

When Poor Resource Governance Becomes Barrier to Rural Community-Based Adaptation: Case Study from the Nigerian Savanna

M. FASONA^{1*}, G. OLOUKOI², F. OLORUNFEMI², P. ELIAS¹ & V. ADEDAYO¹

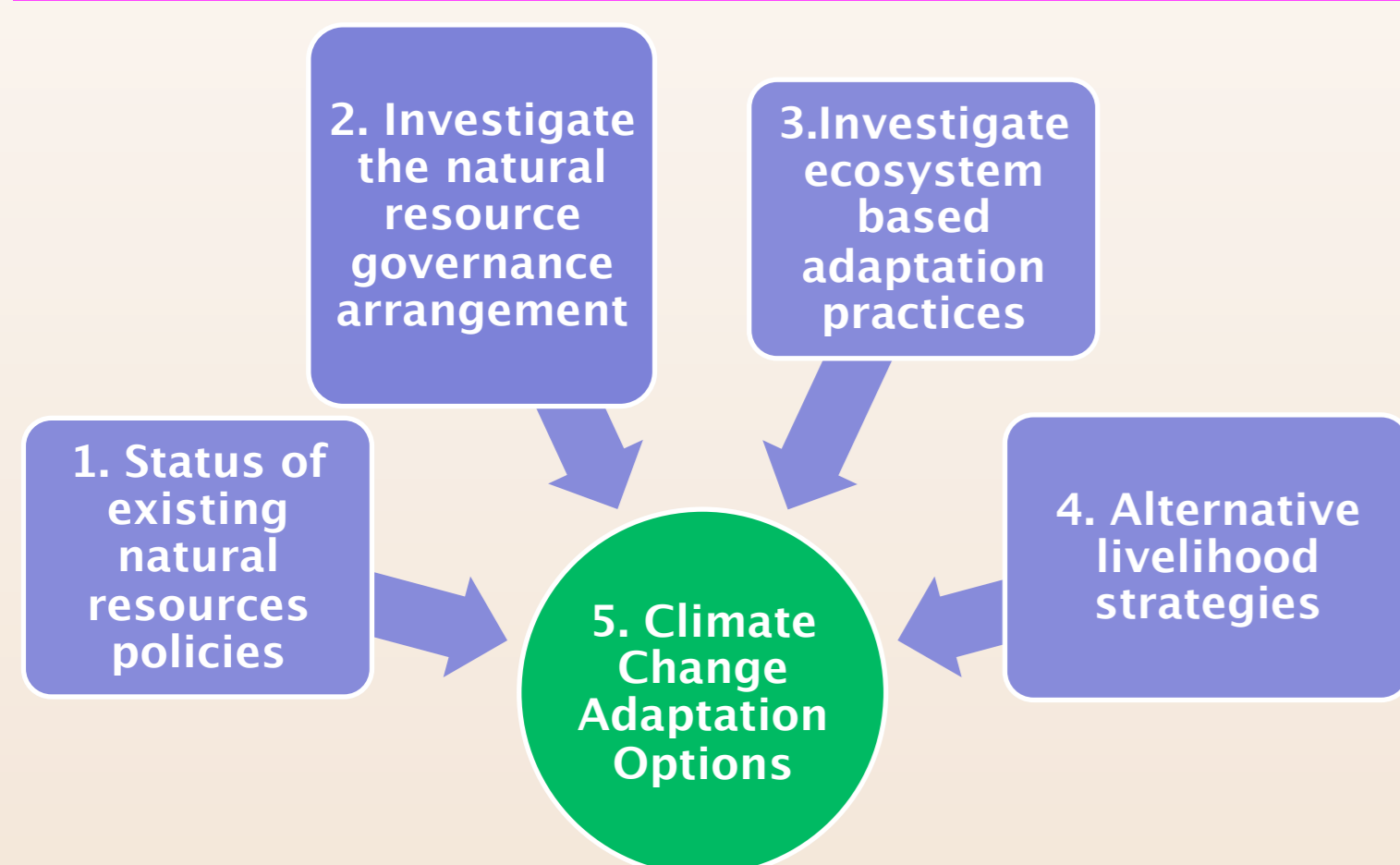
¹Department of Geography, University of Lagos, Nigeria, *e-mail: mfasona@unilag.edu.ng; ²Lead City University, Ibadan, Nigeria; ³Nigerian Institute of Social & Economic Research, Ibadan, Nigeria.

1. Introduction

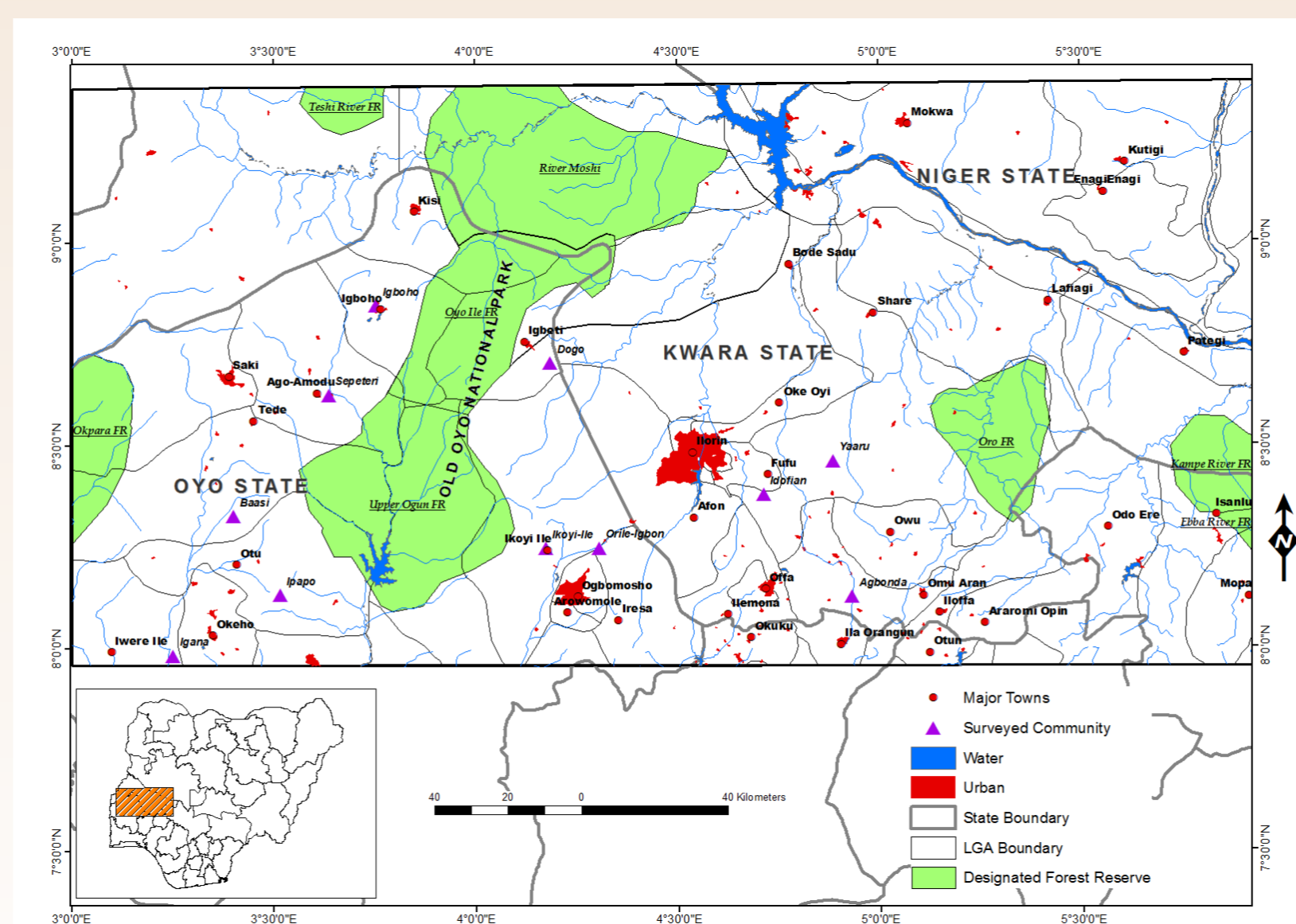
Renewable natural resources play an essential role in enhancing community-based adaptation by providing the ecosystem goods and services (Munang et al., 2011; Millennium Ecosystems Assessment, 2005). Adaptation is local, place-based and context specific. The knowledge of climate risk and available natural resources is indispensable to effective community-based adaptation (CBA). The natural resources governance arrangement available at national and local levels determines how ecosystem-based adaptation is perceived as a component of CBA. CBA is likely to be ineffective when no institution appears to be in control of natural resource management, the extant regulations governing resource access and use are not enforced, or strategies for sustainable natural resources management are not translated into actions. The sustainability of natural goods and services that support CBA efforts depend to a large extent on the ownership and access to common pool resources. According to Grafton, et al (2004), property right exist over an asset whenever a recognizable entity is able to exclude, at least partially, others from either using it or enjoying a flow of benefits of its use.

The Nigerian savanna is a densely settled zone with agrarian population that relies on small-holder rainfed cultivation (Fasona et al., 2013, Omotosho and Abiodun, 2007). Who holds property rights over arable and grazing lands, water natural and other environmental assets and the nature of these rights has implications in terms of adaptation and environmental sustainability outcomes. Natural resources and ecological assets in the Nigerian savanna are not pure public goods, but common pool resources where exclusion is difficult and their use is rivalrous. Despite no exclusivity, one group's use of the resources reduces the ability of the other to either use or enjoy it. This is one of the root causes of resource conflicts which demean CBA in the savanna. Due to poor land management private and community property rights regimes are nearly absent. This results in a tragedy of the common where individual users consider only their private costs and not the costs their actions impose on other resource users. This has created a situation where someone is better off by making someone else worse off and this is a barrier to rural community-based adaptation.

2. Study Objectives



3. Study Area



The study area map

Annual rainfall about 900mm to 300mm, 75% from mesoscale processes. High density agrarian landscape. Livelihood is tied to small-holder rain-fed cultivation, Irrigation is low but potential is high. Natural capital is significant to human well-being and adaptation.

4. Methodology

Engagements

- Content analysis of NR policies and programs – Agriculture, Environment, Forestry and Energy

- Interview with 191 households in 11 communities across 10 communities in 2 states

- 5 Focus group discussion and 4 Key informant interviews

- Interview with NR Desk officers in 10 LGA

- Stakeholders Workshop – community representatives, policy makers, researchers, NGOs and the Press



Engaging different stakeholders on the field

5. Results

- National policies on NR and rural livelihoods and food security are detailed, well intentioned and cross cutting

- Resource governance arrangement is poor – the legal and Implementation authority for most issues concern with CBA is domiciled with State Governments, which are far from the grassroots. The communities are almost completely excluded in NR management arrangement

- The LGAs which are the closest to rural communities agreed they have no legal, technical, human and financial capacity to carry out key functions that will aid CBA

- Field evidences show a big disconnect between policy intentions and situation in the communities

- Communities do not get the needed assistance to make their adaptation effective

Some key CBA issues addressed in the Nigeria NR Policies

S _n	Action Points on the ecosystems and rural livelihoods	Agriculture	Forestry	Environment	Energy	Evidence of implementation
1	Promote Food security /self sufficiency in basic food supply	✓	✓			Partially
2	Promote poverty alleviation and micro-credit facilities for small holder farmers and rural entrepreneurs	✓	✓		✓	No
3	Improve protection and conservation of land resources	✓	✓	✓	✓	No
4	Make available farm inputs and modern technology for rural agriculture	✓				No
5	Develop rural infrastructure to improve quality of rural lives	✓		✓		Partially
6	Provide and improve extension services and pilot plans	✓			✓	No
7	Develop and manage irrigation facilities and dams	✓				Partially
8	Promote farming systems based on natural adaptations across ecological zones			✓		No
9	Establish grazing reserves and water access for livestock	✓				Partially
10	Mobilize farmers through cooperative organizations, local institutions and communities	✓				No
11	Conserve forest resources and protect from forest fire and bush burning	✓	✓		✓	No
12	Reduce percent contribution of fuelwood consumption in domestic sectors				✓	No
13	Encourage production, effective distribution and use of alternative energy to fuelwood		✓		✓	Partial
14	Encourage the establishment of commercial, private and community fuel woodlots				✓	No
15	Promote cultivation of fast growing trees species for forest regeneration				✓	No
16	Public campaign and enlightenment of rural communities of the effects of deforestation		✓	✓	✓	No
17	Provide seedling to conserve priority indigenous trees species					No

Acknowledgment: This study was supported by the Nigerian Institute of Social & Economic Research (NISER) and the United States Global Change Research Program.



References

Millennium Ecosystem Assessment (2005). *Ecosystems and Human Well-Being: Synthesis*; Island Press: Washington, DC, USA, 2005; p. 155. Omotosho, J.B and Abiodun, J. (2007): A numerical study of moisture build-up and rainfall over West Africa. *Meteorol. Appl.* 14: 209-225. DOI: 10.1002/met.11. Munang, R.T, Thiaw, L. and Rivington, M. (2011) "Ecosystem Management: Tomorrow's Approach to Enhancing Food Security under a Changing Climate" *Sustainability* 3, 937-954; doi:10.3390/su3070937. Grafton, R.Q, Adadmowicz, W, Dupont, D, Nelson, H, Hill, R.J and Renzetti, S (2004): *Economics of the environment and natural resources*. Malden, Oxford and Victoria: Blackwell Publishing. Fasona, M., Tadross, M., Abiodun, B., Omojola, A., 2013. Some Implications of Terrestrial Ecosystems Response to Climate Change for Adaptation in Nigeria's Wooded Savannah. *Environmental Development*, 5 (2013) 73-95, <http://dx.doi.org/10.1016/j.envdev.2012.11.003>.