Research Article

Analysis of Gender Contribution to Rural Household Food Supply (A Case Study of Askira/ Uba Local Government Area, Borno State)

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| ARTICLE INFO | ABSTRACT |
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| Article No.: 122412342 | The study was aimed at analysing Gender contribution to rural household food supply in Askira Uba Local Government Area of Borno state Nigeria. Primary data were obtained from a total of 77 respondents who were randomly selected for the study. Data collected were analysed using frequency counts, percentages, and T-test. From the analysis, it was observed that majority (38.5%) of the male respondents had household sizes of 10-19 persons whereas majority (79%) of the female respondents had household sizes of 1-9 persons. Among the male respondents, majority (74%) had farm sizes between 3.5-8.5 hectares while the majority (73.7%) of the females had farm size of 1.5-2.5 hectares. The analysis showed that there was no significant difference between household food contribution of men and women respondents. This indicated that the male respondents contributed equally with the female respondents in the study area. Lack of credit ranked as the major constraints for male respondents while access to land ranked as the major constraints for the female respondents. Based on the findings, it was recommended agricultural production inputs like land should be made more accessible to rural people. |
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INTRODUCTION

Household food security depends on adequate income and asset including land and other productive resources owned (IFPRI, 1995). Food production is not the sole responsibility of men alone as it is believed in some circle (Olawoye, 1996). Women more than men spend their income on food as reported by the World Bank (2008), thus improving household food security and nutrition and particularly the development of children. Many women in Nigeria derive their incomes from both farm and off-farm activities such as making mats, making pottery, trading and other activities thereby making their contribution to the welfare needs of their households. Although gender inequality hinders the chances of women having access to employment, education, decision making and so on, thereby affecting their household food security; women are seen at the home front bearing more than 90% of the production tasks to assure the well-being of the family and that of the society (Ajani, 2008).

Women have been found to control their family nutritional status through food preparation, processing of food products and through daily use of the available resources for determining of quantity and quality of food provision. Hence women contribute to enhancing their household nutrition status and in turn, contribute to reducing hunger and malnutrition. They are also significant in food production as up to 60% of food in Nigeria, is said to be produced by women, even though most of their contribution are hidden and often attributed to men (Maxwell, 1999; Hyder et al., 2005). The extent to which men and women in rural areas contribute to rural household food security has not been investigated in the study area. Indeed, studies with a gender perspective of contribution of food to household food security are few. This study therefore, seeks to analyse contribution of men and women to household food security in Askira/Uba local Government Area of Borno State.

METHODOLOGY

The study was carried out in Askira/Uba Local Government Area of Borno State, Nigeria. Primary data and secondary information sources were used. Primary data were obtained by the use of structured questionnaire. Where the respondents could not read or write in English, personnel interview schedules were used. Secondary data were obtained from published materials like journals, books and other relevant materials. The population targeted for the study were rural households in Askira/Uba local government area. Multi stage sampling technique was used to select the respondent sample. The first stage was the random selection of two (2) districts each from Askira and Uba out of Seven (7) districts. The second stage involved the random selection of two (2) villages from each district. The third stage involved systematic random selection of ten (10) household from each of the selected villages. A total of eighty (80) respondents were administered but only 77 were properly filled and returned.

Data for the study were analyzed using a set of statistical tools such as descriptive statistics, percentage and frequency tables. Descriptive statistics were used to analyze the socioeconomic characteristics of the respondents, areas of men and women’s contribution and constraints that affected men and women’s contribution to household food security. To compare the gender differential in household food security, independent t-test was used.

RESULTS AND DISCUSSION

Socio-Economic Characteristics of the respondents

The socio-economic characteristics of the respondents were examined with respect to the age, educational background, marital status, land ownership pattern, farm size, household size, primary occupation and sex of respondents. The analysis of the respondents in the Table 1 indicated that majority (53% and 84%) of the male and female respondents respectively fell within 20-49 years of age. This showed that the population was made up of predominantly averagely aged people who were expected to be agile and economically productive. This agrees with the finding of Rathman et al. (2002) who observed that 20-49 years age bracket was the economically active age and as such, will respond positively to any intervention aimed at improving their productive capacity.

Majority of the male respondents (38.5%) had no formal education while 61.5% of them had one level of education or the other indicating that majority of the respondents was literate with some level of formal education.

On the other hand 68.4% of the female respondents had one level of formal education or the other revealing that the female respondents were more literate than their male respondents. The education of women has implications for household food security as observed by Quisumbing and Meinzen-dick (2001) who asserted that increase in women’s education and improvements in women’s status over the past century have contributed to the reduction in the rate of child malnutrition. Furthermore, majority of the male respondents (66.7%) acquired land through inheritance compared to 34.2% of the female respondents who had access to inherited land for their agricultural production.

Despite the significant role women played in food production, they continue to have poor command over land ownership pattern in the study area. Women had to purchase land or receive land gifts from men to increase their ownership of land. According to Rahama (2009), even though it has been recognized that women play major role in food supply to households, they do not have the opportunity to own land as men do.
Farm size is a determinant of the access to credit and output obtainable *ceteris paribus*. The result showed that majority of the male respondents (74%) had farm sizes of 3.5 hectares and above while 73.7% of the female respondents had less than 3.0 hectares of land. This implies that the male respondents had more access to larger farm lands when compared to the female respondents.

In addition, most (74.4%) of the male respondents had household sizes of 10-19 persons and above whereas 79% of the female respondents had household sizes of 2-9 persons. The larger the household size the more family labour will be available for agricultural production.

| Table 1: Socio-economic characteristics of the respondents |
|----------------------------------------------------------|
| **Variables** | **MALE** | **Percentage** | **FEMALE** | **Percentage** |
| **Age**       | Frequency |          | Frequency |          |
| 20-29         | 1         | 3.0      | 2         | 5.3      |
| 30-39         | 6         | 15.0     | 10        | 26.3     |
| 40-49         | 14        | 36.0     | 20        | 52.6     |
| 50-59         | 7         | 18.0     | 3         | 7.9      |
| 60-69         | 11        | 28.0     | 3         | 7.9      |
| **Level of education** |          |          |          |          |
| No formal education | 15 | 38.5 | 12 | 31.6 |
| Qur'an education | 7 | 17.9 | 5 | 13.2 |
| Primary education | 2 | 5.1 | 4 | 10.5 |
| Secondary education | 9 | 23.1 | 8 | 21.0 |
| Tertiary education | 5 | 12.8 | 6 | 15.8 |
| Adult education | 1 | 2.6 | 3 | 7.9 |
| **Marital status** |          |          |          |          |
| Married | 39 | 100 | 32 | 84.2 |
| Divorced | - | - | 2 | 5.3 |
| Widowed | - | - | 4 | 10.5 |
| **Land ownership pattern** |          |          |          |          |
| Inherited | 26 | 66.7 | 13 | 34.2 |
| Hired | 3 | 7.7 | 1 | 2.6 |
| Gift | 1 | 2.6 | 5 | 13.2 |
| Family | 5 | 12.8 | 14 | 36.8 |
| Purchased | 4 | 10.3 | 5 | 13.2 |
| **Farm size (hectare)** |          |          |          |          |
| 1.5-2.5 | 10 | 26.0 | 28 | 73.7 |
| 3.5-4.5 | 14 | 36.0 | 10 | 26.3 |
| 5.5-6.5 | 13 | 33.0 | - | - |
| 7.5-8.5 | 2 | 5.0 | - | - |
| **Household size** |          |          |          |          |
| 0-9 | 10 | 25.6 | 30 | 79.0 |
| 10-19 | 15 | 38.5 | 8 | 21.0 |
| 20-29 | 10 | 25.7 | - | - |
| 30-39 | 4 | 10.2 | - | - |
| **Primary occupation** |          |          |          |          |
| Arable farming | 29 | 74.4 | 16 | 42.1 |
| Trading | 3 | 7.7 | 6 | 15.8 |
| Livestock rearing | 3 | 7.7 | 8 | 21.1 |
| Civil servant | 4 | 10.2 | 8 | 21.1 |
| Sex | 39 | 50.6 | 38 | 49.4 |

Source: Field survey, 2011

This implies that male respondents will have greater access to family labour at least cost more than the female respondents who had smaller family sizes. On the other hand, large household sizes also imply that more food will need to be contributed by men than women to meet the needs of their households.
male respondents and 84.2% of the female respondents were married. Among the unmarried women, 10.5% were widowed while 5.3% were divorced indicating that they had previously been married; most of these unmarried women were household heads who had households to provide food to. The marital status of women affects their contribution to household welfare. Khan Rana and Khan Tasnim (2007) observed in their study on informally employed women, their characteristics and contribution to household budget that, married women are contributing more to their household budget as compared to single women.

**Areas of Men and Women Contribution to Household Food Supply**

Table 2: Respondent’s contribution to household food supply

| Contribution                                | Male           |             | Female        |             |
|---------------------------------------------|----------------|-------------|---------------|-------------|
| I give money to Household members to buy food for the home | 8   | 20.5         | 6             | 15.8        |
| I buy food stuff for the households         | 12             | 30.8        | 16            | 42.1        |
| I buy meat or hunt for meat                 | 4              | 10.3        | 28            | 73.7        |
| Fish provision                              | 13             | 33.3        | 33            | 86.8        |
| Process farm produce for household consumption | 4   | 10.3        | 37            | 97.4        |
| Supply fuelwoods, kerosene and others       | 2              | 15.1        | 35            | 92.1        |
| Grow crops for household consumption        | 39             | 100         | 38            | 100         |
| Keep poultry                                | 21             | 53.8        | 8             | 21.1        |
| Keep livestock                              | 4              | 10.3        | 27            | 71.1        |
| Keep backyard farm                          | 9              | 20.1        | 18            | 47.4        |
| Condiments provision (oil, salt, pepper, Maggi) | 17             | 43.6        | 31            | 81.6        |

Source: Field survey, 2011  
* Multiple responses

Table 2 shows that more men (20.5%) than women (15.8%) gave money to their households for food but more women (42.1%) used their money to buy food stuff for the home than men (30.8%). This was probably because issues of direct food provision in households were a gender role assigned to women. Meat, fish and livestock were more often provided to households by women than men. This implies that much of the animal protein needs of households were better provided for by women than men with the exception of poultry which men provided more than women. Energy provision in households in the study area was almost totally the responsibility of women.

All the men and women were providers of grains like maize, groundnut, millet and cowpea which many of them cultivated for both subsistence and commerce. The processing of these farm produce was however the responsibility of women in most homes. More women (47.4) than men (20.1) kept backyard farms as sources of vegetables and other food condiments for household food consumption.

Majority of women (who were also usually responsible for soup preparations) sourced the needed complements like salt and oil for food provision in the home. Household domestic energy requirement was almost wholly provided by women (92.1%). The result shows that women were significant food providers in households in the study area. They were observed to play important roles in supplying animal proteins and vegetables to their households. This implies that

**Gender Differentials in Household Food Contribution**
From Table 3, mean contribution of men to household food (N1637.4/week) was higher than that of women (N1572.9/week) but the t-test showed that there was no statistically significant difference between the household contribution of males and females to household food supply. This implies that men and women's contribution to household food was equal. The least household contribution among men and women was N300/week while maximum individual contribution was higher for men (N6900/week) than women (N4250/week). This was probably because men had larger households than women. The lower family size among women compared with the fact that women's contribution was statistically equal to men's even though men had higher household sizes suggests that women provided more qualitative food to their households. This shows that women contribute very significantly, probably more than men, to household food security.

Factors constraining men and women’s contribution to household food supply

Table 4 indicated that male respondents ranked lack of credit facilities as their major constraints to meeting household food needs. Credit contributed to timely and adequate input supply. When credit is inadequate, it results in lower output and income as well as lower capacity to provide food to households by men. Meeting household needs becomes more difficult especially when there are many mouths to feed. On the other hand, females ranked lack of access to land as the major constraint they faced.

Table 4: Factors that constrain men and women’s contribution to household food supply

| Constraint                  | Male Frequency % | Male Percentage | Male Rank | Female Frequency % | Female Percentage | Female Rank |
|-----------------------------|------------------|-----------------|-----------|--------------------|-------------------|-------------|
| Lack of access to land      | 18               | 46.2            | 5th       | 36                 | 94.7              | 1st         |
| Lack of credit facilities   | 39               | 100             | 1st       | 19                 | 50.0              | 5th         |
| Pest and disease            | 11               | 28.2            | 7th       | 16                 | 42.1              | 7th         |
| Lack of off-farm employment | 24               | 61.5            | 2nd       | 17                 | 44.7              | 6th         |
| No storage facility         | 16               | 41.0            | 6th       | 26                 | 68.4              | 2nd         |
| Lack of input               | 20               | 51.3            | 4th       | 23                 | 60.5              | 3rd         |
| Large family size           | 22               | 56.4            | 3rd       | 21                 | 55.3              | 4th         |

Source: Field survey, 2011

Lack of access to land had a limiting effect on capacity to provide food to the family. The situation is worsened when family size is large.

Among the male respondents, lack of off-farm employment, large family sizes, inadequate farm inputs were among the top four constraints affecting over 50% of male respondents. These constraints militated against male respondents contributing more food to their households. On the side of the female respondents, beside poor accessibility to land, lack of access to storage facilities and farm inputs as well as large family sizes were among the top four constraints which affected about 50% of the female respondents’ capacity to provide their families with adequate food. The major constraints the women faced where as a result of low access to resources. Some of the top most constraints of women were among the least constraints of men as shown in Table 4. This indicated that male and female respondents faced similar constraints in different order of importance.

CONCLUSION AND RECOMMENDATION

The study showed that the women in the study were generally younger and more educated than their male counterparts although they had access to smaller farms than the men. In addition, most women were not opportune to own land. This was a limitation to food production, thus household food supply among women. More women than men engaged in alternative occupations including livestock keeping, trading and the civil service as means of income earning. Women also commonly kept livestock and backyard farms to help them contribute to household food security. The study further observed that on the whole, women
contributed as much as men to household food provision despite being constrained by limited access to agricultural production resources. Men were also constrained from providing more food by constraints like lack of secondary occupation and large family sizes.

From the findings of the study, there is need to improve household food provisions, rural people, especially women with more production resources for more agricultural productivity. Women also need the help of cooperatives and extension information for better processing techniques and storage facilities to preserve their output. Men on the other hand need to be taught family planning methods to control their family sizes.

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