

# Environmental Change & Migration: The Evidence

Dr. Koko Warner

United Nations University  
Institute for Environment & Human Security

# What will climate change mean for migration & displacement?

“In coming decades, climate change will motivate or force millions of people to leave their homes in search of viable livelihoods and safety. Although the precise number of migrants and displaced people may elude science for some time, all available estimates suggest their numbers will be in the tens of millions or more. The mass of people on the move will likely be staggering and surpass any historical antecedent”.

(Warner et al. 2009)



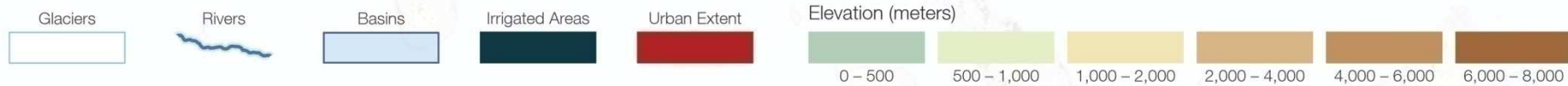
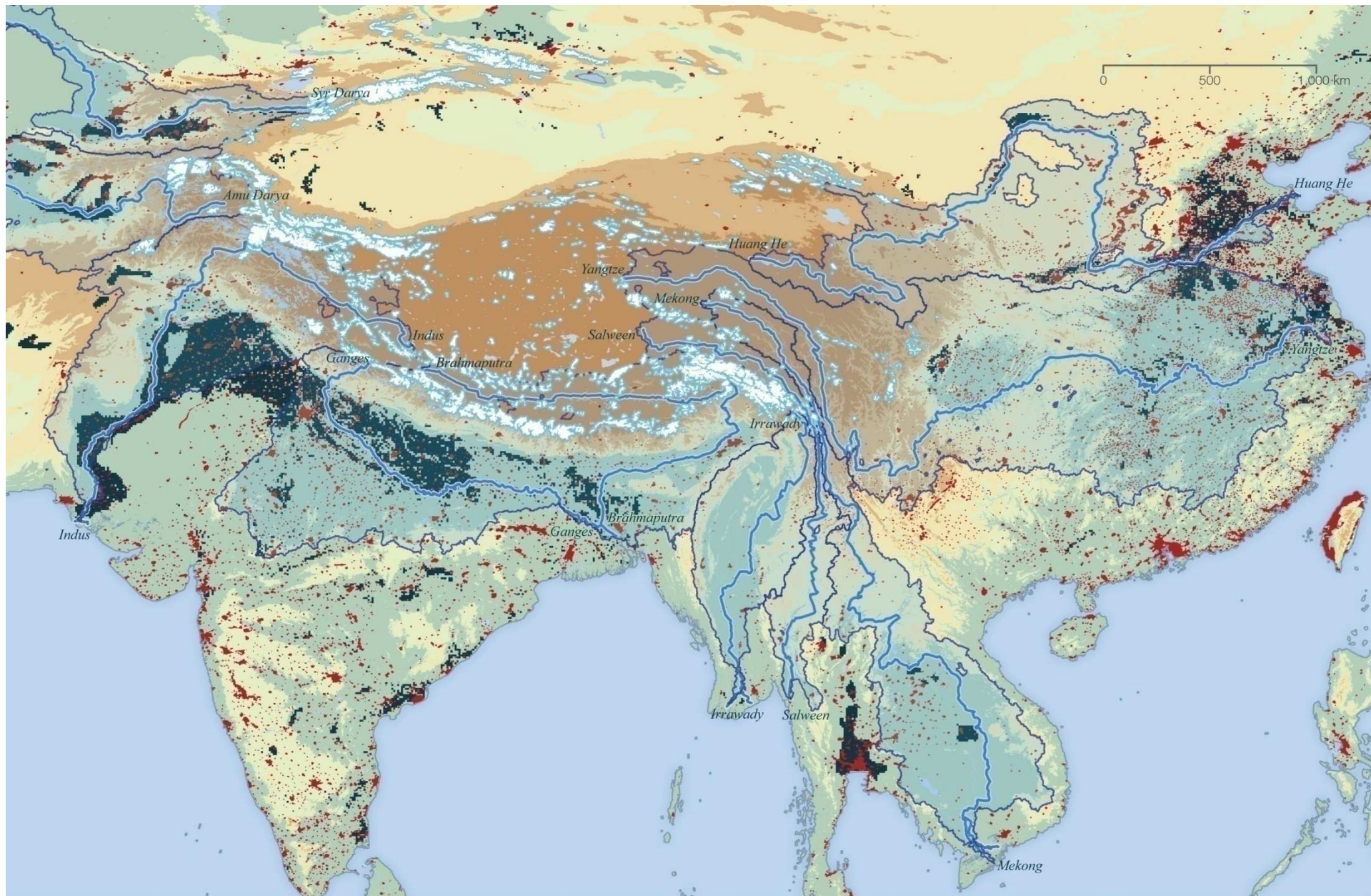
# Impacts of Climate Change on Internal and International Migration Patterns

- Direct and determinative causal linkages between climate change and migration are difficult to identify
  - Migration results from combination of drivers in source and destination countries
  - Climate change and other environmental factors may exacerbate migration pressures....

# Factors Affecting Migration

- Combination of factors affects people's ability to cope with the impact of climate change:
  - availability of **sustainable livelihood options**
  - **household vulnerability**
  - **rates of population growth**
  - extent of **cultivable and habitable land**;
  - availability of **assets** (including education, money and skills) and **social networks** to support out-migration to cities or to other countries where they might find employment; and
  - **admission policies and opportunities** in destination countries.

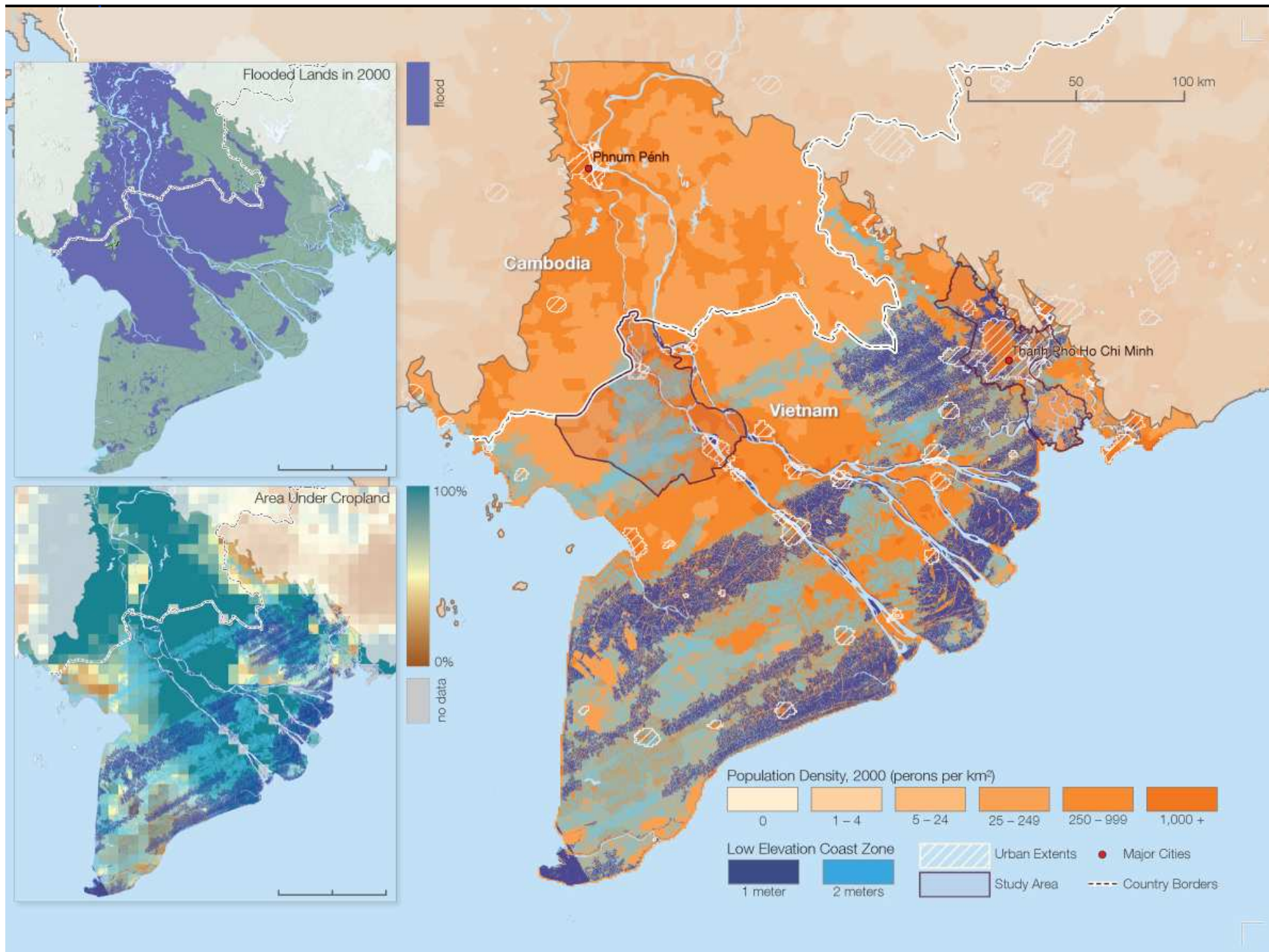




# Climate Change Scenarios

- Four climate change pathways may affect migration:
  - intensified **acute natural disasters** that lead to temporary and permanent displacement;
  - **rising sea levels** that inundate coastal areas and may prove particularly harmful to low lying deltas and island countries;
  - intensified **drought and desertification** that adversely affect livelihoods, and
  - **competition for natural resources** that results in intensified conflict, which in turn causes mass displacement.
- Migration patterns will differ:
  - Acute natural disasters and conflict → emergency displacement
  - Drought and rising sea levels → gradual migration
- Internal migration (e.g., rural to rural, rural to urban) more prevalent than long-distance international migration



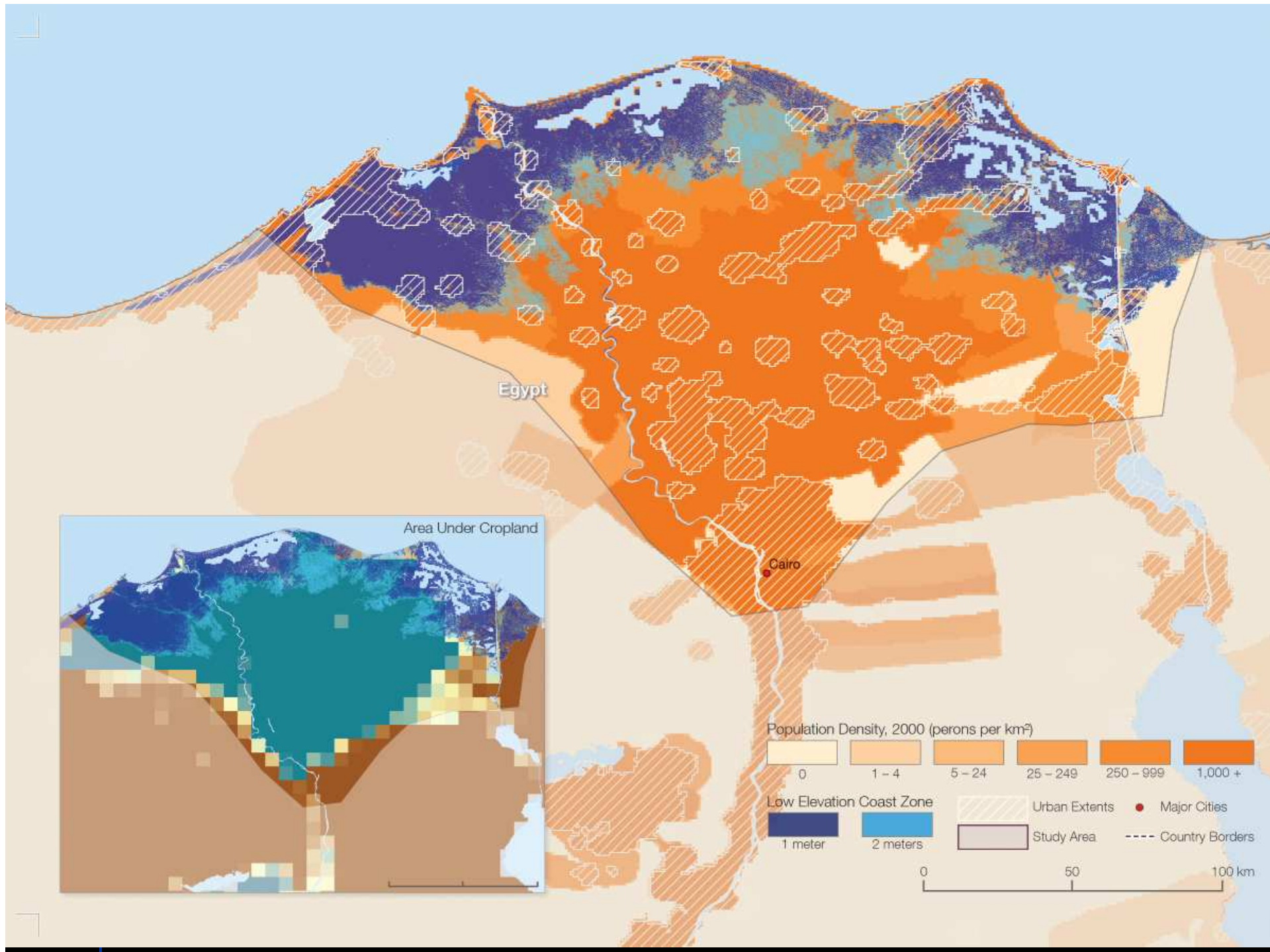




*“Disasters occur so often - Flooding sometimes threatened our lives. Life was miserable.*

*We did not know what else to do other than growing rice and fishing ...but we lost everything.*

*We had to migrate away. My children had to stop school, and I sent my girls to [Phnum Pénh] to work to help our family.”*

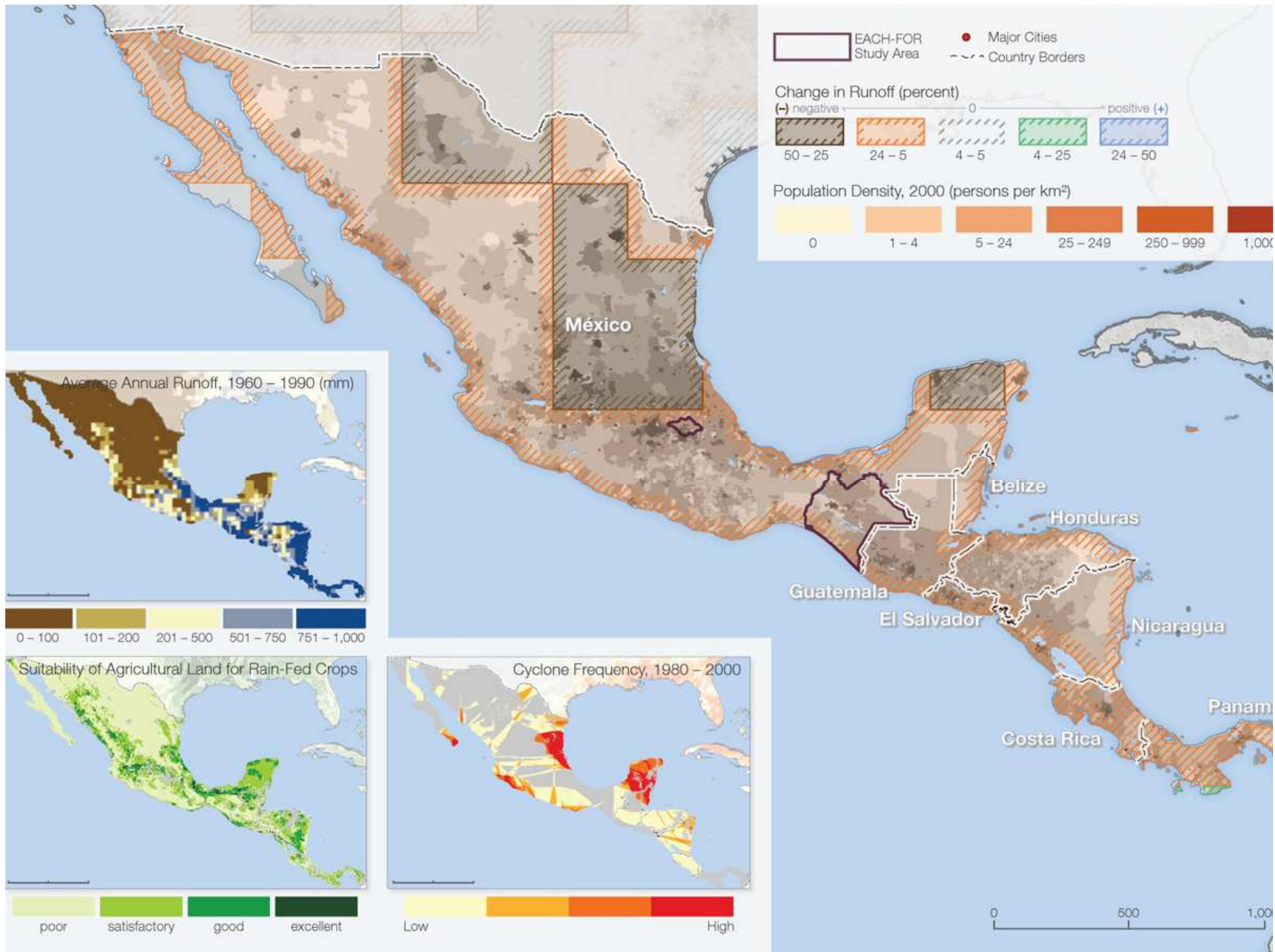




*“The soil is blowing away, & our well water is salty. My crops are declining. I would have a reason to move. Yet, I cannot leave my land.*

*I inherited this land from my father a long time ago. My big family & friends are here. I have never left this place. I have never even gone to Cairo before. How shall I simply leave home now & migrate somewhere else? We will have to eat less and just hope that things will get better.’*



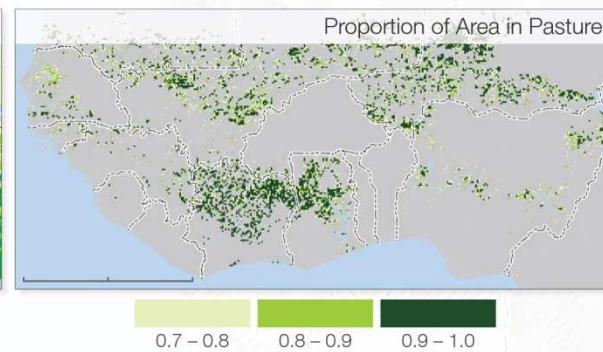
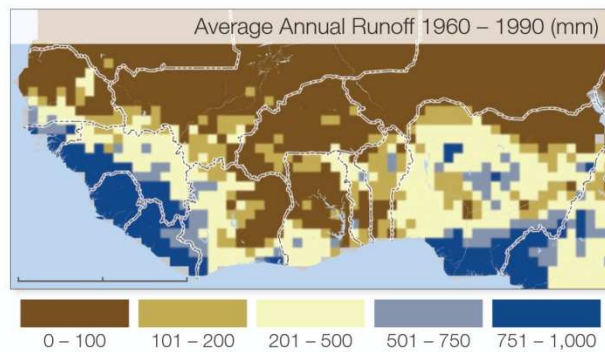
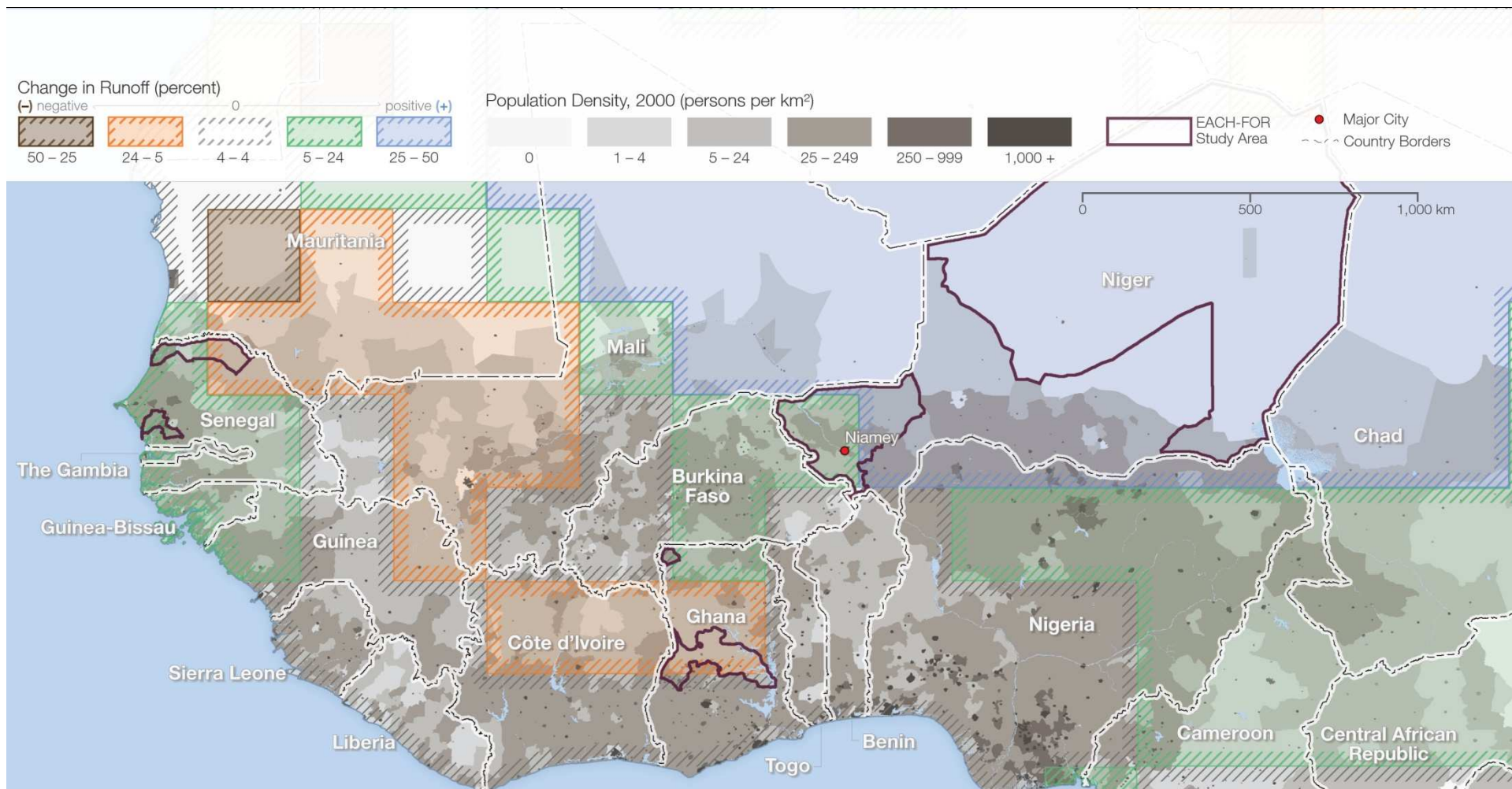


*“My grandfather has worked on our lands, my father—and so do I. But times have changed...the rain is coming later now or not at all, and our crops are declining.*

*The only solution is to go away, at least for a while.*

*But leave my village forever? No. I was raised here and here I will stay.”*







*“My grandfather & father provided abundantly. They were farmers, & sometimes hunted in the forest. After the big drought, the trees died & the animals went away. I am a farmer, too, but I have to go to the city to earn extra money.*

*And our children? None of the young people have a chance to farm—it's a mix of big dreams & too many problems with the weather. Life is too hard here, so they almost all try to go.”*

# **Policy considerations: Migration, Displacement, & Planned Relocation**



UNITED  
NATIONS

## ADVANCE VERSION



Framework Convention  
on Climate Change

Distr.  
GENERAL

FCCC/CP/2010/2  
11 February 2010

CONFERENCE OF THE PARTIES  
Sixteenth session  
X, 29 November to 10 December 2010

Item X of the provisional agenda

### AD HOC WORKING GROUP ON LONG-TERM COOPERATIVE ACTION UNDER THE CONVENTION

Twelfth session  
Tianjin, 4-9 October 2010

## DRAFT TEXT

09.10.2010 @ 15:30

Enhanced action on adaptation

Revision of FCCC/AWGLCA/2010/14, Chapter II

4. *Invites* all Parties to enhance adaptation action under the Copenhagen Adaptation Framework [for Implementation] taking into account their common but differentiated responsibilities and respective capabilities, and specific national and regional development priorities, objectives and circumstances, [and whereby developing country Parties shall be supported by developed country Parties and in accordance with paragraph 6 below], to undertake, inter alia:

- (f) Measures to enhance understanding, coordination and cooperation related to national, regional and international climate change induced displacement, migration and planned relocation, where appropriate;



# Migration as Adaptation (?)

- Potential Positive Aspects
  - Moving people to (physically) safer areas
  - Financial contributions through remittances
  - Technical advice of diaspora
  - Planned movements may be safer, more dignified and economically more feasible than distress migration
- Potential Negative Aspects
  - Viability of communities “left behind”
  - Dependence on migration can undermine other economic activities in source communities
  - Tensions between migrants and destination communities can contribute to communal tensions and conflict
  - Involuntary resettlement programs have been problematic in development context

# Call for policy & institutional help

- People see changes in their environment. These changes affect their decisions about migration.
- Need for government and policy support— & challenge of addressing the problems at sufficient scale (not “just” pilot projects, and not “just” single-ministry approaches).
- Need for policy packages: Climate and environmental changes mix with other factors which drive migration
  - Main question is about alternatives for managing environmental stressors, with a mix of mobility, livelihood options, and social and other forms of capital for affected communities.
- Expand options: As the expected impacts of climate change become more apparent in the future, policy should focus on expanding adaptation options so that migration remains one of a wider spectrum of choices.

# Policy Alternatives

- **1. Foster adaptation alternatives.** Migration can be part of adaptation strategies when it is one of a spectrum of choices for managing risks.
- **2. Where possible, help people remain in place via sustainable rural and urban development:** It's about jobs and job creation (livelihood security), in the countryside and in cities.
- **3. Where necessary, help people to move (in safety and dignity):** Migration can be an effective strategy to manage the risk associated with climate change when done voluntarily and with appropriate planning.



# Policy Alternatives (cont)

- **4. Involve the diaspora** in designing and funding adaptation strategies that enable their home countries and communities cope with climate change.
- **5. Support disaster risk reduction, conflict mediation strategies, and improvements in humanitarian response** . If governments do not take action to reduce the risks people face from acute crises arising from natural disasters and competition over resources leading to conflict, they will be faced with uncontrolled crisis situations.
- **6. Identify guiding principles and effective practices** to help governments in developing appropriate legal and policy frameworks to address internal and international migration related to environmental drivers.

# What policy makers can do now

- **Science.** Support more in-depth qualitative and quantitative research, collection of necessary demographic, socioeconomic, and environmental data on different patterns and scenarios of climate change, migration & displacement in specific areas.
- **Dialogue.** Foster solutions-oriented policy dialogues that review existing experience and identify emerging good practices.

# What policy makers can do now

- **Participatory policy planning.** Involve & provide information to affected communities in planning and implementation of human mobility solutions. Recognize that migrants & diasporas can be effective partners in addressing climate change and involve them in planning processes.
- **Proactive approaches.** Get ahead of the curve. Create alternative livelihoods in situ and opportunities when in situ adaptation may not be possible. Implement effective disaster risk reduction and conflict mediation policies to reduce the likelihood of emergency movements with accompanying humanitarian consequences.

*“In the past everything used to have  
its time.*

*Our grandfathers had a calendar.  
They used to know how & when  
to deal with the weather.*

*Now everything has changed & no one is here  
to help us. We will have to leave, or be swept  
away.”*



# Thank you.

**Dr. Koko Warner**

warner@ehs.unu.edu

United Nations University Institute of Environment & Human Security  
UN Campus, Hermann-Ehlerstr. 10  
53113 Bonn, Germany