Climate change-induced loss and damage in The Gambia: An investigation of impacts on The Gambia Farming Community

Key Recommendations

A national case study needs to be conducted on Loss and Damage in The Gambia. Such a case study would help policy makers protect the lives and livelihoods of Gambians, particularly those in farming communities.

The case study would further help develop national legal and institutional frameworks to address Loss and Damage in The Gambia.

By establishing a more concrete framework for Loss and Damage in The Gambia, better laws and policies could be enacted to address crop and livestock losses that will likely occur as a result to climate change.

This paper aims to raise awareness about Loss and Damage (L&D) and ignite conversation about how Disaster Risk Reduction (DRR), Climate Change Adaptation (CCA) and Loss & Damage (L&D) can be linked in order to ensure more sustainable resiliency strategies for The Gambia.

What is Loss and Damage?

Although there is no official definition for Loss and Damage established in the UNFCCC texts, the UNFCCC literature review for the work programme on L&D uses the following working definition: “the actual and/or potential manifestation of impacts associated with climate change in developing countries that negatively affect human and natural systems” (FCCC/SBI/2012/INF.14). Definitions of Loss and Damage from civil society and researchers vary, but generally emphasize that shortcomings of mitigation and adaptation engender L&D (Durand and Huq 2014). Failure to reduce greenhouse gas emissions is associated with greater frequency and intensity of climate impacts, and an “adaptation deficit” will result in Loss and Damage from climate impacts (Warner and van der Geest 2013).

Pressure to institutionalize a UNFCCC mechanism on L&D has increased in response to the shortcomings of mitigation policy and the inadequacy of adaptation support for nations and communities already experiencing the worst effects of climate change. At COP19 in 2013, the UNFCCC was charged with creating the “institutional arrangements... to address L&D” it had promised a year earlier. This mechanism created, termed the “Warsaw International Mechanism for Loss and Damage” (WIM), was given the role of addressing L&D from extreme and slow onset events in developing countries “particularly vulnerable” to the effects of climate change (FCCC/CP/2012/8/Add.1).
The text establishing the WIM reaffirms the COP18 statement on “the role of the Convention in promoting the implementation of approaches to address Loss and Damage” with some elaboration on tangible actions for the UNFCCC to perform. These include plans for the UNFCCC to collect, share, and manage data and information on L&D, take action to close gaps in international understanding of the issue, and supply leadership, coordination, and oversight on assessment and implementation of approaches to address L&D. The decision also presents means by which the UNFCCC will enhance “action and support” to address L&D, including the provision of technical “support and guidance,” development of recommendations for consideration by the COP, and facilitation of development and implementation of additional approaches to address L&D (FCCC/CP/2013/10/Add.1). A two-year work plan was adopted in December 2014, with activities encompassing institutional growth and strengthening, coalition building, and development of comprehensive risk management approaches.

Loss and Damage was anchored in the COP21 Paris Agreement in December 2015 with a dedicated section in the first part of the agreement and an Article in the second. In the L Loss and Damage section, Parties decided that the WIM would continue its work after the 2016 review, and outlines several requests for the Executive Committee of the WIM, requesting that the Committee create a clearinghouse for information on risk transfer, establish a task force to engage existing UNFCCC bodies and expert groups, and initiate its work towards these requests at its next meeting. A clause at the end of the section states that the L&D Article “does not involve or provide a basis for any liability or compensation.” In the Article, Parties agreed to enhance understanding, action and support for L&D, outlining areas for cooperation that include emergency preparedness, comprehensive risk assessment and management, and insurance solutions. The Warsaw Mechanism is subject to review by the full COP in 2016.

Figure 1: Annual rainfall in Korean (case study area of this research in The Gambia from 1931-2011. Missing data for 1965, 1968 and 1970.

What is the experience of Loss & Damage in The Gambia?

Predicted long-term trends in drought and rainfall variability are reported for The Gambia, which suggests that The Gambia is highly vulnerable to Loss and Damage from climate change. Climate change will continue to have negative consequences for the general population. The farming population, who depend primarily on agriculture production for their livelihoods, are a particular population of concern. Dry areas in the Sahel, which includes The Gambia, are expected to become even drier in the future due to climate change, with longer and more frequent periods of drought (IPCC, 2007b; FAO, 2008, Brown and Crawford, 2008). Due to impacts on farming and food, climate impacts in The Gambia will contribute to poverty levels in the country.

Gambian farmers depend on erratic rainfall for agriculture production which creates a big shortfall in food production. Gaye (2004) and Gibba (2002) reported that the high variability in rainfall in the last three decades in The Gambia led to unstable agriculture production, particularly by the small-scale farmers who form 70% of the population. According to The Gambia Department of Agriculture (2005), further temperature and rainfall changes will have significant effects for local people. The department estimates, for example, that a 40% drop in groundnut yields (one of the major cash crops in the country) will result from rising temperatures.

The 2011 drought affected almost all surveyed households in a case study in the North Bank Region (99.7%). Most respondents (78.7%) qualified impacts as ‘severe’ and 21% reported ‘moderate’ adverse effects of the drought. Only one respondent (0.3%) said the drought had not affected him because his household derived most of its income from salary work (Yaffa, 2013). Of respondents who said the drought had had negative effects on their household economy, 98.1% reported impacts on crop production, 74% on livestock, 40.8% on tree crops and 9.4% on fishing activities (see Figure 2) (Yaffa, 2013). The percentages for fishing and economic trees are lower partly because few households engaged in these activities compared to field crop cultivation and animal husbandry. In addition to the impacts on livelihood sources, 89.2% reported adverse effects on food prices. They thought the drought had led to higher food prices, which made it harder to cope by buying food when their harvests failed.

![Figure 2: Proportion of households reporting different types of drought impacts. Source: The Gambia Loss and Damage questionnaire survey conducted from July-August 2012.](image)
To deal with the impacts of the 2011 drought, 94.9% of household respondents reported adopting at least one coping measure. Coping strategies were primarily geared towards obtaining food after households lost some or all of their harvest. The most widely adopted coping strategy was to seek alternative income-generating activities when crops failed. More than half the surveyed households sold assets, particularly livestock, to buy food. Almost half further relied on social networks and support – mostly food aid – from the government and NGOs to deal with drought impacts. Temporary migration of household members to gain access to food or money to buy food was slightly less common, but still important for one out of four households. Almost two-thirds of respondents indicated that they cut down expenses to cope with the precarious situation that evolved after the 2011 drought, and another two-thirds had to reduce their food intake. In a way, these last two measures are also coping strategies, but at the same time, they are clear indications that other coping strategies have been inadequate.

**Conclusion: what is the scope for national level Loss and Damage mechanism?**

Conducting a national case study on Loss and Damage in The Gambia is essential so that the results of that case study can inform national policy that would adequately protect the lives and livelihoods of Gambians, especially the farming communities. The case study will also attempt to explore the options to develop national legal and institutional frameworks in The Gambia that will deal with Loss and Damage associated with climate change. Any initiative that is required to enhance the legal and institutional frameworks to address Loss and Damage at the national level must be informed by national case study data.

In short, the national case study data will aim to frame Loss and Damage conceptually in order to enhance current legal and policy issues so that new laws and policies could be in-acted and instituted to address crop and livestock losses as a result of climate change, environmental degradation, natural and human-induced disasters, and social safety nets.
References


