

## Changes in Crop and Livestock Activities of Yoruba and Fulani Women in Saki-West Local Government Area of Oyo State, Nigeria

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**ABSTRACT** Over the years Fulani pastoralists migrate from the northern part of Nigeria to Southwestern part in search of pasture for their livestock. The interaction between the Fulani and Yoruba women might have resulted in changes in their socio-economic activities. Therefore, this study assessed changes in their crop and livestock activities. Purposive random sampling was used in selecting one hundred and forty respondents in Saki-West Local Government Area of Oyo-State, Nigeria. The study revealed that most of the respondents were between the ages of 46 – 57 years, married and had no formal education. Majority of the respondents now engaged in crop and livestock activities that are foreign to them with respect to their socio-cultural background. The crops now planted include yam, cassava, maize, guinea corn, cowpea, groundnut, melon, soybean, tomato, okra and millet. While their livestock activities include, rearing of cattle, sheep, goat, guinea fowl, duck, rabbit and chicken. Lack of access to credit facilities and extension services were rated as major constraints. Result of analysis shows that there is no significant difference in cropping and livestock activities of Yoruba and Fulani women, but significant difference exist in their constraints being faced. Therefore, for agricultural extension development to be sustainable there is need to recognize the effect of economic and social interactions emerging between the Fulani and Yoruba in the study area, in order to develop extension packages that will be of benefit to them, irrespective of their cultural background.

### INTRODUCTION

Migration of Fulani pastoralist from the northern part of Nigeria to southwestern part is an age long occurrence that has brought about socio-cultural and economic changes to the migrated Fulani's, especially the settled agro pastoralists as a result of their day to day interaction with the people of the area they migrated.

As stated by Mohammed (1990), large population of agro pastoralists from the drier areas of the northern part of the country settled in the hinterland of the derived savannah of Oyo State, where they engaged in some income generating activities that include crops and livestock production. While the nomadic Fulani's move from one place to another on a continuous basis, the agro pastoralist (settled or sedentary Fulani cattle herders) combine livestock activities with planting of some food crops such as cassava, yam, maize, sorghum, cowpea, groundnut and melon among others.

Past studies in Nigeria into crop and livestock tend to concentrate more on male within households as though they have complete control over resources and decision making in the production units. This is seldom, if ever, the

case in southwestern part of Nigeria. It is important that distinct economic spheres of men and women be recognized and their constraints be understood. Women generally play crucial roles in agricultural production across nations. According to FAO (1990) estimates, rural women constitute about 60% of the agricultural labour force. Spiro (1980) found that women are not involved in decision making process and play important roles in various agricultural practices. These include planting, harvesting, weeding, collection and processing of farm produce as well as marketing of the produce. According to Olawoye (1996) women do engaged in 3 to 5 activities to generate income as well as ensure household food security, while Okoruwa (1994) and Oyesola (2000) reported that migrated Fulani women in southwest Nigeria were found to engage in various agricultural practices and income generating activities. This development however, might be attributed to the interaction between the Fulani and the Yoruba women. Sequel to this interaction, exchange of social norms, values and culture between the two groups of women is inevitable.

Admittedly, like other marginalized groups such as the pastoralist, agro-pastoralist and

landless individuals, women in the past were not given corresponding consideration with respect to their inclusion in extension packages in spite of women enormous contribution to agricultural development in Nigeria. Therefore, in order to enhance the activities of both Yoruba and Fulani women in livestock and crop production in southwestern Nigeria, there might be the need for extension message that will be socially, culturally and economically inclusive.

This study therefore, seeks to examine if there had been changes in crop and livestock activities of the agro-pastoralist Fulani women and indigenous Yoruba women in Saki-West Local Government area of Oyo-State, due to their interactions, so as to develop locality specific and gender sensitive extension messages that will be sustainable. This was achieved through the following objectives:

1. To identify the personal characteristics of women in the study area.
2. To examine the crop and livestock activities of Fulani and Yoruba women in the study area.
3. To assess the reasons for engaging in these activities.
4. To determine the constraints being faced by these women in crop and livestock activities.

### METHODOLOGY

This study was carried out in Saki-West Local Government Area of Oyo State. Saki-West Local Government is one of the thirty-three (33) local government areas in Oyo State. It shares boundaries with Saki-East Local Government Area and Republic of Benin, and Atisbo Local Government Area.

The population is predominantly Yoruba with other ethnic groups such as Ibariba, Fulani, Hausa, Zomba, Tangita, Jugu, Gara, Idoma, Ibo, and Hausa among others.

Majority of the people in the study area engaged in farming, livestock rearing, processing and marketing of farm produce aside other non-farm income generating activities. The vegetation in the study area supports the production of both livestock and food crops.

**Population of the Study:** The target population of the study comprises the Yoruba and Fulani women who engaged in crop and livestock activities.

**Sampling Procedure and Sample Size:** Multistage sampling technique was used in

selecting one hundred and forty respondents from nine (9) purposively selected communities distributed across the local government, where both Fulani and Yoruba were both residing. Proportionate sampling technique was used to select seventy-five respondents from the Yoruba and sixty-five respondents from the Fulani's giving a total of One hundred and forty respondents for the study.

**Measurement of Variables:** The dependent variable for this study is livestock and crop activities. This was measured by presenting to respondents a list of various livestock and crop activities those women within agro pastoral household and Yoruba household does from literature. Respondents were also asked to indicate the livestock and crop they personally owned. Independent variables measured include purpose of involvement in crops and livestock production, constraints being faced in crops and livestock production and their socio-economic characteristics. Purpose of involvement in crops and livestock activities was measured on a 3-point scale of household consumption only, sale only, and for both household consumption and sale. Respondents were asked to list constraints being faced in crop and livestock activities and ranked them in order of severity. Socio-economic variables measured in this study include (age, marital status, level of education, and years of residency in the community).

**Data Analysis:** Descriptive and inferential statistics were used in analyzing the data collected. These include frequency count, mean, and percentages and t-test.

### RESULT AND DISCUSSION

#### Personal Characteristics of Respondents

Result of analysis on personal characteristics shows that majority (67.2%) of the respondents were between the ages of (46 – 57). The mean age of respondents is 53 years. The implication of this is that respondents in this study area were young adults who can actively be involved in agricultural production. The result also support past studies on youth migration to urban centre in search of white collar jobs, leaving behind the old and young adults to do the drudgery farm work. Eighty point seven percent of respondents were married. According to the Fulani respondents' majority of them were second wives

**Table 1: Distribution of personal characteristics of respondents**

| Personal Characteristics   | Yoruba |       | Fulani |       | Total |       |
|----------------------------|--------|-------|--------|-------|-------|-------|
|                            | Freq.  | %     | Freq.  | %     | Freq. | %     |
| (a) Age (year)             |        |       |        |       |       |       |
| 40 – 45                    | 12     | 16.0  | 13     | 20.0  | 25    | 17.9  |
| 46 – 51                    | 23     | 30.7  | 25     | 38.5  | 48    | 34.9  |
| 52 – 57                    | 26     | 34.7  | 20     | 30.8  | 46    | 32.9  |
| 58 – 63                    | 11     | 14.7  | 6      | 9.2   | 17    | 12.1  |
| 64 and above               | 3      | 2.6   | 1      | 1.5   | 3     | 2.1   |
| Total                      | 75     | 98.7  | 65     | 100.0 | 140   | 99.9  |
| (b) Marital Status         |        |       |        |       |       |       |
| Married                    | 56     | 74.7  | 57     | 87.7  | 113   | 80.7  |
| Widowed                    | 11     | 14.7  | 7      | 10.8  | 18    | 12.9  |
| Divorced                   | 8      | 10.6  | 1      | 1.5   | 9     | 6.4   |
| Total                      | 75     | 100.0 | 65     | 100.0 | 140   | 100.0 |
| (c) Educational Attainment |        |       |        |       |       |       |
| No Formal Education        | 65     | 86.7  | 52     | 80.0  | 117   | 83.0  |
| Adult Literacy             | 7      | 9.3   | 13     | 20.0  | 20    | 14.3  |
| Koranic Education          | 3      | 2.7   | -      | -     | 2     | 1.4   |
| Total                      | 75     | 98.7  | 65     | 100.0 | 140   | 99.3  |
| (d) Years of Residency     |        |       |        |       |       |       |
| < 6                        | -      | -     | 2      | 3.1   | 2     | 1.4   |
| 6 - 10                     | 10     | 13.3  | 24     | 36.9  | 34    | 24.3  |
| 11 – 15                    | 27     | 36.0  | 26     | 40.0  | 53    | 37.9  |
| 16 >                       | 38     | 50.7  | 13     | 20.0  | 51    | 36.4  |
| Total                      | 75     | 100.0 | 65     | 100.0 | 140   | 100.0 |

Source: Field Survey, 2005.  
Livestock Activities of Respondents

of their husbands, while majority of the Yoruba are the only wives of their husband. Also, majority (83.6%) of the respondents interviewed had no formal education, while only few (14.3%) participated in adult literacy class. This means that the literacy level of the target respondents should be taken into consideration when packaging extension message, as this will enhance the effectiveness of such messages and sustainability of extension services. Also, the result on table 1 shows that 50.7% of Yoruba and 76.0% of Fulani respondents had been residing in the study area for more than sixteen years. This observation is expected since Yorubas are the indigenous inhabitants of the study area. The number of years of residency could however be considered to have corresponding influence on the level of interaction and exchanges including agricultural practices between the Yoruba and Fulani women in the study area.

From literature traditionally, goats are reared by Yorubas in southwestern part and sheep by Fulani in the northern parts of Nigeria. Worth of note is the proportion of Yoruba women who are now rearing sheep and Fulani women who now rear goat. While both Yoruba and Fulani respondents keep chicken, yet it was gathered

that the Yoruba women do crossbreed their native chicken with that of the Fulani's, the reason being that the Fulani breeds are bigger and tolerant when compared to the Yoruba breeds.

All (100.0%) of the Fulani respondents were involved in processing of milk into cheese. Result of the analysis further shows that 13.3% of the Yoruba women reared cattle, which is more or less a foreign practice to Yoruba women (Table 2). Keeping of cattle is not culturally practiced among the Yoruba indigenes. The involvement of Yoruba women in such practices could be linked to their interaction with the Fulani who are traditionally cattle herders. Guinea fowl is another livestock that are not culturally reared by the

**Table 2: Distribution of livestock activities of respondents**

| Types of Livestock | Yoruba |      | Fulani |      |
|--------------------|--------|------|--------|------|
|                    | Freq.  | %    | Freq.  | %    |
| Sheep              | 63     | 84.0 | 45     | 60.2 |
| Goat               | 62     | 82.7 | 53     | 81.5 |
| Cattle             | 10     | 13.3 | 26     | 40.0 |
| Guinea Fowl        | 27     | 36.0 | 35     | 53.8 |
| Duck               | 20     | 26.7 | 19     | 29.2 |
| Chicken            | 40     | 53.3 | 51     | 78.5 |

Source: Field Survey, 2005.  
Multiple Responses.

Yorubas result of the analysis however indicated that 36.0% of Yoruba respondents reared guinea fowl; this again can be attributed to the co-existence with the Fulani herders.

### Crop Activities of Respondents

Table 3 shows that both Yoruba and Fulani respondents engaged in the cultivation of various crops in the study area. Majority (76.0%) and (70.8%) of Yoruba and Fulani respectively engaged in planting of melon, while 52.0% and 44.6% of Yoruba and Fulani respondents respectively cultivate cassava. Some respondents especially the Fulani's explained that some cropping activities they engaged in are culturally foreign to them and that their involvement in the

production of these crops born out of their long residence in the area. For instance, Fulani respondents explained that culturally, they were not widely involve in the cultivation of crops especially cassava, which after harvest is processed into cassava flour. Also, according to Yoruba respondents' millet is not planted in the area, their interaction with the Fulani actually enhanced their increasing involvement in the cultivation of sorghum and cowpea. Information was also gathered during the field study that the stalks of the harvested millet were being use for staking yam, while stalks too are also use to feed livestock being reared by respondents. Respondents give further explanation that their poultry like chicken, guinea fowl and duck do feed on crop residues. It can be deduce at this point that the co-existence and interaction between the Yoruba and Fulani women had contributed positively to the socio-economic activities of rural women in the study area. Such interaction should however be given adequate consideration in extension messages in order to enhance agricultural practices among rural women irrespective of their cultural background.

**Table 3: Distribution of crop activities of respondents**

| Types of Crops | Yoruba |      | Fulani |      |
|----------------|--------|------|--------|------|
|                | Freq.  | %    | Freq.  | %    |
| Cassava        | 39     | 52.0 | 29     | 44.6 |
| Yam            | 31     | 41.3 | 3      | 4.6  |
| Cowpea         | 5      | 6.7  | 4      | 6.2  |
| Millet         | 20     | 26.7 | 22     | 33.8 |
| Maize          | 28     | 37.3 | 24     | 36.0 |
| Groundnut      | 26     | 34.7 | 25     | 38.5 |
| Sheanut        | 17     | 22.7 | 19     | 29.2 |
| Melon          | 57     | 76.0 | 46     | 70.8 |

Multiple Response

Source: Field survey, 2005.

### Reasons for Engaging in Crops and Livestock Activities

The result of the analysis on table 4 shows that respondents engaged in livestock and crop

**Table 4: Distribution of respondents according to the reasons for engaging in livestock and crops activities.**

| Variables           | Yoruba                     |           |           | Fulani                     |                            |                            |
|---------------------|----------------------------|-----------|-----------|----------------------------|----------------------------|----------------------------|
|                     | Household Consumption/Sale | Sale only | Household | Household consumption/sale | Sale only Consumption/Sale | Household consumption/sale |
| <b>A. Livestock</b> |                            |           |           |                            |                            |                            |
| Sheep               | 32(42.7)                   | 27(36.0)  | 4(5.7)    | 29(44.6)                   | 18(27.7)                   | -                          |
| Goat                | 46(61.3)                   | 16(21.3)  | -         | 17(26.2)                   | 34(52.3)                   | -                          |
| Cattle              | 3(4.0)                     | 7(9.3)    | -         | 4(6.2)                     | 21(32.3)                   | 1(1.5)                     |
| Chicken             | 23(30.7)                   | 17(22.7)  | -         | 10(15.4)                   | 30(46.2)                   | 11(16.9)                   |
| Guinea Fowl         | 5(6.7)                     | 10(13.3)  | 1(1.4)    | 14(21.5)                   | 21(32.3)                   | -                          |
| Duck                | 85(6.7)                    | 8(10.7)   | 4(5.7)    | 6(9.2)                     | 9(13.8)                    | 4(6.2)                     |
| <b>B. Crops</b>     |                            |           |           |                            |                            |                            |
| Cassava             | 25(33.3)                   | 9(12.8)   | 5(6.7)    | 20(30.8)                   | 3(4.6)                     | 6(9.2)                     |
| Yam                 | 22(29.3)                   | 3(4.0)    | 12(16.0)  | 11(17.2)                   | 2(3.1)                     | 4(6.2)                     |
| Cowpea              | 6(8.0)                     | 2(2.7)    | 2(2.7)    | 3(4.6)                     | -                          | 1(1.5)                     |
| Groundnut           | 12 (6.0)                   | 5(6.7)    | 4(5.3)    | 9(13.8)                    | 3(4.6)                     | 6(9.2)                     |
| Maize               | 38(50.7)                   | -         | 7(9.3)    | 17(26.2)                   | 4(6.2)                     | 3(4.6)                     |
| Sheanut             | 7(9.3)                     | 8(10.7)   | 3(4.0)    | 9(13.8)                    | 5(7.7)                     | 2(3.1)                     |
| Melon               | 25(33.3)                   | 9(12.8)   | 4(5.3)    | 21(32.3)                   | 7(10.8)                    | 9(13.8)                    |
| Millet              | 10(13.3)                   | 1(1.3)    | 3(4.0)    | 3(4.0)                     | 2(3.1)                     | 5(7.7)                     |

Source: Field Survey, 2005.

activities for both household consumption and sale, while few respondents indicated that the products of their activities were mainly for household consumption. But, differences were observed with respect to household consumption and sale of some crops, livestock and its product as shown on table 4. Result of analysis also shows that majority of Yoruba women reared goat to generate income and for household consumption, while Fulani women reared goat to generate income. Most of their goats and sheep are sold during festival periods and period of financial stress to generate income. Yoruba respondents (30.7%) indicated that their chickens were for sale and household consumption, while the Fulani (47.6%) affirmed that their chickens were offered for sale only that is to generate income. During the field study respondents (both Yoruba and Fulani) explained they use chicken to hatch guinea fowl eggs and also cross breed the Fulani cock with Yoruba hens to raise tolerant chicks in the study area. This findings corroborate the report of FAO (2001) on livestock keeping in urban areas implies that indigenous knowledge from different cultural background existing between various groups of women in the study area; Also, the immense contribution of women to household food security as revealed by the result on table 4 should be acknowledged for adequate inclusion of women in extension messages and policies that will be of productive advantages to women in livestock development in the country.

As shown on table 5, lack of access to credit facilities and extension services were among the major constraints being faced by the two groups of respondents. Majority (97.1%) and (72.3%) of Yoruba and Fulani respectively identified lack of extension services as major constraints. While,

**Table 5: Distribution of constraints being faced by respondents.**

| Constraints                | Yoruba |      | Fulani |      |
|----------------------------|--------|------|--------|------|
|                            | Freq.  | %    | Freq.  | %    |
| Lack of transportation     | 34     | 45.3 | 21     | 32.3 |
| Lack of extension service  | 62     | 97.1 | 60     | 92.3 |
| Inadequate labour          | 19     | 25.3 | 12     | 18.5 |
| Lack of access to land     | 5      | 6.7  | 62     | 95.4 |
| Lack of access to credit   | 66     | 94.0 | 47     | 72.3 |
| Lack of storage facilities | 2      | 2.7  | 41     | 6.2  |

\*Multiple Responses  
 Source: Field Survey, 2005.

94.3% (Yoruba) and 95.4% (Fulani) considered lack of access to credit as a major constraint. Fulani women (92.3%) identified lack of access to land as another major constraint facing them. Lack of right to land has over the years been one of the major factors that had posed various limitations to women agricultural activities in developing nations like Nigeria. In spite of their immense contribution to agricultural production, women were yet to be given corresponding access to land for cultivation. According to the respondents the land area, which they are cultivating are relatively small and allocated solely by their husbands. They are also being marginalized in access to extension services. According to the respondents women have not been given adequate inclusion in extension service/messages. As further explained by the respondents, if women were given more consideration that will ensure their inclusion in extension packages, it will go a long way to enhance their agricultural activities and also resulted in sustainable production.

**Test of Hypotheses**

**Ho1:** There is no significant difference in the livestock activities of Yoruba and Fulani women in the study area.

The result of the analysis shows that there is no significant difference in the livestock activities of Yoruba and Fulani women in the study area (Table 6). This shows that both Yoruba and Fulani women now reared goat, sheep, cattle, chicken and guinea fowl.

**Ho2:** There is no significant difference in cropping activities of Yoruba and Fulani women in the study area.

As shown on table 7, there is no significant in the cropping activities of Yoruba and Fulani. This means that they are both involved in the production of cassava, yam, millet, etc. That is, they now produce crops that are foreign to them.

**Ho3:** There is no significant difference in the constraints being faced by Yoruba and Fulani women in the study area.

Table 8 shows that there is significant difference in the constraints being faced by Yoruba and Fulani women. For instance, majority of the Fulani respondents explained that lack of access to land as one of their major constraints to their cropping activities, in that the land area they were cultivating is relatively small compared

**Table 6: Test of difference in Livestock Activities of Yoruba and Fulani Women.**

| Source               | df  | Mean difference | Std error | F    | p-value | Decision             |
|----------------------|-----|-----------------|-----------|------|---------|----------------------|
| Livestock Activities | 188 | .58             | .20       | 3.37 | .07     | 2.85 Not Significant |

**Table 7: Test of difference in crop activities of Yoruba and Fulani women.**

| Source          | df  | Mean difference | Std error | F    | p-value | Decision            |
|-----------------|-----|-----------------|-----------|------|---------|---------------------|
| Crop Activities | 138 | .718            | .15       | 1.14 | .029    | .59 Not Significant |

**Table 8: test on difference in the constraint being faced by Yoruba and Fulani women**

| Source               | df  | Mean difference | Std error | F    | p-value | Decision        |
|----------------------|-----|-----------------|-----------|------|---------|-----------------|
| Livestock Activities | 138 | .19             | .13       | 1.33 | .05     | 1.5 Significant |

to what they would have want to cultivate, while only few Yoruba women indicate land as one of their production problems.

### CONCLUSION AND RECOMMENDATION

Based on the findings of the study the following conclusions were therefore drawn

1. Majority of the respondents were between the ages of 46-57 years, married and had no formal education with more than sixteen years of residence in their respective communities.
2. Respondents engaged in the following livestock activities, which include sheep, goat, cattle, chicken, guinea fowl and duck. Respondents also engaged in the production of the following food crops: cassava, yam, cowpea, millet, maize, groundnut, sheanut and melon. This corroborate the findings of Oyesola (2000) that women within agropastoral households in Ogun State, Nigeria are now involved in crops and livestock activities that are foreign to them. Likewise, that their Yoruba counterparts are now taking up the production of food crops like millet, groundnut and rearing of cattle, sheep and guinea fowl that are not indigenous to them.
3. Respondents engaged in these crops and livestock activities to generate income and for household consumption. This finding corroborate Okoruwa (1994), Olawoye (1996), Oyesola (2000) and Gbadegesin and Olawoye (2000) that rural women do engaged in agricultural activities to ensure household food security as well as to generate income as a safety net.
4. Respondents are being faced with various

constraints. Yoruba respondents identified lack of effective extension service and access to credit facilities as their major constraints in their production activities, while Fulani respondents identified lack of extension service and inadequate land for crop production as major constraints.

5. There is no significant difference in the livestock activities of Yoruba and Fulani women in Saki-West local government.
6. There is no significant difference in crop activities of Yoruba and Fulani respondents.
7. Significant differences exists in the constraints being faced by Yoruba and Fulani respondents It is therefore recommended that for sustainable agricultural extension development, in southwestern ecological zone of Nigeria, there is need to:
  1. Recognize the interaction between Yoruba and migrated Fulani and develop extension packages that are gender sensitive and locality specific.
  2. Intensify effort to adequately accommodate women irrespective of their cultural background in extension packages for sustainable agricultural production and household food security.
  3. Provision of credit facilities to women at very minimal interest rate to women within groups in each locality.
  4. Review of the land use act to make more arable land available to women since past and present studies still continue to indicate the significant contribution of rural women to agricultural production and household food security.
  5. Solve rural women needs/constraints

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