Gender Inequality in Agriculture: A Tool for Sustainable Economic Growth.

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Abstract
This study analyzes the effect of gender inequality in agriculture and how it has impede Nigeria economic growth, gender inequality in agriculture affects women across rural and urban area. Data were collected from the rural famers (women) on issues relating to gender inequality especially women. One hundred copies of questionnaire were administered but only eighty-six were retrieved. Focus Group Discussion (FGD) were also carried out among farmers. Returned instruments were analyzed using simple percentage and the pearson product moment correlation analysis. The major finding is that gender inequalities is high in Agricultural sector and thus, hamper economic growth in Nigeria. We therefore recommend that for Nigeria steady economic growth to translate positively to the socio-economic of her citizens the war against gender inequality should go beyond sectors or zones, it should be generally pursed. Also for the goals of the Transformation Agenda to be fully realized, the current situation of women must be factored into policy formulation and implementation.

Keywords: Gender inequality, Agriculture and Economic Growth.

INTRODUCTION
All over the world, Nigerian inclusive, women have the primary role in a household and are key to the food production processes. They are the main natural resource managers, providers of food security, and repositories of knowledge and expertise on indigenous plants, medicines, food and water. However, in many parts of the world, customary laws do not recognize the ownership of land by women. The same is true for cultural divisions of labour between men and women, which hamper economic growth. Also, gender inequality in financial markets, based on erroneous myths such as women are risky borrowers, still prevails with devastating consequences to future generations (UN – Babibat, 2002).

Gender inequality in Agricultural is a pervasive phenomenon in most countries especially the developing nations. One of its important manifestations in the gender wage gap generally referred to the average difference in hourly earnings of men and women.

Gender-responsive interventions that successfully impact overall productivity, income and natural resources management ought to target development assistance specifically at women, in sectors where women are disadvantaged by social norms. This would catalyze a change process for ending gender discrimination, securing women’s access to key resources and enhance economic growth, yet women rarely own land and are often confined to the production of subsistence foods. In Uganda, for example, although 97% of women have access to land 8% have leaseholds and only 7% actually own and have access to credit. (UN-Habitant, 2002).

However, over 90 percent of the world’s staple crops (rice, wheat, maize) are produced by women; this in turn provides up to 90 percent of the rural poor food intake and women produce 60-80 percent of food in most developing countries. According to MDG report released in June, 2013, it was reported that despite the fact that globally, women in paid employment outside agricultural sector countries, “women are mostly employed in agriculture and largely in vulnerable jobs – in subsistence farming, as unpaid family workers or as own-account workers with no or little financial security” (UNCCD, 1990).

Gender inequality in agricultural services staffing has been a major constraint to the economic growth in Nigeria as the number of male extension agents far out weight that of female extension agents. In the African culture and most part of the world, men having close and frequent interaction with married women are frowned at by the community, they have very little access to modern technology that could benefit them hence they are restricted to traditional farming. Inadequate access to credit facilities and income posed great challenges to women as culture restricts women’s membership in co-operative societies (Prakash, 2003). This is a reflection of the age-old stereotype tradition that men are the farmers and not the women. This condition automatically inhibits women’s entrepreneurship and therefore income generation capabilities. As women do not own asset, it is extremely difficult for them to have access to credit facilities as most women do not have collateral to present.

Gender inequality has deprived majority of women better access to educational opportunities and health care, hence, the use of modern farm implement can not be access by rural farmers.

These circumstances increase the feminization of poverty in the country, resulting in women being unable to properly sustain their families. Failure to guarantee equal participation of women in the socio-economic development of the country in a price that is becoming increasingly too high to pay. Not only does it reduce the opportunities for cooperation but it also reduces productivity and economic benefits for the local communities that are put at risk to present and future generations (UN – 2002).
Therefore, the relationship that exists between agricultural output and gender inequality in Nigeria economic growth remains an area for further research since there is no common consensus among scholars on the actual agricultural output since gender inequality impedes the economic growth.

However, there are many reasons to be concerned about existing gender inequalities in Nigeria, especially in the major well-being related dimensions such as agriculture, health, earnings. From the growth as well as equity perspective, such gender inequalities are problematic as they lower well-being and are form of injustice in most conceptions of equity and justice: While such a view would argue for reducing gender inequalities in these dimensions of well-being on intrinsic grounds, recent literatures has argued on the instrumental effects of gender inequality on other important development outcomes with a particular focus on economic growth processes (Stephen and Francesca, 2010). Without denying the importance of reducing gender inequality on intrinsic grounds this study will contribute to that latter literature by examining Gender inequality in agriculture: A tool for sustainable economic growth. To achieve this, the following objectives are identified.

To access the changes in the level of agricultural output and gender inequality in Nigeria economic growth. and, Ascertaining the extent of which gender inequality in agriculture has impede Nigeria Economic Growth.

To ensure the attainment of the above objectives, the following questions were raised.

What is the relationship that exists between agricultural output and gender inequality in Nigerian Economic growth?

To what extent has gender inequality especially women impede Nigeria Economic growth?

The following hypotheses had been formulated.

**Ho:** There is no relationship between agricultural output and gender inequality in Nigeria economic growth

**H1:** There is no relationship between gender inequality and economic growth

The theoretical underpinning of the impact of liberalization on the gender wage gap is based on two mainstream theories, Heckscher-Ohlin/Stolper-Samuelson (HO/SS) theory and Becker’s (1957) theory of discrimination. Both predict a beneficial impact of openness on gender wage gap. The standard theory suggests that global Liberalization is unskilled labour – abundant developing countries increases the demand for unskilled labour and pull up their relative wage since most of the unskilled work is often performed by women. On average 70 percent of the labour forces in EPZs is female (Jookees and Weston 1994) and in some countries, such as Sir Lanka, women constitute 85% of the workforce in EPZs (see United Nations, 1999; Beneria, 2003).

The widening wage gap in some countries mainly due to fall in female wage is often attributed to the informalisation of labour and lowering of women’s bargaining power (Seguino, 2002), Carr, Chen and Tate, 2000; Balakrishnan 2002). Since women concentrate in labour – intensive manufacturing firms and services, their relative bargaining power does not rise even as labour demand increases due to globalization due to the potential threat of relocation of firm to lower wage sites. In contrast, men working mainly in nontradables and capital-intensive industries have more bargaining power to demand higher wages. Secondly, there has been a shift of a large number of formal sector jobs in female dominated labour intensive industries, to informal employment arrangements, like subcontracting or home worker arrangements, where women earn much less than in formal sector jobs (Seguino, 2002).

Studies by Oostendorp (2004); Siegmann (2006); Braunstein and Brenner (2007) have emphasized on the impact of equaling in all aspect to accelerate economics growth liberalized economic policies are designed to remove all the impediments to equality and justices, and of implements to equality and justices, and if implemented, may be an instrument that can lead to export-led growth and raise the output of the export sector. On the other hand, contrary to the famous Brecher and Alejandro (1977) proposition that suggests an inflow of foreign capital into the import – competing sector under certain conditions might lead to import substitution and lower the country’s welfare, there are workers like Marjit and Beladi (1996), Chaudhuri (2005, 2007), Marjit, Broll and Mita (1997). Chaudhuri et al (2006), which have shown that welfare may improve also in this case.

The female wage gap that exists in agriculture is on the high side. For example in India, the wage rates paid to women workers in the agricultural sector are at least 20 to 30 percent lower than those paid to man for the same activity. In non-agricultural activities, the difference is even more pronounced, with women being paid less than half the wages given to their male counterparts (Ramachandran, 2006).

**METHODOLOGY**

In this study a descriptive research design will be adopted. The population for this research study encompasses three senatorial districts for the purpose of the administration of questionnaire. Given the nature of the study as regards data generation requirements, it was considered that responses should be elicited from source knowledgeable in gender inequality especially women so as to limit measurement error (Bowman and abrosini, 1997). In this regard women (farmers) in rural area were treated as the key respondents.

With the key approach, data were collected from the rural famers (women) on issues relating to gender inequality especially women. Therefore two types of structured questionnaires described. It was assumed that
such women have the best advantage point to provide the most accurate response. One hundred copies of questionnaire were administered but only eighty-six were retrieved. Focus Group Discussion (FGD) were also carried out among farmers. We shall analyses the data using percentage and Pearson Product Moment Correlation.

**DISCUSSION OF FINDINGS**

Table 1: Relationship that exist between agricultural output and gender inequality in Nigeria economic growth.

<table>
<thead>
<tr>
<th>Variables</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
<th>TOTAL%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability of women to have access to credit facilities to boost Agriculture product affect production</td>
<td>25(29.1)</td>
<td>38(44.2)</td>
<td>2(2.3)</td>
<td>9(10.5)</td>
<td>12(13.9)</td>
<td>86(100)</td>
</tr>
<tr>
<td>Is inadequate access to credit facilities and income posed great challenges to women as culture restricts women’s membership in co-operative societies affect production.</td>
<td>31(36)</td>
<td>27(31.4)</td>
<td>4(4.6)</td>
<td>6(6.9)</td>
<td>18(20.9)</td>
<td>86(100)</td>
</tr>
<tr>
<td>Does low wage rates paid to women workers in the agricultural sector affect the productivities.</td>
<td>25(29.1)</td>
<td>36(41.9)</td>
<td>1(1.2)</td>
<td>6(6.9)</td>
<td>14(16.3)</td>
<td>86(100)</td>
</tr>
</tbody>
</table>

Source: survey 2013

The above table shows that 73% of the respondents agree that run Inability of women to have access to credit facilities to boost Agriculture product affect production, while 24% disagree and insignificant percentage of 2 were indifferent. Is inadequate access to credit facilities and income posed great challenges to women as culture restricts women’s membership in co-operative societies affect production was agreed by 67%, and disagreed by 28% of the respondents. Also, 70% of the respondent were of the opinion that Customs does not recognized the ownership of land (Asset) by women while 23% were of the opposing views (table 1)

Table 2 Research question one items for hypothesis one

<table>
<thead>
<tr>
<th>X point</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>25</td>
<td>9</td>
<td>2</td>
<td>38</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>31</td>
<td>6</td>
<td>4</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>29</td>
<td>6</td>
<td>1</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>85</td>
<td>21</td>
<td>7</td>
<td>101</td>
<td>44</td>
</tr>
</tbody>
</table>

Source: survey 2013. However, dividing the total in each column by 3 gives the Y responses.

Table 3: Pearson Product Moment Correlation Computation

<table>
<thead>
<tr>
<th>X</th>
<th>Y</th>
<th>XY</th>
<th>X²</th>
<th>Y²</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>5</td>
<td>28</td>
<td>140</td>
<td>25</td>
</tr>
<tr>
<td>A</td>
<td>4</td>
<td>34</td>
<td>136</td>
<td>16</td>
</tr>
<tr>
<td>U</td>
<td>3</td>
<td>2</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>7</td>
<td>14</td>
<td>4</td>
</tr>
<tr>
<td>SD</td>
<td>1</td>
<td>15</td>
<td>15</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>86</td>
<td>311</td>
<td>55</td>
</tr>
</tbody>
</table>


\[
r = \frac{\sum XY - \sum X \sum Y}{\sqrt{n \sum X^2 - (\sum X^2) \times n \sum Y^2 - \sum Y^2}}
\]

\[
r = \frac{5(311) - 15(86)}{\sqrt{5(511) - 86^2}}
\]

\[
r = \frac{265}{\sqrt{175950 - 419}}
\]

\[
r = 0.63
\]

The correlation is 0.63 which indicates a positive linear correlation between the two variables (Agricultural Output and Gender Inequality). There, the null hypothesis that there is no direct relationship between Agricultural Output and Gender Inequality is rejected. This implies that there is a significant relationship between Agricultural Output and Gender Inequality.
Table 4: To what extent has gender inequality especially women impede Nigeria economic growth

<table>
<thead>
<tr>
<th>Variables</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
<th>TOTAL%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customs does not recognize the ownership of land (Asset) by women</td>
<td>42(48.8)</td>
<td>34(39.5)</td>
<td>2(2.3)</td>
<td>2(2.3)</td>
<td>6(6.9)</td>
<td>86(100)</td>
</tr>
<tr>
<td>Has the customs deprived women in making decision concerning ownership of farm land in your community.</td>
<td>35(40.7)</td>
<td>32(37)</td>
<td>3(3.4)</td>
<td>7(8.1)</td>
<td>9(10.5)</td>
<td>86(100)</td>
</tr>
<tr>
<td>Is women contribution to farming higher than men</td>
<td>29(33.7)</td>
<td>31(36)</td>
<td>4(4.6)</td>
<td>8(9.3)</td>
<td>14(16.3)</td>
<td>86(100)</td>
</tr>
</tbody>
</table>

Table 5: Research question one items for Hypothesis two

<table>
<thead>
<tr>
<th>X point</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>42</td>
<td>34</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>35</td>
<td>32</td>
<td>3</td>
<td>7</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>29</td>
<td>31</td>
<td>4</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>97</td>
<td>9</td>
<td>17</td>
<td>29</td>
</tr>
</tbody>
</table>

Source: survey 2013. However, dividing the total in each column by 3 gives the Y responses.

Table 6: Pearson Product Moment Correlation Computation

<table>
<thead>
<tr>
<th>Option on research question 2</th>
<th>X</th>
<th>Y</th>
<th>XY</th>
<th>X²</th>
<th>Y²</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
<td>5</td>
<td>35</td>
<td>175</td>
<td>25</td>
<td>1225</td>
</tr>
<tr>
<td>A</td>
<td>4</td>
<td>32</td>
<td>128</td>
<td>16</td>
<td>1024</td>
</tr>
<tr>
<td>U</td>
<td>3</td>
<td>3</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>6</td>
<td>12</td>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td>SD</td>
<td>1</td>
<td>10</td>
<td>10</td>
<td>1</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>86</td>
<td>334</td>
<td>55</td>
<td>2394</td>
</tr>
</tbody>
</table>

\[
r = \frac{\sum XY - \frac{1}{n} \sum X \sum Y}{\sqrt{n \sum X^2 - \left(\frac{1}{n} \sum X^2\right)^2} \times \sqrt{n \sum Y^2 - \left(\frac{1}{n} \sum Y^2\right)^2}}\\
r = \frac{5(334) - 15(86)}{\sqrt{5(55) - 225} \times 5(2394) - 86^2}\\
r = \frac{1670 - 1290}{\sqrt{22870} \times (11970 - 7396)}\\
r = \frac{380}{478} = 0.79
\]

The correlation is 0.79 which indicates a positive linear correlation between the variables gender inequality especially women impede Nigeria economic growth. This therefore reject the null hypothesis that there is no significant relationship gender inequality especially women impede Nigeria economic growth. This implies that there is a relationship between gender inequality especially women impede Nigeria economic growth.

CONCLUSION

The effect of gender inequality to economic growth cannot be over emphasized, hence, the need to carry out this research to make impact in economic growth arises. Against this background, it is therefore conclude if the society allows gender equity it improve the Agricultural output, hence, it will increase economic growth.

Recommendation

We therefore recommend that for Nigeria steady economic growth to translate positively to socio-economic of her citizens, the war against gender inequality should go beyond sectors or zones, it should be generally pursued. Also for the goals of the Transformation Agenda to be fully realized, the current situation of women must be factored into policy formulation and implementation.

REFERENCES


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