

Loss & Damage: Evidence from the Front Lines

Vulnerable communities beyond adaptation?

Side Event at COP18
Loss and Damage in Vulnerable Countries Initiative

Monday, 26th November 2012, 13:15 to 14:45
Side Event Room 8, QNCC

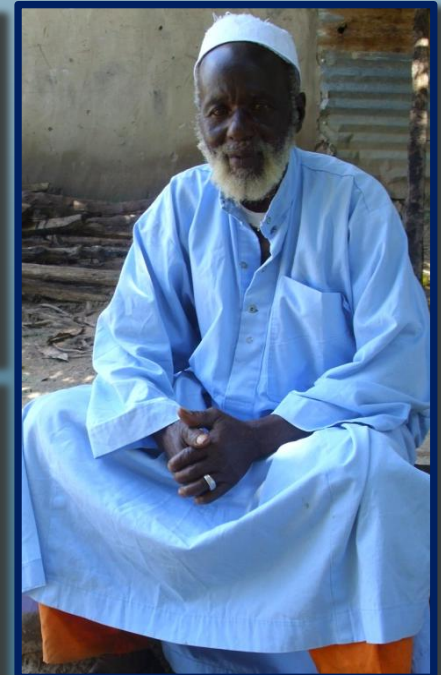
26 November 2012



Why is understanding loss and damage important now?

Loss & Damage

How do the impacts of climate change on society lead to loss and damage among vulnerable households?



5 things you need to know about loss & damage

Loss &
Damage

1. **What causes it?** Climate change impacts interacting with social vulnerability
2. **Loss & Damage continuum:** Loss and damage impacts fall along a continuum, ranging from “events” associated with variability around current climatic norms (e.g. weather-related natural hazards) to “processes” associated with future anticipated changes in climatic norms in different parts of the world
3. **Working Definition:** Loss and damage refers to negative effects of climate variability and climate change that people have not been able to cope with or adapt to
4. **Mitigation can stem loss and damage:** Climate modeling suggests that future greenhouse gas concentrations could drive temperatures beyond the 2 degree limit, with serious implications for societal impacts
5. **Important at COP18 in Doha because** there is a mandated decision on loss and damage under the Subsidiary Body for Implementation



Climate Variability & Change

- Slow-onset processes
- Extreme weather events

A household's potential loss & damage from climate change depends on:

- (1) mitigation efforts (not in figure);
- (2) livelihood context (blue circle);
- (3) its vulnerability profile;
- (4) its coping and adaptive capacity.

Natural Environment

Natural resources, hazard-proneness

Societal impact, e.g. in agriculture, health, food security. Varies between HOUSEHOLDS according to their vulnerability



Current household strategies to cope with extreme events & adapt to climatic changes

Loss & Damage because:

1. Coping or adaptation measures are not (effective) enough to avoid L&D
2. Coping or adaptation measures have costs attached that are not regained
3. Coping or adaptation measures are helpful in short-term but have adverse long-term consequences
4. No measures were adopted (or possible) at all

Political environment

Willingness and ability of governments to protect their citizens from the impact of climate change

Economy

Natural resource dependency, level of economic development

Human & social capital

Education, health, social networks, population structure

Case study countries & focus

(CDKN)

Loss &
Damage

Country	Climate threat	Impact
Bhutan	Changing monsoon	Rice production
Bangladesh	Salinity intrusion	Rice + drinking water
The Gambia	Drought	Millet production
Kenya	Flooding	Crops, livestock + fish
Micronesia	Coastal erosion	Housing, cultural values





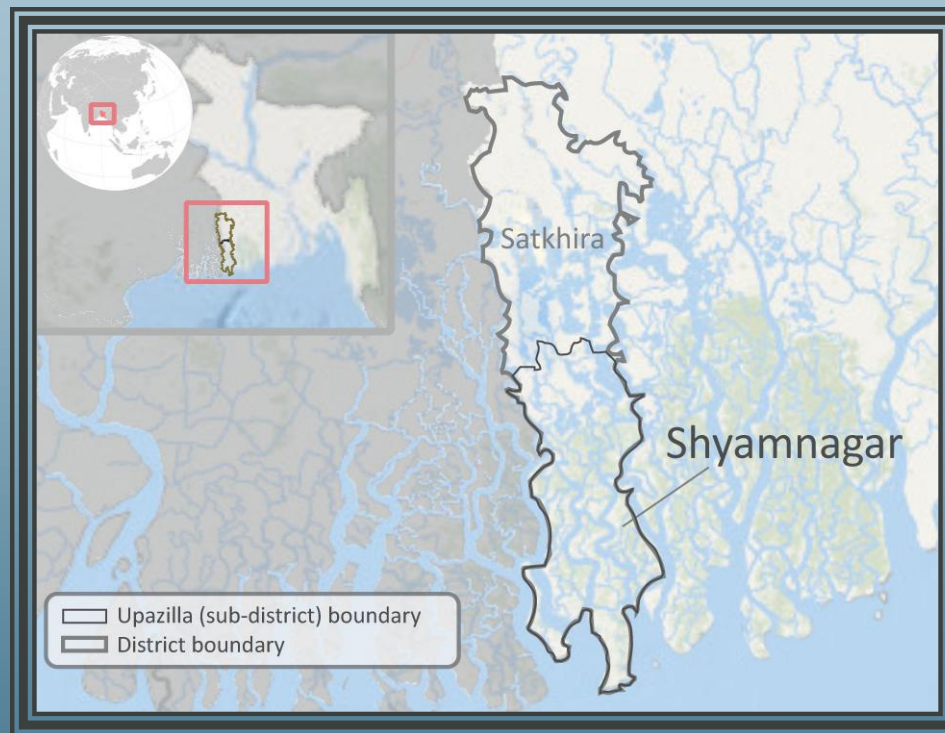




Bangladesh

Golam Rabbani, BCAS

Loss &
Damage



The limits of adaptation in Shyamnagar, Bangladesh:
loss and damage associated with salinity intrusion



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Bangladesh: Golam Rabbani, BCAS

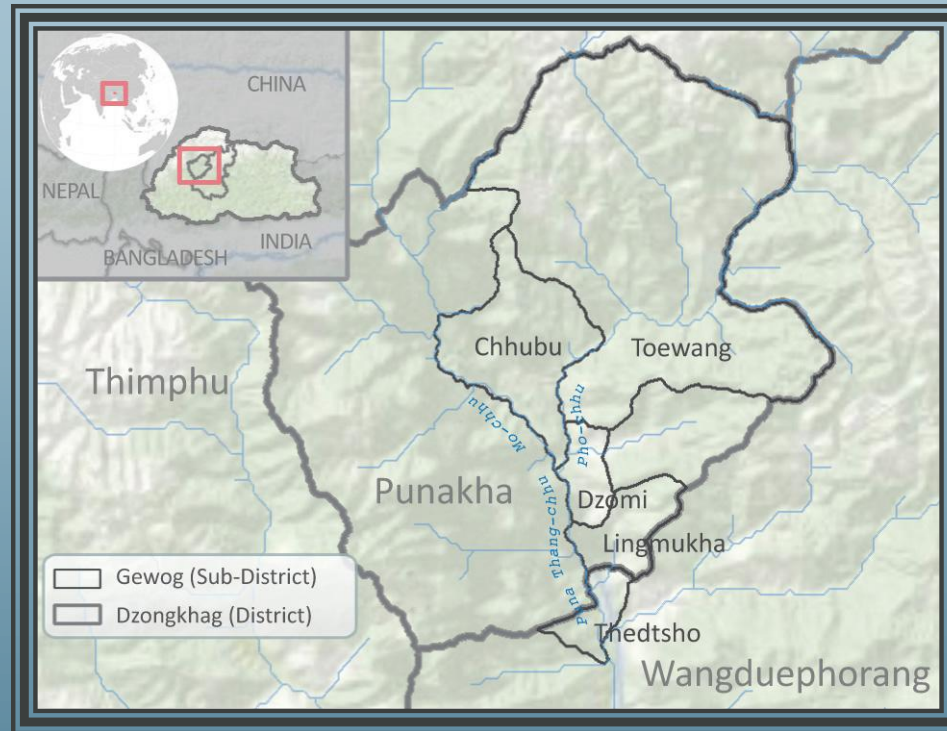
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Households interviewed	360
Experienced medium or high soil salinity	Yes: 99%; No: 1%
Impact on household economy?	Yes: 99%; No: 1%
Impact per sector	Rice production: 98%; Drinking water: 90%
Adopted adaptation/coping measure?	Yes: 81%, No: 19%
Coping/adaptation measure to deal with stressor	Salt tolerant varieties: 39%; Migration: 29%; 'Wash' rice field to reduce Salinity: 27%; Seek non-farm income: 60%
Suffered adverse effects despite coping/adapting	70%
No measures adopted, why not?	Lack of knowledge/skills: 68%; Lack means/resources: 30%

Bhutan

Norbu Wangdi & Koen Kusters

Loss &
Damage



The costs of adaptation in Punakha District, Bhutan:
loss and damage associated with changing monsoon patterns

Bhutan : Norbu Wangdi & Koen Kusters

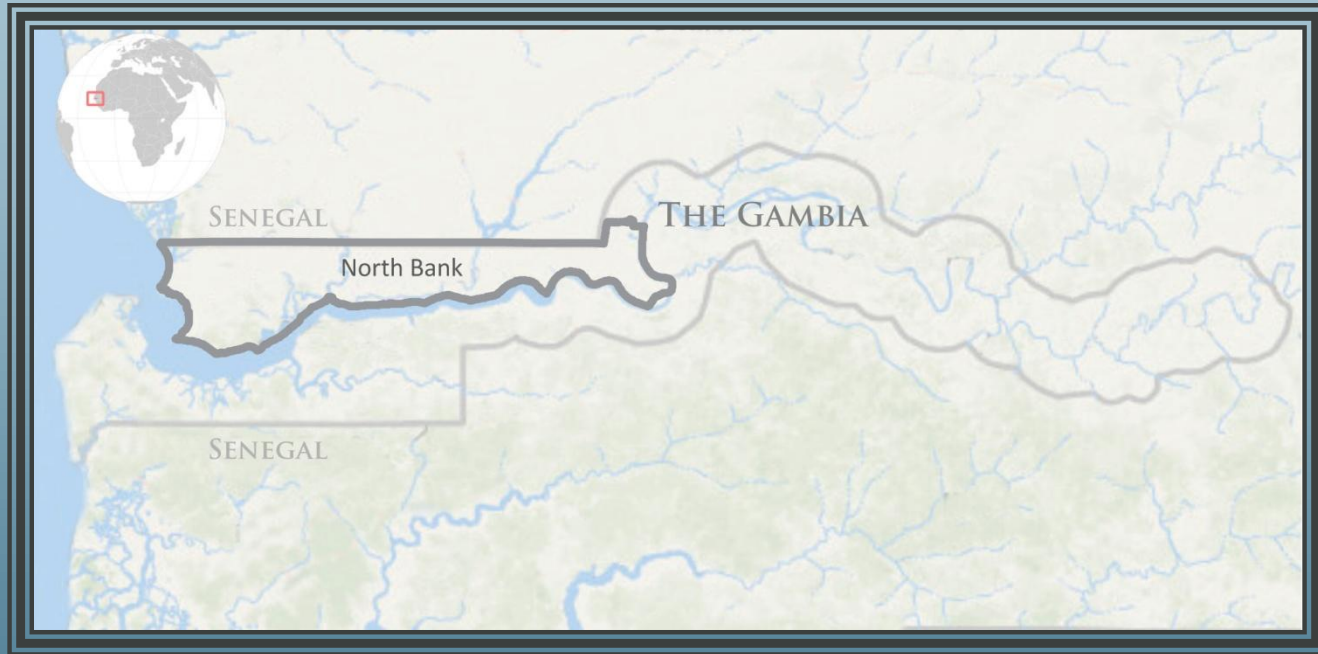
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Households interviewed	273
Experienced changes in monsoon patterns	Yes: 91%; No: 9%
Impact on household economy?	Yes: 89%; No: 11%
Impact per sector	Crops: 97%; Livestock: 12%; Tree crops: 23%
Adopted adaptation/coping measure?	Yes: 88%, No: 12%
Coping/adaptation measure to deal with stressor	Perform rituals: 71%; Adjust water sharing: 48%; Better maintenance of Irrigation channels: 37%; Changes in crop mix: 30%
Suffered adverse effects despite adapting	87%
No measures adopted, why not?	Lack of knowledge/skills: 68%; Lack means/resources: 16%; Not my task: 4%; No priority: 12%

The Gambia

Dr. Sidat Yaffa

Loss &
Damage



Limited coping capacity in the North Bank Region, The Gambia:
loss and damage associated with drought



The Gambia: Dr. Sidat Yaffa

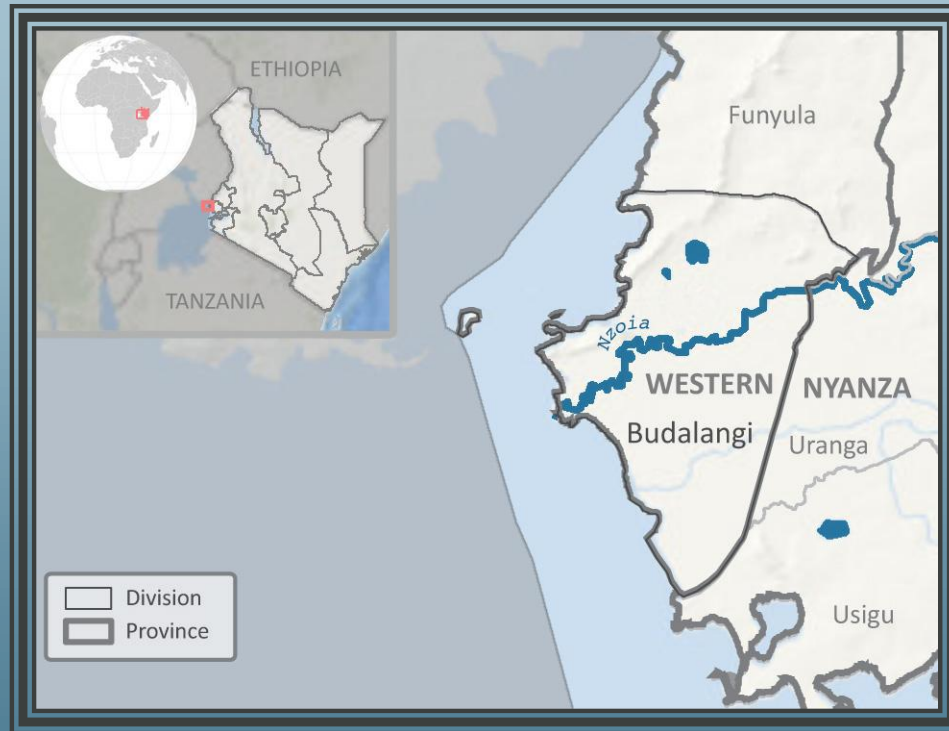
**Loss &
Damage**

Households interviewed	373
Climate stressor	Drought in 2011
Impact on household economy?	Yes: 97%; No: 3%
Impact per sector	Crops: 98.6%; Livestock: 73.6%; Food prices: 88.5%
Adopted adaptation/coping measure?	Yes: 93%, No: 7%
Coping/adaptation measure to deal with stressor	Alternative income to buy food: 58%; Sell assets to buy food: 58%; Ask relatives for food or money for food: 57%; Reliance on aid: 55%; Displacement/migration: 23%
Suffered adverse effects despite coping	66%
No measures adopted, why not?	Lack of knowledge/skills: 58%; Lack means/resources: 28%

Kenya

Denis Opiyo Opono

Loss &
Damage



Erosive coping in Budalangi Division, Kenya:
loss and damage associated with the 2011 floods

Kenya: Denis Opiyo Opono

Loss &
Damage

Households interviewed	400
Climate stressor	Flood in 2011
Impact on household economy?	Yes: 98%; No: 2%
Impact per sector	Crops: 98%; Food prices: 95%; House/properties: 66%
Adopted adaptation/coping measure?	Yes: 93%, No: 7%
Coping/adaptation measure to deal with stressor	Reliance on aid: 91%; Migration & camps: 64%; Alternative income to buy food: 39%; Ask relatives for assistance: 37%; Sell assets to buy food: 22%
Suffered adverse effects despite coping	72%
No measures adopted, why not?	Lack of knowledge/skills: 40%; Lack means/resources: 31%; Not my task: 10%; No priority: 4%

Micronesia

Simpson Abraham & Iris Monnereau

Loss &
Damage



The limits of adaptation in Kosrae, Micronesia:
loss and damage associated with coastal erosion

Micronesia: Simpson Abraham & Iris Monnereau

Loss &
Damage

Households interviewed	363
Experienced coastal erosion	Yes: 87%; No: 13%
Impact on household economy?	Yes: 80%; No: 20%
Impact per sector	Crops: 69%; Tree crops: 70%; Housing: 53%
Adopted adaptation/coping measure?	Yes: 60%, No: 40%
Coping/adaptation measure to deal with stressor	Build sea walls: 29%; 'Landfill to fortify coast: 29%; Plant trees along coastline: 15%; Elevate house: 11%
Suffered adverse effects despite adapting	92%
No measures adopted, why not?	Lack of knowledge/skills: 47%; Lack means/resources: 74%; Not my task: 3%

Four additional case studies in 2013

- ❖ Ethiopia
 - ❖ Mozambique
 - ❖ Burkina Faso
 - Nepal
- Supported by the African Climate Policy Centre (ACPC).
Status: fieldwork complete. Reporting in progress.
- Supported by CDKN. **Status:** Fieldwork starts in December.

Country	Climate threat	Impact
Ethiopia	Flooding	Habitability + livelihood
Burkina Faso	Drought	Livestock + crops
Mozambique	Floods & Drought	Staple crops
Nepal	Floods	Agricultural livelihoods

- Existing coping/adaptation to biophysical impact is not enough to avoid loss and damage

- Measures have costs (economic, social, cultural, health, etc.) that are not regained

Adaptation happens but is not enough

Adaptation getting more costly

Loss and damage occurs when...

Adaptation is not happening

Getting by, but losing ground

- No measures are adopted – or possible – at all

Despite short-term merits, efforts have negative effects in the longer term (erosive coping)

Outlook: Decisions & consequences

- How we address loss & damage will affect how society manages the negative impacts of climate change while pursuing other goals, such as resilient and low-emission development.
- Possibilities and constraints for society today will play out against our collective success or failure in stemming the pathways to loss and damage

Thank you.

Loss &
Damage

- Policy report with case study findings & policy reflections
<http://www.loss-and-damage.net/download/6815.pdf>
- Fact sheet
<http://www.loss-and-damage.net/download/6816.pdf>
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- Initiative: Sven Harmeling harmeling@germanwatch.org



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- Climate Development Knowledge Network
- Africa Climate Policy Center (ACPC)

