

Analysis of Factors Affecting Rural Women in Family Farming in Benue State, Nigeria

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Abstract: *The survey was conducted to analyze factors affecting rural women in family farming in Benue state, Nigeria. Data were collected from a sample of one hundred and eighteen (118) respondents using questionnaire. Frequency, percentage, mean score and factor analysis were used for analyzing data collected for the study. Results indicate that the respondents obtained information mostly from informal sources which include friends (95.8%), relatives (95.8%), family members (93.2%), neighbours (77.1%), among others. Major factors affecting rural women in family farming as indicated by the respondents include poor road network (M=4.86), poor extension agent-farmer contact (M=4.64), high incidence of pests and disease infestation (M=4.58), inadequate transport facilities (M=4.57), unavailability of labor saving technologies (M=4.57), low prices of farm produce (M=4.49), among others. The study further shows that the respondents were highly affected by institutional, soil management, labour and training factors. The study recommends that the state government should ensure adequate provision of physical infrastructure such as good roads for easy transportation of farm produce and highlights the need for more female extension agents to be trained and employed so as to increase the number of extension workers available to rural women farmers.*

Keywords: *Factors, rural women, family, farming, Nigeria.*

1. INTRODUCTION

Rural women play important roles in agriculture and the rural society which is fundamental to agricultural and rural development in sub-Saharan Africa. Studies (Doss, 2002; Ani, 2004; Fontana, 2009) have also shown that rural women are usually disadvantaged in access to all factors of production and processing in spite of their involvement in farming generally (Ani, 2004). Yet as more men migrate to urban areas from rural areas, more women are left as household heads carrying out agricultural activities that provide basic needs for their families. It is documented that over 80% of rural women in sub-Saharan Africa including Nigeria are economically active in one agricultural activity or the other (Onyenechere, 2008). The rural women go beyond crop production to other agricultural aspects like fisheries, rabbitry, poultry as well as sheep and goat rearing (Ironkwe and Ekwe, 2005).

According to Lawanson (2008), rural women in Nigeria have worked side by side with men in family farming with some marked division of labor among them. The men performed the tedious tasks of felling trees, gathering and burning of bush and making ridges, while women were involved in planting of seeds particularly food crops, harvesting, transportation, processing and selling of farm products. Sharon (2008) noted that both women and men play critical roles in agriculture throughout the world, producing, processing and providing food for consumption. In all of these, the rural women play a pivotal role which is crucial to the overall success of efforts directed at agricultural development. The role that women play and their position in meeting the challenges of agricultural production and development are quite dominant and prominent.

Over the years, reports across different countries of the world including that of Nigeria gave credence of the productivity and capability of women in family farming in the society, state and national development in relation to their men folks. In several cases women were found to exhibit greater potentials than men and constitute the bulk of the world's food producers by predominating in the agricultural sector in terms of number and tasks performed (Food and Agriculture Organization (FAO), 2007).

Rural women suffer from the highest illiteracy rates and are the most vulnerable to poverty (Olawoye, 2000). They are often at a severe disadvantage when it comes to securing land tenure rights or owning land out rightly, owning livestock, accessing financial services, receiving the kind of extension services and resources that will increase their outputs (Olayide et al., 2001). The study answers these questions. What are sources of agricultural information for rural women in family farming? What are factors affecting rural women in family farming?

The specific objectives were to:

- i. identify sources of agricultural information for rural women in family farming; and
- ii. ascertain factors affecting rural women in family farming.

2. METHODOLOGY

The study was carried out in Benue State, Nigeria. The state is named after the Benue river and was formed from the former Plateau state in 1976. It has an estimated population of 4,253,641 people (National Population Census (NPC), 2006). Benue State is made up of the following major ethnic groups namely; Tiv, Idoma and Igede. Other tribes found in the state include Jukun, Nupe and Hausa. The major occupation of the inhabitants is farming. Crops grown in the state are millet, cassava, maize, yam, sweet potatoes, ground nut and cowpea. Fishing is mostly attributed to the Jukuns. The state has 23 Local Government Areas namely; Agatu, Ado, Apa, Buruku, Gboko, Guma, Gwer-west, Gwer-east, Katsina-ala, Konshisha, Kwande, Logo, Makurdi, Obi, Ogbadibo, Ohimini, Oju, Okpokwu, Otukpo, Tarka, Ukum, Ushongo and Vandeikya. Benue State comprises three (3) geopolitical zones namely; Zone A (Eastern zone), Zone B (Northern zone) and Zone C (Central zone). Zones A, B and C are also called Benue North East, Benue North West and Benue South, respectively. Map of the study area is shown in figure 1 below.

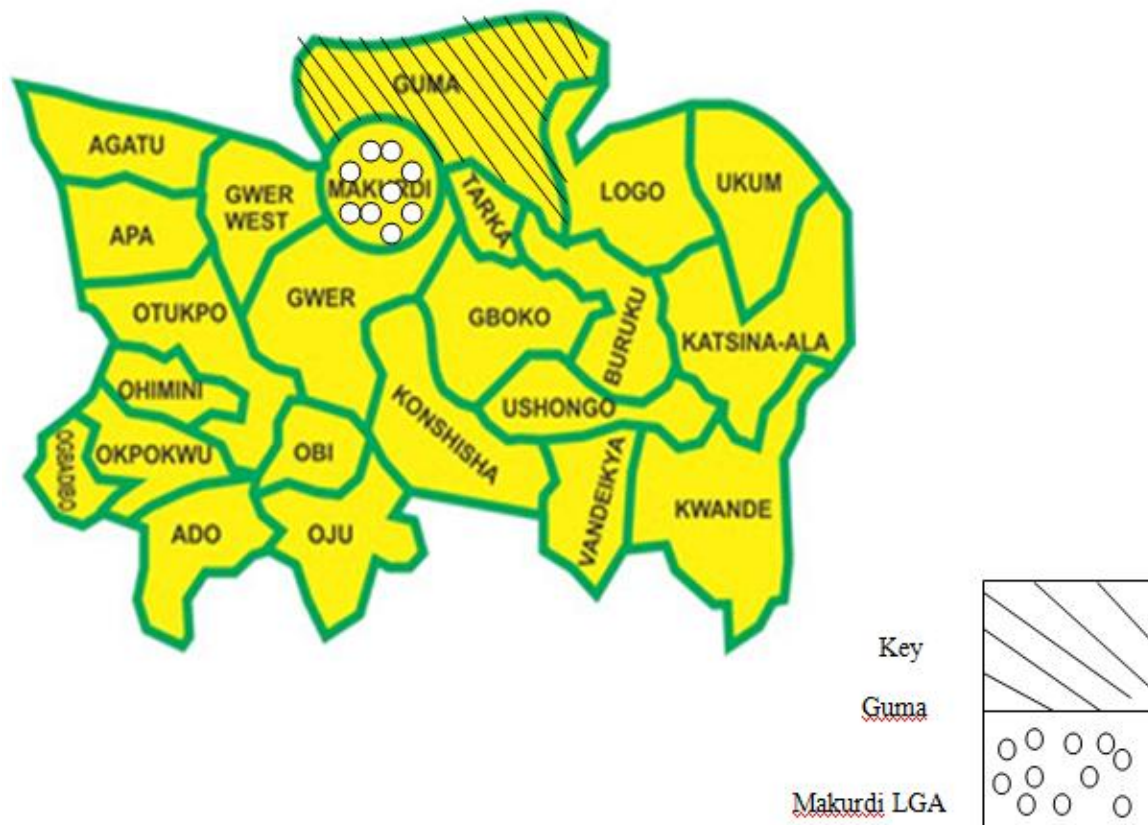


Figure 1. Map of Benue State showing the study area

The population of the study comprised all the rural women in zone B. Zone B is made up of seven Local Government Areas, namely; Buruku, Gboko, Guma, Gwer, Gwer-West, Tarka, and Makurdi. Two (2) Local Government Areas namely; Guma and Makurdi were selected from the 23 Local Government Areas using simple random sampling technique. Three (3) communities were selected randomly from each of the two (2) Local Government Areas using simple random sampling

technique. Twenty (20) rural women were randomly selected from each of the six (6) communities, giving a total of one hundred and twenty (120) respondents used for the study.

Data for this study were collected from primary source using a well structured questionnaire. The questionnaire contained two sections (A - B). Section A talked about sources of agricultural information for rural women in family farming. Section B centered on factors affecting rural women in family farming. One hundred and twenty (120) copies of questionnaire were administered but one hundred and eighteen (118) were found analyzable due to wrong filling.

Objective one which considered sources of agricultural information for rural women in family farming was achieved by asking the respondents to indicate with a tick the sources of agricultural information available to them. This includes radio, television, newspapers, bulletin, family members, friends, relatives and neighbors.

Objective two focused on factors affecting rural women in family farming. This was achieved by asking the respondents to indicate factors affecting rural women in family farming such as poor road network, inadequate transport facilities, lack of credit facilities, inadequate supply of farm inputs such as seeds, fertilizer, etc, lack of social amenities such as schools, hospitals, etc, lack of access to modern agricultural technologies such combined harvesters, knap-sack sprayers; poor marketing information, inadequate marketing channels, scarcity of farm land using a five point Likert-type scale of "strongly agree (5)", "agree (4)" undecided (3) "disagree (2) and strongly disagree (1). The values were added to obtain 15 which was further divided by 5 to obtain a mean of 3.0. Any mean value that is equal or greater than 3.0 was regarded a major factor, while a mean score of less than 3.0 was regarded as a minor factor.

Descriptive statistics such as frequency, percentage and mean score, as well as inferential statistics such as factor analysis were used for analyzing data collected for the study.

3. RESULTS AND DISCUSSION

3.1. Sources of Agricultural Information for Rural Women in Family Farming

Sources of agricultural information available for rural women in family farming include friends (95.8%), relatives (95.8%), family members (93.2%), neighbors (77.1%), among others (Table 1). This implies that the respondents obtained agricultural information mostly from informal sources. This is in agreement with Anyanwu, Agwu and Umeweni (2002) who observed that women farmers receive farm information from non-professional interpersonal sources more often than from mediated and professional interpersonal sources. The use of non-professional interpersonal sources of information indicates high level of interactions among the rural women.

Table 1. *Distribution of respondents according to sources of agricultural information*

Sources of Agricultural Information*	Frequency	Percentage
Radio	53	44.9
Television	63	53.4
Newspapers	4	3.4
Bulletins	7	5.9
Family members	110	93.2
Friends	113	95.8
Relatives	113	95.8
Neighbors	91	77.1

**Multiple responses*

3.2. Factors Affecting Rural Women in Family Farming

Major factors affecting rural women in family farming as indicated by the respondents include poor road network (M=4.86), poor extension agent-farmer contact (M=4.64), high incidence of pests and disease infestation (M=4.58), inadequate transport facilities (M=4.57), unavailability of labor saving technologies (M=4.57), low prices of farm produce (M=4.49), lack of processing facilities (M=4.38), lack of collateral for securing loan (M=4.38), inadequate credit facility (M=4.36), inadequate supply of farm inputs such as seeds, fertilizer (M=4.31), inadequate provision of physical infrastructure such

as electricity, pipe borne water (M=4.30), poor market information (M=4.27) (Table 2). The finding is supported by Anyakoha and Mbanefoh (2002) who stated that where there is no motor able roads rural women trek very long distances and this weakens them gradually.

Table 2. Mean score of factors affecting rural women in family farming

Factors	Mean Score	Standard Deviation
Poor road network	4.86	0.47
Inadequate transportation facilities	4.57	0.59
Scarcity of farm land	2.32	1.27
Inadequate credit facilities	4.36	0.79
Inadequate supply of farm inputs such as fertilizer, seeds, agro-chemicals, etc.	4.31	0.62
Poor market information	4.27	0.85
Inadequate marketing channels	4.23	0.72
Inadequate provision of physical infrastructure such as electricity, pipe borne water, etc.	4.30	0.76
Unavailability of labour	2.97	1.11
Shortage of labour	2.92	1.13
Unavailability of labour saving technologies	4.57	0.82
Inadequate provision of social amenities such as hospitals	3.92	1.02
Poor extension agent-farmer contact	4.64	0.83
Inadequate training opportunities	4.36	0.70
Lack of collateral for securing loan facilities	4.38	0.75
Unfavorable government agricultural policies	4.19	0.92
Poor soil fertility	2.61	1.19
Lack of storage facilities	3.90	0.95
Lack of processing facilities	4.38	0.74
Lack of decision-making power	4.08	1.04
Poor yields of crops	2.72	1.24
High cost of improved varieties of crops	4.28	0.84
High cost of farm inputs such as seeds, fertilizer, etc.	4.38	0.76
Low prices of farm produce	4.49	0.65
High incidence of pests and diseases infestation	4.58	0.69

3.3. Analysis of Factors Affecting Rural Women in Family Farming

Table 3 shows analysis of factors affecting rural women in family farming. Based on the item loadings, factors 1, 2, 3 and 4 were named institutional, soil management, labour and training, respectively. These represent the major factors affecting rural women in family farming.

The factors which loaded high under institutional include lack of collateral for securing loan (0.77), high cost of farm inputs such as fertilizer, etc (0.76), lack of processing facilities (0.68) and inadequate credit facilities (0.63). Lack of collateral for securing loans as well as high cost of farm inputs limits productivity due to the fact that rural women are resource poor and cannot afford the cost of improved varieties of crops and farm inputs such as fertilizer, etc. This confirms Saito (2008) who stated that while both men and women smallholders lack sufficient access to agricultural resources, rural women generally have less access to resources than men.

Soil management factors include poor yield of crops (0.81), poor soil fertility (0.71) and scarcity of farm land (0.55). Poor yield of crops as well as poor soil fertility reduces the quality of crops produced and consequently reduces its market value.

Labour factors include unavailability of labour saving technologies (0.60), unavailability of labour (0.54) and shortage of labour (0.53). Lack of labour saving technologies and unavailability of labour limit the productivity of rural women in family farming. This is in agreement with Daudu (2009) who stated that rural women are engaged in wide range of laborious tasks in crop production but lacks labour saving technologies needed for production, processing and storage.

Training factors comprised poor extension agents-farmer contact (0.82), poor road network (0.77), inadequate supply of farm inputs such as seeds, fertilizer, etc (0.65), unfavorable government's agricultural policy (0.51), among others. Poor extension agents-farmer contact can prevent the rural women from obtaining information concerning improved agricultural practices.

Table 3. Analysis of factors affecting rural women in family farming

Factors	Factor 1 (institutional factors)	Factor 2 (soil management factors)	Factor 3 (labour factors)	Factor 4 (training factors)
Poor road network	0.118	-0.257	0.174	0.768
Inadequate transportation facility	0.029	-0.103	0.313	0.223
Scarcity of farm land	-0.357	0.548	-0.132	0.164
Inadequate credit facilities	0.630	-0.018	-0.234	-0.130
Inadequate supply of farm inputs such as fertilizer, seeds, agro-chemicals, etc.	0.050	-0.025	-0.096	0.647
Poor market information	0.264	0.214	0.087	0.364
Inadequate marketing channels	0.012	0.049	0.215	0.281
Inadequate provision of physical infrastructure such as electricity	0.080	-0.232	0.289	0.092
Unavailability of labour	-0.018	0.017	0.521	0.230
Shortage of labour	-0.056	0.280	0.529	0.245
Unavailability of labour saving technologies	0.393	-0.290	0.595	-0.234
Poor extension agent-farmer contact	0.216	-0.028	0.188	0.816
Inadequate training opportunities	0.393	-0.009	0.253	0.646
Lack of collateral for securing loan facilities	0.774	-0.087	-0.163	-0.270
Unfavourable government agricultural policies	0.068	-0.261	-0.049	0.510
Poor soil fertility	-0.089	0.709	0.053	0.110
Lack of storage facilities	-0.076	0.209	-0.458	0.317
Lack of processing facilities	0.681	-0.168	-0.323	0.296
Lack of decision-making power	-0.027	-0.188	-0.048	0.549
Poor yields of crops	0.060	0.807	0.098	0.015
High cost of farm inputs	0.765	-0.277	-0.294	-0.292
Low prices of farm produce	-0.011	-0.161	-0.143	0.231
High incidence of pests and diseases infestation	0.198	0.082	-0.386	0.289

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization

4. CONCLUSION AND RECOMMENDATIONS

Findings of the study indicate that the respondents obtained agricultural information mostly from informal sources such as friends, relatives, family members and neighbours. Major factors affecting rural women in family farming include poor road network, inadequate transport facilities, inadequate credit facilities, inadequate supply of farm inputs such as seeds, fertilizer, etc. The study further reveals that the respondents were highly affected by institutional, soil management, labour and training problems. The study recommends that the state government should ensure adequate provision of physical infrastructure such as good roads for easy transportation of farm produce. Good medical centers should be made available in rural areas in order to improve health care services of rural women in family farming. More female extension agents should be trained so as to increase the number of extension workers available to rural women farmers.

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