

Compensation for Loss and Damage

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Introduction – The Issue

1. Whilst the precise effects of climate change are not totally predictable, it is nevertheless indisputable that climate change will increase the number of natural disasters. Indeed, from 1987 to 1998, the annual number of climate-related disasters averaged 195. From 2000 to 2006, the average was 365, representing an increase of 87 %.
2. According to the Intergovernmental Panel on Climate Change (*IPCC*), developing countries have contributed the least to the emission of greenhouse gases but are the most vulnerable to the effects of climate change and have the least capacity to adapt to changes. More than 95 % of all deaths caused by natural disasters occur in developing countries and losses due to natural disasters are 20 times greater in developing countries than in industrialised countries.
3. Of developing countries, the following three classes of states are the most vulnerable to climate change-induced loss and damage:
 - Least Developed Countries (*LDCs*);
 - Small Island Developing States (*SIDS*); and
 - countries in Africa.
4. These three classes of states are considered the most vulnerable to climate change because:
 - (A) they have the greatest **exposure** to climate change;
 - (B) they are most **sensitive** to climate change; and
 - (C) they have the least developed **adaptive capacity** to climate change, in that they lack the necessary institutional, economic and financial capacity to cope with the adverse effects of climate change (and often, therefore, are reliant on foreign aid in response to natural disasters).
5. Given this greater risk posed to developing countries and given the fact that developed countries have contributed most to climate change, developed countries are now beginning to acknowledge that they have a role in not only providing financially for mitigation and adaptation options but also compensation.
6. This paper sets out how the issue of loss and damage has arisen the UNFCCC negotiations and possible options for addressing the issue including insurance mechanisms, non-insurance risk-financing mechanisms and a brief look at a compensation mechanism proposed by WWF.

How has the issue arisen in UNFCCC Discussion?

7. The 1993 [United Nations Framework Convention on Climate Change \(UNFCCC\)](#) obliges developed country Parties to provide such financial resources as are needed by developing country Parties to facilitate their adequate adaptation to climate change (Articles 4.3, 4.4 and 4.5). Article 4.8 of the Convention, moreover, gives consideration to how such obligations may be achieved by developed countries, stipulating that “the Parties shall give full consideration to what actions are necessary under the Convention, including actions related to funding, insurance and the transfer of technology, to meet the specific needs and concerns of developing country Parties arising from the adverse effects of climate change and/or the impact of the implementation of response measures, especially [in the most vulnerable states]”.
8. The [Kyoto Protocol](#) reiterates the concept of adaptation and compensation for loss. For example, at Article 3.14 of the Protocol, the Parties are obliged to consider measures to minimise the adverse consequences of climate change, including “the establishment of funding, insurance and transfer of technology”.
9. Under the auspices of the UNFCCC, the following technical papers were released in November 2008 to assess the possible damages and losses caused by climate change, their particular effect on developing countries and financial risk management mechanisms:
 - [“Physical and socio-economic trends in climate-related risks and extreme events, and their implications for sustainable development”](#) (FCCC/TP/2008/3);
 - [“Integrating practices, tools and systems for climate risk assessment and management and disaster risk reduction strategies into national policies and programmes”](#) (FCCC/TP/2008/4); and
 - [Mechanisms to manage financial risks from direct impacts of climate change in developing countries](#) (FCCC/TP/2008/9).
10. The [Bali Action Plan](#) developed at decision 1/CP.13 identified risk management and disaster risk reduction as fundamental to the sustained implementation of the Convention through long-term cooperative action.
11. In Copenhagen, at decision 1/CP.15, Parties extended the mandate of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (**AWG-LCA**) and to continue their work by drawing on the latest adaptation text as of 18 December 2009 ([FCCC/CP/2010/2](#)). In the [Copenhagen Accord](#), Parties affirmed their commitment to the provision of “financial resources, technology and capacity-building to support the implementation of adaptation action in developing countries”.
12. During the tenth session of the AWG-LCA in June in Bonn, Parties considered adaptation issues, including institutional arrangements for adaptation (see [FCCC/AWGLCA/2010/6](#)). The eleventh session of the AWG-LCA will take place in Bonn from 2 to 6 August facilitated by a revised text prepared by the Chair ([FCCC/AWGLCA/2010/8](#)).
13. Under the current AWG-LCA, an Adaptation Framework is proposed with the objective of enhancing action on adaptation. The model would contain the following elements:
 - (A) some kind of adaptation committee or subsidiary body;

- (B) an international mechanism to address loss and damage (which would presumably extend to compensation);
 - (C) regional centres and networks, where necessary; and
 - (D) a process for least developed country Parties to formulate and implement national adaptation plans that build upon the experience of the national adaptation programmes of action as a means of identifying medium- and long-term adaptation needs and developing strategies and programmes to address those needs.
14. The AWG-LCA text also proposes the establishment of a new fund as an operating entity of the financial mechanism of the Convention to support mitigation activities.
15. In addition to the AWG-LCA text, the UNFCCC has also presided over structures to generate information on adaptation needs and efforts – through reporting obligations under Article 12.1 of the UNFCCC and through the [Nairobi Work Programme](#), especially through its National Adaptation Programmes of Action (**NAPAs**).
16. The following funds have been established under the UNFCCC:
- Global Environment Facility (**GEF**) – an operating entity of the UNFCCC’s financial mechanism;
 - Least Developed Countries Fund (**LDCAF**) – which was established to assist LDCs under the Convention;
 - Special Climate Change Fund (**SCCF**) – established under the UNFCCC to finance activities complementary to those funded by the resources allocated to the GEF. Eligible activities for funding include adaptation, technology transfer, energy, transport, industry, agriculture, forestry, waste management and activities to help developing countries diversify their economies.
 - Adaptation Fund (**AF**) – established to fund “concrete adaptation projects and programmes” that are country-driven and are based on the priorities of the most vulnerable countries.
 - Bilateral, regional and multilateral channels – funding provided for in keeping with developed countries’ obligations under Article 11.5 of the UNFCCC.
 - Commitments under the Copenhagen Accord to provide US\$10 billion per year between 2010-2012, scaling up to US\$100 billion by 2020, much of which will be provided through the Green Climate Fund.
17. None of these funds specifically provide for compensation, rather they promote mitigation and adaptation activities.

What are the options for addressing this issue?

18. Given that Oxfam estimates that US\$50 billion per year will be required in compensation, the above funds are inadequate to fully compensate LDCs for climate change-induced damages and losses. Much of the under-funding has come about due to the fact that contributions by states are largely voluntary.

19. In order to make financial contributions obligatory rather than voluntary, it is proposed that clear liability needs to be attached to certain states who will fund the majority of the compensation. Such obligatory funding could either be channelled into one of the above existing funds or a new fund could be established for the purpose. Whichever option is taken-up, rules and principles for the provision of compensation, such as the following, will need to be agreed upon:
- who should be liable to pay compensation;
 - how might a compensation fund be administered;
 - how compensation is to be constituted;
 - who the beneficiaries of the compensation should be;
 - what the heads of compensable damage should be;
 - the circumstances in which compensation is payable;
 - if any limits should be placed on liability.
20. The UNFCCC has considered mechanisms for managing financial risks associated with climate change, including insurance and non-insurance mechanisms.
21. What is emphasised, above all, in formulating options for addressing the issue of compensation for climate change-related loss and damage, is that no one mechanism is a panacea for this issue. Instead, the issue should be approached by taking into account many various options.

Insurance

22. Insurance for climate change-related damage and loss is one of the most contemplated financial mechanisms for dealing with this issue. The UNFCCC contemplated insurance mechanisms in its technical paper, "Mechanisms to manage financial risks from direct impacts of climate change in developing countries" (FCCC/TP/2008/9).
23. The most relevant types of insurance for climate-change related damage or loss include:
- (A) Traditional insurance;
 - (B) Micro insurance; and
 - (C) Insurance-linked securities.

Traditional insurance

24. Insurance is a contractual transaction that guarantees financial protection against stipulated forms of losses in return for a premium. Where the insured experiences a loss of the pre-described type, then the insurer will pay out a previously agreed amount. Some traditional insurance is taken out by sovereign states which may enter into with private sector insurers. For example, the Turkish Catastrophe Insurance Pool (**TCIP**) was established after the devastating Marmara earthquake by the World Bank, Government of Turkey and private

sector insurers. The TCIP is a unique pool and involves the public and private sectors covering different risks in order to reduce premium costs.

Micro-insurance

25. Micro-insurance, which emerged out of micro-finance, is targeted at LDCs and is characterised by both low premiums and low coverage. The response to the 1988 floods in Bangladesh offer a prominent example of micro-insurance. Proshika, a non-government organisation, and the Government of Bangladesh offered a Participatory Livestock Compensation Fund (**PLCF**) that targets farmers. At the moment, the scheme covers 10% of the population of Bangladesh for property insurance and 25% for life insurance. Despite best efforts, large areas of the country and much of the population are still vulnerable to similar natural disasters.

Insurance-linked securities

26. Insurance-linked securities are insurance policies that are tied to the capital markets, which further allows for the dispersion of risk. Insurance-linked securities are generally tied to the occurrence of a specified event, which, upon occurrence, will trigger the payment of insurance. The most common type of insurance-linked securities are catastrophe (cat) bonds. The Mexico Catastrophe Bond (**MCB**) is a high-profile catastrophe bond model. The MCB involves the World Bank as well as the Inter American Development Bank. In 2006 the Mexican government insured its catastrophe reserve fund, the Fondo de Desastres Naturales (**FONDEN**) against natural disasters. FONDEN involves a hybrid of reinsurance catastrophe bond. The resulting contract is linked to a parametric trigger in terms of magnitude and depth of seismicity.

Problems with insurance

27. There are many problems with insurance as a financial mechanism for managing financial loss associated with climate change. These problems include:
- premiums which are too high, especially for persons in vulnerable states;
 - lack of understanding about insurance and lack of a ‘culture’ of insurance amongst vulnerable states;
 - limited coverage of policies;
 - “moral hazard” – that is, persons have no incentive to mitigate loss;
 - difficulties that smaller insurance companies face in building up sufficient capital to insure; and
 - insurance may not be appropriate for very slow-onset climate impacts, such as desertification.

Non-insurance risk-financing mechanisms

28. The UNFCCC also considered non-insurance risk-financing mechanisms in “Mechanisms to manage financial risks from direct impacts of climate change in developing countries”.

29. Forms of non-insurance risk-financing mechanisms include:
- (A) informal risk-sharing;
 - (B) micro-savings and micro-credit;
 - (C) post-disaster assistance;

Informal risk-sharing

30. Informal risk-sharing involves financial arrangements of reciprocal exchange amongst community members or persons linked by kinship ties. Remittances, where foreign workers send money back to their home country, is a major source of finance for LDCs and other vulnerable states. Remittances often spike in the wake of natural disasters.

Micro-savings and post-calamity credit

31. Micro-savings involves individuals creating their own personal savings, which is increasingly becoming assisted by MFIs, banks and other agencies.
32. Micro-credit involves the provision of small loans to vulnerable communities for the purposes of some kind of development. Micro-credit is especially valuable after natural disasters, as often local money lenders will increase their rates at this time. Post-disaster credit may be larger in nature, as where an entity issues disaster victims bonds and other debt instruments which transfer the burden to future periods.

Post-disaster assistance

33. Post-disaster assistance comes in the form of the affected country's government relief, which often supports specific projects targeted at recovery. Some governments have established a post-calamity fund, which accumulates in years without catastrophes and is reduced in years that experience disasters.
34. Governments of vulnerable countries, however, must particularly rely on foreign governments' aid or foreign aid donated by individuals and non-government organisations.

Proposed compensation fund model from WWF

35. The box below sets out a proposed model from WWF for a compensation fund. This is just one option and has not been specifically endorsed by Parties.

WWF: Beyond Adaptation – The legal duty to pay compensation for climate change damage

States liable for compensation

Given their predominant role in contributing to climate change, it is proposed that developed, Annex II states should provide the greatest bulk of compensation to a contribution fund.

The following principles have been relied upon in coming to the view that developed Annex II countries have greater responsibility for compensation: the polluter pays principle; the principle of common but differentiated responsibilities and respective capabilities; the principles of equity and inter-generational equity; the principle that developed country Parties should take the lead in

addressing climate change and its adverse effects and the precautionary principle.

Institutional arrangements for the fund

The fund would need to establish such arrangements as:

- assessing and collecting contributions;
- managing, maximising and protecting funds;
- assessing eligibility for compensation;
- identifying or verifying country vulnerabilities;
- establishing or approving thresholds or triggers on a country or regional basis; and
- hearing claims and awarding compensation.

Accordingly, some form of administering body must be implemented, whether this be:

- an independent body, operating under the auspices of the UNFCCC or any new international instrument created for the purpose of facilitating the compensation fund;
- a constituted body under the UNFCCC Conference of the Parties;
- an independent body under the United Nations; or
- an existing inter-governmental organisation or new inter-governmental organisation.

How compensation is constituted

Options for constituting a fund include:

- assessed contributions from Annex II Parties based on a calculated level of 'excess' emissions;
- assessed contributions, based on agreed criteria (for example, gross domestic product (**GDP**), level of greenhouse gas emissions);
- contributions derived from auctioning a specified percentage of Assigned Amount Units (**AAUs**);
- an agreed level of contributions from national level auctioning revenues;
- layers of contributions from different stakeholder groups; and
- national contributions, based on State collections from regulated sectors.

Beneficiaries of compensation

In terms of who the beneficiaries of such compensation should be, any compensation mechanism must acknowledge the reality that the most vulnerable countries (such as LDCs) are most entitled to compensation, since their physical and socio-economic features make them least able to adapt to climate change. Over time and depending on resources, eligibility for compensation may be broadened to cover a larger number of vulnerable countries.

Heads of damage

For consistency with international practice, a compensation mechanism should take into account heads of damage that are ordinarily in place for international compensation schemes, such as:

- loss of life or personal injury;
- loss of, or damage to, property;
- economic loss (including some losses arising from impairment of the environment);
- environmental damage; and
- moral damage, which includes individual pain and suffering, loss of loved ones, or personal

bereavement associated with intrusion on one's home or private life.

Circumstances under which compensation is payable

As with an insurance policy, the circumstances in which persons or a state could claim compensation would need to be clearly defined. Accordingly, baseline conditions would need to be agreed upon at an international level. Compensation may be made claimable upon:

- actual proof of loss and causation (where possible); and/or
- the “triggering” of agreed thresholds or variations from historical baseline conditions, such as temperature, rain fall, sea level rise, frequency and/or severity of extreme weather events.

Limitations on liability

Depending on extent of resources, certain limits may need to be placed on compensation, such as:

- agreed ceilings on liability (such as through a nominated timeframe or type of damage);
- caps relative to GDP; and
- tiered financial limits, based on historical responsibility or capacity to pay.

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