SUBMISSION BY THE MUNICH CLIMATE INSURANCE INITIATIVE (MCII)

Draft Article for Risk Reduction and Insurance Mechanisms in the context of Adaptation to Climate Change

For Party consideration in the Copenhagen negotiating text[1]

5th MCII submission (Version 5.0)

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Thirtieth sessions of the UNFCCC Convention subsidiary bodies - SBSTA and SBI, eighth session of the AWG-KP and sixth session of the AWG-LCA

Keywords: Risk management, Insurance**,** climate adaptation, climate change, risk, Bali Action plan, post-2012 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), Peter Hoeppe, Joanne Linnerooth-Bayer, 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 serves the purpose of providing Parties ideas about how risk reduction and insurance could appear in a negotiating text, as Parties move towards a climate agreement in Copenhagen in December 2009.

MCII proposes a climate risk management module with two pillars (prevention and insurance) as part of a wider adaptation strategy. In this submission, the draft article for a climate risk management module includes two complementary pillars -- prevention and insurance. Together these two pillars tackle risk at low, medium and high levels.

The **Prevention Pillar** puts reduction of human and economic losses as its top priority. The **Insurance Pillar** has two tiers. The first tier is a *Climate Insurance Pool* that would absorb a pre-defined proportion of high-level risks of disaster losses in vulnerable non-Annex 1 countries. The second tier, a *Climate Insurance Assistance Facility,* would provide technical support and other forms of assistance to enable public-private and private insurance systems (e.g. micro insurance) that provide cover for the middle layers of risk in these countries.

The module would be paid for by the international community. The payment of the Prevention and the Insurance Pillar will be based on the principles of responsibility and respective capability under whatever formula is agreed on—Parties have suggested alternatives— but the costs would be borne totally or mainly by developed nations. This structure would (1) meet 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.

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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.

Acknowledgements

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Contents

Part One

Draft Article: Prevention Pillar and Insurance Pillar

§1. Definition

A climate risk management module to facilitate adaptation is one part of a larger adaptation strategy. Two pillars of a climate risk management module are hereby defined:

(a) A **prevention pillar (PP)** and
(b) An **insurance pillar (IP)**. The insurance pillar has two parts:
  i. A *Climate Insurance Pool* (CIP) for high level risks and
  ii. A *Climate Insurance Assistance Facility (CIAF)* for medium level risk.

§2. Purpose

The purpose of the PP and IP is to assist developing country Parties particularly vulnerable to climate change as defined in [Copenhagen] in adapting to climate change by reducing climate-related risks (in the form of flood, droughts and other weather extremes) and transferring them where necessary through financial mechanisms.

The PP puts reduction of human and economic losses as its top priority. The first tier of the IP is a global *Climate Insurance Pool* (CIP), which absorbs a pre-defined proportion of high-level, climate-related risks. The second tier of the IP is a *Climate Insurance Assistance Facility* (CIAF). The CIAF provides technical support and other forms of assistance to enable regional private and public-private insurance systems for middle layers of climate-related risks.

§3. Benefits of participation

Under the PP and IP

(a) Parties support and facilitate cooperation in adaptation to the impacts of climate change, especially for the most vulnerable countries.[5]
(b) Particular vulnerable developing country Parties benefit from additional prevention and risk reduction activities (PP). They also benefit from agreed-upon coverage for high-level losses through a *Climate Insurance Pool* with premiums paid fully from the financial mechanism of the future climate change regime and from assistance for risk-pooling mechanisms that cover residual middle-layer risks (CIAF).
(c) Parties may use the PP and IP 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.[6] The costs of the two pillars will be borne on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.[7]

§4. Principles guiding the functioning of the PP and IP

Participation in the climate risk insurance pillar shall be based on the principles set out by UNFCCC and KP for financing and disbursing adaptation funds and including the following eligibility criteria:

(a) Developing country Parties particularly vulnerable to climate change as defined in [Copenhagen] are eligible to participate in the PP.
(b) Voluntary participation approved by each Party involved, including a commitment by participating Parties to prevent and reduce risks related to climate change and to secure the proper management of IP funds.
(c) An plan of action to reduce climate related risks, (for example as part of a National Adaptation Plan according to by COP-agreed guidelines)
(d) Apply private and public-private insurance solutions that provide reinsurance cover for high-layer climate-related risks and support dissemination of primary insurance cover for middle layers of climate-related risks.

§5. Governance

The overall performance of the IP shall be subject to the authority and guidance of the COP [COP-MOP] and be supervised by an executive board of the PP and IP. The risk pricing is done independently.

§6. Modalities governing activities

The COP/[COPMOP] will establish the modalities and procedures with the objective of ensuring transparency, efficiency and accountability through independent auditing and verification of

(a) Prevention and climate risk management activities and the support of these activities

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[5] UNFCCC, Art. 4.1.e

[6] UNFCCC, Art. 4.4

[7] UNFCC, Art. 3.1

(b) Assistance for middle-layer risk through a *Climate Insurance Assistance Facility*.
(c) Risk transfer activities through a *Climate Insurance Pool* for high-level risks;

Insurance-related services may be provided by operational entities to be designated by the Conference of the Parties.

§7. Resources for the mechanism

A funding mechanism based on the principle of common but differentiated responsibilities and respective capabilities shall finance the Prevention Pillar and the global *Climate Insurance Pool* and defined activities of the *Climate Insurance Assistance Facility* within the Insurance Pillar. It must be secured that the financing is sufficient to pay for the agreed activities within the prevention pillar and the insurance pillar for participating Parties. The beneficiary countries will not pay for any of the described activities of the IP and PP. Specifically, for Tier 1 the full premium will be paid by the financial mechanism of the future climate change regime. The activities that vulnerable countries take for prevention and building public private partnerships for the middle layer of risk will be supported by the PP and by tier 2 of the IP, respectively, and this support will be fully financed by an adaptation fund. By this the CIAF enables private financing for insurance and investment in insured activities.

§8. Participation

Participation under PP and IP, including activities mentioned under par. 3, may involve public, public-private and/or private entities. The insurance activities are subject to whatever guidance by the executive board of the IP.

PART Two

Executive Summary: MCII Proposal for Climate Risk Management including Prevention and Insurance[8]

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**

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

instruments in the post-2012 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 module that would include insurance instruments for adapting to climate change in a post-2012 agreement.

This module would

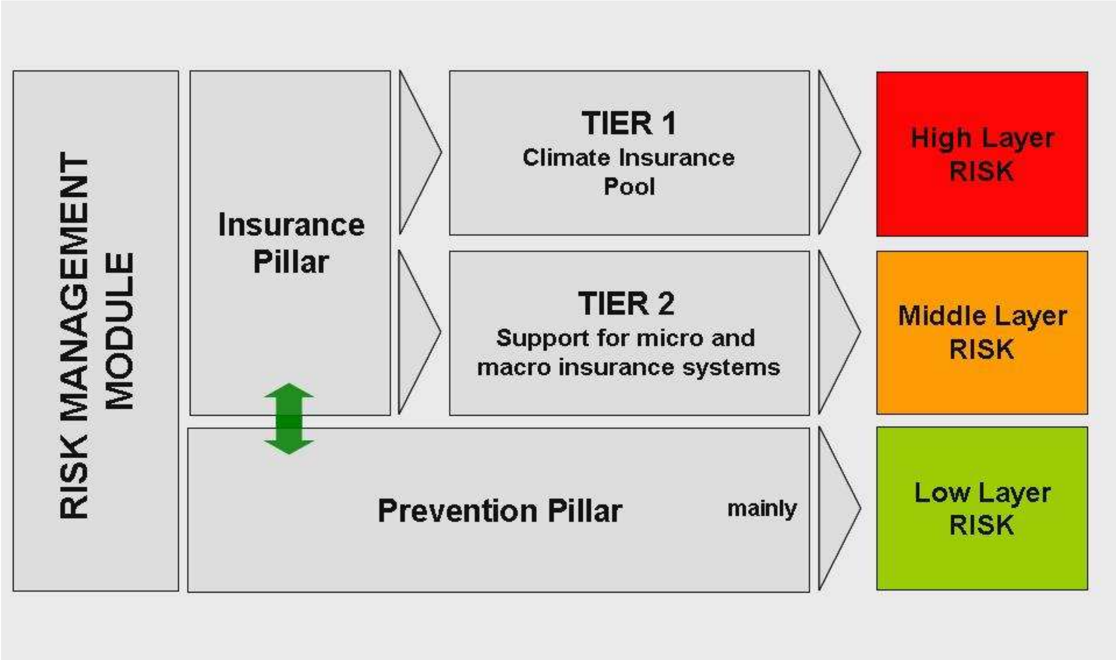
(1) follow the principles set out by the UNFCCC for **financing and disbursing adaptation funds**
(2) provide **assistance to the most vulnerable**, and
(3) **include private market** participation.

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

Climate risk management module within post-2012 adaptation strategy

The figure below illustrates the two proposed pillars of a climate risk management module: a prevention pillar and an insurance pillar.

MCII Proposal: Climate Risk Management Module with two Pillars



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.

The first part of the module is a **Prevention Pillar** emphasizing risk reduction. The second part of the module 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 vulnerable countries, at no cost to the beneficiary countries. The second tier of the Insurance Pillar, a *Climate Insurance Assistance facility*, would address middle-level risk and facilitate public safety nets and public-private insurance solutions.

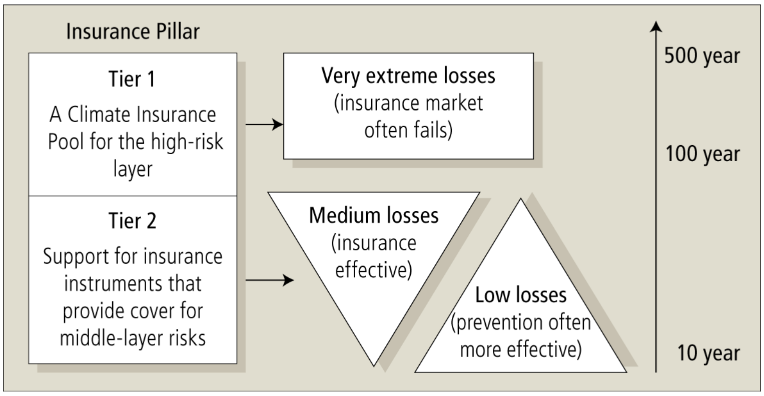
Prevention Pillar

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 module



Climate Insurance Pool (Tier 1)

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 Tier 1 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 module? 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.[9]

Climate Insurance Assistance Facility (Tier 2)

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 Caribbean). Each of these initiatives was made possible with outside technical and financial support. Tier 2 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.

[9] 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.