

Mainstreaming Climate Change Mitigation and Adaptation in Niger Delta Communities: The Role of Women

By

Nenibarini ZABBEY¹

Preamble

I consider it a great opportunity offered me by Kabetkache Women Development and Resource Centre, having invited me to participate in today's deliberations in commemoration of International Women's Day (IWD), and share my thoughts on the role of Women in Community Adaptation and Mitigation of Climate Change. Today's ceremony is unique as it is the centenary IWD. On March 8 every year, the IWD is celebrated to mark the economic, political and social achievements of women. IWD is also used to press home women's rights.

The theme of this year's IWD is "*equal access to education, training and science and technology: pathway to decent work for women.*" Interestingly, organizations and governments are at liberty to choose different IWD themes as far as these reflect global, national and gender issues. Therefore, the choice of Kabetkache that we discuss the role of women in climate change adaptation and mitigation as it relates to the peculiar terrain of the Niger Delta is within context, timely and commendable. Moreover, the Bali Action Plan on climate change reaffirms that effective addressing of climate change requires mitigation and adaptation as well as technology transfer and financing. Interestingly this year's global theme echoes access to education and technology.

As we approach the 2011 national elections, Nigerian women have mobilized on different platforms calling for a sizeable representation of women in governance at all levels. The current 30% Women Affirmative Action campaign is, in my opinion, a mean, fair and justifiable demand. But it seems, as events are unfolding, that most of the women affirmative advocates do not mean or believe what they are campaigning for.

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¹ Paper delivered at a workshop organised by Kabetkache Women Development and Resource Centre for Erema Women to mark the International Women's Day, Erema Town Hall, Erema, Rivers State, Nigeria. 8th March, 2011.

A case in point is the recently concluded PDP presidential primary held in Abuja.

A reasonable number of delegates at the convention were women. However, Mrs. Jubril Aminu, the only female presidential candidate had a lone vote, only her own vote!

Piles of scientific evidences abound that the world climate has changed and is changing with far-reaching implications for the web of life on earth. Women are naturally more vulnerable to the impacts of climate change because they are highly disadvantaged politically, social and economically. The women's roles in communal adaptation and mitigation of climate change cannot be overemphasized on the global combative agenda. Women must determine their destiny. This requires genuine proactive commitment, not political oratory. It requires policy and integrated approach based on the right gender analysis. Women empowerment, family planning, adequate health services and sustainable agriculture to reduce carbon emission are vital steps to the taken.

Overview of Climate Change

Weather means daily fluctuating state of the atmosphere around us, characterized by temperature, wind, rainfall, clouds, etc. Climate on the other hand refers to long time average weather conditions of a region. The intergovernmental Panel on Climate Change (IPCC) describes climate change as any change overtime, whether due to natural variability or as a result of intense human activities. It describes past, present or future shift in climate on global, regional or local scales (Henson, 2006). Independent researchers have analyzed (back-calculated) more than a century temperature profiles. The results, in spite of the diverse sources, point to one thing: a rise, up to 0.80C, in average surface temperature. Besides temperature rise which peaked recently in 1998 (Henson, 2006), other circumstantial facts attest to the unified conclusion that our dear earth is warming up. These includes melting glaciers at the polar region, lengthening growing season across the Northern Atmosphere, expanding geo- graphic range of mosquitoes, etc. historically, the occurrence of changes in climate is well known

(Karlen, 2008) but only rough and unreliable time-series data pertaining to climate exist before the 20th century.

In February 2007, IPCC released a report of the work of 2,500 scientists from more than 130 countries, noting that human activity most likely has been the primary cause of global warming since 1950. This resulted from years of accumulated greenhouse gases emission; of the gases carbon dioxide (CO₂) is principal culprit. Greenhouse gases are able to absorb and radiate heat. Some are naturally occurring (like CO₂, water vapour, methane, ozone and nitrous oxide, etc), others emanate from industrial processes (such as hydrofluorocarbons, perfluorocarbons, chllofluorocarbon, etc).

Environmental and Societal Implications of Climate Change

The cost of climate change can at best be quantify or vary according to where you live. Some regions and some species may benefit from the phenomenon, but many more will suffer intense problems. Below are some predictions and results of measurements released by IPCC in Shangai in 2001.

- a) The global surface temperature has increased over the 20th century by at least 0.6°C.
- b) Satellite data show that snow cover has decreased by about 10% since the 1960 -attributable to the melting effect of temperature increases.
- c) Glacial ice in the polar region is melting leading sea level rise.
- d) Global average sea level has risen and ocean heat content increased.

Tide gauge data show that global average sea level rise between 0.1 and 0.2 meters during the 20th century.

It is estimated that if greenhouse gases emissions continue to rise through this century, the Greenhouse ice sheet could be thrown into an unstoppable melting cycle that would raise sea level by more than 7m (Henson, 2006). This is no good news for the Niger Delta people. Most parts of the delta (except the eastern flanks) are just 6m above sea level, implying that the predicted 7m rise in sea level will submerge greater parts of the Niger Delta. Zabbey (2007) predicted some farming and fisheries challenges the delta people would experience due to sea level rise and soaring flooding.

- e) Moisture concern -too much and little elsewhere. The changes in the timing of rainfall and run-off could complicate efforts to ensure clean water for growing populations especially in the developing world.
- f) Warming temperature could aid spreading vector-borne diseases like malaria. World Health Organization estimates that in 2006 alone, more than 150,000 people died as a result of direct and indirect climate change impacts.
- g) While food productivity is projected to rise in the temperate region where now-barren cold lands would warm enough to bear crops, crop yields in the tropic are likely to drop. Meanwhile tropical lands are homes to hundreds of millions of subsistence farmers and poor populations.
- h) It is projected that climate change between now and 2050 may cause the extinction of as many as 37% of all species. This is particularly worrisome for Niger Delta as livelihoods in the region depend predominantly on biodiversity (UNDP, 2006).

Impact of climate change on Nigeria's economy

According to a recent review (ERM/ DFID, 2007) of the relationship between climate change and the Nigerian economy, inhabitants in the far north and those living adjacent the coastline are far more at risk than other parts of the country. The aforesaid report estimates a loss in GDP of between 6% and 30% (that is, between US\$ 100 to 460 billion) by 2050 in Nigeria. The report model predicts 5 -25% loss for the south-east and south-south. The overall impacts, no matter the local scale, will be worse for the vulnerable groups such as the poor, the old, women and children, and those that depend on agriculture for their livelihoods. Of course, Agriculture (farming and fishing) is the bed rock of the Niger Delta region.

Gender and climate change

Women make up a large number of poor people in communities that are highly dependent on local natural resources for their livelihood and are disproportionately vulnerable to and affected by climate change. Women's limited access to resources and decision-making processes increases their vulnerability to climate change.

Additionally, women in rural areas in developing countries have greater responsibility for household water supply, energy for cooking and heating, and for food security. Thus, women are negatively affected by drought, uncertain rainfall and deforestation. Again, because of their roles, unequal access to resources and limited mobility, women in many contexts are disproportionately affected by natural disasters, such as floods, fires and coastal erosion.

Global efforts at controlling climate change

In 1992, 100 Heads of states met in Rio de Janeiro, Brazil, and signed the United Nation Framework Convention on climate change, Convention on Biological Diversity, Rio Declaration and the forest principles.

The 1997 Kyoto protocol complements the framework convention. The main thrust of the protocol is that 37 industrial countries are expected to reduce greenhouse gases emissions by 5% by 2012. It has three implementation mechanisms:

1. The clean development mechanism
2. Joint implementation
3. Emissions trading.

Women's role in rural adaptation and mitigation of climate change

Mitigation: involves process of curbing greenhouse gas emissions from human activities with the view to stabilizing greenhouse gas concentration at a safe level.

Adaptation: involves a range of activities to reduce vulnerability and build resilience, for instance in key sectors such as water, agriculture and human settlements. This involves new and improved technologies and financing initiative at all levels.

Specific adaptation and mitigation strategies

- Wood fuel use

The use of wood for fuel and its carbon dioxide (CO₂) emissions due to combustion is seen by the US Environmental Protection Agency (EPA) to be of no effect when it comes to global warming, because the standing trees absorbs CO₂ from the atmosphere, store carbon in wood and release oxygen (O₂) to the atmosphere (US EPA,

2003 cited in Adeduntan and Olusola, 2008). Thus when wood fuel is substituted for fossil fuels, global warming is decreased.

- Encouraging the use of wood as tools for building and construction works. Woods product fixed CO₂ permanently unless used as fuel.
- Tree planting. Trees, understory vegetation and tropical soils store a large amount of carbon.
- Unsustainable logging, agriculture as well as deforestation should be avoided
- Sustainable forest management and community based forest management have the potential of not just protecting land and people from some of the harmful effects of climate change, but also providing opportunities for greater, more sustainable rural development and poverty alleviation through income generation and employment opportunities.
- Managing forests with high carbon uptake potential
- Expanding forest through reforestation and afforestation
- Reducing the loss of forest cover
- Agroforestry
- Increasing the use of forest-based products such as bio-energy and durable wood products
- Forest can be used to rehabilitate degraded land and maintain water quality by trapping sediments, removing nutrients and immobilizing toxic substances.
- We should avoid cutting down vegetation surrounding rivers, creeks and streams.
- Start planting economic trees in our homes.
- Family planning

Conclusion

Gender inequalities in access to resources, including credit, extension services, information and technology must be taken into account in developing climate change mitigation and adaptation activities. Given the strategic roles of women, especially in natural resources exploitation and farming in the Niger Delta, they are a key to mitigating and adaptation of climate change in the region.

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