

Vulnerability and resilience in West Africa: understanding human mobility in the context of land degradation

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Presented at the "Longitudinal Research Workshop on Environmental Change and Migration", KNOMAD Thematic Working Group on Environmental Change and Migration

The World Bank, Washington D.C. – March 19, 2015

Structure of the Presentation

- I) West Africa, Slow Onset Events and Vulnerability
 - Drought and reduced water availability
 - Sea-level rise and coastal erosion
- II) Resilience, Land-based Adaptation and Migration
 - Onsite Adaptation
 - Intercontinental, Regional and Internal Migration
 - Seasonal Migration vs. Relocation
- III) Unsafe Migration and Failed Adaptation

A Note on the Authors

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Climate Change and Slow-Onset Events

Slow onset events: "Insert short definition"

Slow Onset Events in West Africa

- Increasingly common throughout the region
- They affect the livelihoods of a growing number of populations through:
 - Accentuating desertification and land degradation

 Insert nice picture of desertification + Talk about expansion of Sahara desert (semi-arid zones, drylands, etc. All in IPCC).

Slow Onset Events in West Africa

- Increasingly common throughout the region
- They affect the livelihoods of a growing number of populations through:
 - Accentuating desertification and land degradation
 - Changing rainfall patterns and reducing freshwater availability

 Map of rainfall patterns or picture of crops ruined by extreme / unplanned rainfall and talk briefly

Picture of Lake Chad Shrinking

Slow Onset Events in West Africa

- Increasingly common throughout the region
- They affect the livelihoods of a growing number of populations through:
 - Accentuating desertification and land degradation
 - Changing rainfall patterns and reducing freshwater availability
 - Causing sea-level rise and groundwater salinization

- Picture of eroded coastal line + talk about sea water intrusion into coastal freshwater systems
- (look for a before / after picture of St-Louis area in Senegal)

Vulnerability

- Exposure:
 - Definition:

- Vulnerability is influenced by the level of exposure to slow onset climate stressors
 - Slow onset events impact upon terrestrial and oceanic systems on which primary sector activities – agriculture, cattle breeding, and fishing – rely
 - Rural populations are the most exposed; their vulnerability is the greatest

Vulnerability

- The population of West Africa is mostly rural
 - Percentage of rural vs. urban
 - GDP of agricultural and livestock activities

Unprecedented expansion of coastal cities

- Picture of peanut cultivation in Senegal (main product)
- Picture of Lagos slums

Resilience

- Can be broadly defined as a "remedy" to vulnerability
- Consequently entails measures that reduce exposure
- Can include:
 - Onsite adaptation
 - Temporary migration
 - Permanent relocation

Onsite Adaptation

- Conditions
 - Non-irreversible consequences

- Incentives
 - Knowledge and education
 - Economic enabling factors

Picture of SWC techniques application, NGOs...

Onsite Adaptation Thresholds

- A variety of factors determine thresholds beyond which populations deem onsite adaptation to be unfeasible
 - In Burkina Faso, the third consecutive year of drought has been found to be the one triggering out-migration
 - In other cases, these thresholds are imposed by the irreversible consequences of slow onset events
 - This is the case in Linguère, Senegal, where sea-level rise has eroded arable land, imposing relocation to affected populations

These thresholds are highly context-specific

• If available, picture waves on agri fields...

Resilient Migration (International)

- Intercontinental and Regional Migration
 - Only afforded to those possessing the necessary financial capital to initiate migration
 - The bulk of environmental migration is thus **internal**, as most environmental migrants lack these financial assets
 - Yet, through the key role of <u>remittances</u>, international migration impacts upon decisions to migrate in places of origin
 - In Senegal, remittances finance the cheap wages of agricultural migrants from neighboring countries

Resilient Migration (Internal)

- Internal Migration
 - Captures most environmental migration
 - Not accounted for by governments and international bodies

- It can be
 - Temporary / seasonal
 - Permanent

Seasonal Migration

Generally involves only one or few family members, not the entire household

- In certain contexts, seasonal (or circular) migration represents an erosive survival strategy
 - E.g., Ghana and two rounds of seasonal migration

- In others, it constitutes a voluntary resilience mechanism, leading to successful adaptation
 - E.g., Senegal and new waves of migration dominated by women

Permanent Relocation

- As in the case with temporary migration, relocation too can be either successful and voluntary, or erosive and forced
 - Quick example

The relative levels of successful adaptation highly depend on the **context**, as well as the strategies employed

Unsafe Paths and Failed Adaptation

- Unsafe Destinations
 - Slums of Dakar

Unsafe Routes

Multiple Layers of Insecurity

 Pictures of Slums, Boko Haram and AQMI, MUJAO, ANSAR DINE....

Abandoned Populations?

- Migration routes and destinations are struck with high levels of political instability and insecurity
- However, places of origin too can see their vulnerability increase as a result of outmigration
 - This is the case for "abandoned" and "trapped" populations
 - E.g., Tougou in Burkina Faso: reduced number of meals and potential to cause malnutrition

Pictures of abandoned villages

CONCLUSIONS

Thank you for your attention!

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