SUBMISSION BY THE MUNICH CLIMATE INSURANCE INITIATIVE (MCII)

Draft Article:

Climate Risk Management Mechanism including Insurance, in the context of Adaptation to Climate Change

For Party consideration in the Copenhagen negotiating text[1]

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Keywords: Risk management, Insurance**,** climate adaptation, climate change, risk, Bali Action plan, adaptation regime, risk reduction and prevention, risk transfer

PLEASE COMMENT: This submission has benefited from the feedback and ideas of many different experts and delegations. We welcome your comments.

[1] This submission from the Munich Climate Insurance Initiative (MCII) is part of its mission to develop insurance-related solutions to help manage the impacts of climate change. Joanne Linnerooth-Bayer, MCII executive board members Christoph Bals (with input from Sven Harmeling and Soenke Kreft), Peter Hoeppe, Koko Warner, Ian Burton, Armin Haas, Eugene Gurenko, and Thomas Loster designed this concept. The Munich Re Innovations team contributed their actuarial expertise. We also thank the numerous country delegates who have talked with us about their needs for and questions about adaptation and climate risk insurance. MCII was founded in response to the growing realization that insurance solutions can play a role in adaptation to climate change**,** as suggested in the Framework Convention and the Kyoto Protocol. With membership on the part of insurers, climate change and adaptation experts, NGOs and policy researchers, MCII provides a forum for insurance-related expertise applied to climate change issues.

Abstract

At COP 14 in Poznan and again at the April 2009 Climate Negotiations in Bonn, the adaptation agenda highlighted risk management including insurance-related mechanisms.[2,3] Parties expressed interest in the potential of insurance, and areas of complementarity emerged in proposals tabled by Parties and MCII, some of which were reflected in the Assembly Text and subsequent Focus Paper provided by the Chair of the AWG-LCA and the UNFCCC.[4] This submission offers a draft article for a Climate Risk Management Mechanism (CRMM) as part of a wider adaptation strategy.

The proposal includes two complementary pillars -- prevention and insurance. Together these two pillars tackle acute climate-related risks at low, medium and high levels. Additionally, MCII is currently developing ideas about how longer-term chronic risks (such as sea level rise, desertification, and other such risks) could be addressed through a risk- and financial risk management perspective. More details will be discussed in the June and subsequent climate talks.

The CRMM would be paid for by the international community, based on the principle of common but differentiated responsibility and in accordance with the decisions of the Parties, and sound risk management principles. We would therefore expect that the costs for most vulnerable countries that have not contributed to climate change would be borne totally or nearly totally by developed nations. This structure would (1) meet the principles set out by the UNFCCC for financing and disbursing adaptation (2) provide assistance to the most vulnerable, and (3) include private market participation for its capacity and expertise in risk management and insurance.

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[2] See, for example, the media article "Climate risk insurance the buzz in Poznan," by the IRIN humanitarian news and analysis, UN Office for the Coordination of Humanitarian Affairs referred http://www.irinnews.org/Report.aspx?ReportId=81947.

[3] UNFCCC. (2008) Mechanisms to manage financial risks from direct impacts of climate change in developing countries. UNFCCC Technical Paper. FCCC/TP/2008/9. 21 November 2008.

[4] Numerous proposals have been put forward mentioning insurance, most recently by Barbados and the Cook Islands on behalf of the 40+ countries of the Alliance of Small Island States (AOSIS), Switzerland, Mexico, some countries of the European Union and further ideas from Bangladesh (for the LDCs), China, India, Argentina, the Philippines, Malaysia, Saudi Arabia and other countries, and from Observers the Munich Climate Insurance Initiative (MCII), CAN, and a few others.

Draft Article: Climate Risk Management Mechanism

§1. Definition

A Climate Risk Management Mechanism is hereby defined.

§2. Purpose

The purpose of the Climate Risk Management Mechanism is to assist developing countries, especially those particularly vulnerable [or actors in these countries], in adapting to climate change by reducing climate-related risks (including in the form of flood, droughts and other extreme weather events, and their impacts) and transferring these risks where necessary through financial mechanisms, in accordance with their adaptation strategy.

§3. Structure

Under the Climate Risk Management Mechanism, the following [programs of action] shall be established:

In the context of national adaptation strategies and plans [including, where applicable, National Adaptation Programs of Action, national disaster risk reduction strategies]

(a) Prevention measures to reduce climate-related risks, including economic risks, [to human and economic well-being];
(b) A Climate Insurance Assistance Facility (CIAF) to provide technical support and financial assistance to enable countries to access regional private and public-private insurance systems for middle layers of acute climate-related risks.[5]

Additional international support for developing countries is provided by

(c) A Climate Insurance Pool (CIP) to absorb a proportion of high layers of acute climate related risks;
(d) A Chronic Risk Management Facility (CRMF) to plan for and absorb a proportion of chronic climate-related risks (e.g. sea level rise, desertification, etc.).[6,7]

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[5] The CIAF can provide support by directly capitalizing insurance programs or non-insurance based safety nets; or, alternatively, brokering pooling and reinsurance arrangements. A main advantage of providing support at a multi-national scale is economies of scale in developing an expert core to assist countries in their efforts to build insurance systems. For this reason, some elements of the CIAF require addressing at the international level.

[6] MCII is currently developing its ideas about a mechanism to address these chronic climate-related risks. We aim to provide more detail in June.

Explanatory Note: Developed country Parties support and facilitate cooperation in adaptation to the impacts of climate change, especially for the most vulnerable countries.[8]

Particular vulnerable developing country Parties benefit from additional prevention and risk reduction activities. They also benefit from agreed-upon coverage for high-level losses through a Climate Insurance Pool with premiums paid fully by developed countries through the financial mechanism of the future climate change regime and from assistance for risk-pooling mechanisms that cover residual middle-layer risks (CIAF).

Parties may use the mechanism to contribute to compliance with their common but differentiated responsibilities to assist the developing country Parties that are particularly vulnerable to the adverse effects of climate change in meeting costs of adaptation to those adverse effects.[9] *The costs of the proposed elements will be borne on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.*[10]

§4. Guiding Principles

Participation of a Party in the Climate Risk Management Mechanism shall be based on the following eligibility criteria:

(a) Developing country Parties particularly vulnerable to climate change as designated by *a technical panel under the authority of the COP* taking into account [guidance/advice of] inter alia [a board of the adaptation funding mechanism[11], the Nairobi Work Programme on Impacts, Adaptation and Vulnerability, and scientific information provided by the IPCC]

(b) Voluntary participation approved by such Party,

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[7] The polluter pays principle and the principle of common but differentiated roles and responsibilities and respective capabilities guide the elements of MCII´s proposed Climate Risk Management Mechanism, including prevention, insurance, and chronic risk management: Those countries which have contributed most to anthropogenic climate change help pay for financial mechanisms such as prevention, insurance, and chronic climate risk management (polluter pays), while those vulnerable countries wishing to participate in such financial mechanisms engage in effective prevention and risk reduction (for acute climate-related risks), and in longer-term adaptation planning (for chronic climate-related risks)

[8] UNFCCC, Art. 4.1.e

[9] UNFCCC, Art. 4.4

[10] UNFCC, Art. 3.1

[11] It would be useful to explore whether provisions related to the Adaptation Fund (AF) established under the Kyoto Protocol could be adjusted in a way that the AF would be able to support the activities under this article and be funded by all developed countries (not only Kyoto Parties). This would help avoid setting up two separate funds for adaptation.

(c) Adoption by such Party of an internationally financed plan of action to reduce climate related risks, which should align with, or be an element of, a national adaptation strategy ; and
(d) A commitment by such Party to secure the proper management of funds disbursed to them;

§5. Governance

The Climate Risk Management Mechanism shall be subject to the authority and guidance of the Conference of the Parties [serving as the meeting of the Parties to this Protocol] and be supervised by an executive board of the relevant adaptation funding window.

§6. Modalities governing activities

The Conference of the Parties [serving as the meeting of the Parties to the Protocol] will elaborate modalities and procedures with the objective of ensuring transparency, efficiency and accountability through independent auditing and verification of the measures undertaken pursuant to the Climate Risk Management Mechanism.

§7. Resources for the mechanism

The Conference of the Parties [serving as the meeting of the Parties to the Protocol] shall elaborate a funding arrangement based on the principle of common but differentiated responsibilities and respective capabilities, to ensure funding for those countries designated as particularly vulnerable to the effects of climate change.

The funding shall be new and additional, sustainable and predictable, and adequate to *cover full costs* of the measures described in paragraph 3(a), paragraph 3(b, c, d) and of other adaptation needs described in paragraph x [adaptation measures other than risk management in the narrow sense].

Explanatory Note: The provision requires a funding mechanism which must secure financing that is sufficient to pay for the agreed activities of climate risk management measures (prevention, insurance, and chronic risk management measures). The beneficiary countries will not pay for any of the described activities. Specifically, the full premium will be paid by the financial mechanism of the future climate change regime for pooled insurance purchased under the CIP and CIAF, and could fund a Chronic Risk Management Facility. The activities that vulnerable countries take to prevent and reduce climate-related risks will be fully financed through support for national adaptation strategies and action plans granted via the adaptation funding mechanism. The CIAF enables private financing for insurance and investment in insured activities.

§8. Participation

Participation under the Climate Risk Management Mechanism, including activities mentioned in paragraph 3 above and in the pricing and provision of risk management instruments, may involve public and/or private entities.

Executive Summary: MCII Proposal for Climate Risk Management including Prevention and Insurance[12]

Losses from climate-related natural hazards are rising, averaging US$100 billion per annum in the last decade alone. A suite of financial instruments, including insurance, has emerged as an opportunity for developing countries in their concurrent efforts to reduce poverty and adapt to climate change. Insurance tools provide financial security against droughts, floods, tropical cyclones and other forms of weather variability and extremes. Yet, insurance alone will not address all adaptation challenges that arise with increasing climate risks, like desertification or sea level rise. It can, however, be a strong complementary mechanism in a wider adaptation framework.

The **Bali Action Plan** (BAP) calls for "consideration of risk sharing and transfer mechanisms, such as insurance" to address loss and damage in developing countries particularly vulnerable to climate change. For the **inclusion of insurance instruments in the adaptation regime**, the potential role of risk-pooling and risk-transfer systems must be firmly established.

In helping to meet this challenge, the Munich Climate Insurance Initiative (MCII) proposes a Climate Risk Management Mechanism that would include insurance instruments for adapting to climate change in a post-2012 agreement.

This mechanism would

(1) follow the principles set out by the UNFCCC for **financing and disbursing adaptation funds**
(2) provide **assistance to the most vulnerable**, and
(3) **include private market** participation.

This mechanism can play a part in a wider adaptation strategy to help Parties address the negative effects of climate change.

In the MCII submission, risk management includes two complementary pillars -- prevention and insurance. Together these two pillars tackle risk at low, medium and high levels. Additionally, MCII is currently developing ideas about how longer-term chronic risks (such as sea level rise, desertification, and other such acute climate-related risks could be addressed through a risk- and financial risk management perspective. More details will be discussed in the June and subsequent climate talks based on the comments of Parties. The essential elements of the MCII proposal are presented below.

The first part of the mechanism is a **Prevention Pillar** emphasizing risk reduction. The second part of the mechanism is an **Insurance Pillar** with two tiers. The first tier of the Insurance Pillar takes the form of a Climate Insurance Pool (CIP) that would absorb a pre-defined proportion of high-level risks of disaster losses, particularly in

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[12] The MCII submissions for the Accra and Poznan climate talks can be found at www.climate-insurance.org.

vulnerable countries, at no cost to the beneficiary countries. The second tier of the Insurance Pillar, a Climate Insurance Assistance Facility (CIAF), would address middle-level risk and facilitate public safety nets and public-private insurance solutions.

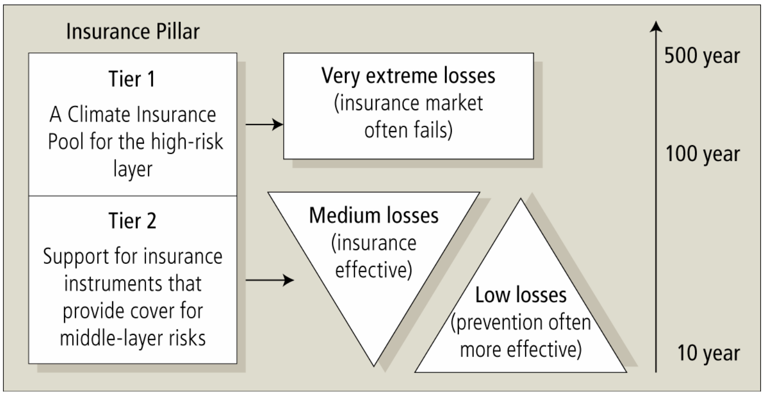
Prevention Pillar

Preventing or minimizing losses is the bedrock of effective risk management. Insurance activities must be viewed as part of a climate risk management strategy that includes, first and foremost, activities that prevent human and economic losses from climate variability and extremes. The proposed Prevention Pillar links carefully designed insurance instruments to risk reduction efforts. Progress in prevention helps countries qualify for participation in the Insurance Pillar. The estimated cost is 3 billion dollars per year, but does depend on the the number of countries involved and the scope of prevention and risk reduction activities.

Insurance Pillar

In spite of best efforts to prevent and reduce risk, countries will face rising medium and high level climate-related risks. MCII proposes an **Insurance Pillar** with two tiers to deal with these. The figure below illustrates the two tiers of the proposed insurance pillar.

A two-tiered insurance pillar as part of a Climate Risk Management Mechanism



Climate Insurance Pool

Even with the best prevention and risk reduction activities, the increasing number and intensity of major weather catastrophes will affect countries. To address these, a Climate Insurance Pool will absorb a pre-defined proportion of high-level risks of disaster losses, particularly in vulnerable countries, at no cost to the beneficiary countries. The Climate Insurance Pool will be reinsured against extreme loss years in the global reinsurance market. The Climate Insurance Pool would require financial resources of approximately between USD 3.2 billion and USD 5.1 billion, in case of an assumption of a 30% attribution of global warming to weather related losses and depending on annual indemnification limits set at US$ 10 billion (15 year return period) or US$ 50 billion (100 year return period). The key features of the Climate Insurance Pool include:

- **CIP Premium Paying Entities**: The CIP receives a fixed annual allocation from a multilateral adaptation fund based on the expected climate change related losses. This fund will fully cover the premium payments (some recent proposals are based on criteria such as capability ("ability to pay") and responsibility ("polluter pays").
- **Beneficiaries of CIP Coverage**: Countries that participate in the insurance program that fall victim to rare but extreme climate-related disasters that go beyond their capacity to respond and recover;
- **Risk Carrier:** CIP operations will be managed by a dedicated professional insurance team that will be responsible for risk pricing, loss evaluation and indemnity payments, as well as placing reinsurance.

Negotiators considering the creation of a Climate Insurance Pool might ask: Why invest adaptation funds in a CIP when we could, instead, allocate these same funds to national adaptation programs that include an insurance mechanism? One answer: Disbursing a portion of climate adaptation funds to the CIP pools the risks of extraordinary losses, costing far less money or requiring far less reinsurance than if each country created its own fund or made individual insurance arrangements.[13]

Climate Insurance Assistance Facility

At **medium levels of risk** – events such as a 1 in 50 year event –a Climate Insurance Assistance Facility, will incentivise the **private sector** to engage in insurance and public-private solutions. Tier Climate Insurance Assistance Facility addresses middle-layer risks to **enable public/private insurance systems for vulnerable communities**. Many examples of programs for these middle-layer risks exist: micro-insurance for agriculture (like in Malawi), re-insurance for aid agencies (as in Ethiopia), and pooled solutions for countries in certain regions (like the

[13] The CIP will utilize market based pricing of its cover and will transfer risk to private risk carriers. This helps avoid distorting private capital markets or catastrophe risk reinsurance markets.

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Caribbean). Each of these initiatives was made possible with outside technical and financial support. The Climate Insurance Assistance Facility could directly **enable the poor to participate**, if deemed appropriate, through targeted support and minimally-distorting subsidies that would not crowd out private incentives for wider market segments. Regional centers can help build the market capacity for different kind of safety nets as well as for new markets for climate related insurance including micro-insurance. The estimated cost for a Climate Insurance Assistance Facility is 2 billion dollars per year.

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