Climate Change and Conflict in Uganda and Ethiopia: Findings from the Field

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UN IPCC 2007

- UN Intergovernmental Panel on Climate Change (IPCC)
- Rising Global Temperatures:
  - More Severe Storms
  - Floods
  - Droughts
  - Glacier Melt
  - Sea Level Rise
- In vulnerable areas of the developing world, extreme weather will cause:
  - Increased Pressures on Land and Water Resources
  - Disrupt Agricultural Production
  - Threaten Food Security
CC and Conflict Projections

- Severe resource scarcity
- Dramatic increases in internal and external migration
- Disease outbreaks
- Destabilizing social and political effects
- Overwhelming of weak or flawed systems of governance and public institutions
- Internal conflicts, extremism, and movement toward increased authoritarianism, and radical ideologies
Contending Academic Perspectives

• National Academy of Sciences Study, combining climate model projections with historical linkages between civil war and temperatures in sub-Saharan Africa:

  • Projects "a roughly 54% increase in armed conflict incidence by 2030" (Burke et al. 2009).

• Halvard Buhaug of the Peace Research Institute Oslo (PRIO) counters:

  “African civil wars can be explained by generic structural and contextual conditions… political exclusion, poor economic performance, and changes in the international system” (Buhaug 2010).
Two Countries, Two Cases
Uganda and Ethiopia

- Studies for Office of Conflict Management and Mitigation, USAID
- What is actual or potential CC-conflict relationship (if any)?
- What should USAID consider doing (if anything)?
## Two Countries, Two Cases

<table>
<thead>
<tr>
<th>Country</th>
<th>Focus</th>
<th>Pastoralists</th>
<th>Related Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uganda</td>
<td>Focus on region of Karamoja</td>
<td>1 Million</td>
<td><a href="http://www.fess-global.org/Publications/Other/Climate_Change_and_Conflict_in_Uganda.pdf">http://www.fess-global.org/Publications/Other/Climate_Change_and_Conflict_in_Uganda.pdf</a></td>
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<tr>
<td>Ethiopia</td>
<td>Focus on southern and eastern Ethiopia (Oromia, Somali, Afar)</td>
<td>10 Million</td>
<td><a href="http://www.fess-global.org/Publications/Other/Climate_Change_and_Conflict_in_Ethiopia.pdf">http://www.fess-global.org/Publications/Other/Climate_Change_and_Conflict_in_Ethiopia.pdf</a></td>
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Some Basic Postulates

- Conflict is always the result of the interaction of a variety of political, economic, social, historical factors, e.g.,
  - How are power/authority determined & used?
  - How are resources controlled & allocated?
  - How are group identities perceived & used?
  - What historical experiences condition grievances?

*In order to identify potential responses, the relationship and possible contribution of CC to conflict needs to be understood in this (country/region) specific context.*
Uganda Context

- 25-Year Regime of Pres. Museveni
  - Stability after coups and mass violence
  - Steady GDP growth (around 6%)
  - From new African leader to president for life?
  - Increasingly flawed electoral processes

Corruption and patronage in allocation of land, water, and forest resources

Military abuses: NR abroad and HR at home
Uganda: The Cattle Corridor and Karamoja
The Karamojong

- Occupy an arid to semi-arid landscape with high climate variability
- Predominantly pastoralists (mobility as climate adaptation)
- Renowned cattle rustlers (coping mechanism)
- Armed after 1979 (Idi Amin caches)
- Clashes with the State (UPDF)
Karamojong vs. State

- UPDF responds to escalating violence
- Both voluntary and forcible disarmament
- Restricts movement of people and cattle
- Escalation of tensions
- Chronic violence/killings
Climate Change in Uganda?
Increasing Frequency of Droughts

Occurrence of Droughts in Uganda

<table>
<thead>
<tr>
<th>Decades</th>
<th>Frequency</th>
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<tbody>
<tr>
<td>1911-1920</td>
<td>1</td>
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<tr>
<td>1921-1930</td>
<td>1</td>
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<tr>
<td>1931-1940</td>
<td>1</td>
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<td>1941-1950</td>
<td>1</td>
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<tr>
<td>1951-1960</td>
<td>1</td>
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<tr>
<td>1961-1970</td>
<td>3</td>
</tr>
<tr>
<td>1971-1980</td>
<td>7</td>
</tr>
<tr>
<td>1981-1990</td>
<td>2</td>
</tr>
<tr>
<td>1991-2000</td>
<td>8</td>
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</table>
Quickening Pace of Droughts in Karamoja

Drought Frequency in Karamoja

- **Severe**
- **Mild**
- **None**

Legend:
- Green: None
- Yellow: Mild
- Red: Severe
Effects of Droughts in Combination with Security Policies in Karamoja

- Severe food insecurity
- Livestock diseases
- Collapse of household assets/recovery
- Need to search for water and pasture
- UPDF refuses to allow mobility
- Erosion of social roles among Karamojong
- Cattle thefts for market
- Banditry by Karamojong warriors
State Interventions

- President appoints wife State Minister for Karamoja
- Integrated plan to promote agriculture, roads, and water development
- Karamojong encouraged to shift from pastoralism to agriculture (change in both livelihood and culture)
Karamojong Reactions

- “Complete lack of trust”
- Land unsuited for agriculture (and no irrigation yet)
- Migration to Kampala (street children)
- However, young people open to alternative livelihoods (petty trade, construction, and agriculture)
Is Climate Change Driving Conflict in Karamoja?

- Without climate change, conflict would surely be present
- But climate change is sharpening the contradictions and grievances
  - Restrictions on mobility prevent use of coping mechanisms
  - Push for agriculture is viewed (by many, not all) as continuing disrespect and a way to restrict mobility by other means
Ethiopia Context

- 15+-Year Regime of PM Meles Zenawi
- Follows centralized military regime (Derg)
- Installs a system of “ethnic federalism”
- Tight party control (EPRDF)
- Developmentalist model (5-year plans)
- Rapid GDP growth (11 percent 2005-2010)
- Restrictions on political competition and operations of NGOs
- Highly vulnerable to climate variability (droughts, famines)
Regions and Zones of Ethiopia
Route Traveled and Principal Communities Visited During Study
Ethiopia’s Contribution to Climate Change (2007 data)

• Temperature
  – Annual average highs have been increasing
  – Annual average of extreme-lows also has been increasing

• Rainfall total
  – Prediction is that the annual total will gradually increase

• Rainfall pattern
  – Frequency of large rainfall increasing
  – Erratic patterns increasing
<table>
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<th>Percentage change in expected annual rainfall in 2030</th>
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<td>Slight increase in annual rainfall in pastoralist areas</td>
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<tr>
<td>• Gradual increase projected to continue through 2050 and 2080</td>
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Southern and eastern Ethiopia (including both Borana and Shinile zones) have been experiencing recent reductions in rainfall, mainly since 1996 and during the March to May rainy season.

Climate Hazard Group (UCSB) links this to anthropogenic warming in the Indian Ocean.
Mar-Sep Rainfall: Entire Country
Decline since 1996

Yabelo Average Rainfall Pattern (1987-2006)

Source: Adapted from Oromia National Regional Government 2011.
Four Main Pastoralist Groups: Oromos, Somali, Afar, Issa

- In southern Ethiopia, chronic conflict between Oromos and Somalis over water and pasture
- In eastern Ethiopia, historical conflict between Afar and Issa over water and pasture
- Pressures on pastoralists:
  - Increasing population of humans and animals
  - Land given to investors (farming, oil, mining)
  - National parks
  - Environmental degradation, invasive species
  - Government policies: “sedentarization” (ranching, agriculture)
One Central Challenge: Deepening Ethnic Tensions Under Federalism

- Contradictions between administrative borders and mobile pastoralism
- Boundaries used as exclusionary right to resources (land, water, pasture)
- “Positive” interventions (e.g., wells) seen through lens of “relative deprivation” (destruction of infrastructure, violence by “excluded” group)
Pastoralist Resiliencies

- Mobility
- Keeping large herds
- Herd diversification and splitting (camels, sheep, goats)
- Mutual assistance (traditional institutions)
- Managing water use
- Crop cultivation where possible (agropastoralism)
Alternative/Supplementary Livelihood Support

- Day labor
- Petty trading
- Handicrafts
- Beekeeping
- Salt mining
- Incense and gum collection
- Savings (cash or non-livestock assets)
Situation in Southern Ethiopia 2011

- Overgrazing, lost grazing land, resource conflicts
  - Frequency of “bad year,” on average, is 1.9 years around Yabelo for the last 25 years; pastoralists just cannot recover
    - Changes in rainfall pattern, particularly late arrival of March rains, is creating real havoc in livestock production
    - Decimated livestock holdings (diseased and dying)
- Coping mechanisms no longer working in the face of new reality (traditional institutions, livestock “assets”)
- Ever increasing destitute/dropout pastoralist population
- Pastoralists questioning the viability of pastoralism: “What will become of us?”
Results of more frequent drought . . .

Picture taken by FESS-Team, 4/26/2011 near Yabelo
State Responses and Pastoralist Reactions

- Federal authorities plan major effort to develop water resources (pipeline) and encourage settled ranching, agriculture
- Pastoralists: “Is the water for pastoralists or investors?”
- Regional authorities turn to traditional leaders for help with conflict (peace committees)
- Pastoralists: “Good start, but need more than fire brigade approach to conflict”
Climate Change and Invasive Species in Afar Region

- *Prosopis juliflora*: Commonly known as mesquite
- Introduced in late 1980s for soil and water conservation
- Tolerance of drought, marginal and saline soils
- Very difficult to eradicate (commercial uses?)
- Under recent climate trends, *Prosopis* has spread and dominates the landscape, drastically shrinking grazing lands in Afar
Near complete domination of *Prosopis juliflora* near Awash Arba in Afar.
Afar Region

- Confluence of problems in Afar
  - Drought-prone, repeated rainfall failure
  - Encroachment of commercial farming on pasture lands
  - Chronic conflict with Issa pastoralists moving into new areas in search of water and pasture: Disputed boundary
  - “An explosive situation” -- Climate change + Prosopis + Boundary dispute + Afar-Issa rivalries and tensions
Protracted and unresolved discussions of boundary issues at federal level

However, regional level engagement with peace-building committees (Afar, Issa, and others) to try new approaches to resource sharing and conflict resolution

Pastoralists: “Promising but only just developing”
Thinking About Climate Security: Some Concluding Propositions

- In the areas studied, CC is neither the necessary nor sufficient cause of conflict.
- Rather, CC reconfigures livelihoods, social relations, and politics in ways that are ripe for conflict… absent effective state and community responses.
- CC is akin to conflict contributors such as poverty and corruption: It consistently imposes hardships but contingently results in conflict (many factors at play).
- Thus, the best analytic route in to understanding climate-conflict linkages is one informed by a combination of:
  1) Climate science and vulnerability analyses to identify specific climate shifts and regions/countries of concern
  2) Field research in regions/countries of concern to determine the specificities of local conditions and national realities and how CC may contribute to conflict within that context
  3) Comparative analysis to determine patterns, mechanisms, or pathways to conflict… and possible steps toward peacebuilding
Thinking About Climate Security: Some Concluding Propositions (Cont.)

- For practitioners: Climate adaptation initiatives must be **highly conflict sensitive**
- Well-intentioned adaptation interventions that are perceived as **preferential or exclusionary** will trigger conflict
- The participation of affected communities in climate adaptation planning and implementation is a sine qua non for success
- Government-community engagement both responds to climate change and **builds new institutional relationships**
Thank You