

## Climate Change for Community and National Development: Challenges and Opportunities in the 21st Century

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### ABSTRACT

In Nigeria, climate change intensifies social and environmental stress and exacerbates entrenched gender inequalities. Extreme weather (floods, droughts) and resource scarcity disrupt schooling and livelihoods, undermining education access for girls. For example, recent floods destroyed farmland and displaced thousands, worsening food insecurity and limiting household coping capacity. These crises increase women's burdens – longer treks to fetch water and fuel and heightened health risks (waterborne disease, heat stress) – and elevate risks of gender-based exploitation during displacement. As a result, gender gaps widen literacy among young women is 90% in the south but under 30% in many northern states (such as Sokoto, Bauchi, Zamfara). The study highlights broad implications: Climate pressures damage school infrastructure and hinder attendance, while related malnutrition and health issues impede learning outcomes. Women's economic participation suffers as climate impacts agriculture and livelihoods. In Nigeria, women often farm marginal land, so climate shocks disproportionately reduce yields and incomes. Gender and asset gaps limit adaptive capacity; closing these gaps through empowerment and inclusion is vital. The authors conclude that inclusive, climate-responsive educational reforms and gender-focused development strategies are essential. Prioritizing girls' education and women's empowerment can bridge Nigeria's regional disparities and drive resilient national development. Education and empowerment emerge as key solutions: stakeholders stress that educating girls builds climate awareness and innovation, forming the 'foundation of women empowerment to ensure sustainable development'. Empowerment programmes such as financial services, training, climate-smart agriculture bolster resilience and adaptive capacity.

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### Introduction

Climate Change is one of the most important environmental issues facing the world today. Presently it has been ascertained within the scientific community and even among the politicians that climate change is happening and its impacts and

consequences are being felt already. It is an area that is currently in dire need of a wide range of awareness in order to curb its effects on education and on the society in general.

According to Limbani (2010). Climate Change is a change in the patterns of the average weather of a specific region or the earth as a whole, Evidence shows that global mean temperature increased by 0.6°C during the 20th Century, with the hottest years occurring between 1997 and 2007. This warming of the world's climate has been traced to higher concentrations of carbon-dioxide and other greenhouse gases (GHGs) in the atmosphere, which emanates from anthropogenic origin such as fossil fuel combustion, Land excavation and Deforestation.

Climate Change phenomenon has serious detrimental consequences for the earth in form of variations in regional climates, recurrent droughts, excessive heat waves, killer floods and windstorms. In Nigeria, the obvious consequences are intense thunderstorms, widespread floods, and incessant droughts. Climate change possess great dangers with consequences such as desertification, sea level rise, flooding, water sanitation, rising temperature which could bring about diseases such as Meningitis, Stroke and Malaria. According to UNICEF 2009, report Climate change affects every citizen, most especially women in the society, including every part of our environment, and our natural resources, practically every aspect of our lives and our economy. These women represent significant part of Nigerian communities as homemakers, partners, guardians, wives, mothers, tutors, nannies, minders, house helps, and cooks, just to mention a few. One can say that nearly all of them have attained a certain level of education or the other from their parents and or guardians. This may simply be referred to as "home training" - just like a girl is trained at home to know the culture and traditions of her community, usually informally (Gender Statistics, 2010). This sort of training can go on till a girl is married and, probably, until her mother/guardian becomes tired or gets too old to be able to impart more of such knowledge to the girl child any longer.

Outside this, there are schools and colleges where girls go through formal education, often from the primary school through secondary school, and up to the tertiary level of education (Oniye, 2010; Ojobo, 2008). But not many girls have the opportunity of going through the formal school system. Also, among those that have the opportunities, some either drop out of school for lack of funds, or their parents and guardians become disinterested in their education (United Nations Educational, Scientific and Cultural Organisation (UNESCO), 1998, 2002; Anyanwu and Augustine, 2013; Gender Statistics, 2010). There are others who have never been to any formal school system but learnt trades formally or informally from professionals (World Bank Group, 2011; Luci, Jütting, and Morrisson, 2012; Mbara, Anurugwo and Alata 2015). However, climate change and its impacts are felt more by poor and developing countries especially those in Africa due to poor educational background, low level of infrastructural development, awareness and coping capacities. This can become worse if the educational systems of such countries experience serious setbacks as a result of the negative impacts of climate change.

This study examined climate change, consequences of climate change on the environment, the levels of literacy of Nigerian women, and their empowerment, Climate change in women education in the 21st century, implications of climate change, challenges and opportunities for the development of the communities. It goes further to make suggestions for sustainable growth and development of the nation through the women that should be seen and heard.

### **Concept of Education**

Education is the process of receiving or giving systematic instruction especially at a school. Education is divided into 3 stages, namely: Primary Education, Secondary Education and Tertiary Education (NPE, 2004). Abiri & Adebayo (2013) perceived Education as an essential element of the global response to climate change for it helps young people to understand and address the impact of global warming encourages changes in their attitude and behaviour and adapt to climate change related trends.

Education is the life wire of any developmental processes of any organization. It is a bedrock or pivot on which sustainable development of any nation depends. Therefore, education could be used to create awareness on the effects of climate change.

This can be in form of empowerment as a concept, which is characterised by a move away from a deficit-oriented towards a more strength-oriented perception, can increasingly be found in management concepts, as well as in the areas of continuing education and self-help (Albert, 2008). But Robert (2008) particularly points to the limitations of any single definition of "empowerment," and the danger that academic or any specialist definitions might take away the word and the connected practices from the very people they are supposed to belong. Thus, a minimal definition of the term was considered as "the capacity of individuals, groups and/or communities to take control of their circumstances, exercise power and achieve their own goals, and the process by which, individually and collectively, they are able to help themselves and others to maximise the quality of their lives."

Climate change in Education can be defined as the alterations in the Education system which affects both the students and the teachers even the environment where teaching and learning is taking place. Education for sustainable development programme according to Pumiyn & Davdi 2009 & IISD 2010 aim at making make climate change education a more central and visible part of the international response to help people understand the impact of global warming today and increase climate literacy among young people. It does this by strengthening the capacity of its member states to provide quality climate change education encouraging innovative teaching approaches to integrate climate change in education in schools and by raising awareness about climate change as well as enhancing non-formal education programmes through media, networking and partnerships. Nevertheless, empowerment as action refers to both the process of self-empowerment and to professional support of people, which enables them to overcome their sense of helplessness and lack of authority, and to recognise and use their resources wisely, judiciously and responsibly. However, to educational sociologists, empowerment is not giving people power, because people already have plenty of power, in the wealth of their knowledge and motivation, to do their jobs magnificently. But empowerment is better perceived as letting this power out (Potterfield, 1999). It encourages people to gain the skills and knowledge that will allow them to overcome obstacles in life or work environment and ultimately, help them develop within themselves or in the society.

Undoubtedly, women of the 21st century are being challenged to make better the scene just like their male counterparts. German (2009) writes that "there have been very great changes in women's lives in the past few decades. They include much more openness about sexuality, millions of mothers going out to work, women breaking into new industries and professions, and acceptance that women will work outside the home, have children outside marriage, and have the right to control their own sexuality." She reiterates that work and personal life have been distorted by the constraints of capitalism and have fallen far short of liberation; and so, there is still as much to fight for. The question remains, how would the women be educated and empowered to play their own roles, fight for liberation, and change the world "to end the class society which created oppression and exploitation in the first place."

### **Concept of Climate Change**

Climate is usually defined as the average weather of atmosphere condition of a place. It includes patterns of temperature, precipitation (rain and snow), humidity, wind and seasons. Climate patterns play a fundamental role in shaping national ecosystem and the human economics and culture that depend on them. Our climate is rapidly changing with disruptive impacts and that change is progressing faster than was seen in the last 2000 years (Akinghade, 2010). Climate change is also seen as changes in the earth's weather, including changes in temperature, wind patterns and rainfall especially the increase in the temperature of the earth's atmosphere that is caused by the increase of gases-carbon dioxide, such change can be temporary or permanent. It can occur regionally or globally (European Commission, 2008).

However, in recent times the main focus is on human activity that is responsible for climate change, thus the United Nations Framework Convention on Climate change (2014) defines this subject as a change of climate which is attributed directly or indirectly to human activities that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods. A study of climate change and its impacts is therefore expedient because

it is considered that if human activities that cause deleterious climate change are not mitigated, the survival of the entire human race is under jeopardy.

### **Causes of Climate Change**

History has it that the causes of climate change have been extensively, debated because climate change can either be due to natural variability or as a result of human activity. Although scientists, politicians, economists and the general public are highly worried about the consequences of climate change caused by humans (pollutions, deforestation) and natural factors (flood, earthquake, tornado, that are accountable for this occurrence. Natural factors that can cause climate change take a long time to produce their impact, on the other hand, there is new and stronger evidence that most of the warming over the past 50 years is due to human activities (IISD Reporting Services (2010). Climate change which is otherwise called global warming has resulted from deforestation, Industrial and domestic emission of toxic material into the atmosphere, oceans, rivers and soil, the rupture of the ozone layer due to the release of chlorofluorocarbon gas Ice core taken from the deep-in ancient ice of Antarctica show that carbon dioxide levels are higher now than at any time in the past. More carbon dioxide in the atmosphere means warming temperatures Inter-governmental Panel on Climate Change (IPCC), in its 2007 report to the United Nations, concluded that more than 90% accelerated warming of the past 50-60 years is due to human contributions. These contributions include increased levels of heat-trapping gases that is "Greenhouse gases such as carbon-dioxide in the atmosphere.

### **Consequences of Climate Change on the Environment**

As the levels of the carbon-dioxide and other Greenhouse gases rise, more heat is trapped and global temperatures rise. This causes significant changes in the timing and length of the seasons as well as the amount and frequency of precipitation in rain and snow. However, Environmentalist warn that even though climate change cannot be accurately projected, a complacent attitude should be avoided, the risk must be recognized and disaster preventative measures must be adapted now to reduce the adverse effect of the climate change.

The climate changes, extreme weather events like the heat waves, droughts, heavy rain, snow, storms and floods are becoming more frequent and intense, some areas have witness more frequent heat waves, forest fires and droughts. Extreme weather events pose a direct risk to health and safety of people, with the very young the elderly, and the disabled and low-income households particularly vulnerable. Damage to property and infrastructure imposes heavy cost on the society and the economy. Sectors that rely strongly on certain temperature and precipitation levels, such as Agriculture, forestry, energy and tourism are particularly affected by climate change. Climate change is happening so fast that many plant and animal species will struggle to cope. These changes pose serious threats to human lives to economic development and to the natural world which much of our prosperity depends. Society therefore needs to take measures to adapt to these unavoidable impacts while taking actions to cut the greenhouse gases emissions that are almost certainly causing climate change (European Commission, 2008).

Nigeria is experiencing adverse climate conditions with native impacts on millions of people. Persistent droughts and flooding, off season rains and dry spells have sent growing seasons out of orbit, on a country dependent on a rain-fed agriculture. Lakes are drying up and a reduction in river flow in the arid and semi-arid region, this results to fewer water supplies for agricultural use, hydropower generation and other uses change is a threat to food security, arid and semi-arid areas. Northern Nigeria is becoming drier, while the southern part of the country is getting wetter. Climate change is evident in Nigeria with its negative impacts such as temperature rise, erratic rainfall, sandstorms, desertification, low agricultural yield, drying up water bodies and flood (Nasiru, 2011). Environment degradation and desertification are major threats to livelihoods of the inhabitants of the states of Nigeria This leads to increasing population pressure, intensive agricultural land use, overgrazing, bush burning, extraction of fuel wood and other biotic resources. As the effects of climate change become more visible and extreme, they are likely to affect adversely the lives of women and children (UNESCO, 2014) Climate change is really of great concern to our nation. The Nigerian government and all the stakeholders involved in the global

phenomenon needs to increase public awareness, promote research and establish a commission or an agency that will handle issues related to global warming and climate change. The Federal, State and Local Government, International Agencies and other development partners are required to fund climate change projects in Nigeria for a sustainable solution (Abiri & Adebayo, 2013).

### **Climate Change in Women Education and Empowerment in 21st Century**

Climate change in Education can be defined as the alterations in the Education system which affects both the students and the teachers even the environment where teaching and learning is taking place. Education for sustainable development programme according to Pumiyn & Davdi 2009 & IISD 2010 aim at making make climate change education a more central and visible part of the international response to help people understand the impact of global warming today and increase climate literacy among young people. It does this by strengthening the capacity of its member states to provide quality climate change education encouraging innovative teaching approaches to integrate climate change in education in schools and by raising awareness about climate change as well as enhancing non-formal education programmes through media, networking and partnerships.

However, to start with, and particularly for the developing world, women education includes areas of gender equality and access to education, and its connection to the alleviation of poverty. It also involves the issues of single-sex education and religious education in that the division of education along gender lines as well as religious teachings on education have been traditionally dominant and are still highly relevant in contemporary discussions of educating females as a global consideration. While the feminist movement has certainly promoted the importance of the issues attached to female education, the discussion is wide-ranging and by no means narrowly defined (de Grauwe, 2009). It includes, for example, HIV/AIDS education. But, universal education, meaning state-provided primary and secondary education independent of gender, is not yet a global norm, even if it is assumed in most developed countries. In some African and other developing nations, including Nigeria, men have surpassed women very considerably (Ojobo, 2008; Fadeyi & Olanegan, 2001).

World literacy is lower for females than for males. The Central Intelligence Agency (CIA) World Factbook (2014) presents an estimate from a 2010 survey which shows that 80 percent of women are literate, compared to 88.6 percent of men. Literacy rates are lowest in South and West Asia, and in parts of sub-Saharan Africa. Even though, to this day, women are studying at prestigious universities at the same rate as men, they are not being given the same opportunity as men to join faculties in tertiary institutions or hold public offices as many as their male counterparts. However, the Nigerian National Bureau of Statistics (2014) affirms that as much as 90 percent and above of women in Lagos, Edo, Ebonyi, Anambra, Akwa Ibom, Imo, Abia, Rivers and Osun states are literate. 80-90 percent of the women in Ogun, Oyo, Kogi, Ekiti, Bayelsa, Ondo, Delta and Cross River states are educated. These rates are quite laudable, being above the global average. But the same cannot be said of the proportion of educated women in Taraba, Benue and Ebonyi states with 70-80 percent. It is 60-70 percent for Kwara and Plateau states. The proportion of literate women in Nassarawa and Adamawa states is just 50-60 percent, and between 35 and 50 percent for Kaduna, Kano and Katsina states. The proportion of the literate women is least in the states of the extreme northeast and extreme northwest, that is, Borno, Gombe, Jigawa Zamfara, Bauchi, Sokoto, Kebbi and Yobe states, with each less than 35 percent (Nigerian National Bureau of Statistics, 2014).

The nation is endowed with over 130 universities owned by the federal and state governments, individual and groups, and awarding certificates, diplomas, degrees and postgraduate degree credentials in different fields of human endeavour. There are also over 100 accredited polytechnics awarding the National Diploma (ND) and Higher National Diploma (HND) certificates. Suffice to say that there are Colleges of Education preparing both males and females for the teaching profession at the primary level of education. The academic institutions are at the rates of about 4, 3 and 2 respectively per state. But despite the proliferation of tertiary institutions, low literacy level still limits the access of women to information, knowledge, power, funds, among others, with which they would have been more productive in the community and in the nation at large.

They are thus, often "unseen and unheard." It is quite instructive, as we have seen above, that the rates and levels of literacy and implicitly empowerment gradually and relatively decrease northward from the south.

### **Implications of Climate Change to Women Education**

Climate change is about people, their rights and future (UNESCO 2014) Climate Change consequences like drought, floods, high temperature, earthquakes have adverse effects on country's bid to achieve long term vision 2020 which aims to provide equitable access to quality education for all as well as the 2015 millennium development goals (MDGs). This is against the falling situation of education sector marked by poor quality of education, inequitable access to education at secondary and tertiary levels, and poor governance and management at all levels. Climate change effects threaten to drive home the last nail into education's coffin but government's coffers get diverted to respond to disastrous situations like floods and hunger, dropout rate and reconstruction, this reduces amount of funds available for other development areas including empowerment education for women.

### **Major Challenges for Women**

Aja-Okorie (2013) asserts that education helps men and women claim their rights and realise their potential in economic, political and social fields. It is also the single most powerful way to lift people out of poverty. Yet, many women are still excluded from education in many of the Nigerian communities. This would mean that they are excluded from "the current wave of globalisation which has greatly improved the lives of women worldwide, particularly the lives of women in the developing world" (Aja-Okorie, 2013). Indeed, women remain disadvantaged in many areas of life, including education, employment, health, and civil rights, that is, despite the realisation that education has been recognised as a basic human right since the 1948 adoption of the Universal Declaration of Human Rights. In the developed world, a positive correlation exists between the enrolment of girls in primary schools and the gross national product and life expectancy. Because of this correlation, enrolment in schools represents the largest component of societal investment in human capital. Rapid socioeconomic development of the nations has been observed to depend on the caliber of women and their education in those countries (de Grauwe, 2009; Elbough-Woytek, Newiak, Kochhar et al, 2013). In Nigeria, the literacy rate of male tripled over the period between 1951 and 2001. Quite surprisingly, the female literacy rate has increased at a faster rate than the male literacy rate during the decades 1951. 2001. The growth is almost 6 times, for example, 7.90 percent in 1951 and 54 percent in 2001. From this analysis, one can infer that still the female literacy rate (only half of the female population are literate) is lagging male literacy rate (three-quarter of the male population are literate). The rate of school dropout is also found to be comparatively higher in the case of women. However, no single factor or cause can be held responsible for the very low literacy rate of the women. It is associated with a combination of many factors including the climate change, social, cultural, economic, educational, demographic, political and the administrative, among others. But it would seem that most important factors responsible for the poor state of women's education emanate from their low school enrolment, high dropout rate, bonded labour system, cast system, dowry demand, child labour practice, female-unconducive school environment, early marriage, inferiority complex, subservience, poverty of the parents (funds), ineffective law enforcement machinery, demographic factors, and poor political will and convictions, among others (de Grauwe, 2009; Gender Statistics, 2010).

To ensure equal access to education, the National Policy on Education states that access to education is a right for all Nigerian children regardless of gender, religion and disability. But before 1920, primary and secondary education in Nigeria was within the scope of Christian organisations only. Out of a total of 25 secondary schools established, only three were for girls only while the remainder were exclusively for boys. In 1920, the colonial government started giving out financial backing to voluntary associations involved in education. This lasted till the early 1950s, and, at that point, education was placed under the control of regions. By 1949, only eight out of a total of 57 secondary schools were exclusively for girls (Methodist Girls' High School, Lagos, St. Anne's School, Molete, Ibadan, St. Theresa's College, Ibadan, Queens College, Lagos, Holy Rosary College, Enugu, Anglican Girls Grammar School, Lagos, Queen Amina College and Alhuda College, Kano). From 1950 up till 1960, six more notable girls' schools were established and by 1960, there were fourteen (14) notable girls' schools, ten

(10) mixed and sixty-one (61) boys only. The following extracts summarised the events between 1960 (at independence) and 1990 that massively encouraged and supported children's school registration generally: 1960s. In the 1960s, when most African states began to gain their political independence, there was considerable gender disparity in education. Girls' enrolment figures were very low throughout the continent. In May 1961, the United Nations' Universal Declaration of Human Rights and UNESCO's educational plans for Nigeria were announced in a conference held in Addis Ababa, Ethiopia. A target was set: to achieve 100 percent universal primary education in Nigeria by 1980.

1970s: The implementation in the 1970s of the free and compulsory Universal Primary Education (UPE) was in line with this UN Plan. Ever since, UNICEF and UNESCO and many other organisations have sponsored research and conferences within Nigeria regarding the education of girls. Up until the 1970s, considerably more boys than girls participated in education in Nigeria. According to one Nigerian Historian Kitetu, the native traditions' philosophy was that a woman's place is at home, and this kept many girls away from education. However, with the government's intervention and public awakening, parents began to send and keep their girl children in school. Consequently, women's involvement became more visible.

1990s: It can be noted that purposeful plans of action led to an increase in females in schools after 1990. While more boys than girls were enrolled in 1991, a difference of 138,000, by 1998 the difference was only 69,400. At the pan-African Conference held at Ouagadougou, Burkina Faso, in March and April 1993 (three decades after the UN Declaration of the 1960s) it was observed that Nigeria was still lagging other regions of the world in female access to education. It was also noted that gender disparity existed in education and that there was a need to identify and eliminate all policies that hindered girls' full participation in education.

Between 1970 and 1994, the enrolment of Nigerian girls in primary education steadily increased from about 30 percent to as high as about 80 percent. But differences existed between the enrolment rate of males and females at all levels of education. In addition, the dropout rate of girls was higher than that of boys, and the participation of girls was lower than that of boys in subjects related to science, technology, engineering and mathematics (STEM) (Federal Ministry of Education, 2013). In 2002, the combined gross enrolment in such subject in primary, secondary and tertiary schools for females was 57.00 percent compared to 71.00 percent for males. This translated into fewer women in certain economic fields as well. The percentages of female workers in some selected professions were as follows: architects, 2.40 percent, quantity surveyors, 3.50 percent, lawyers/jurists, 25.40 percent, lecturers, 11.80 percent, obstetricians and gynecologists, 8.40 percent, pediatricians, 33.29 percent, and media practitioners, 18.31 percent (The Nigerian Bureau of Statistics, 2014). This is like the report of the World Bank (2014) in its data base.

Issues of gender equality in education have been a prominent topic of debate in all countries during the past decades (World Bank, 2014); and as earlier noted, in Nigeria, there are large disparities between the education that boys and girls receive. Many girls do not have access to adequate education past a certain age. The female adult literacy rate (ages 15 and above) for the country was 59.40 percent compared to the male adult literacy rate of 74.40 percent. It is differences in education that have led to this gap in literacy. According to the Central Bank of Nigeria (2014), the gender gap in literacy rates at the rural level between boys and girls was 18.3 percent in favour of the boys overall. But, in the age group 6-9 years (primary school ages) it was only 3.90 percent in favour of boys. This indicates that there is a gender dimension to educational attainment and development in the country. According to the West African Examinations Council (1994), there were still some other problems: high dropout rates of female students, poor performance, reluctance on the part of female students to enroll in science-based courses and poor classroom participation were not uncommon. Across various geopolitical delineations, a greater percentage of school-age girls were needlessly out-of-school, compared with the ratio applicable to boys of the same age group. Again, the situation gets worse as one progress northwards from the south.

The attainment of the target of the second Millennium Development Goal (MDG), that is, "education for all" by 2015 was at risk after having missed the initial deadline of 2005. Educational facilities are generally believed to be inadequate and access is limited for many, especially girls and women. According to the United Nations (2015) and Sholagberu and Alakoso (2015), Nigeria was classified as a low developed country in respect of equality in educational accessibility.

**Some of the Challenges are:**

**Drop-Out Rate**

On any given day, more than a billion children are enrolled in primary and secondary schools. But many of those enrolled children do not complete their education. Instead, they drop out because the quality of the education they receive is poor or because of challenges that make it difficult for them to attend and participate in school. These challenges include deepening poverty, gender imbalances, emergencies and conflict situations, EBOLA virus, HIV and AIDS, chronic environmental degradation and climate-related hazards are also reasons why children cannot finish their education. UNICEF 2014 Scientific research findings clearly indicated that a changing climate has and will continue to have a significant impact on human life and natural ecosystems. Droughts, floods, rising temperatures and heavy rainfall lead to problems such as increased malnutrition, diarrhea and malaria which in turn have adverse effects on the education as they cause absenteeism and dropping out. Floods and rising sea levels can cause drowning, injuries and severe mental and physical trauma, particularly people who live on Islands along major river deltas and in low-lying coastal areas. Moreover, while no area is immune to the impacts of climate change, evidence suggests that developing countries which already struggle with social, economic and environmental issues will be worst hit by changes in rainfall patterns, greater weather extremes, and an increase in droughts and floods. Children and women will be among those most affected by a changing climate. UNICEF (2014) estimated that 80% of those who will be affected by climate-related disaster every year in the next decade will be women and children.

The impacts of climate change on boys and girls' access to quality education have also not yet received much attention, nor have the possibilities of education to support initiatives for sustainability. In Nigeria, according to UNESCO report over 12million Nigerian children are out of school due to many reasons such as climate change and insecurity. We should note that impacts of climate change have more effects on women or girls than men or boys. Increased instances of flooding and other natural phenomena on some houses and school buildings reduce the number of students in schools. Diseases caused by the climate and environmental change might have effect on household income. this will suddenly reduce households into poverty and poor household might find it difficult to provide for their family need as well as the school needs of their children, resulting into either poor attendance or drop out.

**Access to Education**

The implications of climate change on boys' and girls' access to quality education have also not yet received much attention, nor have the possibilities of education to support initiatives for sustainability. UNESCO (2014) believed that education is an essential element of the global response to climate change. It helps the young people understand and address the impact of global warming, encourages changes in their attitudes and behaviour. Also, helps them adapt to climate related trends. High temperatures make students and teachers not to concentrate in school and this reduces hours of learning making it difficult for schools to complete syllabus. A factor that may cause poor performance in schools.

**Damaged Infrastructure & Health Hazards**

Increased instances of flooding and other natural phenomena also result in children houses, school buildings and other infrastructure such as roads, bridges being damaged impacting on children's right to receive an education. Damage to housing caused by natural disasters leave so many children homeless or living in accommodation that is overcrowded and inadequate, while some of their belongings including school uniforms, shoes and books and so on are missing. Worse enough some children might find themselves orphans as their parents might be killed by the disaster. In addition, school premises are usually used as temporary settlements for disaster victims.



These come as a result of a decline in productivity due to droughts and floods, adversely affects children health as it leads to malnutrition and makes it difficult for malnourished children to attend school and participate actively. The adverse impacts of the effects of climate change and environmental degradation on human health. such as waterborne disease as a result of polluted water supplies, more extreme weather resulting in natural disasters and changes in air quality and food quality and also have a particular impact on women/girls in their role as principal care givers. Many children in remote areas have poor access to health facilities and when they become sick with no medical attention their school attendance could also be affected.

### **Food Insecurity**

Climate change ultimately brings about poverty which makes it difficult for families to provide adequate care in terms of foods, clothing and teachings and learning materials necessary for education of their children, more especially girl's children from rural areas and children with disabilities. Increased poverty at home due to the Impacts of climate change means that girls and boys may be taken out of school to work in order to increase household items for families that are agriculture dependent. This affects school attendance and these children turn out to be illiterates when family decides who should be taken out of school. It's the girl who is mostly affected. Girls might work in farms, become house girls are to do petty business.

Changes in the ecosystems and loss of diversity lead to reduced agricultural output and increase food insecurity. This brings greater problems to food producers, as well as impact on human settlements as some areas become uninhabitable Food security may also result into children to lack their proper meals, the outcome is some children will drop out or become truants as they cannot go to school with empty stomach. In many societies, women and girls are responsible for collecting water, meaning that climate change is bringing increased burden, as they spend a greater part of each day fetching water. This in turn is actually serving to strengthen gender inequality, and poverty as it means that women have even less time to participate in income generating activities, contribute to decision making processes, or to find out about things that they could do to cope better with the impacts of climate change. And of course, it leaves less time for girls to go to school or for women to support children learn at home. But expectations also mean that as drought and other natural disasters reduce opportunities for employment at home, men who are expected to provide for their family, have to migrate elsewhere to look for work, where they may face exploits, dangerous working conditions and pressures associated with absence for households. This increases the possibility of children not to be provided with necessities which can help them to obtain school needs such as uniforms, stationery as well as psychological support. Moreover, for those who opt to go to school might not be able to participate actively in the learning process as they are hungry. Hunger affects both body and mind and therefore it affects the learning and academic performance of children. Furthermore, for the Nomads and Pastoralists, drought will force them to migrate into area with green pastures and better weather conditions which support pastoralist and agriculture. This means that the family will migrate with all their children, resulting into the children missing their education rights.

### **Conclusion and Recommendations**

Efforts in achieving sustainable development as envisioned in the vision 2020 and outlined in international agreements like the MDGs depend to a great extent on the type of education it provides to its people. To promote quality education, that is accessible to all, there is need to minimize the factors that have a negative impact on education. Such factors include those brought about by climate change such as floods, drought, high temperature, Tornado and Earthquake. As all hands were on deck to fight Ebola Virus Disease (EVD), so also joint efforts should be used to nip climate change on bud. In final analysis, there is need of less rhetoric and more of coherent action to address climate change. A 5-year strategic plan should be put in place by the education stakeholders.

Education, it must be stressed, is a major contributor in moving individuals out of primitive and inactive engagement into the modern, profitable enterprise and worthwhile wage sectors. It is also critical in guiding individuals and groups to be more productive for themselves and for society at large. The 21st century is almost two decades old, and it is estimated that a good proportion of women are non-literate. Certainly, the Nigerian woman could be better educated. Therefore, women should

avail themselves of available opportunities to be massively educated and empowered to be more useful to themselves, their communities, the nation and to humanity in general.

### Suggestions

In addition, official policies and programmes must be made favourable to women's education and empowerment. To achieve these:

- (1) there must be a change in orientation in homes and in every community on the roles women can perform and the positions they can hold as against the traditional views,
- (2) there must be considerable improvement in the quality of education generally and education coverage among females in every community.
- (3) women should be allowed to stay in the wage sector after marriage, instead of dropping out of the wage sector, which tends to eliminate the positive impact of education on wage employment; Women's burden from household duties should be reduced, while discrimination through social norms should be abolished. Access to capital and other inputs of production and services should also be facilitated; Further improvements in the welfare of women and their families should be ensured through enormous improvements in their productivity in all sectors; and
- (4) the three tiers of government should work out the modalities to discourage rural-urban migration, and where possible reverse the phenomenon. The policy must receive huge support of every government and philanthropist with a target to empowering and improving the lot of women within their localities.

With the surge of opportunities, including the large number of tertiary institutions (universities, polytechnics, monotechnic, colleges of education and institutes), and adult and non-formal education, it is hoped that before the middle of the 21st century, the community of educated and empowered women will be more than double and probably be of equal standing with those of their male counterparts, and Nigerian women would play significant roles in every sector of human endeavour within and outside of the country. Nigerian women would then be seen and heard.

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