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Pendjari River near Porga (north-west Benin) © Papa Sow, 2014

## Migration and Natural Resource Scarcity within the Context of Climate Variability in West Africa

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### Introduction

Human mobility has been an integral part of the social organization of West African societies since time immemorial. In recent times, migration within West Africa has in part also intensified due to the Economic Community of West African States (ECOWAS) protocol, allowing for the free movement of goods and persons

within the subregion. Historically, complex multi-causal combinations of economic, sociocultural and environmental factors have served to dictate population movements within the region (Adepoju, 2005; Sow, Adaawen and Scheffran, 2014).



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While the effects of global climatic and environmental changes as well as improved transport may have accelerated mobility within the subregion, it is envisaged that population pressure on scarce natural resources in part also influence these movements (Van der Geest, 2011). Apart from migration in search of fertile farmland (Le Meur, 2006), many other people in West Africa migrate to exploit both marine and inland fishery resources (Njock and Westlund, 2010). Also, pressure and competition for land have been the underlying causes of most land-use tensions or disputes in several parts of the West African subregion (Obioha, 2008; Tonah, 2002).

Fishery resources governance has been promoted through decentralization and co-management of fishery resources across Africa. However, the lack of adequate participation of local fishers, communities and relevant stakeholders in all processes of fishery co-management and decentralization has often been the cause of simmering tensions. It is important to stress that tensions or conflicts related to resource use are complex and may be driven by multiple causes such as ethnic tensions, distrust, prevailing socioeconomic crises, resource scarcity and political instability (Reuveny, 2007; Benjamisen, Maganga and Abdallah, 2009). These tensions have implications for sustainable livelihoods and development not only within West Africa but also across the continent (Lewins, 2014).

## Migration, Climate Variability and Natural Resource Scarcity

### Climate Variability<sup>1</sup>

In terms of climate variability, climatic projections suggest that the West African Sahel is becoming wetter, as rainfall may have recovered within the region (Brooks, 2004; Nicholson, 2005). This notwithstanding, it is undeniable that the West African region is confronted with a highly variable rainfall pattern, flooding and droughts (Armah et al., 2010). Multi-decadal rainfall variability and desiccation within the West African Sahel, coupled with population pressure on natural resources, have affected agrarian livelihoods and food security in the West African subregion (Hulme, 2001; Dietz et al., 2004).

### Land Resources

The population of West Africa is estimated to be about 290 million.<sup>2</sup> The majority of the people are engaged in agriculture and related activities. As such, land is an important factor of agricultural production. But land scarcity and fragmentation in the wake of population growth, climatic variability and environmental deterioration have undermined large-scale agricultural production. This has worsened the poverty and food insecurity situation in the subregion. With migration as an integral feature of the socioeconomic dynamics of most societies, people have – apart from other responses – resorted to migration in search of fertile land and economic opportunities (Rain, 1999).

A recent study of the Bialaba<sup>3</sup> in north-western Benin has pointed to the persistent migration of people from the environmentally stressed Atacora–Dasari areas towards the south and central parts of the country and Nigeria in search of fertile farmlands or to work as farm labourer (Dreier, 2014). At the same time, internal migration, displacement and resource scarcity have also led to competition and disputes in relation to land use rights. Land-use disputes in the face of population growth in the Dassari, Porga and Pouri areas of north-western Benin in particular have been a major challenge in the area (Le Meur, 2006).

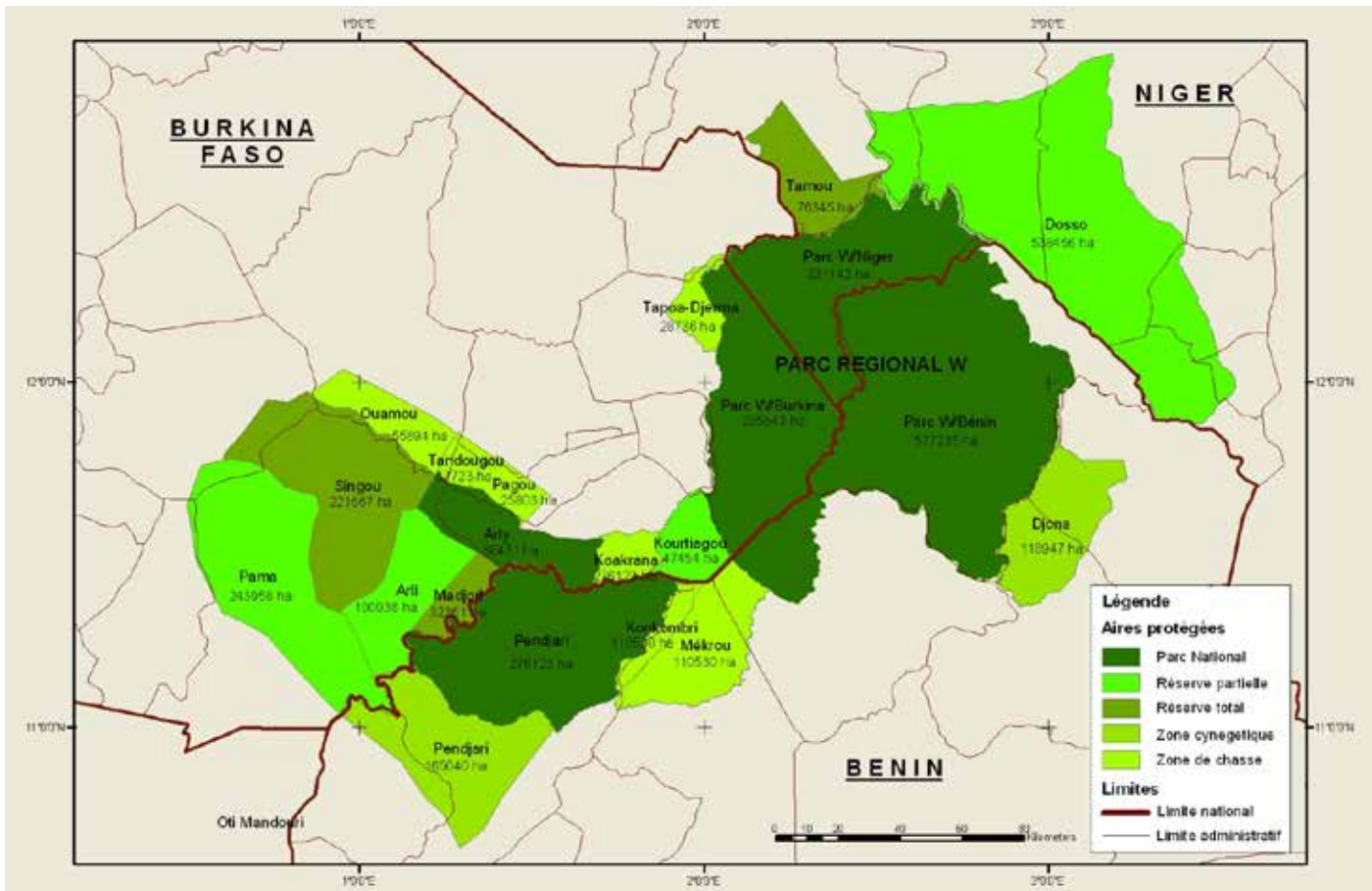
Autochthonous land tenure rights in the area grant locals access to land and resources. These rights offer security and allows for long-term planning and investment. But increasing land fragmentation linked to demographic changes, intensive cultivation and disputes associated with rights to inherited lands in the Dassari area have resulted in insecurity. Recurrent claims of inheritance to cultivated land by rival families have been a major source of disputes, destruction and loss of farm crops in the communities (Dreier, 2014). Furthermore, restrictions to the Pendjari National Park (which covers a land area of 2,755 sq km) aimed at conserving wildlife and biodiversity have compounded the land scarcity situation in the area. These restrictions on access to the park have intensified the competition and recurrent land disputes between locals, non-natives and authorities in the area.

<sup>1</sup> Climate change basically refers to long-term changes in the climate, while climate variability is the yearly or seasonal variations/fluctuations of climatic parameters.

<sup>2</sup> Feed the Future, “Countries/West Africa Regional”. Available from [www.feedthefuture.gov/country/west-africa-regional](http://www.feedthefuture.gov/country/west-africa-regional).

<sup>3</sup> The Bialaba, also known as Burba or Biali, inhabit the Atacora department of north-western Benin and spread across Togo and Burkina Faso.

## Area Coverage of the Pendjari National Park



Source: Parc National de la Pendjari. Available from [www.pendjari.net/parc-pendjari/article/situation-geographique](http://www.pendjari.net/parc-pendjari/article/situation-geographique).

In spite of existing Beninese Land Legislation (Law No. 65, 14/08/1965) derived from colonial origins on the admission of private lands, the legislation is only “theoretically” visible at the national level with no clear focus on customary land tenure rights. The subsequent Rural Land Reform, which saw the enactment of Act No. 2013-01 on private and State-owned land code in Benin, is also confronted with challenges and hence has not witnessed strict adherence in rural areas (Le Meur, 2008; Houangni, 2013). Many of the local people are not only unaware of the legislation but not all persons (especially women and children) are involved in land management. Furthermore, land registration costs are also high and the process of claiming land rights is complicated for the majority who have little or no education. Migration to Nigeria has consequently become a viable strategy to access fertile land under *tutorat*<sup>4</sup> arrangements and to overcome local land disputes.

Migrants who are farming in Nigeria send both food and cash remittances. The cash remittances have been invested in grinding mills, purchasing of bulls for animal traction, construction of buildings and general household provisioning in the home communities (Dreier and Sow, 2015). While not discounting the role of sociocultural and historical factors in dictating movements, migration to resource-endowed areas within the subregion has served to provide a leeway to improving income and food security within the region.

<sup>4</sup> Arrangements normally embedded in the local moral economy where migrants work for landlords for a period of time in order to access land (see Le Meur, 2006:882).



Construction of building and grinding mill with cash remittances (Dassari; Porga) © Vanessa Drier, 2014

## Inland Fisheries and Migrant Fishers

The West African Economic and Monetary Union (Union Economic et Monétaire Oest Africaine) (UEMOA, 2013) has highlighted the fisheries subsector as an important source of livelihood to many rural fishers within the subregion. In its 2013 framework report of the eight member countries, the UEMOA estimates that on average eight persons per household are engaged in the sector with more than 1 million of the total population directly dependent on inland fisheries. In spite of the seeming overwhelming number of people engaged in inland fishing and related activities, the sector draws limited government or donor support. More importantly, migration of fishermen along the West African coast and into the interior to exploit fishery resources has increased in the last 30 years (Overa, 2001). These migrations along the coast to the inland to exploit fishery resources effectively contribute to ensuring food security for the most vulnerable communities, as well as the

diversification and transformation of rural livelihoods. The persistent movements towards the stretches of smooth water have, however, given rise to a number of tensions and latent conflicts.

Inland fishing in West Africa is an unregulated economic activity, which exploits the natural but limited fisheries resource base. This is in view of existing customary African traditions that see fishery resources as collectively owned by communities and hence open to exploitation by any member. Generally, there have been neo-Malthusian<sup>5</sup> concerns about population pressure and global natural resources decline in environmental and climate change discourses (Hillman, Withers and Collins, 2009). There is the concern among policymakers

<sup>5</sup> Scholars who subscribe to Malthus' ideas of regulating human population with the view to ensuring the sustainable use of natural resources.

that resource supply may collapse, creating a new vulnerability for the West African population, which is also exposed to effects of climatic and environmental change. The absence of effective institutional policies and adequate participation of stakeholders in the management of the inland fisheries subsector also hampers the sustainability of inland fishery livelihoods (Binet, Failler and Thorpe, 2012).

Despite the importance of this subsector, the efforts of West African countries and international support agencies in terms of implementing legislation and the management of inland fisheries have hardly had any effect on the ground. Debates on natural resources scarcity necessitate much more attention in African societies that are directly concerned in terms of coping (understood as short-term or flexible livelihood diversification) and adaptation (longer-term and more permanent) strategies. In northern Benin, for example, the most productive fish stocks are developed in protected areas. Competition that may have been increased by the influx of migrant fishers, declining fish stocks and institutional restrictions to protected areas is a major concern to locals who feel they have usufruct rights to fishery resources.

The quest to exploit fishery resources in these protected areas has often been the cause of tensions between local and migrant fishers on the one hand, and authorities on the other. The literal prohibition of any fishing activities in the park by guards, according to Sow (forthcoming), has been the cause of simmering discontent among local and migrant fishers in the area. There have been confrontations between local and migrant fishers who move from the Burkina Faso side of the Pendjari River to the side in Benin. Unlike in Burkina Faso, where unrestricted intensive fishing activities have been ongoing in the Pendjari River, fishing activities are generally restricted in the same Pendjari waters within the frontiers of the protected park in Benin (Smith and Maltby, 2003).

The influx of other West African migrants and local fishers in Benin underscores the importance of the subsector for livelihood security in the region. Against the foregoing background, the profitability of inland fishing can only be guaranteed in the long run if government or institutional control mechanisms effectively involve fishers at all levels of inland fisheries co-management in order to regulate catches. Also, effective land management in especially rural areas is crucial to the improvement of agricultural productivity and curbing the occurrence of land disputes in the region. It is, therefore, important to conduct more research on the existence of control mechanisms and suggest appropriate recommendations.

## Recommendations

1. With regard to the scant information on inland fishing activities within the West African subregion, it is important to extend research that provides priority insights into this subsector to support policy decision-making.
2. There is a need for effective forecasting and timely dissemination of information on seasonal rainfall activity to farmers. With institutions such as the African Center of Meteorological Application for Development (ACMAD) and the Agrometeorology, Hydrology, Meteorology Regional Center (AGRHYMET) already engaged in rainfall forecasting, pragmatic dissemination of seasonal rainfall forecasts via local radio programmes will be vital to agricultural production. Agricultural extension officers working with farmers in various communities should be considered a complementary channel to disseminate information in rural areas and help reach out to uneducated farmers about how they can deal with the effect of erratic rainfall patterns.
3. There is a need for systematic documentation of customary land tenure systems (like *tutorat*) and legalization of customary land rights at the local level. The involvement of all stakeholders in land management issues at the local level is crucial to stemming ambiguities and related land-use disputes. An assurance of a greatly increased land tenure security will invariably involve an investment of time and resources to agricultural production and hence the improvement in food security within the West African subregion. Governments, receiving countries and local authorities should also promote awareness of the property rights for both local and migrant fishers.
4. Increased funding and technical assistance to the fisheries sector should aim at boosting production and the sustainability of the fishery resources. A special attention to the inland fisheries subsector through investment and technical support in fish farming and processing can help increase incomes and welfare of people (both locals and migrants) who are engaged in fishing and related activities as well as reduce disputes related to restrictions and competition.

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