GENDER PARTICIPATION IN CASSAVA PROCESSING ACTIVITIES IN AYETORO AREA OF OGUN STATE

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ABSTRACT
The research investigated gender participation in cassava processing activities in Ayetoro area of Ogun State. Cassava is a staple food in Nigeria generally processed into "gari", "lafun" and "fufu". Male and female processors participate in the various processing activities with the use of different processing techniques. Purposive and random sampling techniques were adopted for the study. Four villages were chosen and 240 respondents comprising of male and female processors in "gari", "lafun" and "fufu" processing. The data were analyzed using both percentage distribution and analysis of variance. The study reveals that 37.5% of male processors were between 41-50 years while 30.6% of female processor was between 31 – 40 years. Majority (60.4%) of female processors were Christians while (50.0%) of the male processors were Muslim. The household size of most of male processors (50.0%) ranges between 6-10 members while that of 56.9% of female processors range between 1 -5 members. The study further shows that 40.0% of female processors had no formal education compared to only 18.8% of their male counterpart. The evidence from the study concludes that at p =0.05, there are significance difference between gender participation and their ages (F=3.73, p=0.05), religion (F=4.167, p=0.044), household size (F=4.454, p=0.037) and sources of cassava (F=12.17, p=0.001). Also, significant difference exist between the attitude of male and female participating in cassava processing activities about the need for men's strength (F=9.79, p=0.002), the availability of time on men's part (F=5.01, p=0.03). However, no significant difference exists between male and female participation based on constraints faced with different processing techniques they are using. Finally, it is recommended that there is the need to motivate male participation in cassava processing activities, and that processing of agricultural products should not be seen as female job alone.

INTRODUCTION

Gender participation is a term that describes the roles and activities of men and women according to traditions and beliefs of a particular culture. (Buckland, 1993). In most developing countries men and women participate in traditional agriculture performing different roles. These roles are gender specific, complimentary and reciprocal in natural activities like bush clearing, land preparation, harvesting, processing and marketing (Ayodele 2001). World Bank (1999) reported that if the contribution of men and women are taken into account equitably when allocating productive resources, agricultural production can be on the increase women gives certain food crops such as cassava, maize, yam, melon etc. and are also responsible for weeding, harvesting, transporting processing, storage and marketing of their crops.

Cassava is one of the most important staple crops given by men and women in Africa due to its efficient production of cheap food energy, all year round availability, tolerance to extreme ecological conditions and suitability to present farming and food systems (Hahn and Keyser 1995). According to Hahn (1995), cassava roots are processed by a variety of methods into many different products used in diverse ways according to local customs and preference. Therefore, the extent of participation in cassava processing activities varies from one place to the other as it is defined by existing gender relations dictated by varying cultural norms and values associated with female work.

FAO (2000) also asserted that with the increasing male migration women are becoming the sole producers and processors in the household economy. This determining the roles, continents and level of participation of men and women in cassava processing activities is adopted for the purpose of this study. The study therefore examined gender participation in cassava processing activities in Ayetoro area of Ogun State. Specifically, the study was aimed at:

(i) Examining the personal characteristics of cassava processors in the study area.
(ii) Ascertaining the constraints militating against the processors participation in cassava processing.
(iii) Determine the attitude of male and female processors on their participation in cassava processing activities.

METHODOLOGY

The study area has semi-savannah vegetation and endowed with a conducive climatic condition for processing activities. The area is rich in fertile land and support in wide range of agricultural products such as maize, cassava, melon and cocoa. Using sets of interview schedule, primary data were generated from two hundred and forty cassava processors randomly selected (using snow-ball technique) from four villages that were purposively selected. The data represent the activities of the processors on cassava processing. The villages are Igbo-Ori, Idofoi, Agbooro church and Ayetoro.

For the purpose of data collection, purposive and random techniques were used in selecting the respondents. Purposively, Ayetoro town and three other villages: Igbo-Ori, Idofoi and Agbooro church were selected based on high concentration of cassava processors in each of the villages. From these villages, 240 respondents were randomly selected for the study. Interview schedule was designed and used for data collection while the data collected were subjected to percentage distributions and analysis of variance was used to test for differences in Gender participation as it relates to variables under test.

RESULT AND DISCUSSION

Personal Characteristics

Processors indicate that 37.5% of male processors are between 41-50 years while 30.6% of female processors were between 31-40 years. Majority 81.2% of the male and female processors were married. This will have effect on participation of family members in cassava processing activities in the household. Also, 75.5% of the male processors have primary and post primary education while 60.0% of the female has the same educational qualification. The high level of literacy among processors will have a positive effect on rates of adoption of modern techniques in cassava processing. The higher percentage of educated male processor can also affect the reason why more males are involved in operation of cassava machines especially the grater and hydraulic pressers.

The study further reveals that, 50% of the male processors have a household size of 6-10 members while 56.9% of the female processors have had between 1 and 5 members in the family. This spread could be able to give a four chance to the processors to have some funds for processing activities between it will give for the use of family labour. Also about 80% of both male and female processor belongs to one social organization or the other especially cooperative societies, religious groups and community development associations. This will enable them to enjoy the household size and can also affect the family expenses and the member that can be united in processing activities the benefit of access to training, inputs and improved cassava processing techniques that come research through these societies groups.Seventy-five percent (75%) of the male processors obtain their cassava from their own farms while 55.6% of the

female processors purchase their cassava from the market. This disparity might be connected to the problem of inadequate farmland accessible to the woman for cultivation.

Table 1. Personal characteristics of processors

Socio-economic characteristics	Male Frequency (%)	Female Frequency (%)	Both Frequencies (%)
Age:			
21-30 years	5(6.3)	36(22.5)	41(17.1)
31-40 years	25(31.2)	49(30.6)	74(30.8)
41-50 years	30(37.5)	47(29.4)	77(32.1)
>50 years	20(25.0)	28(17.5)	48(20.0)
Religion:			
Christian	35(43.7)	110(68.7)	145(60.4)
Islam	40(50.0)	50(31.3)	90(37.5)
Traditional	5(6.3)	-	5(2.1)
Marital status:			
Never married	10(12.5)	8(5.0)	18(7.5)
Still married	65(81.2)	130(81.3)	195(81.2)
Married before	5(6.3)	22(31.7)	27(11.3)
Educational status:			
No formal education	15(18.8)	64(40.0)	79(32.0)
Adult literacy	05(6.3)	-	05(2.1)
Primary education	20(25.0)	42(26.3)	62(25.8)
Secondary education	25(31.0)	43(26.8)	68(28.4)
Tertiary education	15(18.8)	11(6.9)	26(11.7)
Household size			
<5 members	20(25.0)	91(56.9)	111(46.3)
6-10 members	40(50.0)	48(32.0)	88(36.7)
11-15 members	15(18.7)	13(8.1)	28(11.6)
> 15 members	05(6.3)	08(5.0)	13(5.4)
Source of Cassava tubers			
Own farm	60(75.0)	48(26.9)	103(42.9)
Market	05(6.0)	89(55.6)	94(39.2)
Both	15(18.7)	28(17.5)	43(17.9)

Source: Field Survey, 2004

Gender Participation in Cassava Processing Activities

Table 2 shows that majority of the male processors participates in grating (75.0%) and bagging (81.3%) of cassava products compared to the female. More than half of the male processors do participate in cassava peeling as well as the female processors. Majority (52.5%) of the female participates in pressing, fermenting, frying and bagging, while few male processors participate in fermenting, pressing and frying. Most (46.9%) of the female wash their peeled cassava before grating compared to the male. This implies that majority of the processing activities are carried out by the female processors while grating and the male carried out bagging. Also the activities, which show low participation of women, might be because their children are involved in these activities.

Table 2: Distribution of Respondents by their Participation in Gari Processing Activities (N=240)

Gari Processing Activities	Male Frequency	(%)	Female Frequency	(%)	Both Frequency	(%)
Peeling	45	56.3	48	30.0	93	38.8
Washing	5	6.3	75	46.9	80	33.3
Cutting	5	6.3	1	0.6	6	2.5
Fetching of Water	5	6.3	1	0.6	6	2.5
Grating	60	75.0	14	8.8	74	30.8
Pressing	35	43.8	84	52.5	119	49.6
Fermenting	30	37.5	84	52.5	114	47.5
Sieving	5	6.3	80	50.0	85	35.4
Frying	15	18.8	84	52.5	99	41.3
Drying	5	6.3	11	6.9	16	6.7
Sieving	10	12.5	80	50.0	90	37.5
Bagging	65	81.3	84	52.5	149	62.1

Source: field survey, 2004

Table 3 shows that majority of the female processors participate in all the processing activities in fufu processing compared to the male except in fetching of water, pressing and sieving. This implies that more female participate in fufu processing than the male processors.

Table 3: Distribution of Respondents by their Participation in Fufu Processing Activities (N=240)

Fufu Processing Activities	Male Frequency	(%)	Female Frequency	(%)	Both Frequency	(%)
Peeling	15	18.8	38	23.8	53	22.1
Washing	5	6.3	62	38.8	67	27.9
Cutting	10	12.5	64	40.0	74	30.8
Fetching of Water	-	-	24	15.0	24	10.0
Soaking	5	6.3	65	40.6	70	29.2
Draining	10	12.5	69	43.1	79	32.9
Washing	10	12.5	70	43.8	80	33.3
Sieving	10	12.5	70	43.8	80	33.3
Pressing	-	-	4	2.5	4	1.7
Mixing	15	18.8	71	44.4	8.6	35.8
Cooking	15	18.8	71	44.4	86	35.8
Wrapping	10	12.5	71	44.4	81	33.8

Source: field survey, 2004

Participation of Respondents in Lafun Processing Activities

Table 4 shows all the processing activities involved in lafun processing are carried out by the female processors. Few of the male processors participate in some of the processing activities like cutting, peeling, carrying, pressing and fermenting. Most (62.5%) of the male do the bagging of the processed lafun compared to the female (40.6%). 3.1% of the female grate their cassava before soaking. 19.4% of the female fetch their water. Some of the male do peel and also dry their soaked cassava crumbs before grating it.

Table 4: Distribution of Respondents by their Participation in Lafun Processing Activities (N=240)

Lafun Processing Activities	Male Frequency	(%)	Female Frequency	(%)	Both Frequency	(%)
Peeling	35	43.8	42	26.3	77	32.1
Washing	-	-	60	37.5	60	25.0
Cutting	5	6.3	61	38.1	66	27.5
Fetching of Water	-	-	31	19.4	31	12.9
Grating	35	43.8	5	3.1	40	16.7
Soaking	-	-	64	40.0	64	26.7
Carrying	5	6.3	58	36.3	63	26.3
Draining	-	-	64	40.0	64	26.7
Washing	-	-	64	40.0	64	26.7
Sieving	-	-	64	40.0	64	26.7
Pressing	10	12.5	64	40.0	74	30.8
Fermenting	10	12.5	64	40.0	74	30.8
Drying	30	37.5	64	40.0	94	39.4
Grating	50	62.5	54	3.8	104	43.3
Bagging	50	62.5	65	40.6	115	47.9

Source: field survey, 2004

Level of Participation in cassava Processing Activities

Table 5 shows that majority (74.6%) of the cassava processors' participation in cassava processing is low while 25.4% of the cassava processors has a high participation in cassava processing.

Table 5: Distribution of Respondents by their Level of Participation (N=240)

High Participation	61	25.4
Low Participation	179	74.6
TOTAL	240	100.0

Source: field survey, 2004

Constraints to Cassava Processing Activities

Table 6 shows that lack of credit facilities, disturbance from sheep and goats, inconsistency of government and unfavourable weather condition is a very serious constraints to majority of male and female processors while un-affordability of processing equipment and unavailability of spare parts is not a serious constraints to both male and female processors.

Test of Difference between Gender Participation Based on their Personal Characteristics

Table 7 shows that there are significant difference between age, ($F=3.73$, $P=0.05$), Religion ($F=4.167$, $P=0.044$), household size ($F=4.454$, $P=0.037$) and sources of cassava ($F=12.17$, $P=0.001$) at $\alpha = 0.05$ level of significance. This implies that the above listed variables are influenced by gender. For example, female participating in cassava processing may be older than their male counterparts; also their sources of cassava may be quire different. Most of the male participants may source their cassava tubers form their farm, while female participants may depend on their husband or on retail purchase for their participation.

Table 6: Distribution of Respondents by Constraints faced (N=240)
Multiple {=Never, *NS= Not Serious, *VS=Very Serious, *S=Serious}

CONSTRAINTS ENCOUNTERED	MALE N F(%)	NS F(%)	VS F(%)	S F(%)	FEMALE N F(%)	NS F(%)	VS F(%)	S F(%)	BOTH N F(%)	NS F(%)	VS F(%)	S F(%)
Lack of credit facilities	-	20(25.0)	45(56.3)	15(18.8)	16(10.0)	33(80.6)	72(45.0)	39(24.4)	16(6.7)	53(22.1)	117(48.8)	54(22.5)
Unavailability of spare part	5(6.3)	40(50.0)	25(31.3)	10(12.5)	54(33.8)	68(42.5)	12(7.5)	26(16.3)	59.(24.6)	108(45.0)	37(75.4)	36(15.0)
Unaffordability of processing equipment	5(6.3)	30(37.5)	35(43.8)	10(12.5)	11(6.9)	58(36.3)	61(38.1)	30(18.8)	16(6.7)	88(36.7)	96(40.0)	40(16.7)
Unavailability of water	15(18.8)	10(12.5)	40(50.0)	15(18.8)	10(6.3)	53(33.1)	51(31.9)	46(28.8)	25(10.4)	63(26.3)	91(37.9)	61(25.4)
Complexity of technique	20(25.0)	45(56.3)	10(12.5)	5(6.3)	44(27.5)	105(65.6)	6(3.8)	5(3.1)	64(26.7)	150(62.5)	16(6.7)	10(4.2)
Inconsistency in Gov. policy	5(6.3)	25(31.3)	45(56.3)	5(6.3)	11(6.9)	32.20.0)	67(41.9)	50(31.3)	16(6.7)	57(13.8)	112(46.7)	55(22.9)
Unfavourable weather	5(6.3)	15(18.8)	30(37.5)	30(37.5)	(7(4.4)	57(35.6)	58(36.3)	38(23.8)	12(5.0)	72(30.0)	88(36.7)	68(28.3)
Disturbance from sheep/goat	15(18.8)	10(12.5)	15(18.0)	15(18.0)	13(8.1)	47(29.4)	70(43.8)	30(18.8)	28(11.7)	57(23.8)	110(45.8)	45(18.8)
Others	25.(93.8)	-	-	-	91(56.9)	2(1.3)	41(25.6)	26(16.3)	166(69.2)	2(0.8)	46(19.2)	26(10.8)

TABLE 7: Test of difference between personal characteristics of male and female participation in cassava processing activities

Personal Characteristics	Mean Square	F	P value	Remark at α=0.05
Age	448.510 120.238	3.73	0.05	S
Religion	0.163 0.232	0.702	0.404	NS
Marital status	1.052 0.252	4.167	0.044	S
Household size	91.354 20.511	4.454	0.037	S
Type of Household	0.230 0.118	1.954	0.165	NS
Educational Status	0.922 1.918	0.481	0.490	NS
Income derived from Cassava processing	1333.33 20710393.617	0.000	0.994	NS
Years of Participation	12.190 43.455	0.281	0.598	NS
Sources of Cassava	6.914 0.568	12.171	0.001	S

Source: field survey, 2004

Tests of Difference between Gender Participation Based on Constraints Encountered

At α=0.05 level of significance, Table 8 shows that there is no significant difference between constraints encountered by male and female participating in cassava processing activities. This is an indication that whether one is male or female, the constraints facing one will be there for others if they are to participate in cassava processing activities.

Table 8: Tests of Differences between Gender Participation Based on Constraints Encountered

Constraints Encountered	Mean Square	F	P value	Remark at α=0.05
Lack of credit facilities	0.263 0.760	0.346	0.558	NS
Unaffordability of processing equipment	3.857E-02 0.797	0.048	0.826	NS
Unavailability of spare parts	2.750 0.978	2.813	0.097	NS
Unavailablity of water	3.440E-02 0.874	0.039	0.843	NS
Complexity of available technique	9.333E-02 0.596	0.157	0.693	NS
Inconsistency in government policy	0.519 0.776	0.668	0.416	NS
Unfavourable weather condition	0.860 0.734	1.173	0.282	NS
Disturbance from sheep and goat	0.130 0.771	0.168	0.683	NS

Source: field survey, 2004

CONCLUSION

Based on the findings of this research, the following conclusions were drawn:

i. Male and female participants in cassava processing activities were influenced by their age, religion, household size, and their sources of cassava
ii. The processing techniques used by male participants in cassava processing activities are not different from those used by their female counterparts.
iii. The constraints faced by male and female participants in cassava processing activities are not gender biased.

Thus, the study recommends that male and female cassava processors should be given equal chances especially for females on the uses of sources of cassava for processing. If given a better opportunity to grow more of their cassava for processing, this will reduce the expenses incurred on cassava roots. Also there is need to motivate male participation in cassava processing activities. Also processing agricultural products generally should not be seen solely as a female job.

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