

CLIMATE CHANGE, VULNERABILITY AND DISASTERS: IMPLICATIONS FOR HUMAN SECURITY IN NIGER DELTA, NIGERIA

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Introduction

- Climate change, conflicts, and the squeeze on natural resources are intensifying the poverty and vulnerability among people
- The diversity of these challenges and efforts to deal with them are best understood through analysis of their local dimensions
- The most vulnerable households will be those with assets and livelihoods exposed and sensitive to climatic risks



Introduction (contd)

- Climate change presents new and unprecedented challenges to human security particularly for those who are unable to cope with or adapt to the changing conditions
- Climate change may increase the risk of violent conflict
 - First, conflict could come about through changes in the political economy of energy resources
 - The second issue is the prospect of conflict stimulated by changes in social systems driven by actual or perceived climate impacts.
- This paper examines the linkage between climate change, violent conflicts and human security and the catalytic role of disasters

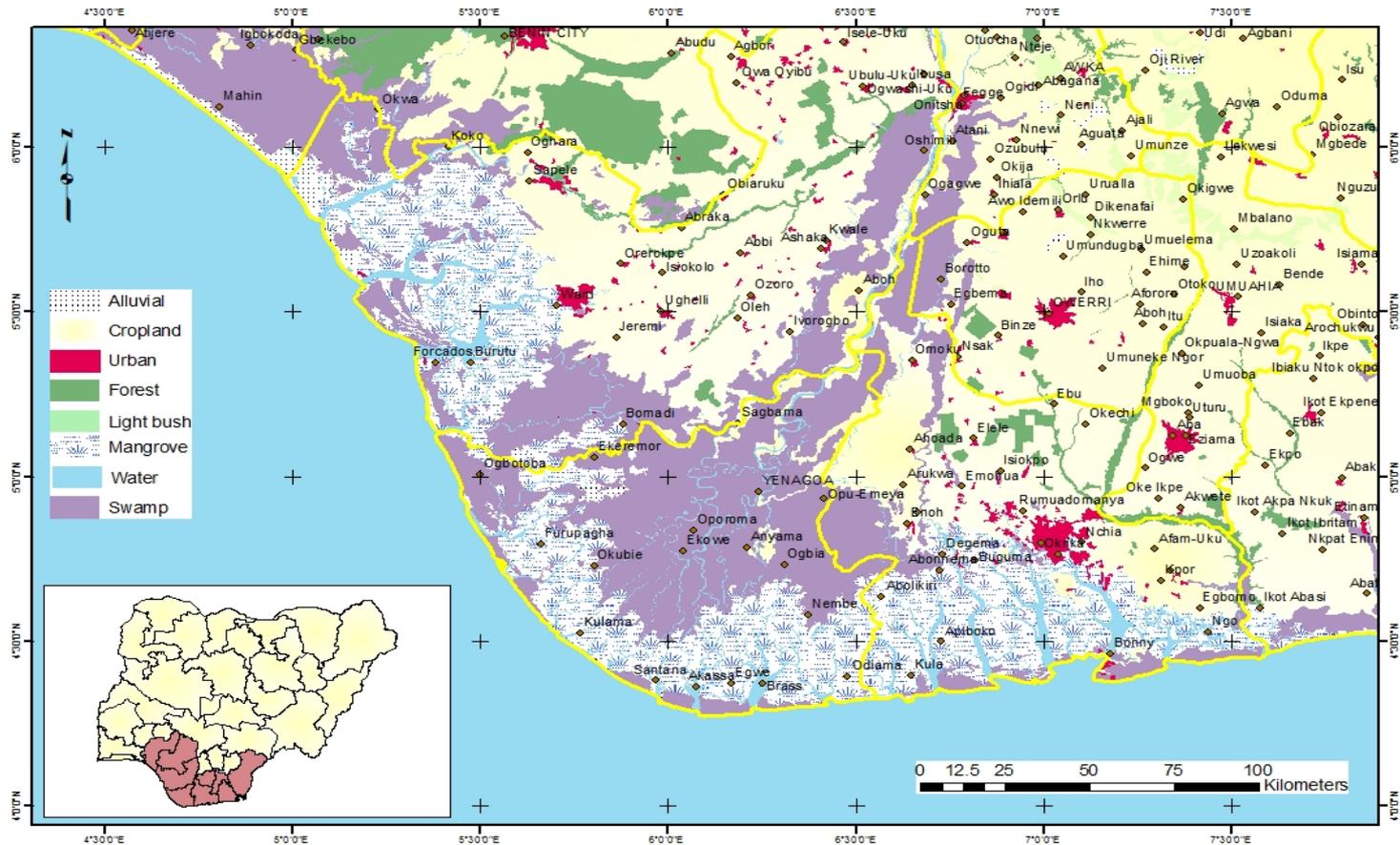


The Niger Delta environmental setting

- The Niger Delta is one of the world's 10 most important wetland and coastal marine ecosystems
- Home to some 31 million people
- It is also the location of massive oil deposits
- The Delta's environment can be broken down into four ecological zones:
 - coastal barrier islands
 - mangrove swamp forests
 - freshwater swamps, and
 - lowland rainforests



The Morphological Map of Niger Delta (Inset: Map of Nigeria showing the Niger Delta Region)



The Niger Delta Socio-economic setting

- The region has emerged as one of the most ecologically sensitive region in Nigeria.
- Resources (oil and gas) from the region are the main source of revenue for the Nigerian state
 - accounting for about 97% of the country's total export
- The region suffers from administrative neglect, crumbling social infrastructure and services, high unemployment, social deprivation, abject poverty, filth and squalor, and endemic conflict (UNDP, 1995)



Climate Change, Violent conflict and Human Security: Conceptual Linkages

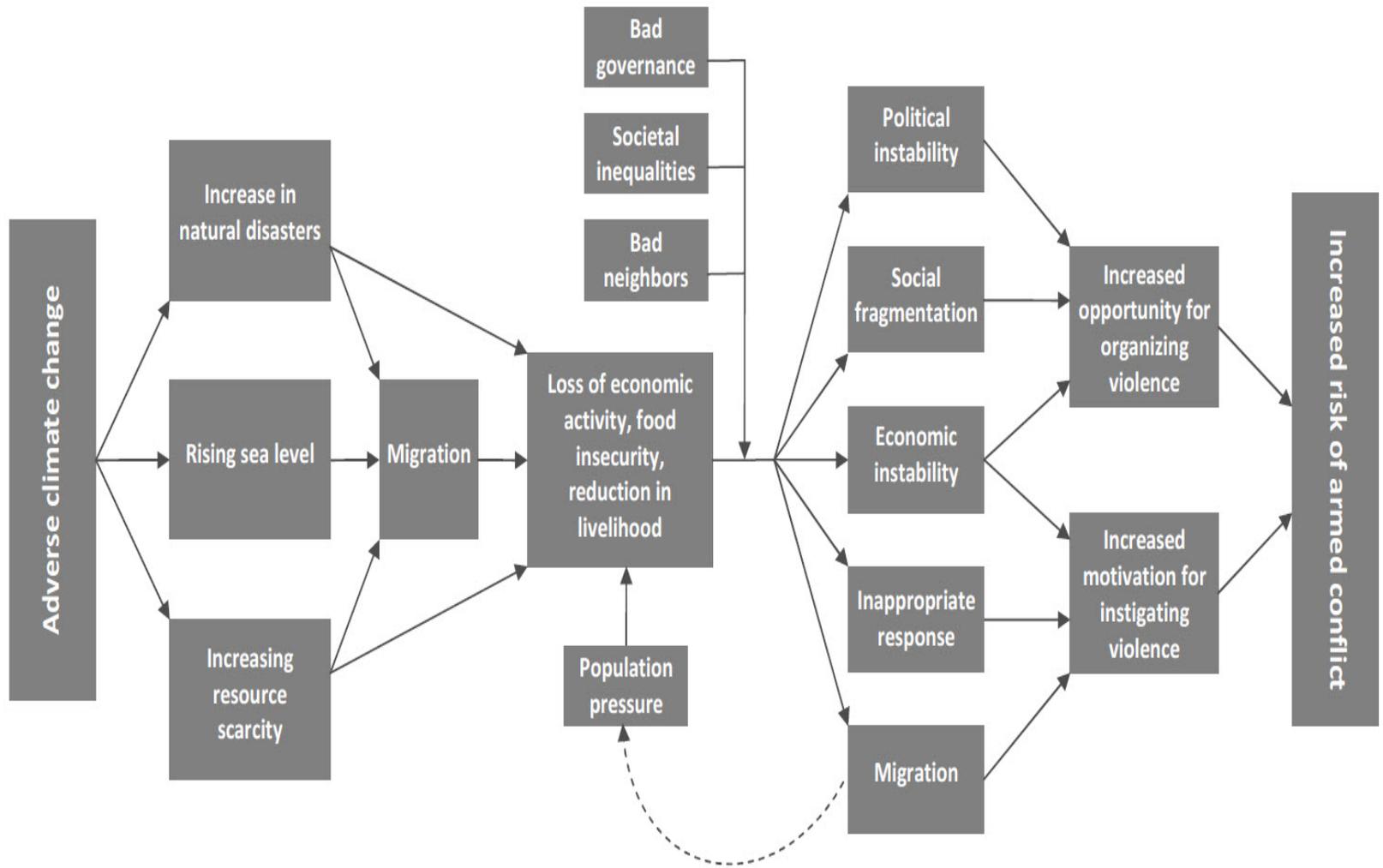
- CC undermines human security in the present day, and will increasingly do so in the future
- It does this by reducing people's access to natural resources that are important to sustain their livelihoods
- CC undermines the capacity of states to provide the opportunities and services that help people to sustain their livelihoods, and which help to maintain and build peace
- These direct and indirect impacts of CC on human security and the state may in turn increase the risk of violent conflict



Climate Change, Violent conflict and Human Security: Conceptual Linkages

- Environmental change does not undermine human security in isolation from a broader range of social factors. These include,
 - poverty,
 - the degree of support communities receive from the state,
 - their access to economic opportunities,
 - the effectiveness of decision making processes
 - the extent of social cohesion within and surrounding vulnerable groups
- The risk to national security may be both a cause and a consequence of human insecurity
- The present state of human insecurity in the Niger Delta shows the linkages among ecological disaster, impoverishment and conflict





Methodology

- The study utilised a combination of primary and secondary data gathering to collect the data and information needed.
- The study also relied on existing literature and documentation on the area to complement field data
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- For the existing disaster management issues, a number of public and Non-Governmental institutions were sampled through the use of structured questionnaires
- Direct observation was used to assess the physical vulnerability of communities
- Data collected were analysed descriptively using the Statistical Package for Social Scientists (SPSS).



Climate Change Risk in the Niger Delta

- The Niger Delta is highly susceptible to adverse environmental changes occasioned by CC because it is located in the coastal region
- The Region is potentially vulnerable to any rise in sea level. Two major factors responsible for this:
 - the region's lowlands
 - the delta is literally dissected by estuaries, rivers, creeks, creeklets and streams
- The region is also faced with myriads of environmental problems resulting from oil exploration and exploitation activities.
- Reports on the environmental state of the Region are conclusive that the area has become an ecological wasteland



Climate Change Risk in the Niger Delta

- The risk of to increasing sea level is further enhanced by the possibility of subsidence
- The region lacks requisite manpower and infrastructure wherewithal needed for the building of shoreline groin to effectively counter surging waters
- at least 80% of the people of the Niger Delta will be displaced due to the low level of the region
- Flooding and coastal erosion are now among the most serious environmental problems in the region



Environmental Degradation, Disasters and conflicts in the Niger Delta

- Environmental degradation issues are of topical concern to communities in the Niger Delta
- The collapse of local economies, induced by oil spillages, gas flaring, and other activities of the oil industry had displaced many from their occupations
- Because of the careless nature of oil operations in the Delta, the environment is growing increasingly uninhabitable
- Gas flaring in the Region has grown proportionally with oil production
- Almost no vegetation can grow in the area directly surrounding the flare due to the tremendous heat it produces
- As a result, oil – induced conflicts have displaced thousands of people in the Region



Women next to an oil wellhead that has been spilling crude oil near the community of Ikot Ada Udo, the Niger Delta, since 2004 © Kadir van

Lohuizen/NOOR



The Impact of oil pollution in the community of Ikot Ada Udo, January 2008



Damaged Crucial sources of livelihood in the Niger Delta



A typical Niger Delta Community



Gas flaring site at Rumuekpe community in Rivers State





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Disaster Risk Management in the Region

- The level of familiarity of the 16 institutions surveyed with the emerging approach to disaster risk management which emphasizes a shift from relief and response is high
- More than half of all the public institutions are able to effectively promote the understanding of the people of such words and phrases including hazard, disaster, risk, vulnerability and disaster risk reduction
- All the institutions surveyed make use of the different means of communication and information dissemination though with varying degrees
- More than two thirds of the institutions have administrative capacity for disaster reduction
- Less than two-thirds of all these institutions have the technical capacity for disaster risk reduction



Disaster Risk Management in the Region

- The rate of knowledge provision in increasing resilience in the people to cope with natural hazards and disasters in the state has been very low
- Livelihood activities that increase vulnerability in the State include
 - farming on fragile land,
 - building on precipice, building on land not approved by government,
 - absence of drains to channel rain/domestic water,
 - poor land use practices



A synthesis of the Study

- The natural resource base upon which the people's livelihood depends have shrank considerably as a result of environmental degradation caused by years of oil exploration.
- This, combined with increasing spate of disasters and predicted sea level rise, provide intermediating catalysts of organized violence
- The Region is now one of the most volatile regions in the world
- A delicate balance exists between the human population in the Niger Delta and its fragile ecosystem (UNDP, 2005)



A synthesis of the Study

- The rate of environmental degradation is pushing the region towards ecological disaster
- Pollution and environmental damage, therefore, pose significant risks to human rights (Amnesty International (2009)
- The damage from oil operations is chronic and cumulative
- This has acted synergistically with other sources of environmental stress to result in a severely impaired coastal ecosystem
- and compromised the livelihoods and health of the region's impoverished residents



Conclusion

- The potential impact of sea level rise on the coastal settlement of the Niger Delta could create alteration of the composition of the biophysical and socio-economic systems
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- Conflict in the region revolves around poverty, bad governance, ineffective corporate-community relationship, underdevelopment, environmental degradation, among others
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- This would be worsened by expected climate change impacts and would have far reaching implications for the country as a whole.



Conclusion

- There is need for integrated approach to development
- This must seek to understand the existing vulnerability and coping strategies of the local people to changes in their environment
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- and build on them through policy formulation with adequate participation of the local people.
- A planned adaptation and effective coping strategy will reduce vulnerability to climate change and other changes in the environment.
- An in-depth understanding of how individuals, communities and natural system can prepare for and respond to changes in climate and non-climate shocks is important to reducing vulnerability to adverse changes in the environment.



THANK YOU FOR LISTENING



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