natural, social, financial and human assets) of rural women in South-Western, Nigeria. The study was designed to examine the access to assets, level of livelihood assets of rural women across two stratified vegetation zones. Multi-stage sampling technique was used to select rural women from two distinct vegetation zones namely the Derived Savannah Zone (DSZ) and the Coastal Vegetation Zone (CVZ). Primary data were collected with the aid of a structured interview schedule and analysed with descriptive statistics (frequency, percentages and means) and T-test analysis. The study revealed that women from both zones in DSZ (76.8%) and CVZ (76.6%) had low access to assets. The result of analysis also indicated that women from both zones had low access to the four assets measured in the study (though the degree varied from one asset to another). However, majority had high access to financial capital. It is concluded that the level of livelihood assets was generally low across the two stratified vegetation zones in the study area. It was recommended that rural credit institutions should be provided by government agencies. There is also a need for the provision of physical assets such as improved production and processing machines by governmental organisations and international agencies in order to improve the livelihood assets of the women in rural communities.

Keywords: Livelihood assets, Rural women, Sustainable livelihood.

Introduction

Rural women around the world play key roles in enhancing their livelihoods and communities in achieving security, food and nutrition, generating income, growing small businesses and overall well-being. They contribute in terms of livelihood pursuits such as food crop production, livestock rearing, crop processing, trading and artisanal activities. These activities contribute to the production of raw materials for export such as oil palm kernels and cassava tubers thereby contributing to the Gross Development Product of the nation in terms of foreign exchange earnings (UNDP, 2011). In many societies, women perform roles that are different from men.

Women perform statutory roles such as childbearing and caring, food preparation for the household and other home management services, yet they still engage in several livelihood activities in order to support their spouses with household needs (Adediran, 2008, FAO, 2009). Consequently, rural women are hardly recognised for their hard work, because her duties are not quantified in monetary terms. Yet, her hard labour in household chores, reproductive and caring roles, income generating activities is undervalued and not recognised (Laura, 2012, World Bank, 2003). Consequently, due to cultural limitations and lack of consideration for her roles at home, family, community and income generating activities, rural women are at a disadvantage in their access to livelihood assets. According to IFAD (2012), in order to enhance rural women's livelihoods and ensure sustainable livelihoods, a paramount issue such as access to assets, improved production and processing machines and social services should be critically emphasised.

Sustainable livelihood as a concept relates to a wide range of issues that surrounds the relationship between individuals', livelihoods and their environments. According to Scoones (2009), a livelihood that is sustainable is accomplished through access to a range of livelihood assets and also the ability to adopt several livelihood pursuits. Therefore, for a rural woman to attain sustainable livelihoods emphasis should be placed on individual's ability to pursue and have independent access to resources both basic materials and social resources that can be found within the individual's environment.

Livelihood assets are resources upon which individuals or households draw on to build their livelihoods (Overseas Development

Institute, 2001). These assets are categorised into tangible and intangible assets. Assets are not simply resources that individuals or households use in building livelihoods, instead these are resources that give the capability to be and act in livelihood pursuits. The term 'asset' in the sustainable livelihood framework connotes more than inputs into income creation because they impart livelihood pursuits and enhance sustainable livelihoods. (FAO, 2010; ODI, 2001).

Considering the sustainable livelihood framework, the terms 'capitals' and 'assets' are used interchangeably or alternatively, but primarily, the term 'capital' is used because most of the assets are invested in productive activities such as farming, fishing, livestock rearing, land lease, social networks and information use which yields a flow of benefits over a period of time. Livelihood is sustainable, when assets are available to support the livelihood. Livelihood can be achieved in many ways through access to various resources or capitals. People draw on the five types of capital to shape their livelihood portfolio. The asset types are related and may potentially be combined or substituted.

Furthermore, assets can be destroyed or created as a result of trends, shocks and seasonal changes based on the more vulnerable situations within which people live (UN, 2009). Those with more assets are more likely to have greater livelihood options with which to pursue their goals and reduce poverty.

Therefore, livelihood assets can reduce risk and increase access to services and reduce marginalisation especially among rural women. Furthermore, greater access to assets will improve rural women's livelihoods and strengthen their ability to ensure sustainable livelihoods.

According to DFID (2000), livelihood assets include the following:

Natural Capital

Natural capital consists of natural resource stocks (such as land, water, forest, rocks, copper, gold, minerals, environmental resources, biodiversity) which resources and services find useful for the livelihoods derived. These resources range from intangible public goods such as the atmosphere, biodiversity to tangible assets that can be divided and used directly for production such as land, trees, water bodies (Carney, 1998).

Natural capital is an important asset to individuals (such as rural dwellers) who derive all or part of their livelihoods from natural resource-based activities (such as farming, fishing and gathering of forest resources). The availability of different types of natural assets (land, water, forest) are considered to have the same level of importance as the access, quality and various combinations of the natural assets at varying seasons of the year. This is essential for sustainable livelihood.

Physical Capital

Physical capital refers to basic infrastructures and producer of goods and means that are needed to assist people in pursuing their livelihoods (DFID, 2000, UNDP, 2010). These basic infrastructures are transport, shelter, energy, communication (such as good roads, railway, building, power supply, access to information) and producer goods (such as farm tools, processing equipment, tractors, farm machineries, generator and tree crops). These facilities are introduced so as to help people meet basic needs and to be more productive. Physical capital is a valuable livelihood asset that assists rural dwellers in improving their livelihood and also in poverty reduction (DFID, 2000).

Social Capital

These are social resources that people draw from in order to achieve livelihood pursuits. These include social networks such as formal or informal groups (DFID, 2011). In rural communities in Nigeria, examples of social groups include farmers' association (such as Women/females association), work exchange groups, (for example, informal work exchange group "aro"), religious groups, community based groups, market associations (such as rural women's groups, community/traders' union), cooperatives, societies and age-grade groups (Jibowo, 1992).

Social capital has a direct link with access to other types of livelihood assets (Lin et al. 2001). Through social capital mutual trust and reciprocity are built and maintained thus, ensuring a reduction in the cost of transaction (DFID, 2000). Also, through social capital, economic relations can be improved and this will help to increase people's financial capital (such as their level of income and rates of saving). For instance, the "esusu group" (informal credit and thrift system) or "ajo group" (informal savings and credit system) enables rural dweller's especially rural women

to have access to financial capital at their disposal in order to enhance their livelihood pursuit. Past studies have also shown that persons, households and communities with a higher access to social capital are wealthier (Lin et al. 2001, USAID, 2008). Social capital is also essential in improving the management of livelihood resources such as natural capital.

Financial Capital

Financial Capital refers to financial resources that people use to enhance their livelihood pursuits (DFID, 2011). These financial resources consists of stocks and inflows of money such as savings, money flows (cash or goods, wage payments, remittances) and access to formal and informal credits (such as banks, microfinance institutions, informal credit and savings, informal credit and thrift). Financial resources gotten through savings are most preferred because they are an independent source of income with no liabilities attached. Whereas, inflows of money from other sources such as pensions, transfers or remittances may not be regular and as such may not make meaningful contributions to rural dwellers livelihood plans or investments (DFID, 2000). According to ODI (2000), financial capital is the rural dweller's income that can be gotten through trading, goods and services produced, transfers to which one may be entitled or liable to such as pension payments, taxes, food relief and even assistance from relatives. Rural dweller's income (especially rural women) is usually measured as cash earnings from subsistence production and nonfarm earnings.

Human Capital

Human Capital refers to the skills, knowledge, ability to labour and good health that enable people to engage in different livelihood pursuits and also to achieve their livelihood objectives (DFID, 2000). Human Capital refers to the ability of people to work in terms of their education, health, skills and work experience. In the opinion of Carney (1998), household as a unit of analysis in human capital is a factor of the size and quality of the "household labour pool". The term, "Human Capital" can be described as the number of individuals or adults, within the household, their level of education and ability to labour. Households may be categorised in terms of their size and dependency ratio and also in terms of endowments such

as level of education or healthy adult labour. In rural communities, available household human capital will also be affected by migration.

Statement of the Problem

From a global perspective, increasing poverty level among rural women has become a phenomenon that cannot be overlooked. Despite an increase in the number of intervention programmes from international agencies and donors, the rate of access to assets by women in rural areas still have a low record (FAO, 2010).

Access to assets, such as natural assets, physical assets, social assets, financial assets are major factors in improving rural women's livelihoods. Studies have also shown that there is a strong link between the access to assets of the rural poor and their livelihoods (FAO, 2010, UNDP, 2010). Poor rural women also have the least access to basic needs such as food, health and education (World Bank, 2010). Yet crucially, these women are an important group for social economic development. From a sustainable livelihood perspective, secure access to resources is a key condition for rural dwellers to improve their livelihood pursuits and standard of living. Hence, investing in rural women can thus be a promising strategy to fighting poverty.

The ecological zones where the rural women are situated, also have a role to play in their access to asset in their various communities. Despite the numerous contributions that rural women play in improving their livelihoods, meeting their basic household needs in Nigeria, they still encounter a number of problems in meeting these basic needs and having access to assets. There is also little empirical research investigating the level of livelihood assets and their access to assets.

This paper examined the key issues among livelihood assets of rural women with a view to determining the implications to sustainable livelihoods in their communities.

Objectives of the Study

The specific objectives of the study are to:

- 1. describe the level of natural capital of rural women in the study area.
- 2. describe the level of physical capital of rural women in the study area.
- 3. describe the level of social capital of rural women in the study area.

- 4. describe the level of financial capital of rural women in the study
- 5. describe the level of human capital of rural women in the study area.
- determine the level of accessibility to livelihood assets of rural women across the two stratified vegetation zones in South-Western, Nigeria.

Research Questions

- I. What is the distribution of rural women by vegetation zone based on the natural capital?
- 2. What is the distribution of rural women by vegetation zone based on the physical capital?
- What is the distribution of rural women by vegetation zone based on the social capital?
- 4. What is the distribution of rural women by vegetation zone based on the financial capital?
- 5. What is the distribution of rural women by vegetation zone based on the human capital?
- 6. What is the distribution of rural women's level of livelihood assets by vegetation zones?

Hypothesis

I. There will be no significant difference in the level of livelihood assets of rural women across the two stratified vegetation zones in the study area.

Methodology

This study was carried out in South-Western, Nigeria. South-Western, Nigeria is divided into four distinct sub-ecological vegetation zones ranging from coastal swamp forest to western upland savannah region. Multi-stage sampling technique was used to sample respondents for the study. Firstly, two distinct vegetation zones: derived savannah zone and the coastal vegetation zone were selected from the region. The derived savannah comprises of woodland forest and savannah mosaic vegetation characteristics, while the coastal vegetation zone comprises of vegetation characteristics such as tropical rainforest and swamp mangrove forest in the coastal region. The coastal vegetation zone falls within the coastal

regions of Lagos and Ogun states, while the derived savannah zone can be found around Oyo and Osun states.

Secondly, twenty-one local government areas were selected for the study. Ten Local government areas were selected in the coastal vegetation zone and eleven local government areas in the derived savannah zone. Thirdly, ten percent of the total number of rural women registered under Women In Agriculture in the chosen LGAs were selected for the study. Finally, a total of 167 respondents in the Coastal Vegetation Zone (CVZ) and 151 respondents in the Derived Savannah Zone (DSZ) were selected for the study.

Both qualitative and quantitative methods were used in collecting data for the study. The qualitative tool (Focus Group Discussion) was used to elicit information from the respondents. Descriptive statistics such as frequency counts, percentages and tables were used to examine rural women's access to livelihood assets.

ODI (2001) states that capital assets are basic materials, social, tangible or intangible resources from where individuals draw to build up their livelihoods. Livelihood assets are made up of the natural, physical, social, financial and human assets.

Results

Research Question I: What is the distribution of rural women by vegetation zone based on natural capital?

Table I: Distribution of rural women by vegetation zone based on the level of natural Capital

Level of Natural Capital	Total Scores	Derived Savannah Zone (DSZ)	Coastal Vegetation Zone (CVZ)		
Low	181(56.8)	98(64.9)	83(49.4)		
High	137(43.2)	53(35.1)	84(50.6)		

Source: Field survey, 2012

Table I shows that majority (56.8%) of the respondents had low level of access to natural capital. This suggests that rural women's access to natural capital is low. This could be as a result of cultural norms that

^{*}Figures in parentheses are percentages

restrict women from gaining access to natural capital in their communities. The table further revealed that majority (64.9%) of the respondents in the Derived Savannah Zone (DSZ) had low access to natural capital, while 50.6% of the respondents in the Coastal Vegetation Zone (CVZ) had high access to natural capital in their rural communities. This implies that respondents in the Coastal Vegetation Zone have an edge over their counterparts in the Derived Savannah Zone. This may be due to environmental differences between the two stratified vegetation zones in terms of gender roles that are played in carrying out livelihood activities. For instance, in the DSZ, it is easier to clear land for farming, therefore land preparations and farming are carried out by the male counterparts and as a result, rural women are restricted from having access to natural capital (land) at such periods. On the other hand at the CVZ, it is more costly to clear land for farming. Therefore rural women have ready access to small portions of farmland in this region. This implies that majority of the rural women have low access to natural capital, due to low capacity to make the natural capital productive.

Research Question 2: What is the distribution of rural women by vegetation zone based on physical capital?

Table 2: Distribution of rural women by vegetation zone based on the level of physical capital.

Level of Physical Capital	Total Scores	Derived Savannah Zone (DSZ)	Coastal Vegetation Zone (CVZ)
Low	189(59.4)	87(57.6)	102(61.1)
High	129(40.6)	64(42.4)	65(38.9)

Source: Field survey, 2012

Table 2 revealed that 59.4% of the respondents had low access to physical capital. The result further reveals that across the vegetation zones in the Derived Savannah Zone (DSZ) and the Coastal Vegetation Zone (CVZ), majority of the respondents (57.6% and 61.1%) respectively have low access to physical capital. This result implies that rural women across the South-Western vegetation zone have low level of physical capital. This

^{*}Figures in parenthesis are percentages

suggests that rural women make use of locally made production and processing equipment that are available and affordable to them. The study showed that there is a need for improvement in the physical capital level of respondents through investments made by international agencies or governmental donors.

Research Question 3: What is the distribution of rural women by vegetation zone based on social capital?

Table 3: Distribution of rural women by vegetation zone based on the level of social capital.

Level of So Capital	ocial Total Scores	Derived Savannah Zone (DSZ)	Coastal Vegetation Zone (CVZ)
Low	179(56.3)	75(49.7)	104(62.3)
High	139(43.7)	76(50.3)	63(37.7)

Source: Field survey 2012

Table 3 also revealed that 56.3% of the respondents had low level of social capital across the two vegetation zones in South-Western, Nigeria. This suggests that rural women need to be mobilised into functional social groups that can be of benefit to them in several ways.

However, respondents' social capital level differs across the vegetation zones. Majority of the respondents (62.3%) in the coastal vegetation zone indicated a low level of social capital. This finding suggests that in terms of social capital rural women in the derived savannah zone may be engaged in well-established social groups than those in the coastal vegetation zone. Focus Group Discussion (FGD) was also employed to obtain qualitative data on why social capital level is low. The result of this study could be buttressed by discussants during FGDs, in the coastal vegetation zone where rural women seemed to view their points from an individualistic angle. This finding establishes that less cohesive group activities occur among rural women in the coastal vegetation zone. This implies that social capital among rural women in coastal areas is low. This finding is consistent with Ebitigha (2008) that social capital is low in

^{*}Figures in parentheses are percentages

riverine rural communities of Ondo State in South-Western part of Nigeria.

Research Question 4: What is the distribution of rural women by vegetation zone based on financial capital?

Table 4: Distribution of rural women by vegetation zone based on level of financial capital.

Level of financial capital		Derived Savannah Zone (DSZ)	Coastal Vegetation Zone (CVZ)
Low	129(40.6)	57(37.7)	72(43.1)
High	189(59,4)	94(62.3)	95(56.9)

Source: Field survey, 2012

Table 4 reveals that 59.4% of the respondents had a high level of access to sources of financial capital. The table further revealed a similar trend in the level of financial capital across the vegetation zones of derived savannah zone and the coastal vegetation zone, where majority of the respondents (62.3% and 56.9%) had high access to financial capital in their rural communities. This implies that many rural women have access to sources of financial capital, due to the existence of informal rural saving structures such as informal credit and savings 'ajo' (informal savings and credit system). The following FGD excerpt revealed major reasons why respondents had a high level of access to financial capital in their communities. Qualitative findings of this study revealed that, some young and middle-aged female discussants at Ikole-Ekiti and Ibiade LGAs under the DSZ and CVZ zones during FGDs explained thus:

"we feel more comfortable saving our money through the 'ajo' system of savings."

^{*}Figures in parentheses are percentages

Research Question 5: What is the distribution of rural women by vegetation zone based on human capital?

Table 5: Distribution of rural women based on the level of human capital.

Level of human capital	Total Scores	Derived Savannah Zone (DSZ)	Coastal Vegetation Zone (CVZ)		
Low	242(76.1)	115(76.2)	127(76.0)		
High	76(23.9)	36(23.8)	40(24.0)		

Source: Field survey, 2012.

Figures in parentheses are percentages.

Table 5 reveals that majority (76.1%) of the respondents had low level of human capital. The table further revealed a similar trend in the level of human capital across the vegetation zones of derived savannah zone and the coastal vegetation zone, where majority of the respondents (76.2% and 76.0%) had low access to human capital in their rural communities. This implies that a rural woman who is educated, has adequate knowledge and skills is more enlightened to better perform her livelihood pursuits and as a result attain optimum levels than her counterpart who is not educated.

This indicates that respondents' low access to quality human capital could impede their ability to increase their level of livelihood activities. This infers that the respondent's level of human capital lack adequate skills, knowledge and educational endowments in assisting the rural women attain optimum levels in their livelihood activities in the study area.

Research Question 6: What is the distribution of rural women's level of livelihood assets by vegetation zones?

Table 6: Distribution of rural women's level of livelihood assets by vegetation zones.

Level of livelihood assets	Total Scores	Derived Savannah Zone (DSZ)	Coastal Vegetation Zone (CVZ)	
Low	244(76.7)	116(76.8)	128(76.6)	
High	74(23.3)	35(23.2)	39(23.4)	

Source: Field survey, 2012.

Figures in parentheses are percentages.

Seventy-six point six percent (76.6%) of the respondents had low access to livelihood assets. The table further revealed a similar trend in the level of livelihood assets of respondents in the derived savannah zone and the coastal vegetation zone as majority (76.8% and 76.6%) had low level of livelihood assets in their rural communities. DFID (2000) stated that, access to capital assets is directly proportional to the level of livelihood activities. This implies that in order to improve the livelihood pursuits and standard of living of the rural women, there would be a need to increase the level of livelihood assets.

Hypothesis

There will be no significant difference in respondents' level of access to livelihood assets across the two stratified vegetation zones in the study area.

Table 7: T-test analysis showing difference in level of livelihood assets of respondents across the two stratified vegetation zones in study area.

Level of	N	Mean	Std.	Std	Mean	t-	Df	p-value
livelihood			dev.	error	difference	value		
assets								
Derived	151	27.58	18.61	1.52				
savannah								
zone					-2.48	-1.24	310.28	0.22
	167	30.06	17.23	1.33				
Coastal								
vegetation								
zone								

Source: Field survey, 2012.

Test of difference on table 7 shows that there was no significant difference in respondents' level of access to livelihood assets across the two stratified vegetation zones in the study area (t=-1.24, p>0.05). This implies that respondents' level of access to livelihood assets is not quite different across the derived savannah zone and the coastal vegetation zone in the study area. In addition, the result is consistent with earlier findings of the study on table 6 which revealed that respondents' in the two stratified zones had low levels of access to livelihood assets in their respective vegetation zones. This implies that rural women have limited access to livelihood assets and resources in their communities, thus resulting in unsustainable livelihoods.

Conclusion

The study revealed that majority (56.8%) had low access to natural capital; majority (59.4%) had low access to physical capital, while majority (56.3%) had low access to social capital and majority (76.1%) had low access to human capital. However, majority (59.4%) had high access to financial capital, which may be due to the ready access of the rural women to informal savings and credit system and informal credit and thrift system also know as 'ajo' and 'esusu' in their rural communities. Overall, the study revealed that majority (60.8%) had low access to livelihood assets in the rural communities in the study area.

Overall, respondents' level of livelihood assets were found to be low, which may be due to the low levels accessibility to these livelihood assets, resulting in limited control of natural, physical, social, financial and human assets by these rural women in their communities.

Recommendations

- I. There is a need for the provision of rural credit institutions by government agencies. It is necessary that rural savings institutions (such as Informal credit and savings 'ajo') be institutionalised, especially with reference to rural women so that they can also access soft loans from banks with their low income wage/savings and also at low interest rates.
- 2. There is a need for the provision of physical assets such as improved production and processing machines, vehicles by governmental organisations and international agencies in order to improve the livelihood assets of these rural women in their communities.

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