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## Gender Participation in Forestry and Agro-Forestry Practices in Sapele Local Government Area of Delta State, Nigeria

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### Abstract

This study examined the level of gender participation in forestry practices in Sapele Local Government Area of Delta State, Nigeria. Specifically, the study examined the gender distribution of operators among various economic activities in forestry practices and gender differences in income. Data were collected on the marital status, age, educational qualification, number of years of experience in forestry/agroforestry practices, income and challenges encountered from 91 respondents drawn by simple random sampling technique. The data were collected by using copies of a structured questionnaire and were analyzed by using descriptive and inferential statistics. The findings, among others, were that: though there was significant difference in gender distribution by occupation within the subsector, there was no significant gender disparity in gender involvement in terms of number; there was no significant gender difference in the educational qualifications of the operators. Furthermore, that a sizeable proportion of single again women depend on forest resources for their livelihood; that a good proportion of the female in the subsector had no alternative opportunity, finally that there was no significant gender difference in income. We conclude that the forestry economy has high potential for the pursuit of gender equality and for poverty alleviation and recommend that policies and programmes directed towards poverty alleviation in the subsector should, however, be gender sensitive.

**Keywords:** Gender, Forestry, Agroforestry, Delta State

### Introduction

Gender has virtually nothing to do with biological differences between sexes. Rather it is an idiom used to express the roles of men and women and their socio-economic and cultural relationships in any community (FAO, 2005). Gender has to do with men and women and how they relate to each other in terms of roles, responsibilities, obligations and entitlements. It defines what men and women do, the degree of access, control and authority to resources and

decision-making and consequently, the abilities to discharge these duties effectively.

The current debate revolving around issues on women integration into the national economy variously referred to as women liberation or women empowerment and, to some extent, gender mainstreaming simply put, has to do with the giving of equal access to opportunities to both men and women for involvement in economic activities and in benefiting from the fruit of economic development. The perceived unfairness in this system of roles and relationships and how to make it acceptable is the crux of the issues involved in gender mainstreaming and more specifically, women

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empowerment. The end to this debate is hardly in sight notwithstanding the increasing rate of female engagement in the public sector and in competitive wage employments and the increasing recognition given to the role of women in non-monetized economic activities which until recently was not recognized in national income accounting and policy directives.

The struggle for gender mainstreaming may have been rooted in the under-acknowledgement and inadequately understood gender roles in agriculture and rural development and the almost unrecognized and unreported role played by women in development policy, planning and implementation. Over the years, culture stereo type role has become odious and therefore reprehensible. Policy interest in rural women emerged as an issue in the 1980s, at a time when there was increasing disenchantment with the effects of development policies on rural areas (Commonwealth, 2001). The situation has however improved remarkably and it keeps improving. The pain in whatever was left of the "imbalance" is today highly orchestrated by reasons of the fact that women now have similar qualifications coupled with the fact that women have internalized the desire to be more gainfully employed in preference to full time house wives (Fink *et al*, 1994).

This move by the women has strong international support. One of the objectives of the World Food Summit, for example, was to ensure gender equality and empowerment of women. To this end governments of member nations were, amongst others, required to: (i) support and implement commitments made at the fourth World Conference on women, held in Beijing in 1995 to the effect that a gender perspective is mainstreamed in all policies. (ii). promote women's full and equal participation in the economy, and for this purpose introduce and enforce gender sensitive legislation providing women with secure and equal access to and control over productive resources including credit, land and water. (iii) Improve the collection, dissemination and use of gender disaggregated data in agriculture, fisheries, forestry and rural development.

Nigeria is a signatory to the World Food Summit agreement of 1996 and to many other international agreements on gender mainstreaming. The global drive for gender mainstreaming has, as it were, provided a canopy for policy attention to be given to very specific issues such as women empowerment. Today, Nigeria like many other countries has established the Ministry of Women Affairs with aims to identify and address gender issues in development from women perspective. Nigeria has, in addition, under the administration of Umar Musa Yar'dua, as President (2007-2009), allocated 30% of political appointments to women. This is without prejudice to other positions individual women may attract on the basis of personal merit. There are other campaigns, programmes and training that are gender biased to favour women political and economic emancipation and gender equality.

Nigeria's forestry economy is small and is largely underdeveloped. Its percentage contributions to the gross domestic product (GDP) have been small with a downward trend. The percentage contribution rose unsteadily from 0.92% in 1981 to 1.01% in 1987 (CBN, 2006). Since this period the contribution has declined steadily to only 0.53% in 2006. Over the years, especially in the face of the tight labour market coupled with the changing fortune of the African Timber and plywood (AT&P), there has been a remarkable increase in the number of small firms engaged in this subsector to justify an interest in assessing the gender relative performance, constraints and the potentials the subsector has for gender mainstreaming and for empowering its operators, especially the women, economically. Presently, baseline data about the fact or otherwise of gender imbalance are scanty and the production of factsheets are piecemeal and far apart. This paper aims to add to the available factsheets with the specific objectives of examining of: (i) identifying the socio-economic characteristics of operators in the sector, (ii) examining the motivating factors for gender participation in the sector, (iii) evaluating areas of involvement by men and women in the sector, (iv) determining gender relative contributions and, (v) identifying the gender specific challenges of the subsector. The hypothesis was

that there is significant gender difference in income in the forestry subsector.

## Materials and Methods

The materials used in the study were obtained from a field survey of the operators of the forestry subsector in Sapele local government area (LGA) of Delta State, Nigeria, in June 2010. The three towns surveyed were Sapele metropolis, Okwurighwre and Amukpe. These three towns were the major centers of wood and wood related activities in the LGA. Sapele is the home of the African Timber and Plywood (AT&P) company, the largest of such companies in Africa. AT&P is involved in the processing and export of wood and wood products. The availability of raw materials and the ease of transportation by sea were the major determinants of the location of this company in Sapele by the erstwhile owner –the United African Company (UAC). These same factors account for wood and forest related economic activities being one of the major occupations in this LGA.

Simple random sampling was used to draw 120 respondents from a list of operators obtained from the Association of Timber and Allied industries. Ninety one of the filled in questionnaires were however used in the study due to observed errors and omissions in information supplied by the remaining 29.

Data were collected with the aid of copies of a structured questionnaire on the socio-economic characteristics of the respondents, constraints to their involvement, the motivation business startup in the subsector, the staff strength and the turnover of the firm. The resulting data were analyzed by using frequency count, mean and percentages.

## Results and Discussion

### Demographic Characteristics of Respondents

Table 1 shows the gender of respondents cross tabulated by their status as heads of household. Out of the 91 respondents, 51.60% (47) were male and 48.4% (44) were female. A Chi-Square test statistic ( $P > .10$ ) indicates that there was no significant difference in the number of male and female involved in the subsector. About 65.90% (60) of the respondents were heads of household while 34.10% (31) were not. About 91.50% (43) of the male were heads of household while 38.60% (17) of the female were heads of household. Thus majority of the males were heads of household.

On marital status, 76.90% of the respondents were married. A higher percentage of the male (87.20%) than that of the female (65.90%) were married. A sizeable proportion of single again women depend on forestry related economic activities for their livelihood.

About 17% (15) of the respondents had no formal education. The educational qualification with the highest frequency for the male was secondary school certificate (36.3%) followed by National diploma (ND)/National Certificate of education (NCE) (21.30%). The female had primary school leaving certificate (PSLC) with 38.60% as the qualification with the highest frequency followed by secondary school certificate or its equivalent (25%). There was however no significant gender difference in qualification (Pearson Chi Square 8.57,  $df = 5$ ,  $P > 0.13$ ). This agrees with Fink, Grajewski, Siebert and Zierold, (1994) findings.

Finally, on Table 1, the 6 - 10 years bracket was the modal number of years of experience. This was true for the male (38.39%) and the female (40.90%). Two deductions can be made from the information contained in Table 1. First was that the male were older in the business. The second is that more female entered into the entrepreneurial class through this subsector in the last five years. This finding agrees with that of Zelliner *et al* cited in Soonthonsmai (2010) that more women entre the entrepreneurial class.

**Table 1: Demographic Characteristic of Respondents**

	Male	Female	Total
<b>Household head</b>			
Yes	43(47.30%)	17 (18.70%)	60 (65.90%)
No	4 (4.30%)	27 (29.70)	31 (34.10%)
<b>Total</b>	<b>47 (51.60%)</b>	<b>44 (48.40%)</b>	<b>91 (100%)</b>
<b>Marital status</b>			
Single	4 (8.50%)	3 (6.80%)	7(7.70%)
Married	41 (87.20%)	29 (65.90%)	70 (76.90%)
Single again	2 (4.30%)	12 (27.30%)	14 (15.40%)
<b>Total</b>	<b>47 (100%)</b>	<b>44 (100%)</b>	<b>91 (100%)</b>
<b>Educational qualification</b>			
No formal education	7 (14.90%)	8 (18.20%)	15 (16.50%)
Primary school	8 (17.70%)	17 (38.60%)	25 (27.50%)
WASC/equivalent	17 (36.20%)	11 (25.00%)	28 (30.80%)
NCE/ND	10 (21.30%)	4 (9.10%)	14 (15.40%)
First degree/equivalent	5 (10.60%)	3 (6.80%)	8 (8.80%)
Higher degree	0 (0.00%)	1 (2.30%)	1 (1.10%)
<b>Total</b>	<b>47 (100%)</b>	<b>44 (100%)</b>	<b>91 (100%)</b>
<b>No of years of experience</b>			
1- 5	7 (14.90%)	14 (31.80%)	21 (23.10%)
6 - 10	18 (38.39%)	18 (40.90%)	36 (39.60%)
11 -15	12 (25.50%)	7 (15.90%)	19 (20.90%)
16 – 20	4 (8.50%)	4 (9.10%)	8 (8.80%)
21 – 25	3 (6.40%)	0 (0.00%)	3 (3.30%)
26 – 30	3 (6.40%)	1 (2.30%)	4 (4.40%)
<b>Total</b>	<b>47 (100%)</b>	<b>44 (100%)</b>	<b>91 (100%)</b>

Source: Field Survey, 2010

**Gender Distribution by Occupation**

Furniture making (36.2%), sawmilling (19.1%) and selling of planks (12.8%), in that order, were the occupation taken to by most male (Table 2). For the female, the three most common occupations were leaf gathering (25%), cooking coal burning (22.7%) and selling of planks (15.9%). The table also indicates that

women were not into such occupation as mushroom production, furniture making and fish production in forest estates. There is thus an apparent difference in gender distribution of forestry activities. This finding may have implications for the design of empowerment policy and programmes in the subsector if they are to be gender sensitive.

**Table 2: Gender Distribution by Occupation within the Sector**

Primary Occupation	Male	Female	Total
Saw milling	9 (19.10%)	3 (6.80%)	12 (13.20%)
Mushroom	1 (2.10%)	0 (0.00%)	1 (1.10%)
Chew Stick Production	2 (4.3%)	3 (6.80%)	5 (5.50%)
Selling of planks	6 (12.80%)	7 (15.90%)	13 (14.30%)
Fuel wood selling	1 (2.10%)	5 (11.40%)	6 (6.60%)
Cooking coal burning	1 (2.10%)	10 (22.70%)	11 (12.10%)
Pole extraction	2 (4.30%)	2 (4.50%)	4 (4.40%)
Furniture making	17 (36.20%)	0 (0.00%)	17 (18.70%)
Bee honey production	1 (2.10%)	2 (4.50%)	3 (3.30%)
Fish farming	4 (8.50%)	0 (0.00%)	4 (4.40%)
Ply wood production	2 (4.30%)	1 (2.30%)	3 (3.30%)
Leaf gathering	1 (2/10%)	11 (25.00%)	12 (13.20%)
<b>Total</b>	<b>47 (100%)</b>	<b>44 (100%)</b>	<b>91 (100%)</b>

Source: Field Survey, 2010

### Gender of Respondents by Major Problems Encountered

The nature of challenges encountered could indicate the degree of access to or control over farm resources. Table 3 reveals that the three major challenges that confront the male were lack of working tools (46.80%), credit (17.00%) and market for products (12.80%). For the female, the challenges were those of credit (29.50%), market for products (20.50%) and

working tools (15.90%). Thus the challenges are sub-sectoral, they cut across occupations in the subsector. Notwithstanding the gender differences in the prevalence of these challenges, that they cut across gender suggests that any form of intervention that would be packaged for the forestry subsector should be holistic in approach at tackling challenges if it is to have any meaning impact.

**Table 3: Gender Distribution by Major Problems Encountered**

Major Problems Encountered	Male	Female	Total
Land	4 (8.50%)	4 (9.10%)	8 (8.80%)
Working tools	22 (46.80%)	7 (15.90%)	29 (31.90%)
Credit	8 (17.00%)	13 (29.50%)	21 (23.10%)
Technical knowhow	1 (2.1%)	2 (4.5%)	3 (3.30%)
Market availability	6 (12.80%)	9 (20.50%)	15 (16.50%)
Basic infrastructure	4 (8.50%)	4 (9.10%)	8 (8.80%)
Culture stereotyping	0 (0.00%)	2 (4.50%)	2 (2.20%)
Vehicle	2 (4.30%)	2 (4.50%)	4 (4.40%)
Product preservation	0 (0.00%)	1 (2.30%)	1 (1.10%)
<b>Total</b>	<b>47 (100%)</b>	<b>44 (100%)</b>	<b>91 (100%)</b>

Source: Field Survey, 2010

### Membership of Trade Association

Out of the 47 male respondents 59.60% (28) were members of one trade association or another. For the female, 52.30% (44) of them belonged to one trade association or another. There was no significant difference between genders in their membership of trade association. Given the importance of trade association in access to information and social capital, the about half of that number of respondents in both gender belonging to trade associations may indicate either lack of awareness of the existence or low level trade related content and therefore low benefit derived

from them. This claim is supported by information in Table 4 which shows the relatively high score for respondents who indicated “none” (30.10%). Membership of trade association has obvious benefits as can be read from Table 4. However, only trade associations which have direct and immediate effects on members’ business should be given priority to enable members’ businesses to grow and become vibrant. Hence the development of appropriate contents for trade associations may be an essential initial activity in empowering operators of this subsector.

**Table 4: Gender Distribution by Major Benefits Derived from being a Member of Trade Association**

Benefits derived	Male	Female	Total
Ease of access to credit	11 (30.60%)	5 (15.20%)	16 (23.20%)
Education	0 (0.00%)	1 (3.00%)	1 (1.40%)
Representation of group interests	8 (22.22%)	8 (24.20%)	16 (23.20%)
Social/moral support	4 (11.10%)	9 (27.30%)	13 (18.80%)
None	13 (36.10%)	10 (30.30%)	23 (33.30%)
<b>Total</b>	<b>36</b>	<b>33</b>	<b>69</b>

Source: Field Survey, 2010

### Gender Distribution by Motivation for Starting Business

Table 5 which shows respondents' motivations for taking to occupation in the forestry subsector reveals that the male are motivated principally by the "need to be independent" (47.80%) and "poor salary" (21.70%). About 29.50% of the female had "need to be independent", 27.30% had "need to utilize unused capacity" 13.60% had "no other means of survival" as their motivation. Finally, "parents' occupation" and poor salary" were also motivating factors (11.4% each way). In other words, female have more motivating factors. That 69.50% of the male indicated "need to be independent" or "poor salary" as their motivation could suggest the availability of alternative employment for the male. The female, on the hand, given the relatively evenly spread responses coupled with

the 13.60% of them who had no other means of survival and 6.80% who resorted to the subsector out of rising cost of living may have taken to their present occupation as a last resort. These responses point to a high likelihood of entrepreneurs of necessity and entrepreneurs of dislocation among the female respondents. Such entrepreneurs are characterized by poor preparedness for entrepreneurial role and low aptitude for the vocation. Barbato and Bracker (1988) define entrepreneurs of dislocation as individuals who start their own business as a result of the loss of employment due to a business closing, plant closing or layoff. The relative ease of finding a place in the forestry subsector may suggest potentials within it for self employment opportunity and for alleviating poverty.

**Table 5: Gender Distribution by Motivation for Starting Business**

Motivation for starting business	Male	Female	Total
Poor salary	11 (23.40%)	5 (11.40%)	16 (17.60%)
Need to be independent	22 (46.80%)	13 (29.50%)	35 (38.90%)
Need to utilize excess capacity	4 (8.50%)	12 (27.30%)	16 (17.80%)
Parents' occupation	7 (14.90%)	5 (11.40%)	12 (13.30%)
No other means of survival	3 (6.40%)	6 (13.60%)	9 (10.00%)
Rising cost of living	0 (0.00%)	3 (6.80%)	3.30%)
<b>Total</b>	<b>47 (100%)</b>	<b>44 (100%)</b>	<b>91 (100%)</b>

Source: Field Survey, 2010

### Gender Distribution by Monthly Income

The income of the male ranged from ₦7000.00 to ₦100,000.00 with a mean of ₦31,686.00 and a standard deviation of ₦54,417.00. That of the female ranged from ₦4500.00 to ₦215,000.00 with a mean of ₦39,682.00 and a standard deviation of ₦23,182.00. A t- test of differences between means indicates that there was no statistically significant difference in income between male and female respondents ( $t = 0.78$

prob. = 0.44). This may imply that the managerial capability of women in economic activities in the forestry subsector is unexploited and largely underutilized. Having said that, it should be noted that the relatively high variation in the income of the female may also indicate that a number of them may just be on what may be term "marginal occupation" or under employed.

**Table 6: Gender Distribution by Income Group**

Monthly turnover (=N=)	Male	Female	Total
1 – 49999	27 (77.10%)	26 (78.80%)	53 (77.90%)
50000 – 99999	7 (20.00%)	3 (9.10%)	10 (14.70%)
100000 – 149999	1 (2.90%)	1 (3.00%)	2 (2.90%)
150000 – 199999	0	1 (3.00%)	1 (1.50%)
200000 – 249999	0	2 (6.10%)	2 (2.90%)

Source: Field Survey, 2010

## Conclusion

The paper set with the broad objective of adding to the factsheet of the truth or otherwise of the proposition that there is gender imbalance in the forestry subsector. All in all we have found that women are competitively engaged in the forestry economy with their male counterpart both in terms of number and in income generation. However, there is a significant difference between male and female in the type of occupation engaged in within the subsector with the implications that policies and programmes directed at gender mainstreaming and poverty alleviation in the forestry economy need to be gender sensitive.

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