The last several decades have seen growth around the world in economic damages from extreme weather events. Most of these losses are attributable to global population growth, the greater concentration of people and economic value in urban areas, and the worldwide migration of populations and industries into areas like coastal regions, which are particularly exposed to natural hazards. However, the increasing severity of climate forces has also contributed to this rising trend. Poor people and poor countries — those least able to cope with such damages — are likely to suffer disproportionately as these trends intensify under a changing climate.

Effective adaptation to climate change will require risk management strategies that can reach vulnerable people in the developing world. Insurance — a financial mechanism through which a policy-holder pays a premium to transfer the risk of future losses to an insurance provider — could be an important component of these strategies. But to provide the adaptation benefits that vulnerable people need, insurance schemes must be designed carefully.

**Insuring Against Climate Change: A Challenge for Public and Private Decision-makers**

As the climate changes and more people experience weather extremes, the insurance industry will be called upon to provide products and services to a large new set of customers. At the same time, the current supply of insurance could be negatively affected if insurers are unable (or unwilling) to cover climate-related losses under changing risk profiles. Insurance providers will have to develop innovative products and delivery systems if they are to expand coverage to the poor and vulnerable while simultaneously covering growing weather-related losses among those who already have access to insurance.

Private insurers alone are unlikely to succeed in this dual challenge of expanding and deepening insurance coverage in response to climate change. For this reason, a growing number of public entities — including the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) — are considering their own role in helping to make insurance an effective adaptation option.

**How Can Insurance Help in a Changing Climate?**

Insurance is a form of ex-ante preparedness for economic losses and can help build resilience to shocks such as storms, floods, or drought. If designed and operated well, insurance can provide immediate financial relief when a climate hazard strikes, providing several resilience benefits that are becoming increasingly important as the climate changes:

- At the household or business level, insurance can help prevent an extreme climatic event from leading to long-term reduction in assets. This helps to prevent a household from falling into a poverty trap, and enables a business to continue to grow.
- At a government level, insurance can help prevent extended gaps in government services after an extreme event, and can speed reconstruction of roads, energy systems, and other important infrastructure. Doing so can help, broadly, to maintain economic, social, and political stability.

Parameterized insurance, where insurance payouts are tied to a physical parameter (or an index) like rainfall — rather than to actual losses — can be especially effective in addressing large weather-induced losses. Parameterization reduces the administrative costs involved in calculating insurance benefits, and speeds delivery of payouts to clients. It is also an important design element in insurance products for small farmers and other low-income consumers. Typical loss-based insurance products rarely reach these customers, due to the high transaction costs involved in providing a large number of very small insurance policies.

**Types of Insurance for Negotiators to Consider**

The adaptation stream of the post-Bali negotiations has seen extensive discussion of whether and how to address insurance through the UNFCCC. Types of insurance that have been discussed include:

- **Post-catastrophe Resource Fund**
  
  The global community pays into a fund that directly supports the governments of vulnerable countries in contending with large-scale catastrophic losses caused by climate change. This is not true insurance, as there is no risk-based premium pricing. Solidarity funds (like the EU solidarity fund for disasters) and the proposed compensation mechanism both would function this way.

- **Subsidized Global Risk Pool**
  
  The international community establishes a global risk pool and pays the premiums on behalf of vulnerable countries to insure them against the large-scale catastrophic losses related from climate change.
**Sovereign Risk Pool**

Vulnerable country governments themselves share the risks of weather-related catastrophic events by paying into regional or global sovereign risk pools. (The Caribbean Catastrophic Risk Insurance Facility (CCRIF.org) is an example of this type of risk pool.)

**Commercial Insurance**

Individuals and companies purchase private insurance to cover extreme weather and climate change related risks.

**Micro-insurance**

Poor and vulnerable individuals purchase specially designed insurance products that cover small-scale household-level losses due to weather extremes.

**Insurance Proposals Under Discussion**

Several proposals have been made regarding possible insurance programs in the UNFCCC:

**AOSIS**

- The Alliance of Small Island States (AOSIS) has actively called for the Copenhagen agreement to include insurance. They have submitted a detailed proposal for creating a new global insurance mechanism that would include “windows” for increasing insurance coverage for climate impacts and for supporting countries in promoting commercial and micro-insurance.
- AOSIS recognizes that insurance can have limits. Beyond insuring for weather related damages, they ask for compensation and rehabilitation funding to address catastrophic climate losses that insurance will not be able to cover, such as the inundation of entire island nations.

**MCII**

- A consortium of organizations called the Munich Climate Insurance Initiative (MCII), which includes private insurance companies, NGOs and universities, has also submitted a detailed proposal for a UNFCCC-led insurance program. Instead of asking for compensation, MCII imagines a multi-layered insurance system with a subsidized global risk pool that pays out to affected countries if they are hit. Annex 1 countries would be expected to put money into such a pool.
- Like AOSIS, the MCII proposal includes a “pillar” addressing commercial and micro-insurance.

**Risk Reduction Proposals**

- Parties are also exploring ways through which insurance can be integrated into larger risk reduction and management strategies that are vital to adapt to a changing climate. The AOSIS proposal leaves the nature of non-insurance risk reduction activities at the discretion of participating Parties; MCII makes risk reduction a condition of access to the insurance mechanism.
- Some Parties (mostly Annex I countries) see insurance as just one element of risk reduction and have not supported the creation of a special UNFCCC insurance mechanism.

**The Next Step on Insurance: Deciding What Role the UNFCCC Should Play**

The costs of insurance programs under discussion have only been roughly estimated, and the overall pool of adaptation finance available through the post-2012 regime remains unknown. The initial level of finance may constrain options for insurance program design, and may force some difficult trade-offs between insurance programs and other adaptation activities that could be supported through the UNFCCC. This situation calls for concrete and specific discussions about options for the roles the UNFCCC should play in the promotion and provision of insurance, and for the institutional arrangements needed to support each option.

The role of a global institution like the UNFCCC in supporting the provision of insurance may vary depending upon:
- which type(s) of insurance Parties prioritize
- the scale of finance available
- Parties’ decisions about what roles are appropriate and feasible
- Parties’ expectations regarding the roles of the private sector and national governments

Table 1 examines several potential roles for the UNFCCC: 1. Convener, 2. Supporter, and 3. Creator of a new insurance regime. It indicates the relative scale of finance needed for each role and explores what different roles would mean for supporting the different types of insurance discussed above.

**Notes**

6. A complete list of participating organizations and individuals can be found at www.climate-insurance.org/front_content.php?idart=147
7. MCII estimates the cost of its proposal to be between 8 to 10 billion dollars per year. (http://www.climate-insurance.org/front_content.php?idart=2508)

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**Table 1: Roles for the UNFCCC in promoting different types of insurance**

<table>
<thead>
<tr>
<th>Role</th>
<th>Post-Catastrophe Resource Fund</th>
<th>Subsidized Global Risk Pool</th>
<th>Sovereign Risk Pool</th>
<th>Commercial Insurance</th>
<th>Micro-insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Convener</td>
<td>n/a</td>
<td>n/a</td>
<td>Governments explores ways to replicate or expand existing catastrophic risk pools and insurance systems through the UNFCCC.</td>
<td>UNFCCC convenes stakeholders to foster learning and exchange around policy and partnerships that expand coverage and improve effectiveness of insurance markets under a changing climate.</td>
<td>UNFCCC convenes various stakeholders to learn, innovate and exchange information about micro-insurance products for developing countries.</td>
</tr>
<tr>
<td>2. Supporter</td>
<td>n/a</td>
<td>n/a</td>
<td>UNFCCC provides support to national governments or UN agencies to set up regional systems and provides information and other technical assistance.</td>
<td>Support goes to national governments or to private sector commissions for policy formulation, and for providing information and other technical assistance.</td>
<td>UNFCCC provides support to national governments, NGOs, private sector to formulate policy, pilot programs and provide technical assistance in vulnerable developing countries.</td>
</tr>
<tr>
<td>3. Creator</td>
<td>UNFCCC creates a new global insurance mechanism (requires the most finance)</td>
<td>UNFCCC creates and/or supports an institution (or institutions) that release funds to countries in case of climate catastrophes.</td>
<td>UNFCCC creates and supports national risk pools for different regions.</td>
<td>Support role described above is played by a ‘window’ of a new mechanism.</td>
<td>Special ‘window’ of a new mechanism encourages and funds country led micro-insurance programs.</td>
</tr>
</tbody>
</table>

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