

# Water Scarcity and Internal Conflict

## Some stones yet to be turned

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# The conventional wisdom

- Widespread belief in the policy community that resource scarcity is a prime driver of conflict:

**Lester Brown:** *What we're seeing across Africa now is that the herders who are on the southern edge of the Sahel are being forced southward into the agricultural areas ... In Nigeria, it's a conflict between Muslim herders and Christian farmers. In Darfur, in Sudan, it's between Arabs and blacks..... And all across Africa that conflict is playing out*

**Ole D. Mjøs:** *I predict that within a few decades, when researchers have developed more comprehensive analyses of many of the world's conflicts, the relation between the environment, resources and conflict may seem almost as obvious as the connection we see today between human rights, democracy and peace*

– and water resources are among those widely believed to be worth fighting over



# The empirical state of the art

- Limited support for such neo-Malthusian concerns about resource scarcity and civil conflict at the country level:

High population density does not generally increase risk of conflict

High water scarcity does not generally increase risk of conflict

Some resources more hazardous when abundant, but probably not water

Some support for rainfall deviations → conflict directly or indirectly (through economic shocks)

# Four new approaches

We may find more support for the thesis linking research scarcity to conflict if we focus on ...

the local distribution of resources

inter-group conflicts rather than conflicts with the state

changes in resources rather than level

the social, political, and economic context of scarcity

# Resource scarcity is usually local

- Access to resources such as freshwater may vary greatly within countries
- Catalysts of environmental stress also likely to vary across space
  - Absence of state authority
  - Rapid population growth, migration
  - Ethnic tensions
  - Migration from neighboring areas
  - Lack of alternative means of living
- Calls for disaggregated research designs



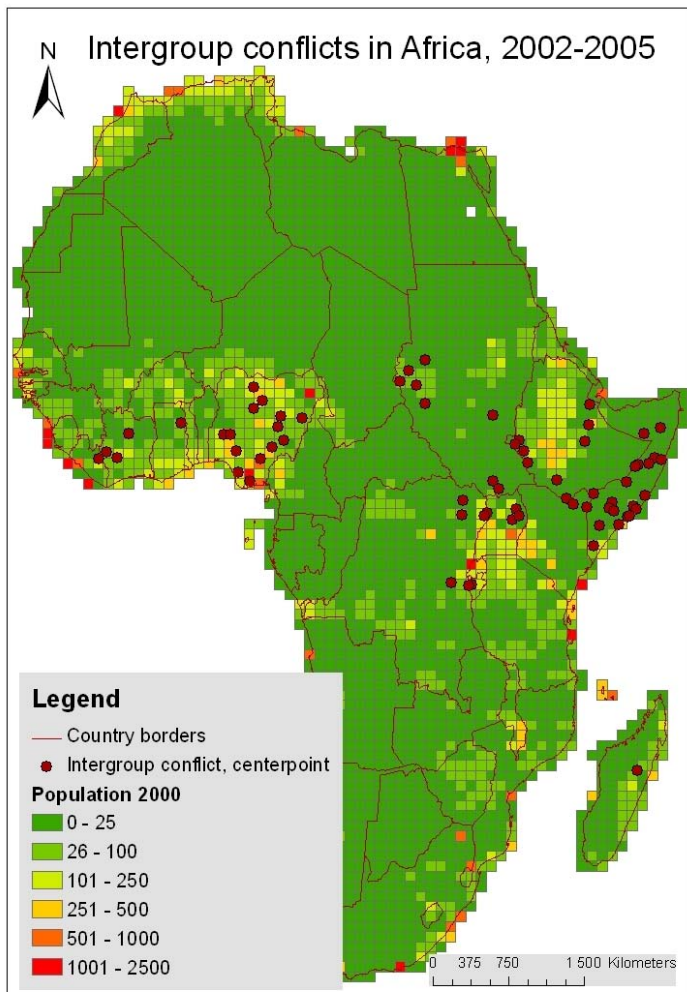
# Focusing on inter-group conflicts

- Fighting the government is extremely costly
- 'The desert vs. the oasis syndrome': nomads hit by degradation, drought etc. migrate to more fertile eco-zones → conflict between locals and newcomers, between farmers and herders

Darfur

Nigeria

# Inter-group conflicts in Africa



- Most African non-state conflicts occur along the southern edge of the Sahel  
vulnerable to deviation in rainfall  
high population density
- This 'belt' also hosts a number of intrastate conflicts that have caused massive population displacement

# Change more important than level

- Humans adapt to the environment, but slowly
- Changes are more hazardous than static scarcities, and abrupt changes even more
- Societal instability and inter-group violence likely to occur in regions with significant and rapid environmental changes
- Environmental degradation likely to have considerable externalities, e.g. through forced migration



# The effect of scarcity is contextual

- Environmental scarcity by itself is an insufficient cause of conflict
- Governments may mediate or accelerate societal impacts of environmental change
  - Drought in Hungary vs. Ethiopia
  - Famine in India vs. China
  - Tropical storms in Haiti vs. the Dominican Republic
- Poor and war-torn societies are not well equipped to handle scarcities
- Structural scarcities that overlap with other inter-group (horizontal) inequalities, e.g. by ethnic marginalization, may be particularly conflict-prone