

Migration in Extreme Climate Change Scenarios

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No direct relationship between the scale of climate impacts and migration impacts

- Small perturbations can have big effects including migration
- Big changes don't always mean big effects on migration
- Don't assume climate hotspots are migration hotspots
- Small and big outcomes can be big in terms of permanence or temporality











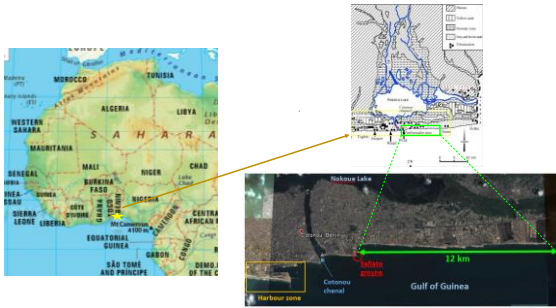




Climate change at 2°C, 4°C, 4°C will make migration different (not bigger not smaller)

- Insist on non-linear changes
- immobility

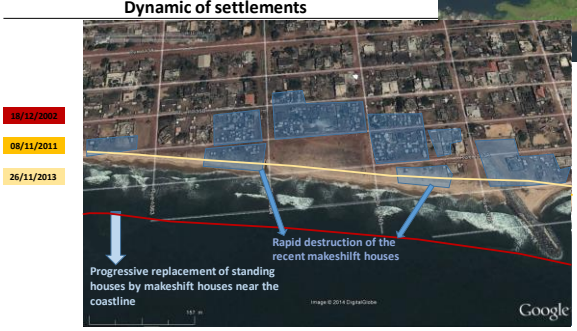
Study area



Two processes of habitats' loss



Dynamic of settlements

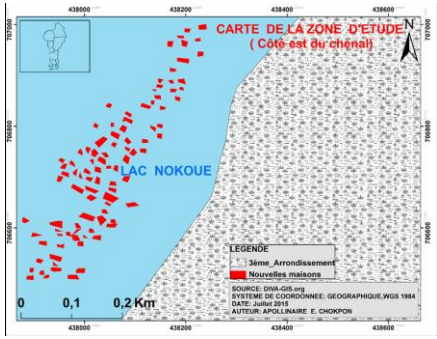


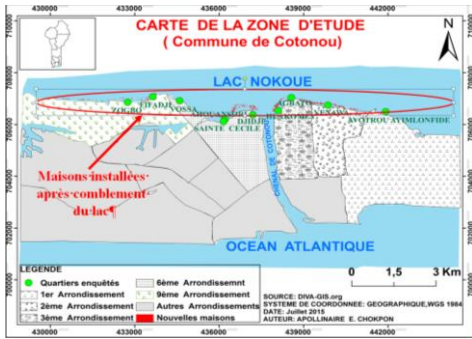












Climate tipping points do not equal migration tipping points

- Perceptions about climate change can alter migration responses
- What is the lag time between perceptions and intentions? Between intentions and actions?

Perception of climate change (rainfall)

Climate	Arid Sahel		
Mean annual rainfall	300-500 mm		
Perception of change	-	NC	+
Source / Indicator	Yearly total rainfall		
Akponikpè et al. (2010)	91	2	2
Nielsen & Reenberg (2010)	62	6	32
Mertz et al. (2012)	83	4	13
Dlessner (2012)	90	6	3
This study (based of AMMA data)	81	3	14

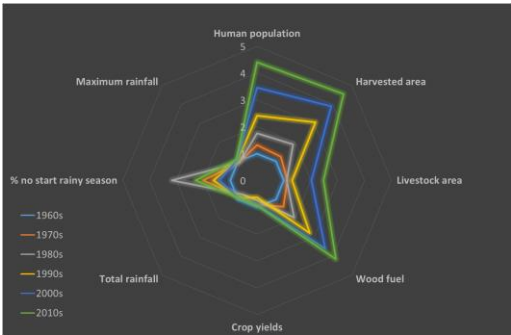
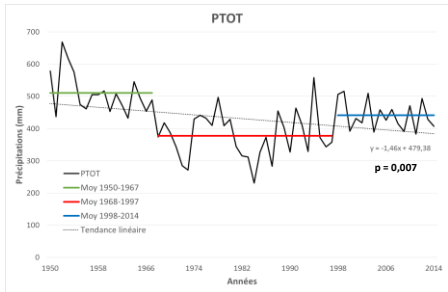
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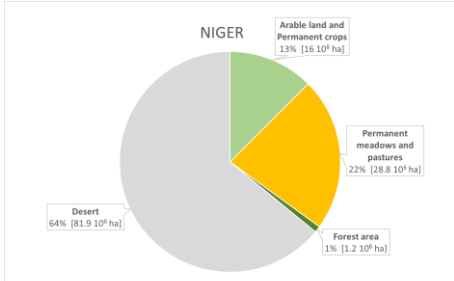
Adaptation to climate change (rainfall)

Temporal migration in response to a drier climate: 4.4%
 Permanent migration in response to a drier climate: 29.8%
 Temporal migration in response to a drought: 35.9%
 Migration in the 'top 3' adaptation strategies to climate change: 54%

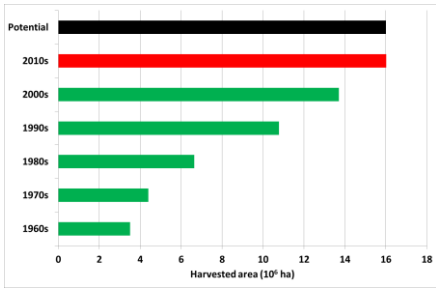
Measured rainfall



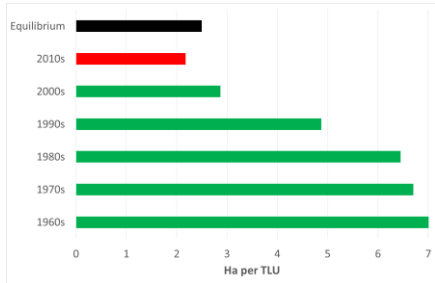
Potential land resources in Niger (FAO, 2015)

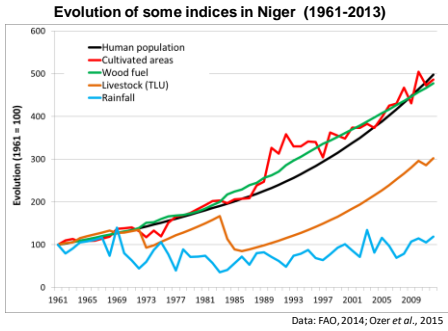


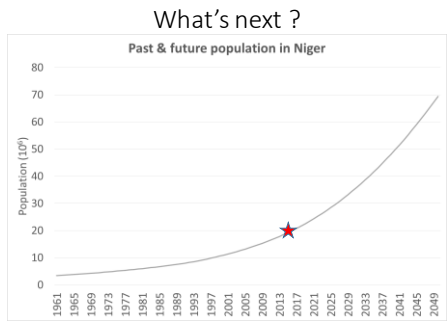
Harvested area Vs Arable land and permanent crops potential



Livestock area Vs Permanent meadows and pastures potential







At the end of the day, it comes down to inhabitability

- The conjuncture of social inhabitability and climate inhabitability
 - Resilience
 - Maladaptation

Cap-Haïtien, Haïti



Cap-Haïtien, Haïti











