Gender Equality and Sustainable Development in Nigeria

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Abstract

This paper focused on gender equality and sustainable development in Nigeria. The study adopted a model made up of Women Literacy Rate (WLR), Women Labour Force Participation (WPR), and life expectancy at birth as the independent variables against women Poverty Rate (ANP) as the dependent variable. In order to achieve this task, the study utilized econometric approach in the analysis of data. The study found that about 60 percent of the total variation in women poverty rate (ANP) is explained by the independent variables while the remaining 40 percent is attributable to factors exogenous to the model. It also found that, gender equality and women empowerment programmes were not significant to bridge inequality and achieve the desired level of reduction in women poverty rate in Nigeria. The study therefore recommends that the various programmes undertaken by the government should be scale up so as to improve the livelihood of women. Also, stakeholders should monitor the implementation of reforms in that direction to ensure equitable distribution of resources and rewards.

Keywords: Gender, Equality, sustainable development, and women empowerment.

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http://internationalpolicybrief.org/journals/international-scientific-research-consortium-journals/intl-journal-of-economics-vol5-no1-jan-2017
Background to the Study

Gender inequality in the development process is a state where resources are distributed between male and female segments of the population in such a manner that one is favoured at the expense of the other. Consequently, this results to income inequality within the society. The income inequality leads to other inequalities in the economy especially in the area of Human Capital Development (Education and Health).

In Nigeria economy, resources are distributed unequally against the female gender due to societal norms and stereotypes. For example gender inequality within the overall society and across all sector show the wide disparities between women and men which, in turn contribute to uneven development and feminization of poverty.

Indicator of Inequality in Nigeria

1. Poverty Level: Out of 70% of people living below poverty line 65% are women and 5% men.
2. Participation in Workforce: 76% of Federal Civil Service Workers are men while women are 24%.
3. Income and Purchasing Power: Estimated to be US $1,495 for men as compared to US$ 614 for women.
4. Participation in Decision Making Process: At the National Assembly. Out of 469 member only 26 members are women. Indicating 94.5% for men and 5.5% for women (FMWA 2006, 2012).

These facts combined to ensure that women financial resources are meager and unstable relative to those of men. The consequences of these problems have both ethical and long-term economic implications. Any process of growth that fails to improve the economic status of the woman, experiences the greatest hardship. In the long run, the low status of the woman is likely to translate into lower rates of economic development.

The above situation of women and its consequent effect on growth and development spurred the United Nations to strive to stimulate the right atmosphere for women’s participation in sustainable economic development. Efforts were therefore put together globally to address how women, who constitute about half of the world’s population, could be integrated into the modern economic system through empowerment. As aptly noted by Asuru (2015) the various strategies being employed both at local and international levels to achieve these objectives include:

(a) The UN declaration of the Decade for women 1975 – 1984, Mexico.
(b) The Nairobi forward looking strategies, 1985 which was a follow – up to the Mexico meeting;
(c) The world health organization conference on the international forum on health conditionality for economic development, breaking the circle of poverty and inequality – Ghana, 1991.
(d) The preparatory committee meetings at the UN headquarters, New York, 1994.
World summit on women – Beijing, 1995.
The Millennium Summit, which adopted the Millennium Development Goals (MDGs) September 2000 – 2015.
The United Nations Sustainable Development Summit, September 25th to 27th 2015 in New York to be met by 2030.

The Sustainable Development Goals (SDGs) officially known as “Transforming our Worlds” is a set of seventeen aspirational “Global Goals” with 169 targets. It is a post MDGs agenda, which leverages on the achievements of the MDGs. The goals address poverty reduction, quality education, good health and wellbeing, gender equality, clean energy, decent work and economic growth among others. Poverty is central in the MDGs and SDGs, but a good number of the goals address women issues and the matter of their health thus, women empowerment goals should be rationally based. Unfortunately, a number of circumstances have brought about situation where women are poorer of the two genders causing uneven development in Nigeria.

This impairment suffered by women in Nigeria as a result of inequality can be clearly seen in resource distribution due to societal norms and stereotype in the form of poor maternal health, high rate of morbidity, low life expectancy, low literacy rate and high rate of poverty among women. For example, a report from Nigeria’s Center for Disease Control shows that the national life expectancy for women in Nigeria has reduced from fifty-one years in 2008 to forty-seven years in 2011 as a result of poverty among women; one of the lowest in West Africa. According to the report, the average life span is dragged down by high death rate among mothers and children (NASAD, 2012). It further indicated that pregnancy is not a disease, yet many mothers die from it. These conditions have combined to create a state of vulnerability, which worsened today, due to economic recession in Nigeria.

The Federal Government of Nigeria realizing the problem of inequality and the danger of poverty, initiated policies and programmes to bridge the gap of inequality and reduce poverty rate among women. These policies and programmes include:

2. Affirmative Action (30%) – 2000
5. Women Economic Empowerment Scheme – 2006
6. Female Functional Literacy for Health Project (FFLA) – 2006
8. Women Empowerment Programme Loan Scheme – 2010

However, the realities concerning the status of women’s livelihood do not seem to respond positively to these policies and programmes. Therefore, the extent to which these policies and programmes have been able to address the issue of gender equality in Nigeria as a precondition for the achievement of the sustainable development goal 5 is the question this work seeks to address.
Research Objective
This study seeks to analyze the relationship between gender equality and the achievement of Sustainable Development Goal 5 in Nigeria. Specifically, the study will:

i. Analyse the relationship between women literacy rate and poverty reduction in Nigeria.
ii. Determine women participatory rate in labour force and poverty reduction in Nigeria.
iii. Examine the relationship between life expectancy rate at birth and poverty reduction in Nigeria.

Research Hypothesis
To guide the study, the following null hypotheses was formulated for testing at 5 percent level of significance.

$H_0$: There is no significant relationship between women literacy rate and poverty reduction in Nigeria.

$H_1$: There is no significant relationship between women participatory rate in labour force and poverty reduction in Nigeria.

$H_2$: There is no significant relationship between life expectancy rate at birth and poverty reduction in Nigeria.

Theoretical Literature
Distributive Theory
According to David Ricardo as cited by Akpakpan (1999), the causes of poverty, hunger and general misery in the land is as a result of distributive pattern, i.e. the way the wealth of the nation is distributed among the members of the society. In Ricardo’s analysis, the pattern of distribution of rewards and resources favoured the land-owning class at the expense of the other (capitalist and workers). Given that the men own most of the land due to societal norms and stereotypes, it therefore implies that the rewards and resources (national wealth) are distributed in their favour, hence causing economic inequality in the society. The spillover effects usually affects the distribution of non-material elements like power, knowledge and health status. To redress this inequality, Amartya Sen as cited by Todaro and Smith (2012). In the capability Approach postulated that women need education, health and empowerment in addition to income to bridge the gap of inequality.

Literature Review
Meaning of Gender
According to World Bank (1995), gender is defined as any aspect of the relationship between men and women that involves role assignments with direct or indirect, positive or negative impact on development goals. Consequently, gender relation refers to culturally defined differences between men’s and women’s rights and responsibilities, i.e. division of labour and the distribution pattern of rewards and resources. In fact, these roles are defined by culture through the assignment of responsibilities by sex and age, thus perpetuating differences in men’s and woman’s right in the distribution of society’s rewards, resources, land, capital tools and time etc. Its spillover effects usually affects the distribution of non-material elements like power, knowledge, participation in decision making, health status, etc. To understand the pattern of distribution, there is the need to know the difference between sex and gender.
While sex is biologically unchangeable and universal, gender is cultural, changeable and variable. Gender is culturally determined and enforced. For example, gender division of labour and distribution of resources is rooted in cultural perceptions of differences in men and women in terms of make-up, taste and preferences, thought process, physical characteristics and capabilities (Nwakeze, 2010).

Causes of Gender Inequality
Oladunni (2003) opined that gender in the household defined by culture is the main cause of female poverty and underdevelopment. In her work, women and underdevelopment, Oladunni shows that gender role and unequal distribution of household resources are the main causes of women’s poverty. She also explained that institutional and social norms and perceptions generate unequal access to services and resources within the community, and wage discrimination in the labour market. She posited that the persistence of gender roles and relations have negative implication on economic development. It is particularly detrimental to the social and economic empowerment of the female gender.

Sex typification in labour force is another issue that promotes gender inequality. While some jobs are specified as feminine others are “branded” as being for male. This specification indicates the actual role and responsibility for the job.

Udosen (2000) posits that housework, catering for the needs of the family and child caring constitute the main work of women. In other words, women’s work is synonymous with “house work”. This implies that much of women’s jobs are done in the home. Sometimes when they work outside their home, women are largely employed in the informal sector. According to Standing (1992), Indian women are employed mainly in the unorganized sector which is seldom captured in official statistics. Besides, employment in the informal sector offer low levels of remuneration and poor condition of services which in turn deepens inequality.

In recent times, there has been a great deal of concern about the discriminatory practices in the labour market based on gender considerations. Specifically, several practices, beliefs and stereotypes are held against the female gender with regards to their suitability for certain jobs, eventual empowerment and advancement on the job.

Gender and Empowerment
The issue of empowerment first surfaced in gender and development debates in the work of Moser (1993) and Sen and Grown (1987). These writings reflected a concern among feminists in the South and North that women would never develop unless they could become sufficiently empowered to challenge patriarchy and global inequality. Moser focused on self-reliance and internal strength, arguing that empowerment was best defined as the ability to determine choices in life and to influence the direction of change, through the ability to gain control over crucial material and non-material resources. Sen and Grown (1987) emphasized collective action based on the life experiences of women in the South, particularly the very poor. Hence they called for a collective vision, a set of strategies and new methods for mobilizing political will, empowering women and transforming society.
Writings on empowerment and gender have continued to emerge in the development literature, including important contributions from the South. For example, Batliwala (1994) warned that empowerment, which had virtually replaced terms such as poverty alleviation, welfare and community participation, was in danger of losing its transformative edge. She called for a more precise understanding of power and empowerment, one that sees power as control over material assets, intellectual resources, and ideology. For Batliwala, empowerment is 'the process of challenging existing power relations and of gaining greater control over the sources of power. It requires political action and collective assault on cultural as well as national community power structures that oppress women and some men. Thus, while she acknowledged the need to improve the lives of grass-roots women, Batliwala insists that women's empowerment requires transformative political action as well.

Kabeer (1994) also insists on the centrality of empowerment for achieving gender equality. Drawing on Luke (1974), she criticized the liberal and Marxist emphasis on power over resources, institutions and decision making, and adds the focus on power as the ability to control discussions and agenda. She argued, however, for a more feminist analysis, one that emphasizes the transformative potential of power within. This power is rooted in self-understanding that can inspire women (and some men) to recognize and challenge gender inequality in the home and the community (Kabeer, 1994). Like Batliwala, Kabeer emphasizes collective, grass-roots participatory action – the power to work with others to control resources, determine agenda and to make decisions. However, Kabeer is particularly concerned with enhancing the ability to exercise choice (associated with access and claims on resources agency and achievement) (Kabeer, 1999).

Another argument is that empowerment is more than participation in decision-making; it must also include the processes that lead people to perceive themselves as able and entitled to make decisions (Rowlands, 1997). It is personal, relational and collective, and involves moving from insight to action. Drawing on in-depth research in Honduras, she points to the crucial role played by social, political and economic contexts, warning that consciousness and agency are always context-specific. Mosedale (2005) building on these debates, suggest that women's empowerment is best seen as both 'the process by which women redefine and extend what is possible for them to be and do in situations where they have been restricted compared to men', and 'the process in which women redefine gender roles in ways which extend their possibilities for being and doing' (Mosedale, 2005). For her, the issue is not simply enhancing choice; it is the need to extend the limits of the possible.

Initially, mainstream development agencies ignored the language of empowerment, but as top-down development policies failed to alleviate poverty in the 1990s, especially among women, mainstream discourse began to change. Empowerment entered the lexicon of mainstream women's and development programmes. For example, the Beijing Platform stated unequivocally that women's empowerment is fundamental for the achievement of equality, development and peace (United Nations, 1995). The Canadian International Development Agency's (CIDA, 1999) Policy on Gender Equality made women's empowerment one of the eight guiding principles for its policy goals; while always hedged with concerns about improving women's productivity and efficiency within neoliberal economic systems and 'solutions' (World Bank, 1995). The United Nations in its development
agenda, the Millennium Development Goal 3 made it unequivocally that gender equality and women empowerment are fundamental to development (United Nation 2000). Development practitioners and policy makers from all perspectives increasingly agree that empowerment is a necessary ingredient for women’s, development.

This seeming congruence of policy and approach obscures the difficulties faced by those trying to understand, implement and measure women’s empowerment. While the instability of the term has its advantages – for empowerment varies by context and condition – that same fluidity can impede our understanding of the ways one might enhance both the process and outcomes of empowerment projects. Moser (1993) has expressed concerns about the transformative mentions of mainstream development agencies. Others, such as Kabeer, point out that attempts to measure (and direct) empowerment have often been based on the assumption that we can somehow predict the nature and direction that change is going to assume. In actual fact, human agency is indeterminate and hence unpredictable in a way that is antithetical to requirements of measurement (Kabeer, 1999). Mosedale (2005) suggests a conceptual framework for establishing a baseline of power relations which is rooted in local contexts and can thus provide a basis for measuring movement towards or away from women’s empowerment. No doubt others will enter the debate, as measuring empowerment continues to challenge those who wish to operationalise the term for development goals, particularly to enhance gender equality.

Despite different emphasis and perspectives, discussions of empowerment have remained rooted in the local, in the needs of the ‘poorest of the poor’ – particularity women. While acknowledging the importance of the local and of grass-roots knowledge and activism, Parpart, Rai and Staudt (2002) argue that this focus on the local and the uncritical use of the term empowerment has constrained the transformative ability of the empowerment approach. They believe that empowerment will only become an effective tool for challenging gender inequality when it moves beyond the local to address global issues.

**Research Model**
The functional relationship between the variables is stated as:
\[ ANP = f (WLR, WPR, LEB, DUM, ...) \]  

Where:
- **ANP** = Women Poverty Rate
- **WLR** = Women Literacy Rate
- **WPR** = Women Participation Rate in Labour force
- **LEB** = Life Expectancy Rate
- **DUM** = Dummy variable (0 = Pre-MDGs 3 while 1 = Post – MGDS 3 implementation phases).

Equation (1.1) is explicitly stated in an Econometric form of:
\[ ANPt = \alpha + WLRt + WPRt + LEBt + DUMt + \ldots \]  

Where:
- **ANP** = Women Poverty Rate at time “t”
- **WLR** = Women Literacy Rate at time “t”
- **WPR** = Women Participation Rate in Labour Force at time “t”
LEB = Life Expectancy at Birth during time “t”
DUM = Dummy
. = Autonomous poverty level
i = Coefficients of the proxies for i, and 4
. = Error term (mean and variance assumed constant)

Mathematically, equation (1.2) can be formulated thus:
ANPt = 0 + WLR + WPR + LEB + DUM + …

Where represents estimates and the behavioral assumptions (the a priori or the presumptive signs) in equation 1.3 are that.
, and , >0 while , > 0.

Equation 1.2 can be transformed into logarithmic form of:
LnANP = LnWLR + LnWPR + LnLEB + LnDUM + …

Where
Ln = Natural Logarithm
i = and =

The variables WLR, WPR, LEB, and Dum are the explanatory variables 0 is the intercept while the parameters i, and , are all elasticity coefficient of the target variables with respect to the empowerment programmes. The signs and magnitude of these parameters will measure the nature of the effect or impact of this women development programme, , is the error term.

Data Analysis and Estimation Techniques
This work utilized econometric approach in the analysis of the data.

Data Diagnostic Results
Unit Root Result
The test is conducted using two different unit root models. That is, the Augmented Dickey Fuller (ADF) model and the Philips – Peron (PP) model. The essence of using the two testing procedures is for confirmatory testing. Table 1a displays the unit root diagnostic test result. The two test statistic employed unanimously indicates that all the variables in the model are non-stationary at levels. This implies that all the variables used in the model have a trending characteristic; hence the usual difference transformation will be required to make the variables stationary. As expected, the variables in the model became stationary after taking the first difference transformation as the parameters are statistically significant at the one, five and ten percents levels respectively as shown in the Table. In other word, all variables are integrated of order one (1) which means that there will be mean reverting in the long run.

Interestingly, the two tests statistics (ADF) and (PP) returned result that lead to similar conclusions. These results imply that the regression results that would be obtained from the model are likely to return spurious results if there is no long-run relationship among the variables in the model. Since all the variables are not stationary at levels, it means that there is need to conduct co-integration test to see if their linear combination could still generate meaningful long-run relationship.
Table 1a: Unit Root Test:

<table>
<thead>
<tr>
<th>Variables</th>
<th>ADF</th>
<th>PP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level (9)</td>
<td>Level (9)</td>
</tr>
<tr>
<td>ANP</td>
<td>-4.712807</td>
<td>-5.34210***</td>
</tr>
<tr>
<td>WPR</td>
<td>-4.648686</td>
<td>-1.575649***</td>
</tr>
<tr>
<td>LEB</td>
<td>-1.342575</td>
<td>4.813201***</td>
</tr>
<tr>
<td>WLR</td>
<td>-2.508888</td>
<td>-6.483209***</td>
</tr>
</tbody>
</table>

Notes: *** indicates significance at the 1%, 5%, 10% levels respectively. The values in bracket for the ADF and PP test, indicates the optimal lag length selected by the SIC within a maximum lag of 9. All estimation assume a constant term.

Table 1b: Johnson Hypothesis Cointegration Relations (with women empowerment and poverty reduction)

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Trace Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob. **</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.991917</td>
<td>130.3859</td>
<td>47.85613</td>
<td>0.0000</td>
</tr>
<tr>
<td>At most 1*</td>
<td>0.594709</td>
<td>34.02592</td>
<td>29.79707</td>
<td>0.0154</td>
</tr>
<tr>
<td>At most 2*</td>
<td>0.393919</td>
<td>15.96290</td>
<td>15.49471</td>
<td>0.0425</td>
</tr>
<tr>
<td>At most 3*</td>
<td>0.257255</td>
<td>5.948057</td>
<td>3.841466</td>
<td>0.0147</td>
</tr>
</tbody>
</table>

Trace test indicates 4 cointegrating eqn(s) at the 0.05 level
*denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

<table>
<thead>
<tr>
<th>Hypothesized No. of CE(s)</th>
<th>Eigenvalue</th>
<th>Max-Eigen Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob. **</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.991917</td>
<td>96.35999</td>
<td>27.58434</td>
<td>0.0000</td>
</tr>
<tr>
<td>At most 1*</td>
<td>0.594709</td>
<td>18.06302</td>
<td>21.13162</td>
<td>0.1275</td>
</tr>
<tr>
<td>At most 2*</td>
<td>0.393919</td>
<td>10.01484</td>
<td>14.26460</td>
<td>0.2109</td>
</tr>
<tr>
<td>At most 3*</td>
<td>0.257255</td>
<td>5.948057</td>
<td>3.841466</td>
<td>0.0147</td>
</tr>
</tbody>
</table>

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level
*denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Contained in Table 1b is the summary of the cointegration test results. In the result four variables are included (ANP, WLR, WPR and LEB). From the table the trace and Max-Eigen statistics return overwhelming evidence of long run relationship among the variables. The statistics in the Table indicates the existence of four cointegrating equations at 5% level of significance for Trace statistic while the Max-Eigen statistics returns two cointegrating equations. Thus, in all, we could not obtain any evidence for accepting the null hypothesis of no cointegration. The evidence of cointegration among the variables ruled out the likelihood of spurious regression results.
### Hypotheses Testing

#### Data Presentation and Analysis

**Table 2:** Nigeria’s ANP; WPR; WLR; LEB and DUM

<table>
<thead>
<tr>
<th>Year</th>
<th>ANP (Million)</th>
<th>WPR</th>
<th>LEB</th>
<th>WLR</th>
<th>DUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>38</td>
<td>36.8</td>
<td>46.86</td>
<td>35.5</td>
<td>0</td>
</tr>
<tr>
<td>1991</td>
<td>38.5</td>
<td>36.1</td>
<td>46.73</td>
<td>43.8</td>
<td>0</td>
</tr>
<tr>
<td>1992</td>
<td>42.7</td>
<td>36.2</td>
<td>46.58</td>
<td>44.1</td>
<td>0</td>
</tr>
<tr>
<td>1993</td>
<td>45.8</td>
<td>38</td>
<td>46.41</td>
<td>54.5</td>
<td>0</td>
</tr>
<tr>
<td>1994</td>
<td>52.6</td>
<td>39</td>
<td>46.26</td>
<td>62.2</td>
<td>0</td>
</tr>
<tr>
<td>1995</td>
<td>59.3</td>
<td>37.1</td>
<td>46.16</td>
<td>53.6</td>
<td>0</td>
</tr>
<tr>
<td>1996</td>
<td>65.6</td>
<td>37</td>
<td>46.13</td>
<td>56.8</td>
<td>0</td>
</tr>
<tr>
<td>1997</td>
<td>73.3</td>
<td>42</td>
<td>46.21</td>
<td>57.6</td>
<td>0</td>
</tr>
<tr>
<td>1998</td>
<td>68</td>
<td>44</td>
<td>46.4</td>
<td>64.6</td>
<td>0</td>
</tr>
<tr>
<td>1999</td>
<td>73.3</td>
<td>52</td>
<td>46.71</td>
<td>59.7</td>
<td>1</td>
</tr>
<tr>
<td>2000</td>
<td>77</td>
<td>59</td>
<td>47.12</td>
<td>79.5</td>
<td>1</td>
</tr>
<tr>
<td>2001</td>
<td>81.2</td>
<td>61</td>
<td>47.61</td>
<td>79.5</td>
<td>1</td>
</tr>
<tr>
<td>2002</td>
<td>86</td>
<td>75</td>
<td>48.15</td>
<td>79.5</td>
<td>1</td>
</tr>
<tr>
<td>2003</td>
<td>81.4</td>
<td>63.2</td>
<td>48.7</td>
<td>79.5</td>
<td>1</td>
</tr>
<tr>
<td>2004</td>
<td>68.7</td>
<td>60</td>
<td>49.25</td>
<td>79.2</td>
<td>1</td>
</tr>
<tr>
<td>2005</td>
<td>78.7</td>
<td>60.1</td>
<td>49.77</td>
<td>80.8</td>
<td>1</td>
</tr>
<tr>
<td>2006</td>
<td>76.27</td>
<td>60.1</td>
<td>50.28</td>
<td>81.2</td>
<td>1</td>
</tr>
<tr>
<td>2007</td>
<td>74.56</td>
<td>60</td>
<td>50.78</td>
<td>80.3</td>
<td>1</td>
</tr>
<tr>
<td>2008</td>
<td>76.51</td>
<td>64</td>
<td>51.27</td>
<td>82.7</td>
<td>1</td>
</tr>
<tr>
<td>2009</td>
<td>77.89</td>
<td>61.4</td>
<td>51.75</td>
<td>82.8</td>
<td>1</td>
</tr>
<tr>
<td>2010</td>
<td>77.24</td>
<td>61.8</td>
<td>52.23</td>
<td>83</td>
<td>1</td>
</tr>
<tr>
<td>2011</td>
<td>76.8</td>
<td>62.4</td>
<td>51.75</td>
<td>82.8</td>
<td>1</td>
</tr>
</tbody>
</table>

**Sources:**
- (i) NBS Fact Book (Various Issues)
- (ii) International Labour Office (ILO) (2011)
- (iii) USAID – (2009)
- (iv) UNESCO – 2010
- (v) UNICEF – (2010)
- (vi) British Council 2012
- (vii) World Bank 2010
- (viii) USAID 2010

**Table 2b:** Average rate of Variables (1990 – 2011)

<table>
<thead>
<tr>
<th>Average</th>
<th>ANP</th>
<th>WPR</th>
<th>LEB</th>
<th>WLR</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990–1999</td>
<td>55.14</td>
<td>39.82</td>
<td>46.45</td>
<td>54.24</td>
</tr>
<tr>
<td>2000–2011</td>
<td>64.61</td>
<td>62.33</td>
<td>49.88</td>
<td>80.82</td>
</tr>
</tbody>
</table>

**Note:**
- (i) ANP – Women Poverty Rate
- (ii) WLR – Women Literacy Rate
- (iii) WPR – Women Participation Rate in Labour
- (iv) LEB = Female Life Expectancy at Birth
- (v) DUM = Dummy variable (Pre-MDG = 0 and while Post-MDG = 1).
Table 2b shows the interaction between gender equality, women empowerment proxies and the achievement of MDG 3 in Nigeria for the period 1990 to 2011. A look at the table indicates that Women Poverty Rate (ANP) had been on the increase over the years. It shows that on the average, the Women Poverty Rate was 55.14 and rose to as high as 64.61 between 2000 and 2011. This finding is in line with the report of FMWA (2006). It then means that if the trend continues the quest for attaining the SDG 5 in Nigeria will not be achieved.

Again, Table 2b shows that on the average, women participation in the labour force rose from 39.82 percent in 1990 – 1999 to about 62.33 percent for the period 2000 – 2011. On the other hand, life expectancy rate of women equally increased from 46.45 percent in 1990 – 1999 to about 49.88 percent for the period 2000 – 2011. This marginal increase in life expectancy rate of 3.43 percent could be attributed to gamut of measures taken by Federal Government of Nigeria aimed at improving maternal health and reducing child mortality. For instance the Vesico-Vaginal Fistula (VVF) project, female functional literacy for health (FFLH) projects, Roll back malaria and vaccination among others.

Discussion of Findings
The analysis of the data was done using the popular and widely used econometrics computer software, E-view version 7 and the results are contained in the Tables below.

Conventional Regression Analysis
Table 3: Static regression analysis for ANP model at level
Dependent Variable: ANP
Method: Least Squares
Sample: 1990 – 2011
Included observations: 32

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-420.6030</td>
<td>173.5840</td>
<td>-2.423052</td>
<td>0.0268</td>
</tr>
<tr>
<td>WLR</td>
<td>0.144761</td>
<td>0.743514</td>
<td>0.194698</td>
<td>0.8479</td>
</tr>
<tr>
<td>WPR</td>
<td>1.418272</td>
<td>1.021665</td>
<td>1.388196</td>
<td>0.1830</td>
</tr>
<tr>
<td>LEB</td>
<td>8.848773</td>
<td>3.632057</td>
<td>2.436298</td>
<td>0.0261</td>
</tr>
<tr>
<td>DUM</td>
<td>-29.30729</td>
<td>29.86239</td>
<td>-0.981411</td>
<td>0.3402</td>
</tr>
</tbody>
</table>

R-squared | 0.597022    | Mean dependent var | 75.05182 |
Adjusted R-squared | 0.502204    | S.D. dependent var | 29.1070  |
S.E. of regression | 20.53262    | Akaike info criterion | 9.078623 |
Sum squared resid  | 7167.000    | Schwarz criterion | 9.326587 |
Log likelihood    | -94.86485   | Hannan-quinn criter. | 9.137036 |
F-statistic       | 6.295482    | Durbin-Watson stat | 0.955679 |
Pro (F-statistic) | 0.002682    |

Table 3 shows that the coefficient of the constant parameter is negative (-420.6) or indirectly related to ANP. This means that if all the explanatory variables are held constant, ANP which is the dependent variable will reduce, by 420.6 units.
Table 3 further indicates that the multiple determinates denoted by R’ is 0.597. This means that 60 percent of the total variation in Women Poverty Rate (ANP) is caused by the independent variables while the remaining 40 percent is caused by other factors outside the model but covered by the error term. The F-statistics computed is 6.296 and greater than the Table value of 2.96 at 5 percent level of significance. Thus, we conclude that the overall model is significant.

Hypotheses Testing
The hypotheses in this section are recast in null forms and tested at 5 percent significant level.

**Hypothesis One**
There is no significant relationship between women literacy and poverty reduction in Nigeria. From Table 3, the coefficient of women literacy rate (WLR) is 0.145. This means that in the shortrun WLR is positively related to poverty (ANP), this means that a unit increase in WLR will increase poverty (ANP) by 0.145. By extension WLR is not significant and does not agree with economic expectation. This may be as a result of literacy rate not having a direct impact on poverty. If one is literate, he/she must be gainfully employed or productive to earn income before it can impact on poverty. An unemployed literate person cannot reduce poverty. Thus we accept the null hypothesis and reject the alternative in hypothesis one.

**Hypothesis Two**
There is no significant relationship between women participatory rate (WPR) in labour force and poverty reduction in Nigeria.

Women participatory rate (WPR) in labour force indicate a positive relationship with poverty at 1.418 coefficient. Meaning that a unit increase in WPR will increase poverty by 1.418. The implication is that poverty increases with women participatory rate. However, this is in contrast with apriori expectation where women participation rate in labour force should reduce poverty rate. Never the less, the result is in line with the reality on ground and the findings of Federal Ministry of Women Affairs where women participatory rate in labour force especially the federal ministries are so insignificant that it cannot reduce poverty. Thus we accept the null hypothesis and reject the alternative.

**Hypothesis Three**
There is no significant relationship between life expectancy at birth and poverty reduction in Nigeria.

From Table 2b there is a managerial increase in life expectancy at birth from 46.45 percent to 49.88 percent within the period under review (1990 – 2011). This marginal increase however is not significant enough to reduce poverty hence the resultant effect in table 3 showing a positive relationship between poverty rate and life expectancy rate. This again does not agree with the apriori expectation.
Conclusion
Based on the findings in this work, Women Poverty Rate had continued to be on the increase in spite of Nigeria’s adoption of Millennium Development Goals in the years in question. This is particularly true with regards to gender equality and women empowerment. The inability of Nigeria to achieve this can be attributed to the continual inequality between men and women in the distribution of resources and rewards. The theoretical foundation of this observation is rooted in the distributive theory.

The advocates of this theory are of the view that since in the household sector and the entire society men mostly own and control the factors of production; women are the most deprived in terms of the distribution of national wealth. Thus, in order to side – step this web, the government as a matter of urgency need to reconsider the place of women in the society especially as it relates to women participatory rate in labour force, women literacy rate, women health and participation in decision making. This can be achieved through the enforcement of the various policies, programmes and projects aimed at bridging gender inequality and equitable distribution of resource and rewards.

Recommendations
(i) In view of the persistent women poverty in Nigeria, the resolution and recommendations of Capenhagan World Summit on Poverty Alleviation and other international summits should be domesticated and enforced in Nigeria.
(ii) To bridge inequality, in Nigerian resources and rewards should be equitably distributed.
(iii) The various programmes in education undertaken by federal government of Nigeria such as Functional Literacy for the Girl child project and skills acquisition for women should be scaled up so as to improve women literacy rate and bridged the gap of inequality in Nigeria.
(iv) Also the various health programme embarked by Federal Government of Nigeria to reduce maternal mortality should be upheld and scaled up such as Vesico-Vaginal Fistula (VVF), Female Functional Literacy for Health (FFLH) projects, Roll back malaria and vaccination among others.
(v) Stakeholders should monitor the implementation of reforms in that direction to ensure equitable distribution of resources and rewards.
References


