

Sustaining Forest Livelihoods in an Era of Climate Change: Dialogue Beyond ‘Participation’ and ‘Community’ Arguments

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Abstract

As climate change risks enlarge, the environment is an ever more important framework to consider when discussing global sustainability. In Africa, following the leadership of national and trans-national economic communities, considerable effort is being made to establish regulations and legal frameworks on environmental resource use, based on international conventions and laws. Such initiatives are often undertaken within a top-down initiative of ‘participatory’ and ‘community-based’ approaches, despite these concepts originally suggesting bottom-up tactics. However, such idealistic approaches have been translated and introduced to regional and local contexts without sufficient consideration for the unique local and social conditions. This then tends to be received in the local context as enforcement, or an obligation, which may be cause for local conflicts. It is therefore critical that gaps between global environmental policy initiatives and their actualised efforts on the ground are identified.

Taking examples from the tropical forest zone of southeastern Cameroon, I will report on how environmental and rural development policies are impacting rural livelihoods, the social welfare of the local residents, and the forest landscape. I will then attempt to demonstrate micro-level governance challenges from perspectives identified within the local society. Finally, while acknowledging the limitations as an outsider, I will discuss what kind of research and practice can contribute to the positive co-governance of natural resources between diverse actors, referring to the potential creation of a citizen science platform in Africa.

Key Words

environment policy, multi-layered governance, communication gap, minority rights, African tropical forest

1. Introduction

1-1. Climate Change Risks and Livelihood Sustainability: Global Discourse

The African tropical forest draws worldwide attention because it is believed to contribute to global environment stability by stocking Green House Gases (GHGs) as a huge stock of carbon. From such a viewpoint, conservation of various types of African tropical forests is regarded as an urgent priority, considering that the globe is already exceeding planetary boundaries for sustaining the ecosystem as a whole. The loss of tropical forests challenges the planet's thresholds, especially seen in the decrease of biodiversity and climate change. Most tropical forests remain in Western and Central Africa. The Congo Basin especially harbours 170 million hectares of tropical forest, which contains the second largest tropical forest in the world after Amazonia. Logging, mining, and biodiversity loss are the core environmental threats against the Congo Basin forest ecosystems.

Global environmental issues have political as well as ecological facets. The aforementioned three threats are all related to each other politically and economically: they are deeply linked to national economic policy and global politics of development (Kitanishi 2010). For example, structural adjustment enforced by the World Bank brought an increase of timber exportation in Cameroon (Burnham 2000). Logging increases wildlife and biodiversity loss by enhancing local demands and by opening access between forest and urban areas (Auzel and Wilkie 2000).

Most of the forested zones in Congo Basin countries are less developed in state services. Logging and mining industries provide employment, essential infrastructures, and access to the global market in rural areas in forested zones (Figure 1). This condition makes the majority of local people accept and even feel favourable towards these operations. The dilemma between conservation and rural development represents a contradiction of the idea of 'sustainable development'. Thus, what is challenging in Africa is that the demands of both forest conservation and rural development should be satisfied under politically and economically vulnerable conditions.



Figure 1. Public route in bushy terrain (Photo: author)

REDD (Reducing Emissions from Deforestation and Forest Degradation), which emerged as an international formal framework at COP 13 in 2008, adds economic incentives for developing countries to reduce carbon dioxide emissions. The idea of REDD came from the concept of Payment for Environmental Services (PES). In addition to REDD, REDD+ (Reducing Emissions from

Deforestation and Forest Degradation and the Role of Conservation, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks in Developing Countries) also includes the acts of forest conservation, sustainable forest management, and increasing forest carbon biomass. The international conservation discourse moved from project-based conservation approaches in the framework of Integrated Conservation and Development Projects (ICDPs) to REDD and REDD+ (Blom *et al.*, 2010). The global REDD framework will also incorporate tropical forest conservation and management into the next global change agreement (Angelsen 2008). Whereas its political and economic influence in forest sectors is large, the REDD concept is still not familiar to most African citizens. Even among the elites who attend at meetings for REDD+ implementation, the meanings of basic terms are not well understood. Stakeholders including the media, researchers, bureaucrats and administrators, international organisation officers, and civil people did not hold enough basic conceptual understanding related to climate change (Tiani, Bele, and Sonwa 2015).

1-2. Paradox of ‘Participation’ and ‘Community’ in Environmental Policies

Preceding REDD and REDD+, plenty of participatory approach-based projects on local communities have been initiated in African countries under the various synonyms of Integrated Conservation and Development Projects (ICDPs), such as community-based natural resource management (CBNRM) and community-based wildlife management (CWM), in the last two decades. Since the late 1980s diverse environmental policies have been introduced and promoted under the initiative of a participatory and community-based approach. This has reflected the turn in development theory from a ‘top-down’ to a ‘bottom-up’ approach. These bottom-up approaches were, however, implemented in a top-down way.

From a policy makers’ perspective, some of these policies succeeded, but many failed in various ways. REDD+ can also fall into the same ‘pitfalls’ of past environmental policy enforcements at local levels, so REDD+ policy makers need to learn from existing experiences (Blom *et al.* 2010). Community-based participation of local people contains paradoxes. Discussing community participation, Robert Chambers (1983) put importance on ‘participation as end’ rather than ‘participation as means’: the former aims to achieve autonomy and empowerment of the community itself through development, whereas the latter aims to achieve particular developmental goals using community participation. However, the reality falls short of the desire ‘participation as end’. In Tanzania, for example, most participatory wildlife conservation approaches have failed to realise full participation because they had prioritised the latter (Iwai 2016).

Since its beginning, ‘participation’ and ‘community’ have been almost fake in Cameroon, as British anthropologist Barrie Sharpe criticised community forest implementation in southwestern Cameroon during its very early stages. Sharpe showed that the concepts of ‘participation’ of local people are not realised, and their ‘community’ is illusion at a local level (Sharpe 1998). Following Sharpe, more than a few number of authors, including Burnham and Hattori, pointed out problems related to community-based approaches to forest societies.

- Definition of ‘community’ itself has caused the problem. Mobile and dynamic characteristics of African rural societies are not necessarily compatible with the static image of community (Sharpe 1998).
- Inequality in decision-making processes. The culturally and politically heterogenetic composition of the community often results in the exclusion of minorities from decision-making processes.

Silent stakeholders remain out of discussion and information sharing (Burnham 2000).

- Benefit sharing provokes conflict and discrimination. Benefits from concessions of logging companies, sports hunting agencies, etc. are controlled by local authorities or local dominant people and are unfairly distributed (Hattori 2005, 2014).

1-3. Aim of the Presentation

Summarising these reports, the so-called participatory approach barely facilitated dialogue between different actors, both at the 'community' and at the sub-national level. Rather, these initiatives brought local conflicts. Thus this paper aims to explore (1) how we can leap beyond these paradoxes between knowledge (concept) production and practice, and (2) how we can contribute to sustaining local livelihoods through what kind of participation we engage in from an African area studies perspective.

2. Research Area

2-1. Cultural Diversity in Cameroonian Forest Scape

Cameroon accommodates more than 250 linguistic groups in different ecological landscapes, including the savannah and tropical forests. The southeastern part of the country is covered with dense tropical forest vegetation, which constitutes a part of the northwestern ridge of the Congo Basin. The African tropical forest has been an internal frontier in the continent since the Bantu expansion started some thousands of years ago.

In the Congo Basin forest, there inhabit a dozen groups of hunter-gatherers who are first inhabitants. From the past to present, the tropical forest provides refuge for various peoples in times of warfare and violence. Diverse peoples come into the forest and encounter the others. Anthropologists have demonstrated that it has also been a sociocultural interface that allows different peoples of various origins to coexist for long periods of time. As such an inner frontier (Kopytoff 1989), the tropical forest plays a role as one of the social places that contribute to the coexistence of local people who have different identities and values. Recent studies in historical ecological approaches are revealing such heterogeneity in local societies has also shaped forest landscape for centuries by ecological modification of forest vegetation through slash-and-burning (Carrière 2003), hunting and gathering (Yasuoka 2009, 2013), and settlement itself (Fongzossie *et al.* 2010).

2-2. Local Settings: Multi-Ethnic Frontier in Cameroon-Congo Border Forest

My research site is a typical example of a multi-ethnic community in the Cameroonian lowland rainforest, which is located on the international border between Cameroon and the Republic of the Congo, and 650km away from Yaoundé, the capital of Cameroon. The variety of people can be classified into three categories according to their lifestyle and ethnic identities: the Baka are hunter-gatherers; the Bakwele (who speak a Bantu language) are farmers; and the Hausa, Bamileke, and Bamoun are merchants. Their populations number around 300, 250, and 50, respectively, for a total population of around 600 (Oishi 2012, Figure 2). The migrant merchants came from the northern parts of Cameroon and various West African countries of the Sahel area. In addition to the Hausa, non-Muslim cocoa traders and merchants, including the Bamileke and Bamoun peoples from the western parts of Cameroon, are increasingly common as cocoa cultivation and markets have begun expanding in the region (Oishi 2016).

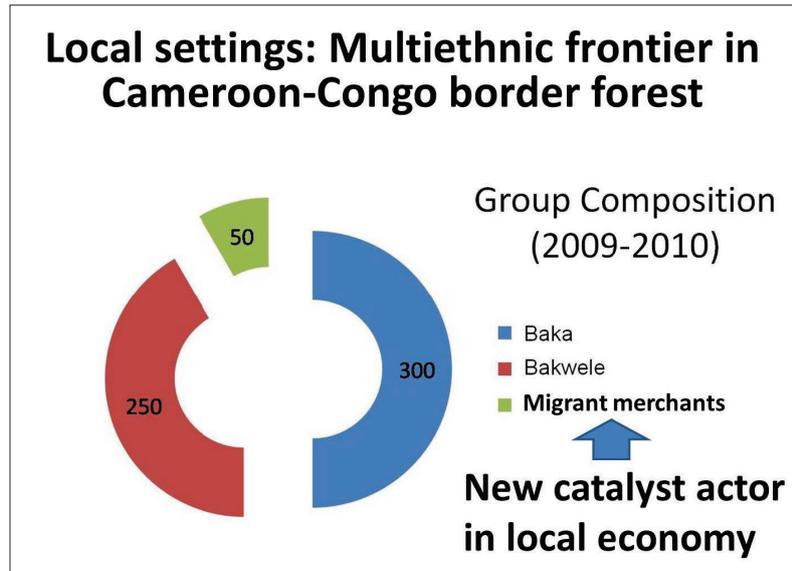


Figure 2: Group composition at the research site (Source: Oishi 2012).

3. Case Study: Trajectory of Forest Policy, Its Impacts on Local Society, and Local Responses

3-1. Large-Scale Enclosure of Forest World from the Upper Governance

The forest world and the people there have been confronting new political pressure during the last two decades, which has been brought into local society in a top-down way. These include, for example, forest zoning which is impacting local livelihoods, especially for hunter-gatherers who are more dependent on forest products (Hattori 2005). The process can be seen as an enclosure of the forest from the government wherein the modern twin of commercial timber exploitation and nature conservation are co-working. Hereafter in the documentation of forest policy consequences, stakeholders include local communities constituted by local Bantu and Pygmies, international conservation NGOs such as World Wide Fund for Nature (WWF: Nature Conservation NGO), NGOs for human rights and indigenous movements, commercial logging companies, and *Le Ministère des Forêts et de la Faune* (Cameroonian government).

3-2. Forest Zonation and Customary Use

Forest zonation was the first official output of forest policy implementation in Cameroon. Forests are divided into permanent commercial logging zones and non-permanent logging zones. Most parts of the forest are reserved for commercial logging. Local people are excluded in the process of forest zonation, which is similar to the concessionary exploitation of resources in the colonial period (Lewis 2005). Following forest zonation, the Cameroonian government and the WWF launched the *Jengi* project in southeastern Cameroon to achieve their conservation and development goals, and utilised a participatory approach, specifically focusing on the Baka Pygmies as they are the first known inhabitants of the area (Hattori 2014).

Participatory mapping by Cameroonian anthropologist Olivier Njounan Tegomo demonstrates how the Baka hunter-gatherers continue to use the forest, regardless of these boundaries in the forest (Njounan Tegomo *et al.* 2012, Figure 3). Community forest implementation has been attempted in the aftermath of zonation policy with support from the WWF. However, very few villages could succeed in maintaining it around the research area. Forest parcels just closed to the ‘community’ had been temporarily registered as community forest, but the government demanded tax payment to fulfil the

right to have it maintained. After the Rehman shock, WWF decreased activities in southeast Cameroon (Sayer *et al.* 2012), and the project was left in the hands of local people. In the research area, several family members of the village chief stole the benefits from timber sales, and the community forest has failed to function.

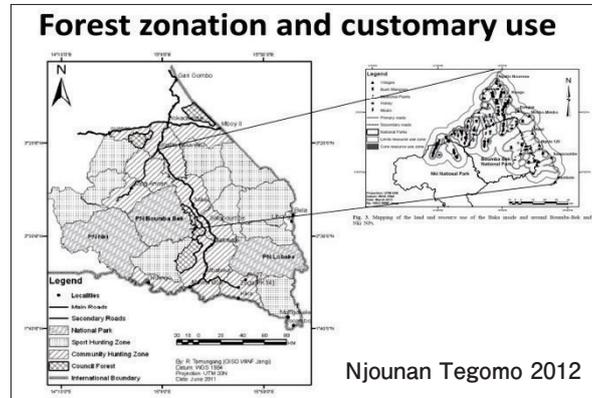


Figure 3: Forest zonation and hunter-gatherer forest use in southeastern Cameroon
(Source: Njounan Tegomo *et al.* 2012).

The Cameroon Forest Law of 1994 also established regulations on local people's use of the forest, including hunting and fishing activities. Control over game animals is decided according to their placement within grouped categories of endangered species created by the Cameroon Forest Law of 1994: A (integrally protected), B (partially protected), and C (the other species). Implementation of these regulations had been very 'flexible' at the ground level. The situation changed, however, in the late 2000s, when the conservation policy shifted from 'participatory' oriented to 'enforcement' oriented. This change included a militarisation of conservation activities, using army forces such as the Rapid Intervention Battalions to support anti-poaching patrols (Oishi *et al.* 2015, Kamgaing *et al.*, 2016). According to government officials, this was done to stop illegal activities like 'poaching' and the distribution of illegal firearms, such as the AK47. The underlying problem motivating this policy change was the increase of elephant poaching with military arms in national parks. Armed operations have occurred at least three times near our research sites between 2009 and 2012. Starting in 2013 and persisting into the present day, local people continue to protest this policy shift at WWF local headquarters.

3-3. Emerging Land Issues: Small-Scale Enclosure of the Forest World on the Ground

I described how the impact of forest conservation functions from above. Now I want to introduce local responses at the ground level, taking an example from cocoa-based small-scale agriculture, which is the most important source of cash income for local peoples in the research area. Cocoa farms are, as a food producing agroforest with food crops, also used as food production by local residents. The cocoa agroforestry system draws attention not only because it shows significant resilience against both climate instabilities and international market fluctuations but also because of its ability to contribute to the decrease in GHG emissions (Montagnini *et al.* 2004, Sonwa *et al.* 2009). The following data show, however, that it can also bring socioeconomic inequity at the ground level.

Figure 4 shows the historical trajectory of cocoa farming. Cocoa farming started in Cameroon during the colonial time, but burst after the penetration of the logging operation in the late 1980s.

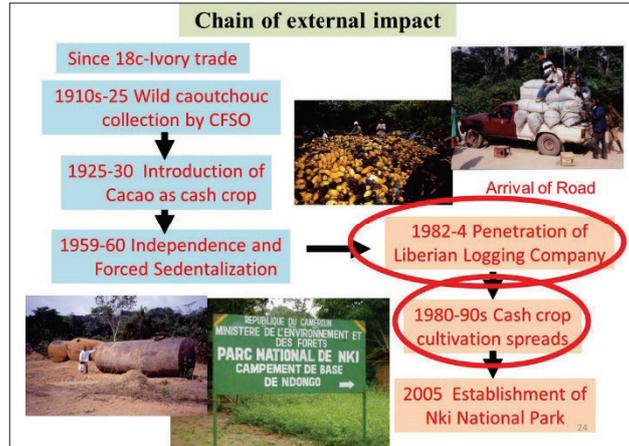


Figure 4: Chronology of major socioeconomic events related to cocoa farming.

Figure 5 shows how cocoa cultivation expanded from the 1960s to the 2010s, based on field surveys. We can see how the political and economic events in the larger world, such as liberalisation of national cocoa markets, civil war in the Ivory Coast in the early 2000s, as well as logging operation, relate to and affect cocoa farming in a remote village.

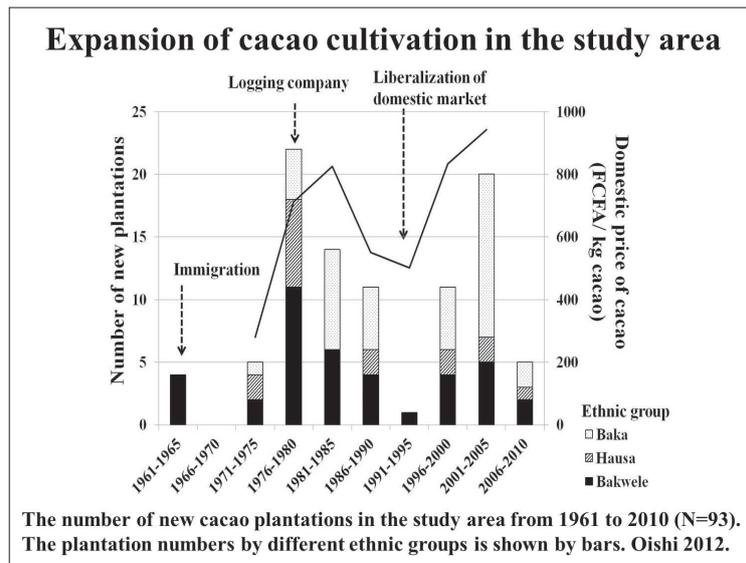


Figure 5: Demography of cocoa farms in the research area (Source: Oishi 2012).

Cocoa farming in the forest is hard work, including the labour in the long-running rainy season (*saison* in French) for harvest. People expect that their harvest will bring a lot of cash, but in reality it results in an increase in debt among the poor. Commoditisation brought accumulation of cash debts among hunter-gatherer households (Oishi 2016).

To solve the debt problem, lands became subject to negotiation. Land sales are prohibited in Cameroon; therefore, people practise land rents, and land rents transform into land transfers as they continue for years. Table 1 shows the combination and direction of land rental contracts, which is literally one-way traffic from the Baka to the Bakwele, and from the Bakwele to the Merchants. Although Baka acknowledges borrowers because they can get cash immediately, these contracts are very unequal between the lender and the borrower (Oishi 2016).

**Lender-Borrower Combinations
in Plantation Rents(location)**

		Borrower				
		Baka	Bantu	Others	Unknown	Total
Lender	Baka	0	9	14	2	25
	Bantu	0	7	10	0	17
	Others	0	0	0	0	0
	Total	0	16	24	2	42

➤ “One-way traffic” of Benefits from Baka to Merchant-Farmers and Bakwele.

Table 1: Combination of land rental contracts by groups (Source: Oishi 2016).

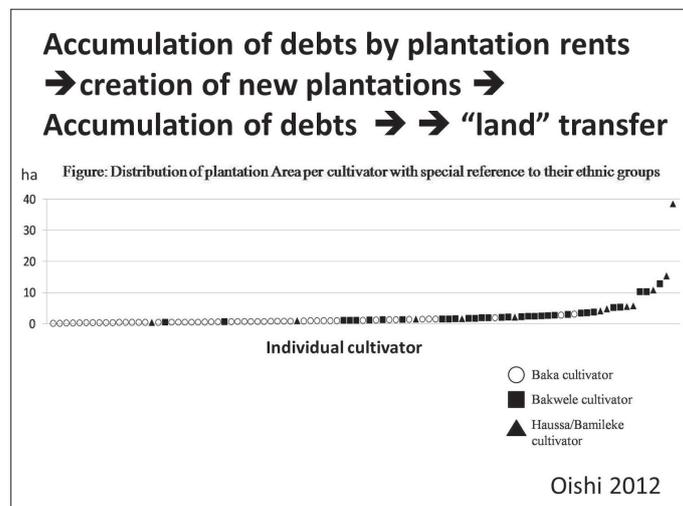


Figure 6: Land accumulation by merchants (Source: Oishi 2012).

As a consequence of land transfer, now land is accumulated by a small number of migrant merchants (Figure 6). This characteristic of land occupation in cocoa farming is now causing small-scale land grabbing by immigrants from local hunter-gatherers and farmers, causing new sorts of conflicts between local peoples.

If perennial tree crop plantations continue, crop fields would not return to forests, unlike the traditionally practised slash-and-burn fields of food crops. The lands no longer rotate from crop fields to forests, and vice versa. This brings fundamental change in the recognition of land use and ‘rights’ to the land.

Differences in the causes and patterns of land disputes demonstrate that hunter-gatherers, farmers, and migrants perceive land resources differently based on their own sociocultural backgrounds. The legitimacy of their informal ‘rights’ to land is often controversial because of the multiple contexts in which rights are claimed. There are the contexts of customary rights to the use of lands, local rules authorised by local authorities, and the state statutory law on the rights to land ownership. Since a cocoa plantation requires semi-permanent occupation of the land, a customary system that defends temporary rights does not catch up to it.

Local agents of the state and village authorities generally accept the rental and sale contracts of land which is prohibited by the state, particularly because they can expect some benefit from

approving the contracts. Under these conditions, migrants gain accumulation of cocoa farms. Whereas these processes can be simply interpreted as a marginalisation of native peoples, transmission of cultural traditions were also observed among stakeholders in the process of land negotiation.

3-4. Summary of Case Study

I summarise my observation: new sorts of land issues emerged in a village between local people of different sociocultural backgrounds. From perspectives of local hunter-gatherers, this is a kind of small-scale enclosure of the forest space. Together with top-down forest zonation, the rights and livelihoods of local people have been damaged. As room for local people’s forest use is increasingly narrowed by forest zoning policy, in combination with commercial logging and nature conservation, this kind of local land conflict imposes a risk of worsening in the near future.

Verina Ingram, Mirjam Ros-Tonen, and Ton Dietz demonstrated how Non-Timber Forest Products (NTFPs) producers and traders created a bricolage within different governance arrangements of statutory, market-based, customary, and project-based mixture of institutions and corruption. This model well explains the realities of wicked situations of forest governance related to cocoa and coffee farm managements, and how local actors try to adapt in responding to it (Ingram *et al.* 2015).

4. Reflections

Researchers play multiple roles in the past and current construction of global environmental discourse, though there are a variety of positions researchers can occupy in the governance hierarchies. It is noteworthy that James Fairhead and Melissa Leach described a ‘conglomerit’ of researchers, international agencies, and NGOs (for example, the ‘Tropical Forest International’) that interplay to create order in conservation policies, which can bring considerable impact to local people’s livelihoods (Fairhead and Leach 2003).

According to Tetsu Sato, who is a Japanese environmental sociologist as well as an ecologist, there are weakness in, and losses in translation between, different scales of governance: local, national, and global. This prevents equitable participation of stakeholders and tends to sacrifice knowledge users at the bottom (Figure 7). Sato discusses that ‘vertical translators’ are needed to improve the communication gap, which can bridge the fissure between global conceptualisation and regional and local contexts (Sato 2016).

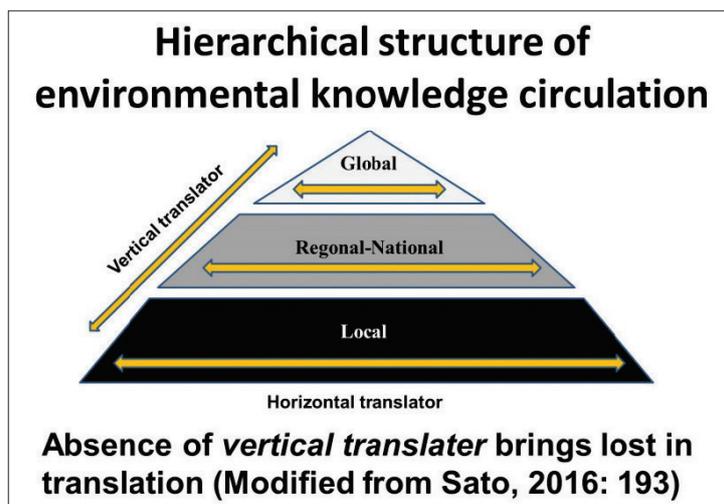


Figure 7: Triangle of environmental knowledge production and circulation (Modified from Sato 2016).

New approaches are needed to achieve more democratic and equitable dialogues between different levels of governance. For example, citizen science can be a breakthrough in mediating different stakeholders to achieve win-win practices of forest use and conservation. Citizen science is 'a situated, bottom-up practice that takes into account local needs, practices and culture and works with broad networks of people to design and build new devices and knowledge creation processes that can transform the world' (Extreme Citizen Science of UCL). For example, participatory mapping of the forest with local peoples using GPS units and its application in improving forest management may be a good example of the potential of citizen science (Lewis 2012).

The question of 'how I can participate' (Chambers 1997, Iwai 2016) should be addressed by every researcher and scholar who wants to contribute to bringing about more equitable African environment policies and close to gap in ground-level realities.

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