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AN ANALYSIS OF CLIMATE CHANGE ON WOMEN'S LIVELIHOOD IN NIGERIA

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Abstract

The study analysed the impact of climate change and how it affects women's livelihood in Nigeria. This study employs a comprehensive analysis which wades into the disproportionate impact of climate shifts on women as it relates to factors such as agriculture, water resources and socio-economic dynamics. This is an interdisciplinary approach by the use of qualitative content analysis that aims to uncover the vulnerabilities faced by Nigerian women and it seeks to offer insights in policy recommendations to mitigate the adverse effects of climate change. The findings on this study will contribute crucial knowledge to the global discourse of climate change, gender equality and equity emphasising the need for interventions that can help safeguard women's livelihood in the ever increasing environmental challenges.

Key Words: Climate Change, Nigeria, Women Livelihood, Socio Economic Impact

Introduction

Climate change according to the United Nations refers to long term shifts in temperatures and weather patterns. These shifts in temperatures and weather patterns may happen naturally due to variations in the solar cycle but human activities and factors have been the major cause of climate change since the 1800s. This happens mainly due to burning fossils fuels like oil and gas, coal, bushes etc.

The resultant effect of burning fossil fuels is the release of greenhouse gas into the atmosphere which in turn acts as a heavy blanket covering the earth trapping the heat from the sun resulting in high temperature and global warming. By greenhouse gas emissions I mean carbon dioxide, methane, soot and other pollutants we release into the atmosphere. How does the rise in temperature affect the earth you might ask, well it has devastating effects such as?

a. Very recently heat waves have killed 1,900 people in Spain and Portugal, and that's one very powerful effect of global warming.

b. As the temperature continues to rise, there will be high level of evaporation leading to drought. This will

result to water shortage in many parts, killing plants, animals and humans along the way. We all know that water is life!

c. The high level of water evaporation also leads to storms. The more hotter the atmosphere, the warmer the ocean surface is and this rise in temperature can lead to high wind speed in tropical storms thereby raising sea levels to areas that don't naturally have contact with the sea causing a cascade of currents and waves.

d. The rise in temperature also leads to high level of air pollution leading to dirtier air. Some years back as a resident of an area close to the industrial layout, I witnessed a change in the air when the companies go into production so bad that if one leaves the environment there is a major difference in the smell in the air and taste in the mouth. Looking back now I know that whatever the companies were emitting was constantly in the air making the residents close by suffer from lungs and eye diseases. The heat helped spread the emissions as it had no place to escape.

e. One very severe case of the rise in temperature is wildlife extinction. Wildlife extinction is the rapid rise in death of all kinds of wildlife and more importantly

pollinators. There was a report some time ago that if bees die we are doomed. A lot of people don't understand the implications of this, in agricultural terms without bees there will be fewer seeds and that will lower plant reproductive success thereby altering the ecosystem. These will most likely lead to famine as there will be lower food productions especially in fruits and vegetables which are mostly insect pollinated. Moving away from pollinators, our over dependence on trees has caused deforestation exposing the wildlife that depend on these forests for their daily survival. By exposure I mean to harsh weather conditions, hunger, poaching and accommodations, leading to the death of thousands of wildlife, if they are not relocated or adapt quickly enough to the changing environment.

The impact of climatic fluctuations on women's livelihoods in Nigeria has been extensively studied. A study conducted by Oyekale et.al (2018), explains how rising temperatures and changes in rainfall patterns have led to much lower agricultural productivity, particularly in rural communities where women play a significant role in food production thus further resulting in increased food insecurity and economic vulnerability for women and their families. Additionally, extreme weather events such as flooding and droughts have disrupted women's access to water, further exacerbating their challenges in meeting household needs. Also, droughts in Nigeria have caused crop failures, compromising the food security of rural people.

About 70% of people living in Nigeria are involved in farming, the majority of which are women (Macaulay, 2014). In many rural communities in Nigeria, women are responsible for farming activities, and when drought occurs, crop failure results in food insecurity among households (Kolawole et al., 2018). Similarly, droughts worsen water scarcity in urban and rural areas, requiring women to walk considerable distances to gather water. This not only takes up time, but it also puts their health at risk. In the words of Oluyemi (2015), 'women in Nigeria face increased health and safety risks due to the scarcity of water during droughts, as they are often required to walk long distances to access water sources, leading to physical strain and vulnerability to waterborne diseases and attacks. For

example, on March 3rd 2024, terrorists abducted 113 female IDPs in Ngala, Borno State. The women were said to have left the camps in search of firewood in the bush around Jillam and Wurga villages about 15 kilometres from Ngala town (Isamotu, 2024).

Further, climatic fluctuations do not only affect crop production but also lead to the death of livestock, which many rural women rely on for income and food security. For instance, in Northern Nigerian rural communities, where pastoralism is a significant livelihood strategy for many households, droughts result in the death of livestock, causing economic losses, particularly for women involved in livestock rearing (Abubakar et al., 2018).

This study analysed the impacts of climate change on the livelihood of Nigerian women who are more vulnerable to the ever rising effects of climate change. The study also recommends ways to tackle this impact to give women more security in climate riddled environment.

Methodology

This study adopts an interdisciplinary approach by incorporating ideas, knowledge, write ups and insights from fields such as environmental science, gender studies, sociology and economics. This study also adopts the qualitative content analysis which attempts to explain the relationship between climate change and women's livelihood in Nigeria. This method deals with reviewing and interpreting texts from various sources like literature reports, blog posts, UN and WHO reports alongside well written articles by well-educated and studied individuals in the field of study.

Impact of climate change on women's livelihoods

Climate change has great impacts on different sections of the Nigerian population especially in countries where there is a high level of dependency on the natural resources. In these societies, women face a higher risk because if anything affects their livelihood because of their dependence on natural resources, they can easily slip into poverty, this brings with it untold hardship. The effect of climate change in Nigeria has caused

great problems starting from conflict between farmers and herders leading to destruction of lives and properties and leading to forced migration, especially women and children.

Here are some of the ways women have been impacted by climate change:

1. Economic consequences of climate change on women

a. Entrepreneurship:

According to the NSW government website, climate change impacts businesses/entrepreneurship in 2 major ways:

I – Directly

li – Indirectly

(i) Direct impacts affect your business directly such as physical damage from flood or bushfires or forced closures. If this happens women are forced to close down their business and migrate or move to safer areas which will make it almost impossible to trade in the new location. It is no longer news that women run the highest level of small businesses all over the world. Their quest to support their families and create financial freedom is highly affected by these impacts from climate change.

(ii) Indirect impacts are the flow on effects of climate change or extreme events such as supply chain being disrupted by extreme weather or income being reduced. This impacts women more because their businesses won't move smoothly anymore. A very practical example is the flooding in Nasarawa state in the yam and rice farming communities where all their produce was washed away in the flood. This resulted in food scarcity later on that year. The women who were into the business of buying and selling this food produces were left with little or no supply at all.

b. Agriculture: Climate change has significant implications for agriculture in Nigeria, the IFAD (The International Fund for Agricultural Development) stated that while 75 percent of the world's 1.2 billion poor live and work in rural areas (IFAD 2001).

According to Akingbami et.al (2019) 50% of the developing countries rural population were small holder farmers and 25% was landless. Davies (2009) and supported by Oxfam (2010) says research has shown that women in rural areas in developing countries are more vulnerable to climate change as they possess low adaptive capacity. Droughts and flooding or in some cases land-slides and melting glacier has destroyed plants. Leading to migration of people to safer areas to continue with their farming or continue with their grazing of farm animals. This kind of migration of herders has led to severe consequences in states in Nigeria. Farmers are constantly trying their best to protect their farms from these herders which has led to extreme conflict between herders and farmers over the years leading to destruction of lives and properties. The women in this case are left with so much pain as they watch their societies degenerate into nothing and their families die in the hands of the conflicting parties.

c. Unemployment: Onwutuebe (2019) states in her article '*Patriarchy and women vulnerability to adverse climate change in Nigeria*' states that in communities where women are deprived the right, privilege and opportunity to participate in other economic or public activities like the men, they are confronted with much greater risk in the face of growing threats of climate change. Men whose privileged power status (in terms of financial, economic, social, and political strength) depends largely on concessions provided by patriarchy invariably possess stronger adaptive capability to cope with adverse effects of climate change.

2. Political consequences of climate change on women:

According to the UN chronicle women represent a high percentage of poor communities that are highly dependent on local natural resources for their livelihood and the differences in the impact shows in the aspect of decision making. When it comes to board room meeting and policy making circles in Nigeria, women are not given enough opportunity to participate in decisions on how to solve climate change problems. Westerling (2023) notes that it is no secret that women are disproportionately exposed and vulnerable to the risks of climate change, given the roles they assume in many of our societies, they remain dramatically

underrepresented in climate action, negotiations and policy making. According to United Nations women are 14 times more likely than men to die due to climate change catastrophe because it influences agriculture, water, housing and sanitation, and women's activities revolve around these sectors frequently.

3. Social consequences of climate change on women:

According to action aid (Action Aid), climate change related events whether slower onset ones like droughts or sudden ones like hurricanes or cyclones can mean women's homes and neighbourhood can become inhabitable. As a result, women and girls may be forced to migrate to camps for displaced people where living under temporary tarps or bare, plain sheets can expose them to violence. Many displaced women have come under attack from their host communities which range from outright sexual assault to soliciting them in terms of prostitution because they know they are desperate to survive and provide for their families.

a. The family/Household: Extreme climate change conditions have been known to affect the entire family. A very practical example is the 2022 flooding in Bayelsa communities which displaced millions from their homes, men couldn't work on the farms, women couldn't go about their businesses and schools were shut down. In this situation, most families have to relocate to safer areas, leaving behind the only home they know and their only means of livelihood, depending on the charity of well-meaning individuals and government aids. The women in this situation are left with a heartbroken man whose ego is seriously bruised and children who can't go to school or even feed properly in some cases. She is torn between caring for her household and looking for a means to aid in providing food for her family. Leaving the woman distracted and frustrated.

b. Women Sanitary life: For women (and girls) lack of clean water, lack of adequate sanitary facilities like sanitary pads, toilets and bathrooms, have greatly affected them. In most cases, the women are faced with the hard task of getting water from far territories and more of them can't even afford quality sanitary products especially if their financial means of

livelihood is affected. For girls in these communities, it is hard to go to school under these conditions. Now in this case, it is not only affecting their lives but also reducing their chances of getting proper education. Not having access to climate resilient facilities holds women, along with their families and communities captive in cycles of sickness and poverty.

c. Migration: There are different types of migration as it affects women and girls – seasonal, temporary and permanent. As for *seasonal migration* it simply means that the effects of climate change are felt at a particular time and the population around this area move away for that season and return after the season is over. Some states in Nigeria experience flooding annually during the raining season. The women and girls in this situation would have to abandon their homes, businesses, schools and sanitary conveniences for the shared ones in the set-up camps or the homes of some disgruntled relatives. The migration in this case is *temporary* as they return to their homes after the season is over. The *permanent migration* is the non-deviating type as they would have to move away for good from the only home they know making the women and children vulnerable and depressed. This is mainly caused by bad planning practices and improper government policies.

d. Physical and Mental health: According to Rule of Law and Empowerment initiative: PWAN (Partners West Africa Nigeria) an NGO dedicated to enhancing citizens' participation and improving security governance in Nigeria and west Africa broadly, climate change has serious implications for human health. The direct health impact could stem from extreme changes in weather events such as heat waves and flood, while the indirect effects can arise from malnutrition due to food shortages and the spread of infectious diseases and food-water-air borne illnesses. Added to the fact that these women have lost loved ones, suffered displacement, lost sense of time and dignity, they are left traumatised.

What Roles Can Women Play In Curbing These Impacts Of Climate Change On Their Lives And Communities

As a way of celebrating the International Women's day 8th March, 2023 the UN (United Nations) climate change news state that in many societies women are responsible for household energy, food, water and care for the young and elderly particularly in developing countries, the consequences of climate change can increase the burden for women and girls for example, causing them to travel further to obtain daily supplies, leaving less time for paid work and potentially exposing them to greater risk of their personal safety. We have established this in the earlier writings but there is succour because there are different ways that we can reduce these climate change impacts through women empowerment.

Here are some ways women can be empowered or employed to reduce the impact of climate change in a developing country like Nigeria:

(a). Women should be involved in policy making and policy implementation action

Women play a strong role in the community as caregivers, nurturers, teachers, education knowledge holders. They are virtually the first contact in a home, the community is made up of different families that are all greatly influenced by a woman or who have been nurtured by a woman and for that they bear the brunt and impact of climate change the more. This reason alone should be enough to include women in the policy making and implementation process as it affects climate change. They have first-hand information on the impacts and should be allowed to make their suggestions and contributions on how it can be tackled effectively.

(b) Women should be trained to be able to give first aid and first medical help in cases of climate related injuries or sickness

In this case, a lot of women in these affected communities who have the capacity to learn should be trained in emergency medical care skills to aid people who might be sick or injured especially in the case of farmer-herder clashes, floods or landslides. They should be given these skills because they might not have quick access to emergency health care facilities.

(c) Women are already in the climate activism frontline

As Anne-Marie Slaughter the C.E.O of the NEW AMERICA rightly put it "women are often the rule takers while men are the rule makers". Women are usually the ones to notice things out of place and speak about it. They are closer to everyone in any community and society. They are usually the first respondents when these impacts are felt. Women should be trained to talk to the community to engage in safe practices that would not jeopardize the climate. Women have taught their families about preserving the environment and their increased income allows them to send their children to school.

(d) Women should be given equal opportunity with men in decision making and policy actions

Inequality and high levels of marginalisation as it relates to gender has been a catalyst for increasing the vulnerability of women and girls to climate change impacts. Nigeria's budget for 2023 has no laid-out programmes to tackle the impact of climate change on women and girls. Statistics has shown that 70% to 80% of women engage more in agriculture and SME which is worse hit with the money impacts of climate change. In conclusion, it is advised that women should be given programmes by the federal government to help them retain or sustain their livelihood, through policies or monetary grants to give them equal fighting chance as the men in the Nigerian society. They should be given equal access to loans and grants that can help sustain them financially and materially.

Theoretical Framework

This study is based upon Human Ecology theory, as it dwells on the relationship between the environment and human activities and how the activities impact the environment. The human ecology theory highlights the dynamic relationship between women's livelihood and the ever-changing environment due to climate change shaping their daily activities, resource access and overall well-being. The study recognises the feedback loop in human and environment interactions.

This study is also based on the Gender and Development (GAD) which focuses on the power relations and aims to integrate gender considerations into development practices. It is relevant for analysing how existing gender inequalities influence the differential impacts of climate change on women's livelihood in Nigeria.

Conclusion and Recommendations

This study has tried to analyse the impact of climate change on women's livelihood in Nigeria employing the use of qualitative content analyses approach. The findings seeks to highlight the relationship between climate induced challenges and the vulnerabilities faced by women in different domains of agriculture, water resources and Psycho-Social and economic well-being. The study reveals a multifaceted pattern shedding light on the burden borne by women in the face of global warming. This paper also tries to point out valuable data for both the academia and policy makers who genuinely want to help shift the paradigm towards gender inclusiveness in decision making as it relates to climate change. This study also seeks to highlight the environmentally sustainable role women play in mitigation and adaptation action. Finally this study serves as a footstool to urging more researches, policy innovation and collaboration to enable a resilient equitable for women in the context of climate change in Nigeria and Africa as a whole. The recommendations for this study are:

- i. To develop more gender sensitive climate change policies: it is important at this point to develop more gender policies that seek to solve

gender specific issues that arise due to climate change. It is pertinent that women be included in the policy making process because women usually have a unique related to climate change impacts. Their perspective due to their experience can go a long way in curbing the impacts

- ii. Promote sustainable agricultural practices: there is need to adopt of climate smart agricultural techniques among the farmers. It is necessary to promote sustainable land use, crop diversification and soil conservation.
- iii. Foster international collaboration: Nigeria should engage in international partnership and facilitate funding mechanisms that prioritize gender sensitive climate action. This should in turn leverage global support and best practices to enhance local resilience efforts.
- iv. Improving healthcare services in disaster prone environments: enhancing healthcare facilities and services are more needed in these areas to ensure timely response reducing mortality and morbidity. Disaster often lead to outbreak of diseases due to compromised sanitation, bad water supply and living conditions, a strengthened healthcare systems can effectively prevent, detect and control such outbreaks, promoting public health.
- v. Holistic solutions: women's participation ensures that solutions are holistic and it ensures all aspect of the society is represented. Policies that incorporate women's voices are likely to be more effective in building community resilience.

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