

Submission by the United States of America
Work program on loss and damage associated with the adverse effects of climate change
25 February, 2011

The United States welcomes the opportunity to provide a submission, pursuant to paragraph 28 of the Cancun agreements, on our views about what elements should be included in the work program on loss and damage associated with the adverse effects of climate change. Pursuant to paragraph 29 of the Cancun agreements, the submission is for consideration of the Subsidiary Body for Implementation at its thirty-fourth session, with a view to making recommendations on loss and damage to the Conference of the Parties for its consideration at its eighteenth session. Our comments aim to offer ideas on the work program to take place over the next two years.

The United States recognizes the importance of further discussion and learning on ways to encourage and facilitate the development of a suite of risk management tools—at the local, national, and regional levels. It is essential for this work program to acknowledge the significant opportunities to anticipate and *avert* loss and damage through risk reduction measures, in addition to recognizing the need to effectively deal with the residual risks through market-based insurance products and other tools. Furthermore, these approaches need to be purposefully linked, as economic signals (such as varying insurance premium rates) can draw attention to risks and motivate actions to avoid or reduce them.

Objectives

Recognizing that there is a growing knowledge base on climate risk management and insurance applications, the work program should endeavor to make this information more widely accessible and actionable, fill remaining gaps, and increase public-private exchange and collaboration.

In particular, the work program should help countries to:

- Target the various approaches – including risk reduction and risk transfer – to those climate risks that each can most appropriately and most cost-effectively address;
- Identify foundational requirements for the establishment of risk transfer programs in a given country or region (including regulatory frameworks, data, and capacity needs); and
- Make decisions on how to allocate limited public funds among a range of risk reduction and risk transfer approaches, and increase collaboration with the private sector, in order to achieve effective and comprehensive risk management.

Elements

In Cancun, the Parties established a work program to consider approaches to address loss and damage. They also invited comments on what elements should be included in the work program, including four potential elements:

- (a) Possible development of a climate risk insurance facility to address impacts associated with severe weather events;

- (b) Options for risk management and reduction; risk sharing and transfer mechanisms such as insurance, including options for micro-insurance; and resilience building, including through economic diversification;
- (c) Approaches for addressing rehabilitation measures associated with slow onset events; and
- (d) Engagement of stakeholders with relevant specialized expertise.

The United States submission responds to each of these four elements. The United States places priority emphasis on element (b), which studies the effectiveness and applicability of tools for risk reduction, risk transfer, and resilience building. We propose that the work program address two topics, described under element (b) below, in two workshops or expert meetings.

Countries' needs will be best met by flexibility that allows tailored approaches on the sub-national, national or regional level. Countries should be able to drive their own adaptation agendas, identifying the optimal allocation of a limited amount of public financing for adaptation between both risk reduction and risk transfer options. According to the World Bank and the U.S. Geological Survey, one dollar invested in disaster risk reduction can save an estimated seven dollars in disaster-related economic costs. Proactive risk reduction can avert loss and damage, whereas risk transfer can help fund recovery after the losses have already been realized; countries and communities need to understand the costs, benefits, and limitations of each approach, and be able to make decisions about their preferences.

This work program should support flexibility and country-driven adaptation actions by making accessible information and capacity building to countries that want to pursue approaches such as risk reduction, micro-insurance, and macro-insurance. Under element (b) below, we elaborate on how the work program can achieve this.

(a) Possible development of a climate risk insurance facility to address impacts associated with severe weather events;

The United States has serious concerns about the development of a global climate risk insurance facility. We believe that, before making operational decisions, there is a need for further analysis on the most efficient and effective ways to support adaptation. Furthermore, there are significant differences between countries in terms of anticipated climate change impacts, characteristics of national insurance regulations, readiness and existing capacity, making a one-size-fits-all approach technically unsound.

A global facility could inhibit a country-driven approach to adaptation by presuming that all vulnerable countries want a significant portion of adaptation resources to be set aside for later use, rather than invested in urgent implementation of actions. Given limited public resources, the decision to lock away limited public resources in an insurance pool implies that fewer funds will be available for adaptation measures that can actually avert or reduce damages. There is also evidence that premiums subsidized by donors, in addition to crowding out private insurance providers, can actually impede climate change adaptation by eliminating the motivation to reduce one's own risks (increasing moral hazard).

Instead, governments interested in insurance can draw on actuarial, financial, and climate modeling expertise to begin pooling risks through tailored products at the national and regional

levels that respond to local realities.¹ National and regional schemes with appropriate private sector participation are also likely to be more nimble and capable of rapid response than a global insurance facility under the UNFCCC. Eventually, some of these regional schemes could partner in an even larger risk pool, with an eye to efficiency and cost savings; this kind of bottom-up approach will ensure that strategies are still country-driven and grounded in local contexts.

The UNFCCC can play an important role in supporting these bottom up actions by catalyzing international coordination to improve access of countries to information and knowledge, including through expert meetings, development of tools, and synthesis of lessons learned, and to strengthen the ability of countries to target various approaches, lay the foundations required for establishing risk transfer programs, and make decisions on how to allocate limited public funds among a range of risk reduction and transfer approaches.

(b) Options for risk management and reduction; risk sharing and transfer mechanisms such as insurance, including options for micro-insurance; and resilience building, including through economic diversification;

The work program should prioritize exploration of appropriate options for effectively and efficiently managing different kinds of climate-related risks.

At the local, national, and regional levels, adaptation efforts will be enhanced by the informed, targeted application of a suite of risk management approaches, from risk reduction to risk transfer and risk sharing. There is a great deal that this work program can do to provide information and access to expertise that will facilitate planning, prioritization, support for, and implementation of such approaches. The work program should also target local and national governments, financial institutions, development practitioners, and others involved in on-the-ground planning and implementation. It should provide negotiators with the technical background needed to be able to provide recommendations to the Conference of the Parties.

We propose that the work program address the following two broad topics in two workshops or expert meetings. These topics are arranged sequentially in order to ensure that a discussion of specific tools like micro- and macro-insurance, and support for implementation, builds on an adequate foundation of knowledge on the economics and complementarity of the different approaches.

Topic 1: Understanding, targeting, and linking instruments for cost-effective risk management.

What risks are insurable? What risks are cost-effectively addressed through insurance, and which are best addressed through risk reduction measures? Tools like risk reduction measures and insurance need to be targeted appropriately. In many cases, risk reduction and

¹ Governments and NGOs have been able to bring in financial and private sector expertise to develop technically sound micro-, meso- and macro-insurance products at the local, national and regional levels. For example, the World Bank provided technical assistance to the Government of Mongolia for the development of index-based livestock insurance; Swiss Re has supported micro-insurance design in countries like Ethiopia and India; and the Caribbean Catastrophe Risk Insurance Facility has forged partnerships with several bodies of experts including universities, the Caribbean Institute for Meteorology and Hydrology, and the Caribbean Development Bank.

preparedness can be the least-cost option; for the most extreme and infrequent events, however, insurance often makes more sense. This area of inquiry can benefit from the expertise of private insurers and financial sector experts, as well as analyses undertaken by the Economics of Climate Adaptation (ECA) Working Group², and pilots recently conducted in eight Caribbean countries by the Caribbean Catastrophe Risk Insurance Facility. The ECA study presents a fact-based risk management approach to understanding climate impacts and identifying cost-effective adaptation measures, including the appropriate targeting of risk transfer instruments. The World Bank and others have also published on these topics.

What can we learn from existing micro-insurance pilot projects? Over the past several years, a number of organizations have supported micro-insurance and other microfinance projects to help low-income smallholder farmers and other vulnerable communities cope with weather risks. Recently, their experiences have been compiled in several publications that seek to better understand the sustainability, scalability, and impact of micro-insurance. More impact evaluations are needed. But this work program can provide countries and donors with a valuable opportunity to review existing pilots and understand the potential—and the limitations—of micro-insurance, in order to inform their own risk management strategies.

What can we learn from existing macro-insurance schemes? Governments often need support in the wake of disasters to rebuild public infrastructure and restore services. Macro-insurance schemes to help governments deal with disaster risks already exist in the Caribbean, Turkey, and Mexico. The work program can look at these and other examples, including catastrophe bonds³, to understand the necessary enabling conditions, and to gauge their replicability in other countries and regions. It will also be important to study what can be done to ensure that insurance payouts to a national government are channeled and spent in a way that benefits the poor and most vulnerable, especially in the absence of micro-insurance products that provide payouts directly to households.

How can incentives for risk reduction be embedded in financial products like insurance and credit? The effectiveness of risk management tools—from risk reduction to risk transfer—can be enhanced by taking advantage of the interplay among them. For example, insurance as a risk transfer tool by itself provides cash to help people or governments cope *after* a disaster strikes. It can also facilitate risk reduction *before* a disaster because banks are more likely to lend to people who are insured; people can then use the loans to buy the technology and inputs needed to pursue diversified, resilient livelihoods. Insurance can also incentivize adaptive behavior through price signals; for example, the insured will pay higher premiums if they have not first worked to reduce the risks they face. This requires pricing that is transparent, risk-based, and based on quality data and clear assumptions. A pilot in Ethiopia also allows people to pay insurance premiums through labor on risk reduction projects.⁴ Credit provides another

² The Economics of Climate Adaptation Working Group is a partnership between the Global Environment Facility, McKinsey & Company, Swiss Re, the Rockefeller Foundation, ClimateWorks Foundation, the European Commission, and Standard Chartered Bank.

³ Catastrophe bonds transfer risk to investors rather than insurers.

⁴ The Horn of Africa Risk Transfer for Adaptation (HARITA) project involves Ethiopian farmers, Oxfam America, Swiss Re, the Relief Society of Tigray, Columbia University's International Research Institute for Climate and

opportunity; for instance, lower interest rates could reward resilient infrastructure design or adherence to zoning and building codes. Taking advantage of these linkages means carefully designing a system of adaptation programs and financial products.

There is much to be learned about these design aspects, and how to pursue these opportunities in a way that maximizes affordability and effectiveness by keeping the monitoring burden and the administrative costs low. This work program can help fill that gap.

How can bonds be used to mobilize resources to reduce the risks associated with slow-onset events? In Australia, a new Coral Reef Bond, developed with Goldman Sachs, puts a \$50 billion livelihood value (from tourism and fishing) on the Great Barrier Reef. The up-front money generated by the bond will allow the government to make investments that increase the resilience of the reef and protect against coral bleaching from rising sea temperatures. The work program can explore how this approach could be adjusted to work in other countries and regions, where the long-term vulnerability of shared natural resources or other assets can be reduced through nearer-term investments.

How do non-climate stresses amplify loss and damage, and how can this be minimized? We need to examine what can be done to reduce the risks associated with ongoing trends—such as urbanization, population growth, and coastal development—that increase exposure to the adverse effects of climate change. In anticipation of both extreme and slow onset events, public policies and planning should be designed to avoid putting additional assets at risk of loss or damage. The work program should also recognize the potential of livelihood diversification and inclusive economic growth to facilitate shifts away from the most vulnerable occupations and localities.

Topic 2: Informing implementation and support.

Under this topic, we would look more concretely at how the tools identified in the collective analysis undertaken in Topic 1 can be applied on the ground. These discussions would prepare governments and practitioners to choose and apply the appropriate tools in countries and regions that are vulnerable to the adverse impacts of climate change.

How can risk management approaches be matched to national contexts and specific vulnerabilities? This discussion will help countries identify the risk reduction and risk transfer approaches that would be appropriate given the risks they face, and design policies to address non-climate stresses that threaten to exacerbate loss and damage. It will help governments, NGOs, and other actors consider the best interventions at both the national and local levels. It could include the development of risk analysis and decision-making tools, as well as the opportunity to discuss with insurance and financial sector experts on the most appropriate tools for priority risks. It will also help identify areas where international coordination would be beneficial.

What can countries do to apply these approaches and attract private sector involvement?

This sub-topic would help pinpoint barriers to implementation and private sector participation, including areas that require intervention from the national government. It would be helpful, for example, for the work program to support creation of a template that could be applied in various countries and regions to assess readiness for market-based insurance schemes, for those who decide that insurance is worth pursuing as part of their risk management strategy. This template would identify critical constraints in the areas of data, capacity, regulations, demand, and the insurability of priority risks. It can also help identify supporting investments that donors and others can make—in areas such as weather data collection and capacity building—that will directly contribute to adaptation in addition to facilitating the development of risk transfer mechanisms by reducing barriers to private sector entry.

(c) Approaches for addressing rehabilitation measures associated with slow onset events;

Slow onset events are a serious concern. There are a number of slow onset events for which policies can be designed to reduce risks. We propose that the work program focus first on these types of slow-onset events. For example, some of the impacts of droughts can be mitigated through effective water management, crop and livelihood diversification, watershed restoration, and early warning systems. There are also a number of micro-insurance schemes that are specifically designed to help farmers cope with drought risk. In this regard, both slow onset and rapid onset events should be considered in the discussion proposed under Topic 1 of element (b) above, on the appropriate targeting of a suite of risk management tools.

It will be important to make the best possible use of limited funds today to reduce the severity of anticipated impacts from slow-onset events. Communities will be better off with protected assets and stable, resilient livelihoods, than with humanitarian aid or insurance payouts once their homes and livelihoods have been destroyed. We should also prioritize the development of strategies that leverage private sector resources and create market-based mechanisms that are not overly reliant on public sector budgets, and that are sustainable in the long term.

As further detailed in Topic 1 of element (b) above, the work program could also bring together financial sector experts to explore innovative ways to address slow onset events like sea level rise, which are not insurable due to a high probability of occurrence and long time frames; one potential approach is to use bonds. In addition, the work program should explore policy and planning options to deal with trends such as urbanization and coastal development that may increase the economic costs of slow-onset events associated with climate change.

(d) Engagement of stakeholders with relevant specialized expertise.

For all of the topic areas proposed above, it will be critical to engage relevant experts. These include insurers and other private sector representatives, disaster risk reduction specialists, and academics and non-governmental organizations involved in research and pilots around the world. The work program can invite submissions on the key questions proposed above under Topics 1 and 2. It can also commission reports and ask relevant experts to participate on panels at the expert meetings and workshops proposed in this submission.

It will also be important to consult with the intended beneficiaries, in order to target the work program at the most pressing questions, and facilitate the development of effective risk management systems that make a real impact on vulnerability. When reviewing existing micro- and macro-insurance schemes, for example, the work program can request that some insured individuals and governments share their perceptions of specific products and how well these tools have helped to reduce their vulnerability. Consulting with intended beneficiaries will be particularly important under Topic 2 (Informing implementation and support). The work program should consider beneficiaries' perceived risks, existing coping mechanisms, demand for products like micro- or macro-insurance, and need for training on topics like risk reduction and financial literacy.

A significant amount of program implementation will ultimately happen at the national and local levels, with the participation of governments, NGOs, and private sector companies; the work program should encourage the use of demand studies and stakeholder consultations to ensure broad buy-in and maximize desired impact. Furthermore, as insurers develop risk models for these new locations, there will be opportunities for coordinated public-private efforts to develop data sources and risk models, and a need for transparency in pricing. Transparency can help increase uptake of insurance products by engendering trust, and will also increase awareness of the climate risks present in these communities.