Asian Journal of Agricultural Extension, Economics & Sociology
9(1): 1-8, 2016; Article no.AJAEES.22803
ISSN: 2320-7027

SCIENCEDOMAIN *international*
www.sciencedomain.org

Role of Gender in Family Farming in Kabba/Bunu Local Government Area of Kogi State, Nigeria

C. M. Ekenta[1*], M. O. Akinola[2] and K. Usman[1]

[1]Department of Agricultural Extension and Management, Kabba College of Agriculture, Division of Agricultural Colleges, Ahmadu Bello University, Zaria, Nigeria.
[2]Department of Agricultural Economics and Rural Sociology, Ahmadu Bello University, Zaria, Nigeria.

Authors' contributions

This work was carried out in collaboration between all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJAEES/2016/22803
Editor(s):
(1) Rana Ozen Kutanis, Sakarya University, Esentepe Campus, Health Management Department, Turkey.
(2) Kwong Fai Andrew Lo, Agronomy and Soil Science, Chinese Culture University, Taipei, Taiwan.
Reviewers:
(1) Bergaoui Ridha, National Institute of Agronomy, Tunisia.
(2) Marian Amu-Mensah, Water Research Institute (WRI), Accra, Ghana.
(3) Anonymous, Field Crops Research Institute, Giza, Egypt.
Complete Peer review History: http://sciencedomain.org/review-history/12605

Original Research Article

Received 28th October 2015
Accepted 27th November 2015
Published 9th December 2015

ABSTRACT

Family farming is one of the most predominant forms of agriculture world- wide and plays significant role in household food security. The roles of men and women in the household are very important in sustaining family farming. The study examined the role of gender in family farming in Kabba/Bunu Local government Area of Kogi State with the objectives to identify family farm activities by gender; identify the socioeconomic benefits of family farming; identify the socioeconomic costs of family farming on gender and identify the constraints to family farming in the study area. The study was carried out in Kabba/Bunu Local Government Area from February to August, 2015. Simple random sampling technique was used to select 120 respondents (men and women) from the three districts in the Local Government Area. Primary data was generated through the administration of structured questionnaire. Descriptive statistics was used to achieve objectives one, two and four while 4-scale ranking methods was used to achieve objective three. The major findings indicates that 87% of men were more involved in bush clearing while 92% of

**Corresponding author: E-mail: cmcekenta@yahoo.com, cmcekenta@gmail.com;*

women were involved in processing; increased household food (95%) was the major benefit of family farming; increased workload on the household members was the major socioeconomic cost of family farming on gender while rural-urban migration was the major constraint to family farming in the study area. It was recommended Governments at all levels should provide conducive environment in the rural areas with basic social amenities so as reduce the level of rural-urban migration especially among youths and government at the local level should grant credit facilities and agricultural loans to farm family at low interest rate.

Keywords: Gender relation; family farming; Kabba/Bunu; Kogi.

1. INTRODUCTION

The family farm is the nearest and easiest source of food, income and employment for the family members especially in rural societies. A family farm is a farm owned and operated by a family. Members of the household form the labour force for crop production. Like other family businesses and real estate, ownership often passes to the next generation by inheritance. Family farm features the production of agricultural commodities, increased food, creation of income, managed by the household head and has a substantial amount of labour provided by the household and family members.

A family consists of men and women (young and old) who leave in a household and whose relationship and interaction specifies roles and responsibilities in family farming. Based on this premise, gender roles is important to be considered in family farming. Gender focuses on the different roles and responsibilities of women and men and how these affect society, culture, the economy and politics [1]. [2] explained that gender deals with the social relationship between men and women and how these relationships are negotiated in the production of goods and services. Gender relations therefore manifests in the different roles, priorities, opportunities and limitations of males and females in a social setting. Roles and responsibilities of gender in family farms therefore are perceived to have positive influence on household food security.

According to World Bank [3], household food security is a year-round access to an adequate supply of nutritious and safe food to meet the nutritional needs of all household members (men and women, boys and girls). Most often, family farms are operated at the peasant level in Nigeria. The roles of gender in the peasant level of farm operation are pertinent in improving food insecurity levels in the farm household. According to FAO [4], food insecurity underscores a situation where people at all times, do not have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life. The main goal of food security therefore, is for individuals to be able to obtain adequate food needed at all times, and to be able to utilize the food to meet the body's needs [5].

The World Bank [6] identified food availability, food accessibility, food affordability and food utilization as the pillars underpinning food security. The role of gender in family farms will ensure availability of labour which in turn will improve food production at the family level. Based on this background, this research is conducted with the aim of identifying the socioeconomic characteristics of the farmers by gender, identifying family farm activities by gender in the study area; examine the socioeconomic benefits of family farming in the study area; examine the socioeconomic cost of family farming on gender in the study area and identifying the constraints to family farming in the study area.

2. MATERIALS AND METHODS

2.1 Study Area

The study was carried out in Kabba/Bunu local government area of Kogi state. The local government has common boundary with Ijumu, Lokoja, Adavi, Okehi and Mopa/Muro local government areas. The area has a land mass of 8, 154 m^2 and a population of 145,446 [7]. The area is within the Guinea Savannah zone with thick forest and experience the wet and dry seasons. The wet begins from April and ends in October while the dry season is between November and March.

The annual temperature varies between 27℃ and 37℃ with relative humidity between 30% and 40% in January and rising between 70% and 80% in July to august. The soil in the study area

is predominantly sandy loam in texture. The major crops cultivated in the area are maize, cassava, yam, mango, pawpaw, citrus, oil palm, coffee, and guava.

2.2 Sampling Technique and Sample Size

Simple random sampling was used to select respondents from the three districts in the local government area; Kabba, Bunu and Ikowa Opa. From each district 20 male farmers (representing 20 households) and 20 female farmers (representing 20 households) were purposely sampled for the study. The researcher purposely selected equal number of men and women irrespective of their population that engage in family farming to ensure equal representation of men and women in the sampled respondents. A total of 120 respondents were sampled. Primary data were collected through interview schedule technique with the use of structured questionnaire.

2.3 Statistical Tools for Analysis

Descriptive statistics (tables, frequency and percentage) were used to satisfy objectives i, ii, and iv, while objective iii was achieved by ranking using 4-scale ranking methods as specified below.

1 - Mostly affected
2 – Moderately affected
3 – Less affected
4 – Not affected

3. RESULTS AND DISCUSSION

3.1 Socio-Economic Characteristics of Farmers in the Study Area by Gender

The respondents were given options for each of the socioeconomic characteristics to choose appropriately as they relate to them.

Table 1 show that more of the younger women from 20 – 39 years (71.66%) are more engaged in agricultural activities in the study area against the younger males (53.33%). This finding is in agreement with the finding of [8] that more of the younger females than the male were involved in agricultural production in Abia State, Nigeria. Contrary to these findings, [9] asserted that agriculture in Africa is dominated by the old people whom he explained lack enthusiasm and strength which results to their engaging in traditional subsistence cultivation which gives poor returns. On the other hand, [10] and [11] found that there is no significant difference between the age of the respondents and the level of agricultural production practices or activities. The educational level indicates that 56.25% of the female respondents had no formal education while 65.03% of the males had both secondary and tertiary education. The implication of this is that the males will be more innovative and receptive of new technology than the females. This finding agrees with [11] who found that level of education has significant influence on the level of adoption of agricultural production practices. This they explained implies that farmers with higher level of education are likely to fully adopt improved agricultural technology than those with low educational status. Further, about 58% of males and 73% of females had farm size of 1-5 acres while 75% of males and 25% of females inherited their land for farming. More so, 75% of males and about 53% of females had contact with extension agents once in a season. According to [12], agricultural extension is a mode by which the latest information is communicated to the farming community. Also [13] found that Extension service provision in the form of advice received, is a significant factor that explains whether farmers adopt fertilizer or improved seed, and the rate of use of these inputs.

3.2 Family Farm Activities by Gender in the Study Area

The respondents were asked to specify by ticking, the activities they predominantly undertake in the family farms. The responses are presented in the Table 1.

Table 2 shows that men were more involved in bush clearing (86.6%), seed selection (80) and land preparation/ridges (81.6%). On the other hand, women were actively involved in almost all the family farm activities in the study area. This implies that women in the study area are more actively involved in different farming activities than men. This finding is in line with the finding of [14] that women are actively involved in making of ridges, yam moulds, yam staking, weeding, fertilizer application, harvesting, processing, storage and marketing. [15] noted that women in Nigeria form an active and reserve labour force but rarely own the means of production. [16] and [17] agrees that much of the work is done by

women living in the rural areas; women who constitute more than one third of the total population in developing countries, and produce most of the food for domestic consumption which contribute to national agricultural output, maintenance of the environment and family food security [18].

3.3 Socioeconomic Benefits of Family Farming by Gender in the Study Area

Respondents were asked to specify by ticking the appropriate options on the benefits of family farming to them. Their responses are presented in Table 2.

Table 1. Socio-economic characteristics of farmers in the study area by gender

Characteristics	Male		Female	
	F (60)	%	F(60)	(%)
Age				
20-29	14	23.33	18	30
30-39	18	30	25	41.66
40-49	22	36.67	11	18.33
50-59	4	6.7	4	6.7
>59	2	3.33	2	3.3
Marital Status				
Single	20	33.33	14	23.33
Married	40	66.67	46	76.67
Level of education (Yrs)				
None formal education	6	10	21	56.25
Primary education	15	25	25	12.5
Secondary education	35	58.33	12	6.25
Tertiary education	4	6.7	2	3.33
Household size (No.)				
1-5	40	66.67	44	73.33
6-10	14	23.33	9	15
11-15	3	5	2	3.33
>16	3	5	5	8.33
Farm size (Acres)				
1-5	35	58.33	46	76.67
6-10	17	28.33	6	10
11-15	6	10	3	5
16-20	1	1.6	3	5
>21	1	1.6	2	3.33
Farming experience (Yrs)				
1-10	35	58.33	18	30
11-20	19	31.67	26	43.33
21-30	3	5	11	18.33
>30	3	5	5	8.33
Level of income (₦)				
50,000-99000	20	33.33	44	73.33
100,000-149000	34	56.67	5	8.33
150,000-199,000	4	6.7	4	6.67
> 200, 000	2	3.33	7	11.67
Land ownership				
Inheritance	45	75	15	25
Rent	6	10	24	40
Purchase	8	13.33	15	25
Lease	1	1.6	6	10
Extension contact				
Once a season	45	75	32	53.33
Twice a season	15	25	28	46.67
Thrice a season	0	0	0	0
>Thrice a season	0	0	0	

**Field survey data, 2015*

Table 2. Multiple responses on family farm activities by gender in the study area

Family farm activities	Male (N = 60)		Female (N = 60)	
	Frequency	%	Frequency	%
Bush Clearing	52	86.6	30	50
Seed selection	48	80	35	58.3
Land Preparation/Ridging	49	81.6	40	66.6
Planting	35	58.3	51	85
Weeding	15	25	56	93.3
Chemical Application	33	55	41	68.3
Harvesting	40	66.6	46	76.6
Processing	17	28.3	55	91.6
Storing	24	40	28	46.6
Transportation	37	61.6	40	66.6
Marketing	22	36.6	48	80

**Field survey data, 2015*

Table 3 indicates that the major socioeconomic benefits of family farming to men were increased household income (85%), improved social status (77%) and improved purchasing power (68%) while women benefited through increased household food (95%), employment opportunity (88%) and increased household income. Increased household food is major benefit of family farming to women. This benefit as reported by women shows that women in families' especially rural farm families are more enthusiastic in agriculture as a means of meeting the family food needs. This finding agrees with [19] who reported that the fight against hunger can be achieved by widespread adoption of the WIA packages by women since they are basically responsible for meeting family food needs.

3.4 Socioeconomic Cost of Family Farming on Gender in the Study Area

Respondents were asked to rank the socioeconomic costs of family farming to them as most affected, moderately affected, less affected and not affected. Their responses are presented in Table 3.

Table 4 shows that increased workload, limited time for educational activities and increased monotony of the activities are the costs of family farming on men. On the other hand, reduced time for personal leisure, increased workload and increased dependency on the household resources are the major costs on women. This finding confirms the findings of [19] which

Table 3. Multiple responses on the socioeconomic benefits of family farming by gender in the study area

Socioeconomic benefits	Males		Females	
	Frequency (N=60)	%	Frequency (N = 60)	%
Increased household income	51	85	49	81.6
Increased household food	40	66.6	57	95
Employment opportunity	32	53.3	53	88.3
Improved social status	46	76.6	33	55
Enhanced educational opportunity	30	50	29	48.3
Improved purchasing power	42	70	48	80
Improved social relations/networking	23	38.3	34	56.6
Enhanced self reliance	40	66.6	45	75
Enhanced family cohesion	29	48.3	33	55
Meeting household obligations	23	38.3	40	66.6
Improved access to social amenities	18	30	21	35

**Field survey data, 2015*

Table 4. Responses on the socioeconomic impacts of family farming on gender in the study area

Socioeconomic costs	Men	Women
Reduced time for personal leisure	2	4
Increased workload	3	4
Reduced time for social activities/networking	2	3
Limited time for educational activities	3	3
Limited time for other productive ventures	2	3
Increased dependence on the household resources	2	4
Reduced tendency to seek greener pastures	2	1
Increased monotony of the activities	3	1
Fatigue and increased aging	1	2

**Field survey data, 2015. 4 = most affected; 3 = moderately affected; 2 = less affected; 1 = not affected*

Table 5. Multiple responses on the constraints to family farming in the study area

Constraints	Frequency (N=120)	%
Rural – urban migration	112	93.3
Inadequate household capital	98	81.6
Inadequate credit facilities	84	82.3
Land ownership problem	80	66.6
Use of crude implements for farming	63	52.5
Search for white collar job	54	45
High cost of farm inputs	50	41.6
Ineffective extension services and coverage	48	40

**Field survey data, 2015*

indicates that the adoption of WIA programme had some socioeconomic costs on different gender groups of the family.

3.5 Constraints to Family Farming in the Study Area

From Table 5 above, the major constraints to family farming are rural-urban migration (93%), inadequate household capital (82%), inadequate credit facilities (82%) and land ownership problem (66.6%).

4. CONCLUSIONS

The following conclusions were made;

1. Women were more involved in various family farm activities than men in the study area. This was so because most men in the villages studied engaged in other works like carpentry, commercial bike riding, operating barbing saloon and other forms of small scale businesses.
   Increased household income and increased household food were the major socioeconomic benefits of family farming for men and women respectively in the study area.
2. Increased workload was the major socioeconomic impact of family farming on gender in the study area. This was so because both men and women who engage in family farming had other forms of responsibilities in the family and their immediate villages.
3. Rural-urban migration was the major constraint to family farming in the study area. This was so because the youth who contribute majorly as the labour force relocate to the urban areas in search of white collar jobs and other businesses that are more decent and quicker in bringing in income. This development leaves the villages studied with elderly people who less productive agriculturally as farming needs physical strength.
4. The extension service delivery level in the area is poor. This resulted in the low level of extension contact with the farmers. The situation will create gap in knowledge dissemination to the rural people in the villages studied.

5. RECOMMENDATION

Based on the conclusion, the following recommendations were made;

1. Government at all levels should provide conducive environment in the rural areas with basic social amenities and grant loan to the youths at low interest rate, so as reduce the level of rural-urban migration especially among youths.
2. Government at the local level should grant credit facilities and loans at low interest rate through the Bank of Agriculture to women in agriculture. This will encourage them to increase their agricultural activities which will improve food production and income for the family.
3. The State government should strengthen the extension service departments with more personnel to help in educating the youths on other areas of agriculture such as keeping poultry, fish pond and bee keeping which are decent agricultural avenues that spin money.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Ajani OIY. Gender dimensions of agriculture, poverty, nutrition and food security in Nigeria. Nigeria Strategy Support Program Background Paper No. NSSP 005, International Food Policy Research Institute; 2008.
2. Ironkwe AG. Gender Involvement in Yam Minisett Technology Development, Transfer and Utilization in South-East Agro-ecological Zone of Nigeria Ph.D Dissertation, Department of Rural Sociology and Extension. Michael Okpara University of Agriculture, Umudike, Umuahia, Abia State, Nigeria. 2011;186. Unpublished
3. World Bank. Gender in Agriculture Sourceboo. The World Bank, Food and Agriculture Organization, and International Fund for Agricultural Development. 2009;2.
4. FAO. Socio-Political and economic environment for food security, food and agriculture organization of the United Nations, World Food Summit. 1996;1(1.4)
5. Attah AW. Food security in Nigeria: The role of peasant farmers in Nigeria. African Research Review; An International Multidisciplinary Journal, Ethiopia. 2012;6(4). Serial No. 27: 173-190. Available:http://dx.doi.org/10.4314/afrrev.v6i4.12
6. World Bank. Strategy for Food and Nutrition Security. World Bank Report N0. 9040. Washington D.C; 1996.
7. NPC. (National Population Commission). National Population and Housing Census, National Population Commission Abuja; 2006.
8. Ironkwe AG. Gender involvement in REFILS for effective agricultural transformation in southeast agro-ecological zone of Nigeria. International Journal of Agriculture and Rural Development. 2013;16(2):1476-1485.
9. Gitau M. Challenges and issues faced by african youth in agriculture: Youth agro environmental initiative; 2011. Available:http://yagrein.blogspot.com/p/home.html (Retrieved on 30th November, 2014)
10. Ibitoye OO, Akinsorota AO, Meludu NT, Ibitoye BO. Factors affecting oil palm production in Ondo State of Nigeria. Journal of Agriculture and Social Research. 2011;11(2):97–105.
11. Anaglo JN, Boateng SD, Swanzy A, Felix KM. The influence of adoption of improved oil palm production practices on the livelihood assets of oil palm farmers in Kwaebibirem District of Ghana. Journal of Biology, Agriculture and Healthcare. 2014;4(1):88–94.
12. Ali A, Rahut, DB. Impact of agricultural extension services on technology adoption and crops yield: Empirical evidence from Pakistan. Asian Journal of Agriculture and Rural Development. 2013;3(11):801-812.
13. Ragasa C, Berhane G, Tadasse F, Taffesse AS. Effects of extension services on technology adoption and productivity among female and male farmers. Gender Differences in Access to Extension Services and Agricultural Productivity. Ethiopia Strategy Support Program II. ESSP Working Paper 49; 2013.
14. Ekenta CM, Mohammed AB, Afolabi KO. Gender analysis of land ownership structures and agricultural production in Imo State, Nigeria. Journal of Economics and Sustainable Development. 2012;3(9): 67–73. Available:www.iiste.org
15. Rahman SA. Gender differential in labour contribution and productivity in farm production: Empirical evidence from Kaduna State of Nigeria. Paper Presented

at the National Conference on Family held at New Theatre Complex. Benue State University, Makurdi, Nigeria. 1st-5th March; 2004.

16. Sulo T, Koech P, Chumo C, Chepng'eno W. Socioeconomic factors affecting the adoption of improved agricultural technologies among women in Marakwet County Kenya. Journal of Emerging Trends in Economics and Management Sciences. 2012;3(4):312-31.
17. Onyemobi FI. Towards agricultural revolution and rural development. In: Onyemobi FI, (editor) Women in Agriculture and Rural Development towards Agricultural Revolution in Nigeria. Enugu Nigeria: Falude Publishers; 2000.
18. Brown LR, Feldstein H, Haada L, Pena C, Quisumbing A. Women as producers, gatekeepers and shock absorbers. In: Per Pinstrup Anderson and Rajul Pandya Lorch (editors); The Unfinished Agenda - Perspectives on over coming Hunger, Poverty and Environmental Degradation. DFID Sustainable Livelihoods Guidance; 2001.
19. Odurukwe SN, Matthews-Njoku EC, Ejiogu-Okereke N. Impacts of Women-in-agriculture (WIA) Extension Programme on Women's Lives; Implications for Subsistence Agricultural Production of Women in Imo State, Nigeria. Livestock Research for Rural Development. 2006;2(18).

Peer-review history:
The peer review history for this paper can be accessed here:
http://sciencedomain.org/review-history/12605