# Ethical issues arising in research into health and climate change

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## **Pecha Kucha presentation**

# Adaptability during adversity: climate change and health policy in hard-to-reach communities Jigawa State, Nigeria

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### **Brief description of context**

The cultural practices and environments in Jigawa State, Nigeria are unique. The environment is mostly dry and occupied by groups confronted by certain health challenges made worse by climate change. The issues include torrential rainfall patterns, environmental degradation, and soil erosion. They contribute to the disruption of livelihoods and present threats to health in remote communities of the state (Bidoli, et al. 2012; Raimi, et al, 2021; Yakudima, et al. 2023). Researching these issues to support communities in their responses raises ethical concerns, particularly in obtaining informed consent from vulnerable community members during interviews, particularly given the complex and unpredictable health risks posed by climate change and related political issues.

In the face of these challenges, Indo Abubakar, a resident primary school teacher, and voluntary community health worker in Masara, a hard-to-reach village in Jigawa State, Nigeria recognized the importance of community engagement through collaboration with relevant stakeholders, and authorities in protecting the health and welfare of the affected populations, as they adapt to the changing climate.

To overcome these challenges, she applied a community engagement strategy, grounded in Indigenous knowledge and customs, in coordination with multi-sector adaptation activities that proved effective against the under-study threats.

### Objectives of the Study

The main objective of this case study was to explore local adaptation techniques employed by the Masara residents.

The specific objectives were to;

- Understand the ethical issues involved in researching local adaption solutions to the effects of climate change and health in Masara village.
- Examine the ethical issues that arise when creating and implementing health and climate change policies, with emphasis on informed consent and community engagement.
- Determine ethically sound, fact-based policy recommendations for interested parties, making sure that community rights, equity, and justice are priorities in climate change and health programs.

#### Methodology

The case study was developed through a purposive discussion with Indo and selected community members. The discussion focussed on the effect of climate change on health and the adaptation techniques employed. Verbal consent was obtained before the commencement of the interview. The narrative was developed using themes and sub-themes as they emerged, and presented as the issues of the study. Secondary data was obtained through a deliberate and purposive review of related literature.

#### The issues

The case study investigated how practical techniques were developed to adapt to the health impacts of climate change in Masara, Jigawa State, Nigeria. Implications for health policy formulation, prioritization, and implementation were drawn out.

In this regard, to foster resilience and adaptability to the effects of climate change on health, after careful consideration of potential ethical challenges like informed consent, cultural sensitivity, equitable participation, sustainability, data privacy, and knowledge integration among others, Indo's first action was a community engagement intervention carried out in partnership with local leaders, health professionals, and the surrounding neighbourhood. She summoned a meeting of local authorities, health professionals, and external experts. This led to the development of a ground-breaking movement applying tactics to enable locals to recognize climate-change-related health risks and cooperatively create solutions that foster resilience and solidarity by harmonizing Indigenous knowledge with scientific approaches. As a result, by encouraging partnerships between healthcare providers and local communities, solidarity was strengthened. It also enables the management of ethical issues related to obtaining informed consent during the engagement, striking a balance between the needs of the larger community, and individual autonomy.

The Masara community benefits from this as a resilient community that is unified in its commitment to preserving health in the face of the threat posed by climate change. However, some ethical issues such as concerns about confidentiality, consent, and the fair treatment of participants were encountered. These challenges were managed by ensuring privacy protection, transparently informed consent obtainment, and adherence to ethical guidelines protecting the rights and well-being of participants.

The native methods that were modified turned into a ray of hope for combating child malnutrition and food scarcity. In this regard, flood-resistant crops like sorghum and millet produced through irrigation farming were introduced with the help of community leaders, civil society, residents, and health professionals. These crops offer a sustainable source of fresh produce, enrich diets with necessary nutrients, and are harvested before the flooding season. Furthermore, the participation empowers people with knowledge about appropriate feeding practices and balanced nutrition. Masara's children and women flourish thanks to the coordinated efforts; they are living examples of the tenacity and resourcefulness of their community.

Indo's initiatives, which draw on traditional knowledge and community engagement, have also helped the communities to adapt to the effect of floods on the spread of malaria. The traditional early warning systems alert the community to potential floods, allowing for the timely adoption of preventive measures like opening drainage of waterlogged areas. Additionally, collaboration with native healthcare providers ensures prompt treatment and diagnosis of malaria cases, reducing the severity of the epidemics. Communities in Masara have seen a substantial decrease in malaria incidence through these localized efforts, demonstrating the initiative effectiveness.

Using various strategies, a civil society organization invited by Indo was essential in tackling water scarcity and contamination in Masara communities. Firstly, they take part in advocacy work to bring attention to the problem and advocate for policy changes to prioritize the availability of clean water and sanitary facilities. Secondly, they work with local communities to practice sustainable water management strategies adapted to the unique requirements and limitations of the community. Examples of these strategies include rainwater collection systems and groundwater retention programs. Thirdly, they provide the communities with the skills to monitor the environment for contaminants, in water quality. They also identify the sources of contamination and put appropriate adaptation measures in place, like covering well water above knee level with bricks and concrete lining, to stop contaminated water from entering the well. Holes were dug inside Baobab trees to enable water to accumulate in the hole and function as a clean reservoir for dry season. Succinctly, the program contributed immensely to raising the quality and accessibility of the potable water supply, which in turn improved the health and well-being of Masara communities.

#### Discussion of ethical issues

Community engagement and participation are crucial to the applicability, acceptability, and sustainability of health and climate change initiatives, as are ethical compliance frameworks for practical adaptation skills. The case study evaluates how Masara communities meaningfully engaged in decision-making and adaptation efforts for possible adoption by other Northern Nigeria states. The case study suggested ways of improving ethics governance mechanisms and the efficacy of policy responses to climate-related health risks in Masara, by looking at ethical issues such as data privacy in the context of climate change and practical methods of adapting to health challenges driven by climate change.

Several ethical issues with impact on the community and policy formation came up. For example, obtaining informed consent from the study's participants is crucial in the study protocols. In this case study, interacting with community members through discussion raises ethical questions about the confidentiality and privacy of the participants. Therefore, researchers in these circumstances protect the participants' right to confidentiality and privacy of their identity.

Indeed, ethical issues are present in every facet of this case study. This includes the possibility of inappropriate exploitation of the vulnerable, informed consent, confidentiality, respect for participants' values, and cultural sensitivity which should be carefully protected by taking proactive measures like the promotion of equity focusing on practical adaptation techniques, such as seeking a proper balance between scientific approaches and Indigenous knowledge.

#### **Conclusions and recommendations**

In the face of the challenges posed by climate change to the health of hard-to-reach communities in Jigawa State, this case study demonstrates how the Masara community, built resilience through teamwork and evidence-based policy recommendations, such as adjusting to climate change, preserving health, and ensuring sustainable food security. Indo's leadership role in community engagement provides a positive example for others and paves the way for climate change and health resilience adaptation in Jigawa State, Northern Nigeria, and beyond.

The following recommendations should be considered, by policymakers;

- Efforts must be made to understand local communities' efforts to address the effects of climate change on health through adaptation techniques. Understanding the particular challenges and vulnerabilities confronting the communities and the adaptation techniques they practice, can produce important knowledge for other communities facing similar problems
- Recognition of relevant ethical issues involved in adaptation practice, such as the risk of
  exploitation of the vulnerable, informed consent, confidentiality, respect for participants'
  values, and cultural sensitivity. Analysis of the ethical issues involved in tackling climaterelated health issues is critical for the implementation of relevant health and climate
  change policies, especially in marginalized hard-to-reach communities, such as Masara
  and similar settings.

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