



Workshop Report

Climate Risk Insurance: Opportunities, challenges and framework conditions

4 July 2017

EUREF Campus, Berlin



Hosted at:



UNITED NATIONS
UNIVERSITY

UNU-EHS

Institute for Environment
and Human Security

Table of contents

- 1. Introduction 3
- 2. Summary of presentations..... 3
- 3. Workshop outcomes 10
 - 3.1 Bottomline 10
 - 3.2 Open questions 11
 - 3.3 Exchange and collaboration 12
 - 3.4. Next steps..... 12
- Annex 1: Agenda 13
- Annex 2: List of participants..... 15

1. Introduction

On 4th July 2017 at EUREF Campus, Berlin, the Munich Climate Insurance Initiative (MCII) held a workshop on the topic of “Climate Risk Insurance – Opportunities, Challenges and Framework Conditions”. The event aimed at creating a space for strategic exchange and networking as well as providing technical information on the topic of climate risk insurance (CRI). The workshop brought together key stakeholders (civil society, research and private sector) in the context of the InsuResilience Initiative, who work on/who are interested in the topic of CRI. The event particularly aimed at bringing together civil society and research stakeholders from the UK and Germany as driving forces of the current debate around CRI.

The following workshop reports summarizes the inputs and discussions during the workshop and documents the workshop outcomes. The discussions were conducted under Chatham House Rule, the documentation of the outcomes reflects MCII’s understanding of the conversation.

2. Summary of presentations

The workshop consisted of three thematic sessions with presentations from panellist followed by a question, answer round and an open debate. Session 1 aimed at setting the stage, introducing the need for climate risk management for the most vulnerable and outlining possibilities and limitations of CRT in protecting most vulnerable populations. Session 2 was designed to further deep dive into the basics of insurance. The insurance value chain, different insurance instruments, methods of premium calculation and pre-conditions for CRI were outlined. The role of CRI in a comprehensive risk management framework was illustrated and success factors and challenges for CRI in developing countries were specified. Session 3 targeted to discuss the opportunities, challenges and framework conditions regarding CRI for most vulnerable populations. During this session, ways of premium support to make insurance accessible for the most vulnerable were outlined and the Africa Risk Capacity as a promising sovereign insurance scheme under debate was discussed in detail.

Following, the presentations during the sessions are summarized along their key messages.

Session 1: Setting the stage. Climate risk insurance – the why, how and what?

The need for climate risk management for the most vulnerable

Peter Hoeppe, Head of Geo Risk Research, Munich Re

Peter Hoeppe’s presentation provided evidence on how natural disasters are increasing in number and intensity and how people in poor countries are especially affected. The presentation’s key points are summarized below:

- Data from the Munich Re NatCat Service clearly indicate an increase in the number of relevant loss events per year from approximately 200 in 1986 to approximately 700 in 2016. While there has been no change in trend on occurrence of geophysical events, the data indicates a steep rise in the weather related events. Looking at the percentage distribution of the events and their impact according to income groups, it becomes clear that low and lower middle income economies are significantly hit by the impacts. They experienced 46% of related loss events, 27% of overall losses

and 83% of fatalities occurred in these countries. However, Peter Hoeppe showed that only 3% of the losses in developing countries were insured between 1980 and 2016.

- Benefits of insurance against weather related losses were highlighted are as follows: Insurance can provide a buffer against climate change risks by swiftly providing financial resources necessary to bounce back after extreme weather events. On the micro level, quick payouts can prevent business interruption during major storms. On the macro level governments can bridge liquidity gaps after extreme weather events to speed up recovery efforts. Peter Hoeppe also indicated that insurance cover significantly helps economic recovery following a natural catastrophe. Academic studies show that a higher level of insurance cover is accompanied by significantly better economic performance following a catastrophe. And depending on the type of catastrophe and the level of economic development, insurance cover can even offset the negative indirect effects of natural catastrophes on national economies.
- Further research needs to be carried out on how insurance schemes can support risk reduction measures, how they can increase resilience of vulnerable people and further stabilize national economies in poor countries after weather shock.
- Munich Re has built up a wealth of expertise on disaster and climate risk management over decades and is happy to share this.

Possibilities and limitations of climate risk insurance in protecting most vulnerable populations

Sabine Minninger, Policy Advisor on Climate Change, Bread for the World

Presenter Sabine Minninger presented key findings and key messages from a recent Bread for the World analysis on the topic of CRI for the most vulnerable. The study shows how poor people are most at risk from climate impacts and that so far they take the risk by and large alone, which the presenter highlighted as a breach of climate justice. It was highlighted that comprehensive climate risk management including CRI can help to close the risk gap and that InsuResilience is a positive step into this direction. To protect vulnerable poor populations against climate induced loss and damage, InsuResilience should operationalize the MCII Pro Poor Principles, including the provision of premium support. For the further implementation of InsuResilience and other CRI efforts, the following recommendations were given:

- Build insurance literacy, capacity and transparency to bridge the lack of experience which results in misinterpretation of opportunities and limitations of insurance products.
- Insurance needs to be embedded into a broad climate risk management strategy and be aligned with climate mitigation and resilience measures, social safety nets and humanitarian response.
- Insurance product should be focused on the needs of the most vulnerable and the MCII Pro-Poor Principles should be implemented. Insurance products that endanger food security should not be supported.
- The formation of regional multi-risk pools, ideally up to the global level, reduces the cost of risk protection and should be encouraged through incentives. Best practices should be documented and best-in-class approaches used to define standards so as to reduce operational costs.
- Risk financing should gradually implement the principle of solidarity and the polluter pays principle. Innovation should be promoted by supporting and learning from pilot projects.
- Ownership of vulnerable states should be promoted and civil society participation should be ensured. To create trust through financial security, donors should commit to long term support for InsuResilience.

- For public-private partnerships, the basic principles of climate justice and fairness as well as a focus on the poor will need to be followed. Moreover, protection gaps that cannot be met by CRI e.g. slow sea level increase, need to be addressed.

Session 2: Global insurance markets and climate change – What can climate risk insurance offer? What are its limitations?

Basics on insurance & reinsurance (value chain, instruments, pre-conditions, & premium calculation)

Simone Ruiz-Vergote, Managing Director of Allianz Climate Solutions GmbH

In her presentation, Simone Ruiz-Vergote covered the basic purpose of insurance, the main functioning of insurance tools and their framework conditions. The presentation's key points are summarized below:

- Insurance coverage is a contract, binding a party (the insurer) to indemnify another party (the insured) against a specific loss from an uncertain event in return for a premium paid thereby providing protection from specific, uncertain events.
- Reinsurance on the other hand works as insurance of the insurer. It provides protection against fluctuations, catastrophe and accumulation risks, improves the insurer's solvency margin, increases underwriting capacity and supports the underwriting of new, unfamiliar risks. Broadly, there are two possible ways in which this can be done. In return for taking over part of the risk and paying a share of any claims, the reinsurer receives the same share of the premium paid by the insured to the direct insurer. Alternatively, instead of transferring a portion of the risk, the direct insurer may pay the reinsurer a reinsurance premium in return for a promise by the reinsurer to pay any claims above a certain amount. If the reinsurer defaults, the primary insurer is still liable to policy holders. Hence, security is an important consideration in the choice of the reinsurer.
- How insurers go about insuring extreme weather events: In a first step, they define/ assess types of risk (e.g. Flood depth, wind speed, peak ground acceleration etc.). In a second step, they assess the vulnerability (Calculate damage hazard by calculating the probability and severity of risk). In a third step, they calculate the loss (Financial module, calculate loss metrics).
- When an insurance company calculates its risk premium – that is, the premium that should be just sufficient to cover expected losses – two factors are of fundamental importance: the severity of expected losses and their frequency of occurrence. This risk premium will then be loaded with various safety and profit margins and an amount to cover expenses.
- Four things are to be considered to close the protection gap. These include the ease of distribution, the pay out in case of a claim, the incentive for prevention and the financial sustainability of the product.

The role of insurance in comprehensive climate risk management

Swenja Surminski, Senior Research Fellow at the Grantham Research Institute on Climate Change and the Environment, part of the London School of Economics

The presentation showcased the research done by presenter Swenja Surminski on the role of CRI in comprehensive climate risk management. The presentation's key points are summarized below:

- Insurance needs to be integrated into comprehensive climate risk management. Integrated climate risk management is the process of reducing risks and managing residual risks and uncertainties. Financial risk management measures are part of the response and include risk pooling and transfer,

catastrophe risk insurance, contingency finance, climate themed bonds, catastrophe bonds and other measures.

- Tools for deciding if insurance is the right tool are risk layering and sequencing. The presenter remarked that there is a risk acceptance threshold, below which risk should be reduced, and above which there is need for risk transfer.
- In selecting the appropriate risk management measure, there are many measures to consider, including: Cost effectiveness, the enabling environment, a monitoring process, the needs of the recipients, the aims of the donors, crowding-out or kick-starting other initiatives, fairness and equitability, as well as co-benefits and the question if insurance can be a catalyst for adaptation.
- In identifying the right sequence for installing comprehensive risk management schemes, the following steps should be considered: 1. Support collection of better climate risk and weather information; 2. Helping governments develop integrated risk management strategies; 3. Engage in developing enabling environment through technical assistance, education initiatives, 4. Providing financing to establish insurance schemes.
- Insurance can encourage 'positive risk taking' that is fundamental to any development process: It can make investments less risky and therefore foster innovation and growth. However, this may also lead to an increased vulnerability to exceptional events, if resilience measures encourage investment in at-risk areas. This points to a potential flip-side of using insurance in support of climate resilient development: where insurance can create a false sense of security, or encourage development in high-risk areas.
- Research has been conducted on the available CRI schemes, their categorization by region and type. In research it has been found that for 63% CRI schemes there is no linkage to risk reduction and they just focus on risk transfer. 13% schemes have a direct linkage and 20% have an indirect linkage with risk reduction measures.

From micro insurance to climate risk insurance: new ways to transfer risk for the poor and vulnerable Thomas Loster, Chairman of Munich Re Foundation

Thomas Loster's presentation provided insights into success factors and framework conditions of micro insurance products for the poor. The presentation's key points are summarized below:

- Insurance is more than financial loss compensations. It can increase the risk transparency, put a price tag on risk, increase risk awareness and risk prevention and foster research and data on climate risks.
- Weather risk insurance is a relatively complex type of insurance, more complex than life or property insurance.
- The claim paradox depicts a difference in behaviour of beneficiaries in developed and developing countries. In developed countries, policy holders don't hope to be involved in an incident which would cause a payout while in developing countries policyholders hope to see a payout as soon as possible. This leads to the question: How can micro insurance be made beneficial even if the beneficiary doesn't get money?
- There are three Ts determining the success of micro insurance product: 1. Trust (Building trust of beneficiaries in the product and trust amongst all the stakeholders: beneficiaries, public sector, private sector) 2. Time (Insurance is a long term tool and needs years to stabilize). 3. Technique (Efficient design of the product and make it attractive for pro poor).

- Lessons learned from a street vendor project in Jakarta indicate that a key challenge for micro insurance products is the sales volume. Although the target group responded positively when asked if the product was needed, if they can afford it and if they would buy it, only a few actually bought the product when marketed.
- In designing and implementing micro-insurance products, a lot of time should be invested in analysing the market potential, including all stakeholders, getting index right, setting up a multiyear business, developing real blueprints, building trust and using technology adopted by target group.

Session 3: Opportunities, challenges and framework conditions regarding climate risk insurance for most vulnerable populations

The role of insurance for the most vulnerable: What are opportunities, challenges and necessary framework conditions?

Aaron Oxley, Executive Director, Results UK

Aaron Oxley's presentation highlighted key principles that need to be considered when targeting insurance products at most vulnerable people. The key points of the Results UK Pro-Poor Principles are summarized below:

- **Accessibility** - Effectively target and reach poor and vulnerable people. Finance for sustained public funding for targeted premium support. Embed a gender framework into CRI policy and programming.
- **High Impact** - Ensure the insurance mechanism builds resilience and reduces poverty, immediately and over time. Integrate insurance with essential livelihood activities. Incentivize risk reduction and preparedness
- **Enabling** - Strengthen policy and regulatory frameworks for insurance to protect unfamiliar consumers. Foster financial education to allow clients to judge what products will benefit them and be aware of risk. Build capacity through the system in areas such as: collection and auditing of weather data, contingency planning, risk modelling, premium pricing, claims processing etc. Build expertise and infrastructure in weather stations, climate models, yield data, remote sensing data etc. Invest in open data system.
- **Transparency, accountable and participation** - Promote inclusive and meaningful participation of affected communities. Require rigorous transparency and accountability in partnership with the private sector. Check that insurance is the most appropriate option. It is not appropriate for very frequent, slow onset events and social/ cultural loss.

Addressing the affordability challenge: What are ways of premium support to make insurance accessible for the most vulnerable?

John Ward, Managing Director, Vivid Economics

The presentation by John Ward provided insights into different types of premium support for insurance products and their effectiveness. The presentation's key points are summarized below:

- Decisions on whether and how to provide premium support should only be taken after decisions about whether insurance is an appropriate tool in the specific context.
- Evidence suggests that reducing premiums increases demand: at level of households and firms, clear evidence exists that lower premium rates will lead to increased use of insurance - as indicated by several agricultural insurance schemes that have seen significant increases in demand after the

introduction of generous subsidies. For sovereign schemes, it is more difficult to identify willingness to pay/demand but again, some evidence exists for the expected relationship. At least 48 (out of 133) disaster insurance schemes are supported by subsidies.

- There are a range of ways to reduce premiums: On the demand side, premium subsidies are given to insured countries and reduce the effective premium level they face. But also risk reduction measures can be a way to reduce the risk related elements of premium. On the supply side, operational subsidies typically only address a fraction of the total premium level. Technical assistance can address modelling costs (relatively small) but also potentially affect scheme design and risk understanding. Moreover, donor capital can reduce cost of capital to the scheme, and also reduce reinsurance cost depending on how capital is exposed to the risk and risk layer financing (through reinsurance premium subsidies, contingent loans, or other alternatives) can reduce the cost of reinsurance and can also reduce capital requirements.
- In many circumstances, direct premium subsidies will be more effective at immediately reducing the premium paid by the insured than other approaches. There are moral hazard concerns from direct premium subsidies but these are substantially less for parametric schemes, and can also be reduced by linking the subsidy to undertaking risk reduction measures and by making the subsidy a fixed percentage. However, it is difficult to successfully reduce/eliminate direct premium subsidies. Providing capital may be more effective at ensuring sustainability.
- Donor capitalisation will be less effective at reducing premiums but can be an effective way of getting schemes off the ground.
- Technical assistance and risk reduction mechanisms have benefits well-beyond their effect on premiums. Technical assistance provides expertise to, for example, improve modelling or product design and brokerage and can lead to more sustainable products while additional expertise in, for example, brokerage can help reduce premia costs by far more than the amount of the assistance designed well, can help deliver long-term sustainability. Risk reduction measures on the other hand are funding and technical assistance to reduce risk e.g. implementation and enforcement of improved building codes, or improved urban drainage systems to reduce flooding risk. The immediate impact on premia levels will be limited but the measures can bring them down in the medium term. They also play a crucial role in preventing moral hazard.

ARC – a promising sovereign insurance system under debate

Veronika Bertram-Hümmer, Economist, KfW

In her presentation, Veronika Bertram-Hümmer introduced the Africa Risk Capacity (ARC), its goals and approach as well as lessons learned and next steps for the sovereign insurance pool. The presentation's key points are summarized below:

- In 2012, 18 African states founded the ARC with the goal of ex-ante risk management to enable early response until humanitarian aid arrives. They wanted to create an African-owned and African-led disaster risk management initiative that supports climate change adaptation, food security, and poverty reduction. Until now, the humanitarian system works like a “begging bowl”: It is delayed, uncoordinated and insufficient for speedy disaster response.
- ARC's approach: African countries take insurance against drought after a compulsory risk and vulnerability analysis and contingency planning which needs to be approved by the ARC. The occurrence of drought is indicated by satellite rainfall index which triggers insurance payouts.

- KfW contributed EUR 72.2 million to ARC equity of ARC Ltd. and EUR 14 million grants to support the ARC group including product development.
- The benefits of ARC include implementation of early warning system, contingency planning and fast and reliable access to funding which enables early action and improves speed of disaster response in the critical time after an extreme weather event and until international aid arrives.
- Up to now, ARC had three insurance pools and in total, 8 countries bought ARC insurance coverage. In these three years, insurance payouts worth USD 34 million have been given to Mauritania, Niger, Senegal and Malawi. The payouts proved that ARC's approach works: The payments were used to enable food and fodder distribution and conditional cash transfers (~ 1.3 million people, 0.5 million livestock). Audit reports indicate scope for improvements: Institutional setting, coordination (national, international) both before and during the disaster response.
- Next steps for ARC include product improvements, e.g. covering additional risks and having a more attractive pricing. Moreover, linkages to international humanitarian system and cooperation with NGO (e.g. by ARC Replica) shall be strengthened.

Jonathan Reeves, Policy Adviser, Action Aid

In his presentation, Jonathan Reeves shared lessons learnt from Malawi's ARC experience. Key points are summarized below:

- In 2015, Malawi purchased a drought insurance policy for the 2015/16 agricultural season from ARC Insurance Company Ltd, for about USD 4.7 million. Malawi then experienced severe drought across almost all its districts, induced by a record El Niño, supercharged by climate change. In May 2016, the Government of Malawi, with UN agencies and NGOs, assessed 6.5 million people as requiring food assistance (later revised to 6.7 million). The estimated response cost was USD 395 million, with a funding gap of USD 304 million. However, no ARC pay-out was triggered, as ARC's model calculated that only 20,594 people had been affected by the drought. After a Malawian university showed that there had been an error in the ARC model regarding the type of maize assumed to have been planted, resulting in a change in the number of people affected, ARC made a payout of USD 8.1 million to Malawi – a decision made public on 15 November 2016.
- Honest learning is necessary: don't let ARC get away with "it was just wrong input data – model is fine". There is a need for more transparency, participation and perhaps use of simpler index/model or comparison of various models to trigger payouts.
- We need an evidence-based dialogue about CRI.
- We need transparency about policy objectives of development partners, decisions, modelling, use of money and limitations of particular mechanisms. Malawi's ARC experience highlights important role for the parliament and civil society.
- Climate risk finance schemes need to be bottom-up, empowering, participatory, and integrated (& synergistic) with agriculture, rural, social protection and other disaster risk reduction finance.
- Global and regional mechanisms and bodies must support national-level evidence-based, participatory dialogues to develop, implement, monitor and evaluate holistic, integrated climate and disaster resilience strategies. Is there a role for an adapted ARC here and should ARC only offer insurance for 1-in-7 or 1-in 10 year events and ensure countries have other mechanisms in place to deal with more regular losses before selling them this insurance?
- Value for money of resilience-building options need to be assessed against national objectives, including equity, and in national context.

- The sequencing of interventions is important (also regarding opportunity costs): The priority should be a transition to climate-resilient, sustainable agriculture, EWS and shock-responsive, adaptive social protection systems, which are what enables sovereign insurance to have the potential to be cost-effective. There is a need to figure out the right time for insurance.
- There is a need for equitable international financing model: Can we engineer a not-for-profit scheme, or only allow reinsurance companies who have divested from fossil fuels and invest sustainably to profit from climate risk of developing countries? Carbon majors levy? Bonds? Green bonds? Resilience bonds?

3. Workshop outcomes

The discussion during the workshop was structured along the following outcome categories:

1. **Bottomline** - Key points on CRI that most participants agreed on.
2. **Open questions** - Questions raised by participants regarding CRI as approach, as tool, its impacts and framework conditions.
3. **Exchange and Collaboration** – What are potential areas for exchange and collaboration between the participants on the topic of CRI.
4. **Next steps** – Way forward and concrete next steps to further the discussion.

The discussions were conducted under Chatham House Rule. The workshop documentation of the outcomes reflects MCII's understanding of the conversation. Below, the key messages discussed with all workshop participants are described.

3.1 Bottomline

This category summaries key points on CRI that most workshop participants agreed on. These points include:

- **The role of CRI:** Participants agreed that CRI is an important part of comprehensive climate risk management. In this sense, insurance is more than financial loss compensations. It can put a price tag on risk, increase the risk transparency, awareness and risk prevention. It can foster research and data on climate risks. However, the view was shared that that weather risk insurance is a relatively complex type of insurance, more complex than life or property insurance. Challenges particularly include the construction of valid and easy to understand models and indices as well as the expectation management with the insured.
- **A principles based approach:** CRI can be part of the response to the climate justice challenge. To design and implement insurance products that work for the most vulnerable, certain principles have to be in place. They include: affordability, accessibility, participation, transparency, accountability, sustainability and an enabling environment. The existing sets of principles (e.g. MCII's Pro-Poor Principles, Results UK Principles) provide a good starting point. However, these principles would need to be followed consistently during design and implementation of projects and provide the basis for Monitoring & Evaluation (M&E) Systems, e.g. as part of the indicators for InsuResilience's M&E System.
- **Solidarity in insurance:** Participants agreed that insurance schemes need a culture of solidarity and that the Africa Risk Capacity is a good example for unprecedented solidarity between African Countries.

- **Areas of improvement:** All participants highlighted the strong need for an evidence based approach to CRI. The view was shared that current evidence on the issue is weak, in particular regarding the cost-effectiveness of insurance products and their impacts on resilience of vulnerable households and countries. Moreover, better expectation management and significant efforts to increase the insurance literacy are needed. Additionally, the need for effective M&E of existing CRI products in order to learn from mistakes was stressed. CRI products are still relatively new on the market, cases like Malawi make clear that models are still premature and participation structures not fully developed.

3.2 Open questions

In the course of the workshop, participants raised open questions regarding CRI as approach, as tool, its impacts and framework conditions. The key questions are summarized below:

- **Evidence on CRI:** How cost-effective are CRI products? What is the impact of CRI schemes on the resilience of their target group? To what extent can beneficiaries reduce the premium price through risk reduction measures? What are risks for wrong incentives by CRI schemes? Are bundled projects an unsustainable practice (some participants criticized bundled products in the agricultural sector, e.g. ACRE)? What factors determine the success and the failure of CRI products? Under which framework conditions does CRI work for catastrophes that persist longer term, e.g. droughts? Are the most vulnerable interested in buying CRI products? What is the scientific evidence for the effectiveness of CRI products in developed countries?
- **Index insurance, models and triggers:** How to understand and control the quality of models with index insurance (e.g. the quality of African Risk View)? How to design and communicate easy to understand triggers? How to manage the basis risk of index insurance products?
- **The climate component:** How to design CRI products in a climate just manner? How to design public-private partnerships so that they increase climate justice? What are possibilities to distinguish between the natural occurrence of weather extremes and the climate component, intensifying these extreme weather events (Climate vs. weather risk variability)? How to communicate the difference?
- **Organization of CRI:** What are the advantages and disadvantages of a public international reinsurance pool? Should CRI be an essential public service provided by an institution without profit interest? What is the profit of insurance companies from Nat Cat insurance? Is a repercussion from volatile financial markets on beneficiaries in developing countries possible? How to make insurance loadings more transparent? What are advantages, disadvantages and possibilities regarding perennial insurance contracts?
- **Learning:** How to organize an effective learning process within CRI schemes? How to feed back lessons learnt in running CRI systems (like ARC)?
- **Subsidies:** What are potential sources of subsidies for CRI products, e.g. a carbon levy? How to measure the price reduction in a premium through the capitalization of an insurance scheme?
- **Macro level insurance schemes incl. ARC:** How was ARC money spent in detail? Where to find information on this? Does ARC lead to fewer households receiving food assistance than in current humanitarian system? What is the governance structure and objective of other macro level insurance schemes (e.g. CCRIF, PCRAFI)? How exactly is the CCRIF money spent?
- **Other approaches:** What are alternatives to insurance and what are their costs? As insurance is only for rare events - what are approaches for countries to deal with more regular losses?

3.3 Exchange and collaboration

During the workshop, the following areas for exchange and collaboration between the participants on the topic of CRI were identified:

- **Transparency and Participation:** Participants highlighted the need for a broader stakeholder inclusion into the InsuResilience initiative, and that broader stakeholder input to the M&E framework for the initiative should be heard. Moreover, participants drew attention to the necessity to push schemes and donors of existing CRI schemes to install effective monitoring and evaluation systems.
- **Principles:** Participants expressed the wish to work collectively on a harmonized set of principles for CRI to be fed into the InsuResilience ME& framework.
- **Research:** Participants stressed the necessity to push for more research projects to close the evidence gap on CRI approaches. The research community needs to be better engaged in analyzing current CRI approaches. Research projects on CRI topics need to be initiated. Collaborations with the private sector, e.g. regarding research on the impact and attribution of climate change could support closing the evidence gap.
- **ARC:** Participants raised the need for civil society representation on the ARC board as well as the need to design and implement a mechanism that allows the ARC system to effectively learn from and improve on the basis of current challenges and mistakes.
- **Areas for future dialogues:** The one-day workshop could only cover a limited amount of topics. Participants expressed the need for future dialogues on the following topics: 1. Future of CRI in a three degrees warmer world; 2. Impact of insurance on equity, equality and gender. For these future dialogues, participants highlighted the need to bring “southern voices” to the discussion and build capacities accordingly.

3.4. Next steps

The Workshop in Berlin emphasized the need and demand for a continuous dialogue on the topic of CRI between civil society, research, private sector and public actors. This dialogue should be formalized through

- Regular calls with civil society and research organizations to facilitate constant exchange about latest developments on the topic of CRI (covering both the political and the implementation processes).
- Meetings with political representatives on the CRI topic, particularly InsuResilience representatives to discuss the implementation of the InsuResilience initiative, other policy processes relevant to CRI and how to better include civil society and research stakeholder in these processes.
- Follow up meetings with civil society, research, private sector and public actors on identified open questions

Concrete next steps are:

- MCII will address some of the open questions in a series of papers on “Critical questions regarding climate risk insurance”. The draft papers will be shared with the workshop participants in a peer-review process and will be discussed during separate calls. Questions that will be addressed include
 - The cost-effectiveness of CRI;
 - Advantages and disadvantages of public, private and mutual insurance schemes;
 - Incentives and CRI;
 - CRI and human rights;
 - CRI and social safety nets.
- A follow-up workshop in the UK beginning of 2018 organized by Results UK will bring together a similar group of actors to further the discussion.

Annex 1: Agenda

Time	Session
9.30 – 10.00	Welcome and introduction Objectives of the day followed by a round of introductions, expectations and open questions by participants
10.00 – 10.50	Session 1: Setting the stage – Climate risk insurance: the why, how and what The need for climate risk management for the most vulnerable Peter Hoeppe Head of Geo Risk Research, Munich Re Possibilities and limitations of climate risk insurance in protecting most vulnerable populations Sabine Minninger Policy Advisor on Climate Change Discussion & formulation of key messages
10.50 – 11.05	Coffee break
11.05 – 12.35	Session 2: Global insurance markets and climate change – What can climate risk insurance offer? What are its limitations? Basics on insurance & reinsurance (value chain, instruments, pre-conditions, & premium calculation) Simone Ruiz-Vergote Managing Director of Allianz Climate Solutions GmbH The role of insurance in comprehensive climate risk management Swenja Surminski Senior Research Fellow at the Grantham Research Institute on Climate Change and the Environment, part of the London School of Economics From micro insurance to climate risk insurance: new ways to transfer risk for the poor and vulnerable Thomas Loster Chairman of Munich Re Foundation Discussion & formulation of key messages
12.40 – 13.50	Lunch
13.50 – 14.00	Summary of session 1+2 & outlook to session 3+4
14.00 – 15.45	Session 3: Opportunities, challenges and framework conditions regarding climate risk insurance for most vulnerable populations

The role of insurance for the most vulnerable: What are opportunities, challenges and necessary framework conditions?

Aaron Oxley

Executive Director, Results UK

Addressing the affordability challenge: What are ways of premium support to make insurance accessible for the most vulnerable?

John Ward

Managing Director, Vivid Economics

ARC – a promising sovereign insurance system under debate

Veronika Bertram-Hümmer

Economist, KfW

Jonathan Reeves

Policy Adviser, Action Aid

Discussion & formulation of key messages

15.45 – Coffee
16.05

16.04 - **Session 4: Way forward for climate risk insurance for the most vulnerable**
16.45

Plenary discussion & summary of workshop key messages

16.45 – **Wrap up**
17.00

Annex 2: List of participants

Last name	First Name	Organisation	Country
Antwi-Boasiako	Benjamin	Allianz Climate Solutions	Germany
Bertram-Hümmer	Veronika	KfW	Germany
Culey	Carolyn	Development Initiatives	UK
Forest	Rosemary	Results UK	UK
Funk	Kerstin	Aktion gegen Hunger	Germany
Gornott	Christoph	PIK	Germany
Harmeling	Sven	CARE UK	Germany
Hiller	Debbie	Oxfam UK	UK
Hoeppe	Peter	MunichRe	Germany
Hughes	Ruth	Natural Environment Research Council	UK
Huttly	Kevin	Vision Fund International	UK
Kowalzig	Jan	Oxfam Deutschland e.V.	Germany
Kreft	Sönke	MCI	Germany
Künzel	Vera	Germanwatch	Germany
Lin	Sheri	CARE UK	UK
Loster	Thomas	Munich Re Foundation	Germany
Matias	Denise	German Development Institute (DIE)	Germany

Minninger	Sabine	Bread for the World	Germany
Oxley	Aaron	Results UK	UK
Reeves	Jonathan	Action Aid	UK
Ruiz-Vergote	Simone	Allianz Climate Solutions	Germany
Schäfer	Laura	MCII	Germany
Storch	Anne-Marie	Aktion gegen Hunger	Germany
Surminski	Swenja	LSE	UK
Tollmann	Jennifer	e3G	UK
Vyas	Shaily	MCII	Germany
Ward	John	Vivid Economics	UK
Weingärtner	Lena	ODI	UK

MCII, July 2017

Contact: schaefer@ehs.unu.edu

The Munich Climate Insurance Initiative (MCII) is a leading innovation laboratory on climate change and insurance. It was launched over 10 years ago in response to the growing realization that insurance-related solutions can play a role in adaptation to climate change, as advocated in the Framework Convention and the Kyoto Protocol. MCII, through its unique set-up, provides a forum and gathering point for insurance-related expertise on climate change impacts. The Initiative brings together insurers, experts on climate change and adaptation, NGOs and researchers intent on finding effective and fair solutions to the risks posed by climate change, as well as sustainable approaches that create incentive structures for risk and poverty reduction. MCII is hosted by the United Nations University Institute for Environment and Human Security (UNU-EHS) in Bonn, Germany.

