

Poverty and climate change in a rural Nigerian community

nnaEmeka Meribe, La Trobe University

Introduction

This paper offers insights into farmers' lived experiences of climate change in a poor Nigerian rural community. Interviews showed farmers lacked the knowledge required to understand changes they were experiencing, and that they drew on their socio-cultural frames of reference in seeking to understand changing circumstances primarily caused by climate change. The participant farmers expressed a desire for sophisticated information to enable them to understand the situation and adapt. As the Nigerian government may be further marginalising poor rural communities by not supplying them with accessible information on climate change, this paper argues that using new media in tandem with informal local communication networks could engage rural communities to address this 'poverty' of communication and allow rural farmers to share knowledge to obtain better understanding of impacts such as climate change on their livelihoods.

Background

Despite efforts to eradicate or alleviate poverty, it has remained an issue of concern in many countries including Nigeria where low literacy rates, low per capita income, low life expectancy, high maternal and infant mortality and weak infrastructure are exacerbated by climate change which 'damages economic growth and well-being even further' (Toulmin 2009:24). 'Climate change provides an additional threat that adds to, interacts with, and can reinforce existing risks, placing additional strains on the livelihoods and coping strategies of the poor' (African DB et al. 2003:11). 'Any progress achieved in addressing the goals of poverty and hunger eradication, improved health, and environmental protection is unlikely to be sustained, if disruption of ecosystem continues' (MEA, 2005 cited in MacDonald 2010:11).

Poverty in Nigeria

Although Nigeria experiences high economic growth, levels of poverty have doubled in the past 20 years (Holmes et al. 2012). To contain rising poverty, the government established the National Poverty Eradication Program in 2001 but the program is still struggling to achieve its major goal of significantly reducing poverty, particularly absolute poverty.

The *African Economic Outlook* (2012) reported 63 per cent of Nigeria's population lived on less than USD 1 per day in 2001, up from 61 per cent in 2010. While a slight improvement in poverty reduction was noted in the *Nigeria Economic Report*, the report warns that the country's poverty rate still remains very high at over 60 per cent of the population (World Bank 2014a).

The International Fund for Agricultural Development (IFAD) estimates up to 80 per cent of the Nigerian rural population live below the poverty line with limited social

services and infrastructure (IFAD 2010). The infrastructure vacuum has restricted rural people's access to safe drinking water and services such as schools and health centres. Nigeria's rural poor depend on agriculture for food and income (World Bank 2014b). The majority are small holder farmers who depend on rainfall rather than irrigation systems and while they produce a significant quantity of Nigeria's food, they generally live in abject poverty 'because most of the farming in Nigeria is still done at the subsistence level with minimal commercialisation' (World Bank 2014b:1). This may explain the observation that the agricultural sector has the highest poverty incidence in Nigeria (Phillip et al. 2009).

Nigeria and climate change

Countries struggling with poverty, inequality and other basic development challenges are particularly vulnerable to the effects of climate change 'because poverty is pervasive and there is a lack of financial resources, institutional capacity and/or structures to mitigate risks' (NEST 2011:10). In Nigeria rainfall has declined in the past 100 years—except in coastal regions which have experienced slightly increased rainfall in recent years (Akpodiogaga-a and Odjugo 2010). Rising temperatures, extreme weather events and rising sea levels have implications for Nigeria's economy which is highly dependent on crude oil and agriculture (ibid). Rising sea levels are likely to have negative impacts on the country's oil assets which are largely located in the coastal Niger Delta region. Even minor changes in climatic conditions will affect rain fed agriculture which accounts for over 35 per cent of the country's GDP (African Economic Outlook 2012). In 2012 the National Bureau of Statistics revealed that agricultural contributions to Nigeria's economy declined following flooding that ravaged many parts of the country in that year.

The danger of rapid population growth without concurrent improvement on infrastructure 'could lower the quality of life and result in unstable livelihoods, economies and governments' (Lozet and Edou 2013:30). With a population of over 170 million people and an annual growth rate of 2.5 per cent (World Bank 2014b), Nigeria's growing population will continue to place increasing demands on food, healthcare, water and other resources (Kovats et al. 2009), reducing the nation's resilience to climate impacts (NEST 2011).

Rural Nigeria

In Nigeria, the word 'rural' conjures images of abandonment, rejection, neglect and suffering (Udoakah 1998). Nigerian rural communities generally lack basic infrastructure and amenities and are generally 'regarded as abodes of diseases, superstition, poverty...low income and low productivity' (Eteng 2005:65). According to the International Fund for Agricultural Development (2015):

Rural infrastructure in Nigeria has long been neglected. Investments in health, education and water supply have been focused largely on the cities. As a result, the rural population has extremely limited access to services such as schools and health centres, and about half of the population lacks access to safe drinking water.

Successive Nigerian governments have shown clear urban bias in the provision of social and economic amenities (Eteng 2005).

While the urban poor live in physical congestions or slums, the rural and disadvantaged poor live in physical desperation and isolation... Their houses seldom ever have running water and electricity and they live in extreme survival crises during rains, sun, wind, storms, hurricane and harmattan¹, blizzards and droughts... (Umanah, in Meribe 2008:28)

These conditions in rural Nigeria are exacerbated by the impacts of climate change and reduced capacity to adapt. Widespread poverty and poor infrastructure limit access of rural people to the information they need about climate change and ways of adapting. Erratic supplies or lack of electricity limit rural people's access to mass media and their low income means they are rarely reported in mainstream media due to the commercialisation of news in Nigeria. Omenugha and Oji (2008:14) have observed that 'news is no longer about reporting timely occurrences or events, it is now [mainly] about packaged broadcast or reports sponsored or paid for by interested parties'. This commercialisation of news exacerbates mass media access and creates a problem for representation of rural people living at subsistence levels.

Methodology and findings

A qualitative case study approach was employed in this research as a means of examining the understanding and experiences of subsistence farmers in a rural Nigerian village. The research contributed insights into how local information networks could be used to engender public participation in discourse on changing climatic conditions.

Interviews were conducted in Igbo language by the author in April 2013 in Amagunze—an agrarian rural community in Nkanu East Local Government Area of Enugu State, Nigeria. The respondents were mainly unschooled farmers, interviewed because their agricultural experience put them at the frontline of the effects of climate change.

Respondents understanding of climate change

For many respondents, changes in climate were expressed in terms of variations in sunshine and rainfall. Some thought that a change in climate came from the sun. 'Whenever the sun shines so much for a long time it causes climate to change', observed one respondent. Another respondent was of the opinion that 'the sun has deviated from its original position and is causing the temperature to rise'. Further insight into how rural people link the sun and climate change was noted when one respondent told of how he learned from 'experts' that 'the problem [climate

change] started when white people shot something into the sun and damaged part of it, making the weather to change abruptly'.

This lack of knowledge of underlying causes of climate change has long term implications that could be addressed through education. Rural people could therefore benefit from education regarding changes in climate and its long term effects, which may be essential for their survival.

Rising debt and increasing hunger were of concern to respondents. One farmer told of debts she incurred because of unusual floods which ravaged most parts of Nigeria in late 2012. Another noted that 'when crops are destroyed by too much sunshine and rain, there will be less food for farmers to eat and also less to sell to people.' Observing her situation was worsening each year, she appealed 'in the name of God those of you who know better than us about this phenomenon should come and tell us what to do.' Another farmer complained that 'I no longer have enough to eat, let alone to sell' and lamented that rising temperatures had also altered her sleep pattern and affected her health. She appealed: 'You people should please come and help us because what we don't know is greater than us. We don't know where to start comprehending this [climate] change and how to respond to it.'

Puzzled by unusual occurrences, some respondents found solace in religious beliefs to help shape their understanding. For example, one respondent observed: 'Christians say that... God will change the order of things in the future; day will become night and night will become day... From what we are seeing these days, the order of many things has changed.' It appears such assumptions are being made across Africa as a trans-African study found 'people link changes in the weather to their faith regardless of religion' BBC World Service Trust (2010:10). The study quoted an Ethiopian Muslim woman explaining 'Allah brings the rain. The one who causes the drought... is Allah.' (ibid). As faith may have implications when communicating on climate change, it is important to educate key figures of faith and recruit them to educate others on the issue.

Technology and communication

Given limited access to mass media, participants in this study preferred face-to-face communication. Although some listened to radio, their consumption of mass media was generally low due to low literacy level, erratic electricity supply and lack of disposable income. One participant stated: 'I do not always listen to radio because of electricity issues'. As most newspapers in Nigeria are published in English, this participant also noted that she was not literate in the English language: 'I am not educated to the level of reading a newspaper. But anything I want to know, I will ask the educated ones who read newspapers to tell me'.

While respondents longed for information on adaptation, they observed they would understand such information better if gathered as a group and addressed by experts. One respondent said she would appreciate any approach to engagement that would allow her to seek immediate clarification from experts. Another explained that engaging farmers face-

to-face in small groups would allow them to learn directly from experts and ‘even if we could not understand immediately, I’m sure that some of us would understand quicker. So, those who could not understand immediately would learn from those who understood quicker’. These respondents’ comments affirm observations that rural women in Nigeria prefer to communicate face-to-face than through news media (Okunna 1995).

Participants also noted the importance of the involvement of authority figures such as village chiefs and religious leaders in communicating climate change to rural people. Findings showed that authority figures wield much influence and can frustrate rural development efforts if not consulted. Traditional chiefs are very influential in their communities. As one respondent observed, they are the only people who ‘can easily make every youth and adult in the community gather at the village square’.

Conclusion

This study has offered some insights into a Nigerian rural community’s understanding of climate events and their continual struggle to survive. The people of the community continue to experience crop failure, dwindling income and hunger and generally lack the specialised knowledge needed to understand the changes they are experiencing to try and adapt. They rely on the knowledge framework operating within their community to make meaning of their experiences. However, rural people acknowledge their poor understanding of the situation and yearn for specialised information that will help them to understand and appropriately adapt.

Furthermore, the findings indicate absence of institutional leadership, therefore presenting an opportunity for institutional intervention with both short term and long term capacity building initiatives to fill the culture and knowledge gap in the rural people’s understanding of climate and other changes impacting on their livelihoods. This, among other initiatives, requires the improvement of communication systems and other infrastructure in rural communities. As already noted, rural communities across Nigeria lack basic infrastructure and amenities, a situation which leaves them vulnerable to the impacts of climate and other changes. It is therefore imperative for government and climate change communicators in Nigeria to engage rural people and educate them. ‘Communities are unlikely to respond to government policies promoting mitigation and adaptation strategies without an improved perception of climate change risk at a local level’ (Harris 2014:77).

Engaging marginalised people on issues like climate change can be challenging, especially as the very inequalities they regularly experience can tend to make them suspicious and defensive when dealing with outsiders. Freire (1970) recommends that those who educate the marginalised show love and humility to gain trust. One way to gain rural people’s trust is to appreciate their culture including their modes of communication. As Soola observed: ‘an appreciation of the media environment of the rural non-literate farmer and information flow within that environment is thus vital not only for meaningful communication

with him but also for getting him to adopt the new practices being recommended’(1988:83).

The first step towards engaging rural people on changes in climate is to work with individuals in positions of authority in rural communities, such as religious leaders and traditional chiefs who can mobilise people for meetings to create familiarity and acceptance for successful engagement and also enable external communicators the opportunity to understand people’s experiences of changes in climate.

Increasing internet access and unprecedented levels of mobile phone distribution across Nigeria offer possibilities for communication changes across the country. All respondents in this study owned a mobile phone—a resource that could facilitate production of videos and digital stories by rural communities to draw government attention to their experiences and open a discursive space that ‘enables citizens to share knowledge and acquire better understanding of the impacts on livelihood and culture’ (Harris 2014:77). The use of technology to build on the strength of the oral culture of African traditional societies has been employed in Madagascar where ‘participatory videos and digital storytelling are being used to stimulate community debates over climate change issues, and raise their concerns to decision-makers and broader audiences’ (BCO in Ospina and Heeks 2010:26). Such bottom-up approaches offer opportunities to utilise informal local networks and technology to communicate with and educate rural and marginalised communities in Nigeria.

Notes

- 1 A hot very dry wind that blows off the Sahara Desert.

References

- African DB, Asian DB, DFID, EC, Federal Ministry for Economic Cooperation and Development Germany 2003, ‘Poverty and climate change: Reducing the vulnerability of the poor through adaptation’, accessed 23 June 2015, <http://www.unpei.org/knowledge-resources/publications/poverty-and-climate-change-reducing-the-vulnerability-of-the-poor-through-adaptation-african-db-asian-db-dfid-ec-federal-ministry-for-economic-cooperation-and-development-germany>.
- African Economic Outlook 2012, African Development Bank (AfDB), Organisation for Economic Cooperation and Development (OECD), the United Nations Development Programme (UNDP) and the United Nations Economic Commission for Africa (UNECA), assessed 6 December 2012, <http://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/Nigeria%20Full%20PDF%20Country%20Note_01.pdf>.
- Akpodiogaga-a P and Odjugo O 2010, ‘General overview of climate change impacts in Nigeria’ *Journal of Human Ecology*, 29(1), 47–55.
- BBC World Service Trust 2010, *Nigeria Talks Climate: The public understanding of climate change*, London, BBC World Service Trust.
- BCO (Building Communication Opportunities) 2010, ‘Madagascar: survival strategies, participatory video project’ in A Ospina and R Heeks *Unveiling the Links Between ICTs & Climate Change in Developing Countries: A scoping*

- study, Manchester, Centre for Development Informatics, available online: 4223b488-d02a-4948-a3df-ea49e9ca25cf [Accessed 3 June 2016].
- Eteng FO 2005, 'Rural development in Nigeria: Problems and remedies', *Sophia: An African Journal of Philosophy*, 8(1), 65–71.
- Freire P 1970, *Pedagogy of the Oppressed*, London Continuum.
- Harris US, 2014, 'Communicating climate change in the Pacific using a bottom-up approach', *Pacific Journalism Review*, 20(2), 77–95.
- Holmes R, Akinrimisi B, Morgan J and Buck R 2012, *Social Protection in Nigeria: Mapping programmes and their effectiveness*, Overseas Development Institute, London.
- International Fund for Agricultural Development (IFAD) available at: <http://www.ruralpovertyportal.org/country/home/tags/Nigeria> (accessed 20 April 2015)
- Kovats S and Lloyd S 2009, 'Population, climate and health', in JM Guzmán, G Martine, G McGranahan, D Schensul and C Tacol (eds), *Population Dynamics and Climate Change*, UNPF, New York and IIED, London, 164–75.
- Lozet F and Edou K 2013, *Water and Environmental Security for Conflict Prevention in Times of Climate Change*, Global Water Institute, Brussels.
- Meribe N 2008, 'Indigenous African Communication System (IACS) and participatory rural development in Nigeria: A case study of Umunahihie water project', MA Dissertation, University of Westminster, London.
- NEST (Nigerian Environmental Study/Action Team) 2011, 'Building Nigeria's response to climate change. Gender and climate change adaptation: Tools for community-level action in Nigeria', Ibadan.
- Okunna CS 1995, 'Small participatory media technology as an agent of social change in Nigeria: A non-existent option?' *Media Culture and Society*, 17(4), 615–27.
- Omenugha KA and Oji M 2008, 'News commercialization, ethics and objectivity in journalism practice in Nigeria: Strange bedfellows?' *Estudos em Comunicação*, 3, 13–28.
- Phillip D, Nkonya E, Pender J and Omobowale AO 2009, 'Constraints to increasing agricultural productivity in Nigeria: A review', Background Paper No. NSSP 006 for the Nigeria Strategy Support Program (NSSP), accessed online 3 June 2016, <https://www.ifpri.org/publication/constraints-increasing-agricultural-productivity-nigeria-0>.
- Soola E 1988, 'Agricultural communication and the African non-literate farmer: The Nigerian experience', *Africa Media Review*, 2(3), 75–91.
- Toulmin C 2009, *Climate Change in Africa*, London, Zed Books.
- Udoakah N 1998, *Development Communication*, Enugu, Stirling-Horden.
- World Bank 2014a, *Nigerian Economic Report*, World Bank, Washington DC.
- World Bank 2014b, *Nigeria—Agriculture and Rural Poverty: A policy note*, World Bank Group, Washington, DC, accessed 3 June 2016, <http://documents.worldbank.org/curated/en/2014/05/19888933/nigeria-agriculture-rural-poverty-policy-note>.