

Factors affecting Livelihood Diversification among Rural dwellers in Otukpo Local Government Area of Benue State, Nigeria

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Abstract: The study examined factors affecting livelihood diversification among rural dwellers in Otukpo Local Government Area, Benue State, Nigeria. Primary data obtained through the use of questionnaire administered to 160 respondents were used for the study. Data obtained were analyzed using descriptive statistics and multiple regression analysis. Result of the study revealed that 76.25% of the respondents were below 41 years of age, 58.75% were male, 40.00 % completed primary school and 57.50 % were married and have household size of between 1–5 persons respectively. About 39.23% were farmers while 6.15% were weavers and 58.75% earned above ₦15, 000 as income per month. Result of the livelihood abilities of the respondents revealed that 42.50% worked between 1-5 hours/day, 58.75% had indigenous training on their livelihood activities and 48.75 % have active family support of between 1-3 persons. Regression result revealed that, the coefficient for age, income, extension visit and household size were positive and significant at 1% level. Inadequate access to cultivable land, limited inclusion in political decision making and limited access to financial institutions were the major constraints faced by the respondents.

Keywords: Livelihood; diversification; family support; financial institutions; physical capital.

INTRODUCTION

Livelihood refers to what people do in order to make a living and the resources that provides them with the capability to build a satisfactory living [1]. It also consider the risks involved in managing their resources, the institutional and policy context that either helps or hinders them in pursuit of a viable or improved living. The livelihood concept according to Krantz [2] is based on a premise that a rural household has access to a minimum amount of resources base (crop farming, livestock rearing, off farm employment etc.) to improve its welfare. According to Ellis [3], a livelihood is made up of abilities, assets (stores, resources, claims and access) and activities necessary for a means of living. Activities are understood in the sense of individual and group activities that transform materials using abilities and resources to produce goods or services that can be exchanged especially for a price. Activities in the livelihood analysis include income generating (Agricultural and non-Agricultural) and non-income generating (religious, fun, relaxation) activities.

In Nigeria, most people are engaged in agricultural activities. The sector employs about two-third of the country's total labour force and provides a livelihood for about 90% of the rural population [4]. In the pioneering period of this nation up to the late 1960s, agriculture contributed more than 75% of the export

earnings. The average farm family produced surplus of many crops to feed themselves and even sell the excess [5]. The outlook suddenly changed with the discovery of oil in the 1970s. By the mid-1990s, Nigeria once an exporter of food and other cash crops became importer of food to meet its domestic demand [4].

Everyone recognizes today that farmer's problem is the nation's problem [6]. When agriculture lacks a solid business foundation, and cannot profitably sell its crops, the consequences are vital for the entire population [7]. Whereas agricultural production is constrained primarily by low potential of much land. It is also affected adversely by a range of socio-economic factors [6]. It is difficult for farmers to secure the credit and loans needed to purchase inputs. Markets are underdeveloped and often difficult to access. Access to appropriate extension advice is minimal, and institutional arrangement governing resources use is not functioning efficiently, to the detriment of local livelihood and the environment.

Despite the huge amount of oil revenue, poverty is still a challenge in the country, most especially in the rural areas. About 80% of the rural population lives below poverty line, social service and infrastructure are limited [8]. Department for International Development (DFID) [11] defined poverty

to be, not just a question of low income, but also include other dimensions such as bad health, illiteracy, lack of social services, as well as a state of vulnerability and feelings of powerlessness in general. The number of poor people in rural areas exceeds the capacity of agriculture to provide sustainable livelihood opportunities. Many most especially educated youths migrate to towns and cities in search of jobs and social amenities as a means of livelihood strategies in response to poverty in the rural areas [9]. These also have implications for agricultural and rural development, while there is potential for out-migration; urban centers cannot be assumed to be capable of providing adequate livelihood opportunities for all those unable to make a living in agriculture.

Rural non-farm activities: commercial motorcycle riding, motorcycle mechanic, vulcanizing, petroleum product hawking are rapidly becoming escape routes, as they absorb surplus labour in rural areas; offer more remunerative activities to supplement agricultural income and provides a means to cope or survive when farming fails. Under this circumstance farmers will have opportunities of practicing other business practices and increased their production. This will make them to stay in the rural areas to continue with their agricultural production. This study was therefore conducted to examine the factors affecting livelihood diversification among rural dwellers in Otukpo Local Government Area of Benue State, Nigeria. The specific objectives were to:

- i. describe socio-economic characteristics of the respondents in the study area,
- ii. identify livelihood activities engaged by the respondents,
- iii. identify the constraints faced by the respondents against livelihood diversification and;
- iv. ascertain the relationships between socio-economic characteristics and the livelihood activities participated by the respondents.

METHODOLOGY

The study was conducted in Otukpo Local Government Area of Benue State, Nigeria. The Local Government Area is one of twenty three (23) Local Government Areas of the State. It has a population of 290,457 people [10]. The area is known for commercial farming especially yam, rice, and soya beans production [11]. Eight out of the thirteen (13) wards were selected using random sampling technique. The list of the registered farmers of the wards selected was obtained from the Benue State Agricultural Development Agency (BENARDA) which was used as sampling frame. Based on the list, respondents were randomly selected proportionate to the number of registered farmers from each of the eight wards using Taro

Yamane's formula as adopted by Usman *et al.* [12]. The model is expressed as;

$$n = N/1+N (e)^2$$

Where;

n = number of respondents

N= Population of the study and

e = error

In all, a total of 180 respondents were randomly selected. However, out of the 180 questionnaires administered, 160 representing 88.9% were successfully retrieved and used for the study. Descriptive statistics was employed to analyze the socio-economic characteristic of the respondents, livelihood activities engaged by the respondents and constraints faced by respondents. Regression analysis was used to ascertain the relationship between socio-economic characteristics and the livelihood activities of the respondents. The model was explicitly stated as:

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + b_6X_6 + b_7X_7 + b_8X_8 + b_9X_9 + U$$

Where,

Y=Livelihood activities (proxy by the level of livelihood activities engaged by the respondents)

X₁= Extension contact (Number/year)

X₂ = Farmer's Age (years)

X₃= Sex(proxy by Male =1, Female = 0)

X₄= Income (Naira)

X₅= Household size (Number).

X₆= Access to credit (proxy by Yes =1, No = 0)

X₇ = Educational level (proxy by number of years spent in school)

b₁- 6 = Regression coefficients to be estimated

U = Stochastic error term

RESULTS AND DISCUSSION

Socio-economic characteristics of the Respondents

Table 1 shows that majority (76.3%) of the respondents were between the ages of 20-40 years old. This indicates that most of the respondents were in their productive ages (15 - 40 years) and can actively increase their livelihood status provided that factors that facilitate these are in place. The result corroborates with the findings of Oludipe [13] which states that majority of work force in the rural areas are between the ages of 20-40 years. About 59% of the respondents were male. This could be because male play different roles and responsibilities as head of families in most cases. This agrees with findings of Ebitigha [14] and Oludipe [13] who reported that male dominate the rural income generating activities in Nigeria. Majority of the respondents (57.50 %) were married.

Table 1: Socio-economic Characteristics of the Respondents (N= 160)

Variables	Frequency	Percentage (%)
Age (years)		
≤ 30	52	32.50
31-40	70	43.75
41-50	26	16.25
> 50	12	7.50
Gender		
Male	94	58.75
Female	66	41.25
Marital status		
Single	50	31.25
Married	92	57.50
Divorced	6	3.75
Widow/ Widower	12	7.50
Educational level		
Non-formal	10	6.25
Adult education	24	15.00
Primary	64	40.00
Secondary	40	25.00
Tertiary	22	13.75
Household size		
1-5	92	57.50
6 -10	58	36.25
11 -15	8	5.00
> 15	2	1.25
Average monthly income (₦)		
≤ 20000	66	41.25
20001-30000	42	26.25
30001-40000	30	18.75
> 40000	22	13.75
Extension contact/Annum		
Not at all	30	18.75
1-2	68	42.50
3-4	44	27.50
> 4	18	11.25

Source: Field survey, 2014

Result on Table 1 also shows that 6.25% had non-formal education while 78.75% had formal education (40.00% primary, 25.00% secondary and 13.75% had tertiary education). This shows that almost all respondents attended formal education. The large number of educated people in the study area will help in creating awareness and ensuring the judicious use of the resources. Education will also play a major role in increasing knowledge, skills and attitudes of persons. Ani [15] reported that education plays a significant role in skill acquisition and knowledge transfer, which enhances technology adoption and ability of the farmers to plan and take risks thereby bringing self-actualization and improved quality of life.

Household size distribution of the respondents reveals that 57.50% of the respondents have household

size of between 1-5 persons, only 1.25% of respondents have household size above 15 persons. Household size determine the availability of family labour, the larger the household size, the more human capital available to the family. Majority of respondents (58.75%) earned above ₦20, 000 as income per month. This couldbe as a result of diversificatiuon in their livelihood activities.About 43% of the respondents had 1-2 contacts with extension agents while only 18.75% had no contact with extension agents at all. The result indicated that there was fairly adequate extension coverage in the study area considering the percentage of respondents without extension visit. Bakari [16] reported that a well-coordinated extension programme delivered through highly skilled and dedicated agent is a vital tool in persuading farmers to accept modern method of production.

Livelihood Activities of the Respondents

Table 2 shows that 39.20% of the respondents were farmers, 21.53% were civil servant and 14.61% were traders. About 13% were transporters, while 6.15% weavers and 5.38% were blacksmith. Almost all of the respondents were occupied in more than one

activity so as to diversify their income. This may be family responsibilities that make the respondents to diversify to meet the demand of the family considering 68.75% those iscombined percentages of married, widowed and divorced respondents (Table 1).

Table 2: Livelihood Activities of the Respondents

Occupation	Frequency *	Percentage (%)
Crop Farmers	102	39.23
Civil servants	56	21.54
Traders	38	14.62
Transporters	34	13.08
Weaving	16	6.15
Blacksmith	14	5.38
Total	260	100

Source: Field survey, 2014

* Multiple responses exists

Livelihood Abilities of the Respondents

Table 3 reveals that 42.50% of the respondents worked for 6-11 hours/day and 53.75% worked for 4-6 days/week. About 43% have 1-10 years of experience, 48.75% have active family support between 1-3 persons, and 58.75% had indigenous training on their livelihood activities. It can be seen that 42.50% work for an average of 8.5 hours/day which is enough to sustain an individual. Working for 4-6 days/week may also be enough to sustain the respondents considering that majority (57.50%) have household size of between 1-5 persons which is not on the higher side. Similarly

having family support is very important most especially in rural setting were not everybody can afford hiring labour. Indigenous training may limit the capability of the respondents if compared with modern training. From Table 3, it can be seeing that 58.75% of the respondents had indigenous training. According to Ellis [3], livelihood ability does not only include physical labour, but also knowledge, trainings, support, skills and years of experience. It is thus expected that the higher the livelihood ability of an individual, the higher his/her activities.

Table 3: Distribution of respondents based on livelihood abilities (N= 160)

Variables	Frequency	Percentage (%)
Labor (hours/day)		
1-5	54	33.75
6-11	68	42.50
Above 11	38	23.75
Labor (days/week)		
1-3	54	33.75
4-6	86	53.75
>6	20	12.50
Years of experience		
1-10	68	42.50
11-20	44	27.50
21-30	30	18.75
> 30	18	11.25
Training		
Indigenous	94	58.75
Non-formal	40	25.00
Formal	26	16.25
Number of active family support		
1-3	78	48.75
4-6	50	31.25
>6	32	20.00

Source: Field survey, 2014

Constraints Faced by the Respondents

The distribution of respondents based on constraints as contained in Table 4 shows that 20% of the respondents complained of inadequate access to cultivable land. Cultivable land is the most important natural resources in rural areas and a key factor in determining the livelihood strategies of the rural poor, since agriculture remains the most dominant economic activity in the rural areas. About 19% of the respondents had limited access to educational institution (particularly technical and skill training schools). Education is very important for empowering youths most especially training skill acquisition. Also, limited political inclusion is also a problem to respondents in the study area and accounted for 17% of the

respondents which denied many the opportunities to participate in substantive decision making process that concerned them.

Limited access to financial institution is also a problem in the study area. About 16% complained of inadequate financial institution to provide banking service, credit facilities, loan etc. to the rural sector. Inadequate infrastructural base constituted about 16% of the constraints. Rural area is characterized by inadequate infrastructure such as roads, power supply, water supply and poor communication system. The rural poor are particular disadvantage to influence decision-making or acquire the resources to initiate infrastructural development themselves.

Table 4: Distribution of Respondents based on Constraints faced by the Respondents

Constraints	Frequency*	Percentage (%)
Inadequate access to cultivable land	120	18.99
Limited access to educational institution	118	18.67
Limited access to political inclusion	104	16.46
Unemployment	90	14.24
Limited access to financial institution	98	15.51
Inadequate infrastructural base	102	16.14
Total	632	100

Source: Field survey, 2014

* Multiple responses exists

Relationship between Socio-economic Characteristics and Livelihood Activities

The result shows that R^2 is 0.63, which means that 63% of the variation in livelihood activities was explained by the variables used in the model (table 5). The coefficient of extension contact (X_1) was significant at 1% level. This implies that increase in the number of extension visit to respondents, influences their livelihood activities. Extension visit brings about increase in productivity as well as specialization.

Income (X_4), household size (X_5) and access to credit (X_6) were found to be statistically significant at 1%. This means that increment in income, household size and access to credit may bring about diversification in the activities engaged by the respondents. Education (X_7) is significant at 5% level. This indicated that, the higher the level of respondent's education, the higher would be his livelihood activities. Education serves as a catalyst in the adoption of innovation.

Table 5: Relationship between Socio-economic Characteristics and Livelihood Activities of the Respondents

Variable	Coefficient	Standard error	T-value
Extension Contact (X_1)	6528.2	999.0	6.53*
Age (X_2)	-148.2	309.8	-0.48 ^{NS}
Gender (X_3)	4220.1	2670.7	1.58 ^{NS}
Income (X_4)	11257.6	1652.0	6.81*
Household size (X_5)	2410.4	635.9	3.79*
Access to credit (X_6)	1908.2	3096.5	3.07*
Education Level (X_7)	499.7	218.1	2.29**
Constant	6735.0		
R^2	0.63		
Adjusted R^2	0.61		
F-ratio	28.9		

Source: Field Survey, 2014

* = Significant at 1%, ** = Significant =at 5%, NS= Not significant

CONCLUSION

It was concluded from the findings of this study that majority of the respondents were male, married and attended formal education. All of the respondents were engaged in more than one livelihood activities, well experienced in their activities and had their training locally. About 39% of the respondents were engaged in crop farming and were constrained of cultivable land and access to financial institution.

The authors recommends that government should establish technical and vocational schools in the study area in order to develop entrepreneurship skills of the respondents, land use act should be amended to enable the rural poor have the opportunity of owning their land and microfinance banks should be established to develop banking habits in the rural areas.

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