



**InsuResilience  
GlobalPartnership**

**Report on the Second InsuResilience  
Global Partnership Forum 2018**

**Paving the Way to Effective  
Risk Financing Solutions**

**10th December 2018, Katowice Poland**





InsuResilience Global Partnership

# Report on the Second InsuResilience Global Partnership Forum 2018

## Paving the Way to Effective Risk Financing Solutions

10th December 2018, Katowice Poland

By the InsuResilience Global Partnership Secretariat

June 2019

## List of Abbreviations

<b>A2R</b>	UN Climate Resilience Initiative A2R Anticipate Absorb Reshape
<b>ARC</b>	African Risk Capacity
<b>BMZ</b>	German Federal Ministry for Economic Cooperation and Development
<b>CDRFI</b>	Climate and Disaster Risk Finance and Insurance
<b>COP</b>	Conference of Parties to the United Nations Framework Convention on Climate Change
<b>DRF</b>	Disaster Risk Finance
<b>DRM</b>	Disaster Risk Management
<b>DRR</b>	Disaster Risk Reduction
<b>EC</b>	European Commission
<b>G20</b>	Group of Twenty
<b>GRiF</b>	Global Risk Financing Facility
<b>HLCG</b>	High-Level Consultative Group
<b>ICMIF</b>	International Cooperative and Mutual Insurance Federation
<b>IDF</b>	Insurance Development Forum
<b>IDFC</b>	Infrastructure Development Finance Company
<b>ISF</b>	InsuResilience Solutions Fund
<b>KfW</b>	Kreditanstalt für Wiederaufbau
<b>MDB</b>	Multilateral Development Bank
<b>PA</b>	Program Alliance
<b>PPP</b>	Private Public Partnership
<b>R4</b>	R4 Rural Resilience Initiative
<b>WFP</b>	World Food Program
<b>V20</b>	Vulnerable Twenty

## Content

Executive Summary .....	6
1. Introduction .....	7
2. Objectives of the Partnership Forum: The Year in Review and Moving Forward .....	8
3. Reporting Back of the HLCG Co-Chairs of the InsuResilience Global Partnership .....	9
4. Panel Discussion: Lessons Learned from Existing Schemes .....	10
5. Report Back from Working Groups .....	12
6. Breakout sessions: The Global Partnership in Practice .....	13
7. Interactive Q & A session: The Program Alliance .....	17
8. Panel Discussion: The Way Forward .....	18
9. Presentation of A2R/InsuResilience Contest Winners .....	19
10. Outlook .....	20
Appendix 1 .....	21
Appendix 2 .....	22
Appendix 3 .....	29

## Executive Summary

**The second annual Partnership Forum has showcased and celebrated a number of achievements of the InsuResilience Global Partnership ('the Partnership') in 2018.** This year the Partnership formed and convened the first meeting of its strategic guiding body, the **High-Level Consultative Group**. Additionally, a strong focus within the Partnership lied on **implementation** this year, supporting a total of 25 programs active across 78 countries. Throughout this, the Partnership focused on **knowledge sharing, networking, and innovation action on the ground**.

The Partnership Forum was full of exciting discussions and constructive exchanges throughout the day that identified **the need for a strengthened alliance** across different activities and programs. It was emphasised that the Partnership offers the benefit of increased outreach for programs on Climate and Disaster Risk Finance and Insurance (CDRFI). Moreover, the issue of widespread socio-economic barriers **that play a part in the affordability, perceived value, willingness to pay, and expectations** was also center stage in discussions. Besides, there was a unanimous agreement on the existence of widespread technical challenges in terms of **lack of data, limited modeling capacities, and basis risk**, which present a pervasive barrier to improving solution quality.

Reporting on their progress, the Partnership's three multi-stakeholder working groups shared their processes and outcomes of 2018. Working Group 1: **Pro-Poor Principles and M&E** reported the creation and submission of a proposed set of guiding Pro-Poor Principles for the Partnership to the HLCG. Working Group 2: **Data as a Public Good reported on** commissioning a gap analysis and stakeholder mapping to illuminate priority areas of action for the Partnership to improve data availability and accessibility. Working Group 3: **Integrated Resilience Approaches** compiled a catalog of solutions along the risk management value chain to map and further establish linkages between various resilience-building components in the design of integrated resilience solutions.

Further, the breakout sessions offered an arena where the challenges and best practices were shared. For instance, Sri Lanka, which has an established National Natural

Disaster Insurance Scheme (NNDIS) run by the government in conjunction with other partners, brought the other participants to the attention that it is facing financial sustainability problems. To improve the general sustainability of the Sri Lanka scheme, the breakout group recommended that NNDIS engages with the IDF to improve underwriting practices, access to data and efficiency in claims settlement. Additional learnings from other breakout groups highlighted, amongst other points, the need to 1) invest in improving capacities to collect and understand climate data, 2) use innovative technologies such as digital devices and drones to enhance the quality of solution and efficacy, and 3) pursue concessional financing to improve affordability and 4) focus on pre-disaster intervention.

The actions of the past year and gathered learnings provide a stable foundation to support the Partnership in achieving its ambitious targets towards maximum impact for poor and vulnerable communities. Combining the tools, networks, and expertise of the **Partnership Forum** and the **Program Alliance** ensures a holistic approach to closing the protection gap and making a lasting resilience impact. A clear way forward for the Partnership in 2019 emerges with a strong focus on fostering cooperation between the V20 and G20, mainstreaming resilience through the support of other programmes, and speeding up the implementation of focus topics such as addressing and pushing resilient infrastructure solutions and mainstreaming gender dimension. It was emphasised by the Partnership's Co-Chairs that there is an urgent need to scale up and accelerate risk financing in 2019 and beyond, in close cooperation with the private sector. Moreover, represented by the Co-Chairs, the High Level Consultative Group identified better risk data modelling, country-level capacity building as key factors to accelerate the spread of CDRFI: They mentioned the importance to anchor CDRFI into Nationally Determined Contributions (NDCs), broader climate finance and the Sustainable Development Goals (SDGs) to systematically promote and scale up CDRFI.

## 1. Introduction

**The InsuResilience Global Partnership reflects the G20's ambition to strengthen the resilience of developing countries and protect the lives and livelihoods of poor and vulnerable people from the impacts of disasters.** It aims to achieve this by closing the protection gap and, in particular, by using climate and disaster risk finance and insurance solutions to facilitate more timely and reliable post-disaster response.

On December 10<sup>th</sup>, 2018, the InsuResilience Global Partnership hosted its second Partnership Forum during the COP24 in Katowice, Poland. Approximately 200 representatives from G20, V20 and other countries, international organizations, civil society, the private sector, and academia attended the Partnership's second Forum. The annual Partnership Forum aims to facilitate networking, exchange, collaboration and innovation across a diverse community of Climate and Disaster Risk Finance

and Insurance (CDRFI) actors, to collectively promote and enable the adoption of holistic and comprehensive climate risk management solutions. The Partnership plans to hold additional regional and annual forums in the coming years.

Taking into account the various backgrounds of the participants, the Partnership Forum encouraged a peer to peer learning on the basis of real country cases on successful ways to promote climate and disaster risk finance and insurance solutions from the perspective of poor and vulnerable countries (see Appendix I).



## 2. Objectives of the Partnership Forum: The Year in Review and Moving Forward

**Opening and welcome notes were given by the Head of the InsuResilience Secretariat, Dr. Astrid Zwick, and the Global Director of the Sustainable Finance Center of the World Resources Institute, Dr. Leonardo Martinez-Diaz.**

Speakers highlighted hopes for exchange and collaboration at the Forum through a sharing of lessons learned over the past year and active, collective action to address this in the coming year. The Partnership celebrates its progress and growth this year in further setting up the governance structure of the Partnership, including the formation and first meeting of the Partnership's strategic High-Level Consultative Group (HLCG). In addition to structural change, the Partnership has focused strongly on implementation this year. This included much action on knowledge sharing and empowerment (e.g. the A2R InsuResilience Absorb Contest, the interactive knowledge platform RISK TALK), networking building and innovation (e.g. working group exploring integrated approaches for resilience), and further strong support to scaling up implementation with a total of 25 programs supported by the Partnership in 78 countries (already more than half of them are in operation).

With 2018 ending as yet another year of extreme losses during the hurricane season, there is a renewed call for urgent action on behalf of the Partnership to carry out its vision. Leonardo Martinez-Diaz reiterates the need not only for more solutions but also for better solutions: ones, which place insurance as one component of a broader disaster risk management approach. The Partnership can promote insurance solutions as a catalyst to building a broader ecosystem of disaster risk management where risk is better understood and monitored, reduced (where possible and cost-effective), and absorbed or transferred to the capital market where a reduction is not effective or feasible. The key in pushing this further is to make solutions more affordable and to build capacity in the private sector, ministries and end users to most effectively use the co-benefits of insurance solutions, such as risk modeling.

African Risk Capacity's (ARC) Chief of Operational Planning, Papa Zoumana Diarra, and International Cooperative and Mutual Insurance Federation's (ICMIF) Chair of the ICMIF Development Committee, Dr. Aris Alip, provided further context for the discussions of the day with insights from some of the Partnership's programs. Papa Zoumana Diarra discussed the vital role of sovereign insurance solutions in protecting national budgets, ensuring effective and efficient use of funding during disaster response, and in building national and institutional capacities through inclusive

contingency planning processes. The key challenge to scaling up such schemes is reported to be a perceived lack of value, as high basis risk often makes such schemes politically unattractive. Sovereign insurance providers should thus promote more success stories and better communicate how these solutions work and can link to other disaster response and reduction aspects.

Dr. Aris Alip, in turn, discussed the emerging role of microinsurance where other solutions, such as sovereign insurance, are not as effective. Microinsurance is very accessible to poor and vulnerable populations as it works in these communities directly and can be made very low-cost through member-owned cooperative models. Also, microinsurance has a strong and essential gender focus. The scaling up of microinsurance schemes is often hindered by the limited resources available in poor communities to capitalize on such enterprises and by restrictive regulatory environments. Microinsurance schemes may overcome some of the barriers to capitalization by following the mutual people-based approach that makes these schemes as fiscally efficient as possible through cutting out aggregators and commissions and reducing fraud. Overcoming the regulatory limitations must, however, be addressed collectively by the Partnership by raising awareness of the benefits of inclusive microinsurance solutions for decision makers.

The Partnership welcomes new members, among them the International Development Finance Club (IDFC), the European Commission (EC) and the Republic of Marshall Islands. Alexis Bonnel of the IDFC Secretariat expressed the IDFC's interest in developing synergies with the Partnership to fill gaps between poverty alleviation efforts and climate risk finance. Carla Montesi of the EC expressed the EC's support of the Partnership's Pro-Poor Principles and reiterated their commitment to active participation and financial support to the Partnership in empowering the poor and vulnerable to become active climate risk managers. Hilda Heine, President of the Republic of Marshall Islands, shared a powerful message of the daily realities of climate change seen in many developing countries and highlighted the critical role that the Partnership can play in promoting insurance to alleviate financial strains of these impacts and build resilience.

Furthermore, the HLCG welcomed the Pro-poor principles and recognized the importance of the gender dimension within CDRFI.



### 3. Reporting back of the HLCG Co-Chairs of the InsuResilience Global Partnership

**The Minister of Finance of the Republic of Marshall Islands, Honorable Brenson S. Wase, and the Parliamentary State Secretary to the Federal Minister for the German Federal Ministry for Economic Cooperation and Development's (BMZ), Dr. Maria Flachsbarth, shared insights from the first meeting of the Partnership's strategic steering body, the High-Level Consultative Group (HLCG).** The HLCG is aware of the daily realities of climate change in many V20 countries and the strain this places on national budgets. The HLCG celebrates the Partnership as a successful collaboration between the V20 and G20, which brings together all the relevant stakeholders to create an inclusive, global, cross-sectoral platform on climate risk finance. Further, the Co-Chairs presented on the agreement from its members on the urgency of scaling up and accelerating risk financing in 2019 and beyond, in close cooperation with the private sector. Members noted that risk financing was **most effective when integrated** in a broader dialogue on and complementing in-country systems for disaster risk management and humanitarian financing, with simultaneous efforts to strengthen **country ownership**. They discussed the need to amplify the impact of ongoing CDRFI initiatives and resolved to consider the development of new solutions, such as the Southeast Asia Disaster Risk Insurance Facility (SEADRIF). The HLCG Co-Chairs also brought forward the discussion from

the HLCG on the need for **better risk data and modelling** of climate impacts, **capacity building** at a country level, and addressing the **lack of financial resources** as key factors for accelerating the spread of CDRFI. In addition, the HLCG welcomed recommendations from a research study on gender and discussed a summary document on concessional finance. Moreover, members voiced their expectations of the Partnership, namely, that it should act as an advocate for early action; provide guidance; act as a convener of different public and private stakeholders and a platform for the exchange of knowledge; provide knowledge management; and ensure complementarity and exploit synergies with existing initiatives.

The following documents were endorsed during the HLCG meeting by the HLCG: InsuResilience Concept Note, Pro-poor Principles and the Governance Charter. In summing up the report from the HLCG, the co-chairs reiterated that the HLCG calls upon the Partnership to continue supporting the development and scaling up of successful sovereign-level solutions, and hereby had mandated the InsuResilience Secretariat to **elaborate a Workplan for the InsuResilience Global Partnership** with a short-term roadmap to the Climate Summit (2019) and a medium-term vision 2025.



## 4. Panel Discussion: Lessons Learned from Existing Schemes

**World Food Programme's R4 Coordinator, Fabio Bedini, National Drought Management Authority Kenya's Director of Technical Services, Sunya Orre, Kaleidofin India's Executive Director, Sucharita Mukherjee, and the Ministry of Finance and Economic Cooperation Ethiopia's Environmental and Social Safeguards Specialist, Medhin Mekonnen joined for a panel discussion to share lessons learned from their various programs.** Three significant challenges and learnings emerged from this panel discussion.

- (1) The predominant common narrative throughout the discussions was the need for **deepened integration with other programs**. Such partnerships offer advantages in **expanding outreach potential** and **scaling up** programs.

Each of the programs reported either having already utilized and benefited from this integration and collaborating approach or having identified this approach as a key step to further improving and scaling up their operations. The World Food Programme's R4 Solution utilizes a risk layering approach in which microinsurance is integrated within a broader national social protection scheme as part of a comprehensive risk management strategy. R4 **utilizes the existing distribution networks** and communication channels of the social protection scheme to easily increase its reach and coverage. Similarly, the National Drought Management Kenya capitalizes on partnerships between the Kenyan government and various CDRFI actors to provide effective, widespread, comprehensive protection for vulnerable Kenyan pastoralists and farmers. The National Drought Management Kenya utilizes its partnerships with CDRFI actors to improve the program's **access to modelling** and to improve its **capacities to understand and manage climate risks** via a diverse range of mechanisms. Nevertheless, the program reported the need for further integration with its partner programs to overcome barriers of limited financial resources. The program cites limited awareness of DRR and CDRFI for decision makers in Treasury as a key barrier to **unlocking necessary funding** to scale up CDRFI solutions effectively. By deepening its partnership with the Treasury branch of government, the program aims to raise awareness and support for CDRFI in the budgetary decision makers of the government to expand the uptake and scope of these mechanisms in Kenya. Another program, Kaleidofin India, which provides holistic financing plans for farmers and SMEs to grow their businesses, intends to utilize a partnering approach to **overcome its current limited scope of**

**protection**. Kaleidofin India currently only provides crop insurance, which leaves a large protection gap for many SMEs who have more difficult-to-insure, small assets. To protect against these less insurable asset losses, the program sees the need for an income protection solution to be integrated into the current solution. Additionally, as a non-program-specific example, integration was reported to help **address a gender agenda** and provide protection to more women. Panelists reported that the primary challenge here often lies in finding effective means to reach women in the first place. Programs thus need to start exploring new distribution channels. Usually this can be quickly done by partnering with or utilizing existing NGO networks which already work closely with women groups. Such partnerships can help **effectively reach target audiences** (in this case women), **minimize distribution costs**, and better **incorporate on-the-ground feedback** from intended beneficiaries into the solution design.

- (2) The second key theme to emerge in the discussion was the widespread socio-economic **barriers to uptake in limited affordability, perceived value, willingness to pay, attitudes and expectations**.

To improve affordability, programs reported subsidies in microinsurance models as being an effective means of cutting premium costs. For example, the Indian government made crop insurance mandatory for farmers taking out loans, to expand protection to roughly 60 million farmers. To ensure this compulsory uptake is affordable and thus enables rather than prohibits farmers to grow their businesses, the **government subsidizes the premiums**. The government itself can take on such a large volume of risk by making the program **market-linked** and thus passing on the risk to (re) insurers. Alternatively, the R4 Solution shared experiences of using a **micro approach**, where the farmers participate in risk reduction activities, **to cut costs** in its premiums to make the solution more affordable.

Regarding attitudes and expectations, there appears to be mistrust and misunderstanding of the technologies and processes behind developing a CDRFI solution. Farmers, government, donors, and private sector actors all are impatient and want to see results immediately. However, it takes time to build appropriate regulatory environments, markets, trust, etc. to develop large scale, successful protection systems. The Ethiopia R4 Program is attempting to partially address the challenge by **improving financial education** and awareness of communities and decision

makers. Moreover, to improve uptake, the program is utilizing **innovative technology** such as mobile banking and mobile phone solution interface to enhance the **ease of use and the accessibility** of the solution.

Regarding perceived value, there is an underlying technical challenge of basis risk and a social disconnect in the narrative surrounding CDRFI solutions. While basis risk is an inherent aspect of parametric insurance solutions, new technologies can improve perceived value and stakeholder support for such solutions by, for example, **improving risk monitoring and modelling** to minimize basis risk. Beyond the technical barrier of basis risk, programs reported that the narrative around CDRFI often remains limited to a discussion of “the numbers,” which does not resonate with decision makers. The National Drought Management Kenya wants to address this by focusing more on sharing the **human stories** of these solutions to build interest and political as well as popular support for CDRFI solutions. To reframe the insurance narrative panelists called for more great packaging of insurance solutions with other resilience-building measures. In addition to simply providing broader protection and the other benefits mentioned above of integration, **bundling multiple solutions together** enables programs to **appeal to a more extensive array of political and public interests**, e.g., a social protection agenda.

(3) The third major point to emerge was that of widespread technical challenges in **lack of data, limited modelling capacities, and basis risk**, which present a pervasive barrier to improving solution quality.

Lack of data and limited modelling capacities lead to high basis risk in parametric insurance solutions as the design of parametric triggers is often insufficient to reflect risks and losses accurately. The risk that a payout from a CDRFI solution will be inadequate or arrive too late impacts the above demand-side point of perceived value for governments. High basis risk can, however, also keep private sector actors



from engaging in and supporting a solution as the risk of potentially paying out more than necessary in an event undermines the business case for joining a solution. The R4 Solution in Ethiopia, for example, experiences a problem of high basis risk in mismatched triggers with actually experienced losses due to its very limited historical, on-the-ground datasets. To compensate these limitations, R4 Ethiopia has done a lot of **capacity building** in Ethiopia to increase and improve the use of automated weather stations and to calibrate satellite data better. However, ultimately the program will need to supplement this capacity building with direct financial support to build **new weather data collection stations**.

## 5. Report Back from Working Groups

**At the Partnership Forum 2017, the InsuResilience Secretariat collected member feedback on potential thematic working groups.** Subsequently, the Secretariat launched three working groups in 2018: “Pro-Poor Principles and M&E”, “Data as a Public Good” and “Integrated Resilience Approaches.”

Soenke Kreft, Executive Director, Associate Academic Officer of the Munich Climate Insurance Initiative reported on **Working Group 1: Pro-Poor Principles and M&E.** The goal of the working group is to improve the ability of the poor and vulnerable to better cope with climate change impacts. To ensure this, a set of Pro-Poor Principles have been created to inform, inspire and motivate all actors in their objectives to deliver climate and disaster risk financing and insurance solutions to this target group. The final principles generally acknowledged by the HLCG were: 1) impact, 2) quality (quality solutions), 3) ownership (ensuring a demand-driven approach), 4) complementarity (promoting a synergetic mix of DRF and insurance solutions, embedded in comprehensive risk management frameworks), and 5) equity (achieving an equitable world). While these principles currently remain overarching and generalized, they will be narrowed to specific contexts for implementation. With the final version being published in first quarter 2019 moving forward, the working group aims for the Partnership to utilize the principles as a framework for the design, structuring, and implementation of solutions.

Katharina Nett of the InsuResilience Secretariat and Jeremy Hindle mandated author of the data study reported on **Working Group 2: Data as a Public Good.** The lack of quality data emerged in the Partnership’s first annual M&E Survey as a key barrier to adequate risk understanding and modelling to manage climate risks effectively. The working group is thus positioned to identify concrete actions for the Partnership to aid in the improvement of data availability in vulnerable climate countries as well as how to transfer and translate this data to communities and decision makers. Accordingly, the group commissioned a stakeholder and gap analysis study, with the purpose of identifying possible priority areas of action by peril type and regional focus. If pursuing activity by hazard type, the analysis suggests using the highly developed, nearly global maps for earthquake and flood hazard as guiding models for the standardization of data collection and risk mapping for other, lesser-mapped hazards. For a geographical focus to prioritize action, the

analysis suggests either establishing a global “heat map” by peril/hazard, exposure, and vulnerability, or utilizing existing risk indexes to determine where the need is highest. A challenge in deciding where to prioritize action based on need is that there is no optimal way to measure where solutions would provide the most benefit (e.g., GDP-based, social indicators, readiness). For general challenges to improving data accessibility, the analysis revealed that greater collaboration across stakeholders will be key in building trust for community involvement in data collection and risk modelling, garnering decision-maker interest to invest in data collection and risk modelling, and capacity building for vulnerable communities to best utilize data, risk modelling, and insurance solutions.

The InsuResilience Secretariat’s Daniel Stadtmüller, Sophie Evans of Willis Towers Watson, and Josh Ling of Mercy Corps presented on **Working Group 3: Integrated Resilience Approaches.** To promote more comprehensive risk management solutions, this group aims to foster integrated instruments that link risk transfer elements within other components of disaster risk management. Therefore, the group collected cases of existing and emerging resilience instruments, developed a reference model to map various integrated solutions along elements of risk management, and began developing a set of feasibility and impact criteria to evaluate emerging solutions. By mapping solutions with the reference model at a workshop, four predominant groupings of integrated resilience solutions emerged: 1) capturing the resilience dividends of infrastructure upgrades, 2) risk financing for preparedness and early action, 3) using insurance elements to promote investments in resilience, and 4) embedding insurance solutions in a holistic climate risk management approach. This mapping can be used to identify synergies between various pillars of risk management and guide the development of future, more comprehensive climate risk management solutions. The working group next aims to finalize its feasibility and impact criteria, disseminate lessons learned, explore applications on the ground, and collectively establish links to broader international agendas and frameworks on resilience.

## 6. Breakout sessions: The Global Partnership in Practice

**Supporting the Partnership’s focus on implementation, Forum participants were divided into five breakout groups to foster in-depth dive discussions of regional programs.** Each breakout group covered a different regional program, in which participants discussed the following points:

1. Where are we;
2. Where do we want to go; and
3. How do we get there?

The goal of the working sessions was to carve out strategic orientation for the individual programs as well as the Partnership as a whole through assessing the current status, lessons learned, best practices, needs, gaps, and priority areas of action for the way forward for each program.

### A. Colombia: Enhancing urban resilience through financial risk transfer in Colombia

Colombia is widely recognized as one of the most disaster-prone countries in the world. According to the World Bank, at least 85% of its population and its assets are exposed to two or more natural hazards per year. In 2016, Colombia issued the National Strategy for Financial Management, which

recognizes the need to promote risk transfer tools to reduce the impact of natural hazards on public budgets. Following this guideline, the national government has taken the first steps by establishing a Disaster Risk Management (DRM) fund and adopting risk transfer measures at the national level. However, with a few exceptions, the ability to implement the strategy at the sub-national level remains limited.

This breakout group examined the first-ever partnership between an international NGO, the insurance industry and the municipalities of Manizales, Medellin, and Cali to enhance urban resilience against extreme weather events for at-risk communities in Colombia through financial risk transfer. For the purpose of the Forum, this discussion focused specifically on the case of Medellin.

#### A.1 Where are we?

Medellin, Colombia is a city of 2.5 million people in the middle of a valley which suffers from flash floods, river flooding, mudslides, and landslides. Poor residents of Medellin face particularly high-risk exposure because they move further out of the city into the flash flood and mudslide risk-prone areas in the surrounding hillsides where building codes are often not enforced.



In that context, tools, DRM strategies, and an accompanying climate finance strategy are being developed. These components provide the basic criteria to move forward on managing risk in Medellin and eventually on the national level.

A similar process is being carried out in the cities of Cali and Manizales.

### **A.2 Where do we want to go?**

In Colombia, risk management actors would like to enhance their work with local communities to improve risk knowledge to a level where informed development and risk management decisions can be jointly made with the community. While community empowerment is a priority, DRM decisions ultimately remain a municipal responsibility.

As data quality and availability are currently limited, the program's partnership intends to bring its stakeholders together to identify and map the demand- and supply-side problems and indicate necessary action to meet various stakeholders' needs. Additionally, one of the main aims of the program is to identify and map out disaster risk reduction activities and measures which could be led and funded (at least partially) by communities themselves. Lastly, they would also like to increase the resilience of at-risk settlements to reduce their vulnerability. A few nascent initiatives are focusing on housing retrofitting, led by volunteers who are teaching communities on how to strengthen their homes. However, this needs to be scaled up further to yield more significant impact.

### **A.3 How do we get there?**

The plan in Colombia is to put communities at the center of all risk management activities by creating partnerships with local stakeholders and gaining a better understanding of demand-side needs and the optimal means to scale up operations.

To complement the demand-side focus with supply-side capabilities, the program plans to collect more data and information on new technologies to support the development of more effective and comprehensive risk management products. By building partnerships with insurance agencies, governments, and universities, the solution will not only be comprehensive in scope but will also enjoy high ownership across its stakeholders and long-term support (which translates into sustainability). To move this project forward, the program would like to work together with KfW via the InsuResilience Solutions Fund (ISF).

## **B. Pakistan: Disaster risk financing for enhanced fiscal resilience**

Pakistan has tremendous exposure to natural hazards and ranks the 7<sup>th</sup> most vulnerable country to long-term climatic risks according to the Germanwatch Climate Risk Index Report. The breakout session on Pakistan examined the increasing protection gap between the insured and uninsured economic losses due to natural hazards and the resulting vulnerability of Pakistan to these hazards. The discussion focused on the identification of solutions in the Disaster Risk Finance (DRF) space and developed a comparative analysis of these options, keeping in view the advantages and limitations of each solution. Since the concept of disaster risk transfer is relatively new in Pakistan, there is a need for a coordinated and integrated approach to inform and guide the decision makers to optimally utilize the scarce available resources.

### **B.1 Where are we?**

Earthquakes and floods are currently the most significant types of natural hazards experienced in Pakistan. However, Tropical Cyclones are beginning to approach the Pakistani coastline as well. Despite the increasing climate risks, the growing exposure of agriculture to these risks, and the costs this poses to the government and communities, the focus on disaster risk financing remains limited. The National Disaster Risk Management Fund (NDRMF) was operationalized in 2018 to begin addressing this gap. The Fund is expected to deliver a national disaster risk financing strategy by 2020, which is scheduled to highlight and mainstream the agenda of disaster risk financing. Meanwhile, in Pakistan, the protection gap is growing, putting increasing stress on public budgets and yielding high fiscal vulnerability.

### **B.2 Where do we want to go?**

To address this challenge, there is a substantial potential role for the NDRMF to play in utilizing and expanding on existing funding to reach sustainable fiscal resilience outcomes better. Developing and implementing a comprehensive disaster risk finance strategy which includes climate risk insurance could help the government to reduce its financial risks and build resilience to the impacts of these hazards for its population.

The current disaster risk financing programs and the initiatives that are looking to operate in Pakistan will need to work closely with one another, and with the government and local communities to ensure synergy in planning and implementation. This synergy must incentivize and mobilize private sector actors in Pakistan to engage in a stronger public-private partnership. This will support the development of solutions with strong stakeholder ownership, high

transparency, centralized data collection and monitoring, digital technologies, and comprehensive coverage.

### **B.3 How do we get there?**

To arrive at such level of fiscal resilience, Pakistan should begin by improving policy-level and community-level understandings of economic and financial impacts of natural hazards. This will involve capacity building to improve data collection and modelling capacities to improve sufficient quality data for private sector actors to design solutions effectively. Stakeholders will also need to enhance technical knowledge and understanding of various financing tools. This will be complemented by developing legal and institutional frameworks for new solutions to operate in. Stakeholders will additionally need to build religious-cultural confidence in and acceptance of financing tools in vulnerable communities to ensure that there are local-level support and commitment to solutions. This will help to create an enabling environment for decision-makers to undertake feasibility analyses of solutions to decide a way forward.

## **C. Sri Lanka: Leveraging international private sector engagement to enhance the National Natural Disaster Insurance Scheme**

Sri Lanka is one of the five countries most heavily affected by natural disasters. In 2016, the Government of Sri Lanka established the National Natural Disaster Insurance Scheme (NNDIS) to protect its uninsured population against natural disasters. Since its inception, the NNDIS has faced significant challenges. Jointly with the Insurance Development Forum (IDF – a Private Public Partnership (PPP) led by the international insurance industry), and supported by the Sri Lankan government and the German development bank KfW, the Sri Lankan National Insurance Trust Fund (NITF) will explore options to make the NNDIS more sustainable. This breakout session engaged the group members into a deep-dive analysis of the proposed way forward.

### **C.1 Where are we?**

Sri Lanka experienced severe losses and damages resulting from flooding in 2016 and 2017. The NITF launched the NNDIS in 2016 to address these risks. NNDIS is paid by the government and covers uninsured houses and SMEs to protect the country's poor and vulnerable who would otherwise not be able to access insurance coverage. However, the scheme is facing several challenges related to its financial sustainability. In particular, there is limited technical understanding and handling of the underwritten assets, a lengthy and costly claims settlement process, and an unsustainable financial strategy where the insurance

premium paid by the Government is lower than the reinsurance premium, creating an additional contingent liability for the government.

### **C.2 Where do we want to go?**

The broad aim is to address the current shortcomings and make the NNDIS sustainable. This will entail addressing four core pillars of action: 1) improving understanding of risks and better modeling, 2) better handling of claims, 3) better tailoring the product to the needs and circumstances of the poor, and 4) improving reinsurance procurement.

### **C.3 How do we get there?**

To address these four core pillars of action and to improve the sustainability of the NNDIS, the breakout group suggested the project first enlists support from KfW by applying to the InsuResilience Solutions Fund (IFS). Additionally, it was recommended that the government of Sri Lanka enters into partnership with IDF for the NNDIS to improve underwriting practices, access to data and efficiency in claims settlement. To enhance overall sustainability, the breakout group recommended that NNDIS adopts a more participatory approach where NNDIS works collectively with other ministries of the government of Sri Lanka and other climate programs to better integrate the NNDIS activities with other resilience-building measures in Sri Lanka.

## **D. West Africa: A model to shift from responding to disasters to managing risks – the example of ARC Replica**

This breakout session explored how humanitarian actors can support and leverage sovereign level climate risk insurance to enable quicker and more effective humanitarian responses, through the lens of the two-year African Risk Capacity (ARC) Replica pilot in West Africa. The session provided an overview of the first year of the ARC Replica pilot, focusing on lessons learned, opportunities and challenges. Outputs of the group discussion can help inform how ARC Replica may approach the second year of the pilot and beyond, as well as how the Global Partnership might support countries and partners to engage more in risk financing for effective humanitarian response.

### **D.1 Where are we?**

Increasing climate change impacts and late humanitarian response is causing substantial losses and damages in West Africa. Over the last few years, the humanitarian community has been piloting ex-ante approaches to counter this.

The African Risk Capacity (ARC) has assisted over 2.1 million people, and through the ARC Replica, it envisages to reach



more vulnerable people and improve the effectiveness of climate risk insurance and humanitarian response. The ARC Replica has assisted in changing the humanitarian model, by modelling the use of insurance as a way to manage disasters through improved financial preparedness. ARC Replica has brought additional capacity into the ARC process; facilitating technical improvements, increased visibility, and transparency of the mechanism, and additional finance to expand coverage. However, there is still limited understanding within the government and wider humanitarian actors on climate risk insurance and the role of ARC and its mechanism. Additionally, basis risk and high premiums remain a significant barrier to scaling up the program.

#### **D.2 Where do we want to go?**

There is a need to move to forward-looking risk management approaches and embed these in the wider humanitarian strategy. This would create options for disaster response beyond donors' emergency funds to include pre-disaster funding as well as more rapid payouts after events. Within further developing these solutions, ARC Replica will need to address issues of basis risk and affordability.

#### **D.3 How do we get there?**

To scale up ARC Replica it will need to be integrated more deeply with other humanitarian programs with a similar vision. For this to happen, ARC Replica and CDRFI actors, in general, will need to build more trust with the humanitarian sector, address its problems of basis risk, and ensure solutions are affordable to poor and vulnerable communities.

Establishing trust among other humanitarian and climate sector actors will require time, a growing repertoire of success stories, and an increasing overlap in agenda focuses (e.g., forecast-based financing).

To get countries to see value in and subscribe to CDRFI solutions, ARC Replica needs to bundle these solutions with other disaster risk management tools. Basis risk is an inherent part of parametric insurance solutions which often discourages countries from subscribing to a CDRFI solution. This can be partially reduced by improved data collection and modelling capacities. However, bundling of CDRFI within a broader integrated climate risk management approach will further minimize the burden on communities and the government if a payout is not triggered.

Such an approach will additionally open solutions to broader donor engagement. With access to this broader network of stakeholders, programs may better leverage concessional financing for these solutions to make them affordable.

#### **E. Zambia: Reaching smallholder farmers with climate risk insurance**

In Zambia, 53% of the working population works in the agricultural sector, mostly as smallholder farmers with less than five hectares of land and little access to markets to increase productivity or manage risks. Weather events such as late onset of rains, droughts, insufficient rainfall or excessive rainfall, can lead to livelihood-threatening crop and livestock losses. When smallholders cope with extreme weather events, they often weaken their livelihoods and end up in poverty traps.

This breakout session focused on climate risk insurance as one part of an integrated climate risk management approach for smallholder farmers. The group discussed a conceptual framework for policy actions and project interventions to help farmers assess and understand their risks, reduce them and manage and transfer the residual risks. This discussion looked



at 1) how to generate effective access to risk management tools by using aggregators, such as contract farming operators, and 2) how to create insurance awareness among smallholder farmers through innovative digital and analog techniques.

### **E.1 Where are we?**

With the increased frequency and severity of extreme weather events, risk self-management in the farming sector has become increasingly difficult. Alliance Gineries Ltd. and NWK AgriServices, with support from GIZ, are currently offering an index insurance product to protect smallholder farmers in the cotton sector against dry spells, droughts and excessive rainfall in Zambia. Without protection, production failures due to bad weather conditions pose a systemic risk, both for farmers in indebtedness and for the agribusiness in portfolio exposure. Insurance offers farmers financial stability to cope with weather-related shocks and provides an incentive to engage in more productive activities. For the agribusiness, the pre-financing of premiums and inputs creates a value proposition for farmers, thus increasing loyalty and minimizing the risk of side-selling at the end of the season.

### **E.2 Where do we want to go?**

The aim is to improve the resilience benefits of solutions and increase uptake. A risk layering approach is recommended but will require public support for the development of market-based risk finance and transfer tools. To achieve this, four actions are suggested: 1) risk assessments, 2) development of tools, 3) improving risk awareness and information dissemination, and 4) integration of tools and practices into policy. Once solutions are developed, the development

of remote sensing technologies, digitalization, and the financing of premiums will be critical to improve quality and enhance the uptake of solutions. Additionally important, agricultural index insurance should be embedded in sound business cases to ensure that they are long-term financially viable and sustainable.

### **E.3 How do we get there?**

To better assess risks and design appropriate solutions for farmers, there needs to be capacity building on the supply-side actors for better data collection, risk modelling, and risk awareness to improve parametric triggers and reduce basis risk. Basis risk can also be addressed through validation mechanisms such as satellite data, random sampling claim or area yield indexes.

To improve demand-side capacity (i.e., farmer risk awareness, financial literacy, resilient farming practices, knowledge of CDRFI solutions) and a willingness to take part in these solutions, trust creation remains a key challenge. Fostering transparent practices, grassroots-based learning and active participation of farmers can be powerful for building trust and capacity.

Finally, support from the public sector, as well as the InsuResilience Global Partnership, can leverage private sector action and facilitate the upscaling of approaches and help integrate them into policy. This can be done through supporting knowledge exchange platforms for stakeholders, improving data infrastructure and access, providing premium support, and incorporating insurance solutions within other risk management approaches.

## **7. Interactive Q & A session: The Program Alliance**

**Forum participants joined for an interactive Q&A session with a panel of representatives from the Program Alliance.** The Program Alliance consists of four core programs: The Centre for Disaster Protection, the InsuResilience Solutions Fund (ISF), the Global Risk Financing Facility (GRiF), and the InsuResilience Secretariat. Each body has its specific focus and function to support the aim of the Program Alliance to leverage partners for the development of tailor-made solutions to specific country contexts and to scale up existing programs.

Panelists Philipp Knill of BMZ, Annette Detken of the KfW Development Bank, Daniel Clarke of The Centre for Disaster Protection, and Marc Sadler of the World Bank Group

were asked a series of questions from the audience on the operations of the Program Alliance. The ensuing discussions by the panel clarified various aspects of the Program Alliance. The Program Alliance's scope of action, for example, is positioned to advocate for better risk management systems at a global level rather than at a regional level. However, in guiding this global action, it was reiterated that the Program Alliance is first and foremost needs-based in its operations and values the input of local actors and regional Multilateral Development Banks (MDB). Several programs of the Program Alliance have strict eligibility requirements for schemes to be rooted in regional contexts to ensure sustainability from both a supply and demand side.

Regarding the Program Alliance's aim of inclusive stakeholder involvement, panelists explained that there exists a political disconnect which hinders funding flows to private sector actors in PPPs. To address this, the Partnership should work on better showcasing the benefits that private sector actors bring to adaptation projects, such as risk modeling and capacity building, in order to make it more politically attractive for climate funds to give money to private sector partners. In addition to inclusive stakeholder involvement and support, the panel discussed possibilities for expanding the focus of action for the Program Alliance. Panelists noted that there are many opportunities for the Program Alliance to pilot more forecast-

based financing approaches and support further innovation on this front as part of the larger agenda to integrate insurance solutions within a broader climate risk management approach across the board. Finally, panelists discussed the importance of making the InsuResilience Initiative and CDRFI more engaging and exciting for a more general audience. To do so, panelists suggested further promoting success stories of CDRFI and simultaneously better aligning the InsuResilience Global Partnership Initiative with other climate adaptation and resilience narratives, which already have positive support and publicity.

## 8. Panel Discussion: The Way Forward

**Philipp Knill (Head of the Climate Policy division at BMZ), Maybelline Andon-Bing (Republic of Marshall Islands' Secretary of Finance), Ivo Menzinger (Swiss Re's**

**Managing Director), Beth deHamel (Mercy Corps' CFO) and, Jan Kellett (Special Advisor at UNDP), gathered to discuss the next steps of the Partnership.**

The panelists discussed the most significant challenges and objectives for the Partnership in the upcoming year, expressing a strong emphasis on implementation. To achieve this, panelists advised the Partnership to bring together its diverse actors to further explore the integration of various resilience-building components into comprehensive solutions and to expand the overall repertoire of available financial tools. To promote the uptake and sustainability of these solutions, panelists reiterated the need for the Partnership to continue exploring and supporting contingent financing to make these solutions affordable.

The panelists next discussed what to do about the critique that sustainable climate risk insurance is not sustainable enough yet as a long term solution. In addition to reiterating their support for a continued push for more implementation and inclusive solution design, it was suggested that more work needs to be done on the political level to address this issue. That is, fostering V20 and G20 cooperation; mainstreaming resilience, e.g., through supporting the work of the Global Commission on Adaptation using the IPCC Special Report on 1.5°C as a basis. Also, existing structures and agendas, such as support for concessional financing and viable insurance market development, can be scaled up in the macro sphere to get more donors, civil society, and private sector actors on board. This will help climate risk insurance reach greater penetration and thus be able to manage risks more effectively at a larger scale. Another area that was discussed was the speeding up of implementation with focus



topics such as access to innovative finance solutions; access to public data; advancing and scaling up microinsurance solutions. Also, increasing capabilities of country counterparts; addressing and pushing resilient infrastructure solutions and mainstreaming the gender dimension were seen as the next focus areas for the Partnership. Regarding

the specific role of the Partnership in this macro-level action, panelists noted the need for the Partnership to keep its vision and aims clear by sticking to its key objectives to provide a clear message with a flexible work plan for its members to implement.

## 9. Presentation of A2R/InsuResilience Contest Winners

### **In closing the day, the Secretariat presented the winners of the A2R InsuResilience Absorb Contest.**

The winner of the Judges' Choice Award was the project, "Enhancing the resilience of smallholder rice farmers in Nepal." This project intends to promote a two-tiered crop insurance system in Nepal with community-managed insurance to cover small events (i.e., small fires, landslides, or animal-related trampling of crops) and a comprehensive, overarching group risk insurance for larger events. Community-managed insurance schemes are efficient and have low moral hazard because people in the community know if an event has happened, so insurance companies do not need to get involved, and the payout is rapid. While these communities on their own would be uninsurable, lack access to insurance markets, or would not be able to afford premiums, as a cooperative of many communities, they can access new markets and be granted affordable premium rates for coverage against larger-scale disasters. With the contest grant, the project has started working with five communities of smallholder rice farmers to develop an insurance ecosystem in these communities and to scale up coverage.

The winner of the Popular Choice Award was a project by the Mahila Housing Sewa Trust, an association that aims to empower women in poor communities in India to upgrade their habitat. This project aims to improve access to basic services in slums to enable women to engage in income generation and look after their assets. Currently, climate vulnerabilities pose a substantial threat to access to basic services, women's ability to participate in income generation, as well as their ability to survive. To combat this, the project is working to improve knowledge of climate change in slums by providing technology and training to do vulnerability assessments at a localized level. This capacity-building approach empowers local women to design their locally-appropriate solutions. To make these resilience solutions holistic and comprehensive, the project looks to utilize chit funds (this is a rotating savings and credits system that

allows to save and borrow money simultaneously) to include a financial aspect in these solutions. Chit funds are widely accepted and utilized in India and operate by collective, continued pooling of funds for savings in times of need – in this case for a natural disaster. This project intends to introduce a microinsurance aspect to this fund to protect and de-risk it – thus enabling the continued expansion and operation of adaptation initiatives in these informal settlements.



## 10. Outlook

**With 2018 proving to be a very successful year for the InsuResilience Global Partnership, the way forward looks promising for widespread action on implementing the Partnership's Pro-Poor Principles, supporting the affordability of solutions, and continual collaboration on implementation and improved solution design.** These continued efforts will rely on the ongoing support and commitment of all members and partners and their engagement in helping to shape the Global Partnership.

The Partnership intends to continue supporting **the development and scaling up of successful sovereign-level solutions, to renew its focus on micro- and meso-level solutions, to explore concessional finance** as a means to strengthen the global knowledge base on CDRFI, and to build capacity.

The InsuResilience Secretariat will continue to **host and provide support for its three working groups**, now with an increased focus on implementation. It will follow the process in each working group and provide the support needed, facilitate exchange within and between the groups, and potentially facilitate further resources if required. Activities of the working groups for the coming year may include, for example, assisting in the acquisition of funding to pilot projects, publishing discussion or orientation papers, developing guidelines for the Partnership, or simply exchanging experience and good practice.

The Secretariat will continue supporting promotion and growth of the Partnership, coordination of knowledge exchange within the Partnership and knowledge generation to support implementing partners as well as foster the integration of CDRFI into the broader adaptation space.



## Agenda

INSUREILIENCE GLOBAL PARTNERSHIP FORUM AGENDA	
<b>08:30-09:00</b>	<b>Registration and welcome coffee</b>
09:00-09:05	Opening and welcome
09:05-09:45	Framing session: Effective risk financing and insurance solutions for the poor and vulnerable
09:45-10:00	Warm Up: Getting to know the Global Partnership community
<b>10:00-10:30</b>	<b>Coffee Break</b>
10:30-10:55	Remarks by Co-Chairs of the High-Level Consultative Group
10:55-11:15	New members of the InsuResilience Global Partnership
11:15-12:00	Panel discussion: Lessons learned from existing schemes
12:00-12:30	The Global Partnership in action – Report from the Working Groups
<b>12:30-13:30</b>	<b>Lunch Break</b>
13:30-14:00	Interactive Q&A session: The Program Alliance
14:00-15:45	Breakout sessions: The Global Partnership in practice ( <i>for more details, see below</i> ) <ul style="list-style-type: none"> <li>&gt; Group 1 – Sri Lanka: Leveraging international private sector engagement to enhance the National Natural Disaster Insurance Scheme</li> <li>&gt; Group 2 – Zambia: Reaching smallholder farmers with climate risk insurance</li> <li>&gt; Group 3 – Pakistan: Disaster risk financing for enhanced fiscal resilience</li> <li>&gt; Group 4 – Colombia: Enhancing Urban Resilience through Financial Risk Transfer in Colombia</li> <li>&gt; Group 5 – West Africa: A model to shift from responding to disasters to managing risks – the example of ARC Replica</li> </ul>
<b>15:45-16:30</b>	<b>Coffee Break and open presentation of breakout session results</b>
16:30-17:00	Panel discussion: The way forward
17:00-17:30	Presentation of contest winners (InsuResilience-A2R contest on absorbing climate impacts)
<b>From 17:30</b>	<b>Reception</b>

## Appendix 2

## List of Participants

No.	Name	Organization
1	Abakar Souleymane, Hamid	Ministry of Civil Aviation Development and National Météorology
2	Abdallahi, Moustapha Cheikh	Commissariat a la sécurité alimentaire
3	Aguilar, Maria Mercedes	Ministerio de Ambiente y Recursos Naturales
4	Ahmed, Kamal	National Disaster Risk Management Fund
5	Ahmed, Sara Jane	IEEFA/V20
6	Alip, Aris	ICMIF
7	Alonzo, Alfonso	Ministerio de Ambiente y Recursos Naturales
8	Alvarez, Paola	Department of Finance
9	Amin, Amal-Lee	Inter-American Development Bank (IADB)
10	Andon-Bing, Maybelline	Ministry of Finance, Republic of Marshall Islands
11	Anthony, Isaac	Caribbean Catastrophe Risk Insurance Facility (CCRIF)
12	Archibong, Amanda	AFRICAN RISK CAPACITY
13	Assah, Fatou	World Bank Group, GIIF
14	Awiti, Iddah	InsuResilience Secretariat
15	Balogun, Kehinde	United Nations University
16	Beavogui, Mohamed	African Risk Capacity Agency
17	Bedini, Fabio	R4, WFP
18	Bender, Till	Rosa-Luxemburg-Stiftung
19	Bentley, Peter	Department for International Development
20	Bhandari, Preety	Asian Development Bank
21	Bhusan, Chandra	Centre for Science and Environment
22	Bondeli Esow, Alexis	Ministère de la Solidarité et Actions Humanitaires
23	Brahmbhatt, Bijal	Mahila Housing SEWA Trust
24	Braun, Mélody	International Research Institute for Climate and Society (IRI)
25	Bronk, Andreas	Hannover Re
26	Calkins, Julie	Climate-KIC
27	Calvo, William	Ministry of Foreign Affairs

No.	Name	Organization
28	Chakraborty, Ranjit	Ministry of Finance
29	Chinoko, Vitumbiko	CARE International
30	Clarke, Daniel	Centre for Global Disaster Protection
31	Connor, John	COP23 Presidency Secretariat
32	Cruz Martinez, Edgar Hernan	National Planning Department
33	Cunliffe, Chip	AXA XL
34	Curuki, Jale Samuwai	Oxfam in the Pacific
35	Davison, Naomi	ICMIF
36	De Guzman, Emmanuel	Climate Change Commission
37	de Silva, Sanath	National Insurance Trust Fund Board - Ministry of National Policies & Economic Affairs
38	deHamel, Beth	Mercy Corps
39	Desta Wubet, Selamawit	Federal Democratic Republic of Ethiopia, Ministry of Environment, Forest and Climate Change
40	Detken, Annette	KfW Development Bank
41	Dhananji, Buddhika	Ranadheera
42	Diarra, Papa Zoumana	ARC Agency
43	Díaz, Juan Carlos	Ministerio de Ambiente y Recursos Naturales
44	Dirkes, Fatma	Frankfurt School of Finance & Management
45	Eberhard, Christine	KfW Development Bank
46	England, Juan	Willis Towers Watson
47	Essel, Ama	Independent Consultant
48	Evans, Sophie	Willis Towers Watson
49	Fang, Barbara	African Risk Capacity Agency
50	Fernández, Raúl	Munich Climate Insurance Initiative
51	Flachsbarth, Maria	Federal Ministry for Economic Cooperation and Development
52	Funes, Milton	Global Communities

No.	Name	Organization
53	Gornott, Christoph	Potsdam Institute for Climate Impact Sciences (PIK)
54	Grewe, Hanna	Social Impact Partners
55	Gunawardhana, Chandri	Global Business Counselling
56	Hagemann, Simon	Federal Ministry for Economic Cooperation and Development (BMZ)
57	Hamadalla, Hana	Ministry of Environment Natural Resources and Physical Development
58	Hansen, Rachael	United Nations University
59	Hare, Bill	Climate Analytics
60	Harmeling, Sven	CARE International UK
61	Heimfarth, Leif	Hannover Re
62	Heine, Carlsan	Office of the President, Republic of the Marshall Islands
63	Hillier, Debbie	Oxfam UK
64	Hindle, Jeremy	HindlesWorld Risk Solutions Ltd
65	Hook, Scott	Pacific Islands Forum Secretariat
66	Hoven, Ingrid-Gabriela	Federal Ministry for Economic Cooperation and Development (BMZ)
67	Huber, Benjamin	ClimateRe
68	Humphrey, Ed	OPM
69	Hutfils, Marie-Lena	Germanwatch e.V.
70	Huttly, Kevin	Vision Fund International
71	Inyaregh, Mnena	UNFCCC
72	Ishoda, Albon	Embassy of the Republic of the Marshall Islands
73	Iyahen, Ekhosuehi	IDF
74	Iyanda, Babatunde	African Risk Capacity Agency
75	Jacobsen, Fentje	Brot für die Welt – Evangelischer Entwicklungsdienst - Evangelisches Werk für Diakonie und Entwicklung e.V.
76	Jäger, Alexander	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
77	Jones, Emily	World Food Programme
78	Jones, Monika	Deutsche Welle
79	Jovanovska Boshkovska , Nadica	EUROPA Re AG
80	Kaiser, Delia	InsuResilience Secretariat



No.	Name	Organization
81	Kanuric, Jasmina	Oxford Policy Management
82	Kavuma, Eva	African Risk Capacity Agency
83	Kellett, Jan	United Nations Development Programme (UNDP)
84	Kieselhorst, René	InsuResilience Secretariat
85	Klockemann, Lena	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
86	Knill, Philipp	Federal Ministry for Economic Cooperation and Development (BMZ)
87	Koh, Jay	The Lightsmith Group
88	Köngeter, Alexandra	Deval Deutsches Evaluierungsinstitut der Entwicklungszusammenarbeit gGmbH
89	Konrat, Selin	World Bank Group
90	Kramer, Berber	International Food Policy Research Institute
91	Kreft, Sönke	Munich Climate Insurance Initiative (MCII) - UN University
92	Kuhn, Saskia	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
93	Kyanza, Annie	African Risk Capacity Agency
94	Kyuma, Richard	Kenya Livestock Insurance Program
95	Laganda, Gernot	World Food Programme
96	Landis, Emily	The Nature Conservancy
97	Lim, Sheri	CARE International UK
98	Lima, Euloge	Ministère du Cadre de Vie et du Développement Durable
99	Ling, Josh	Mercy Corps
100	Loster, Thomas	Munich Re
101	Lu, Xianfu	Asian Development Bank (ADB)
102	Martinez-Diaz, Leonardo	World Resources Institute
103	Maurtua Konstantinidis, Enrique	Regional center for Climate Change and Decision Making
104	McArthur, Shaughn	CARE Canada
105	McCarter LaBorde, Elissa	Development Finance for Global Communities
106	McKinnon, Matthew	Republic of the Marshall Islands
107	McQuistan, Colin	Practical Action
108	Mekonnen, Medhin Fissha	Ministry of Finance and Economic Cooperation (MoFEC)

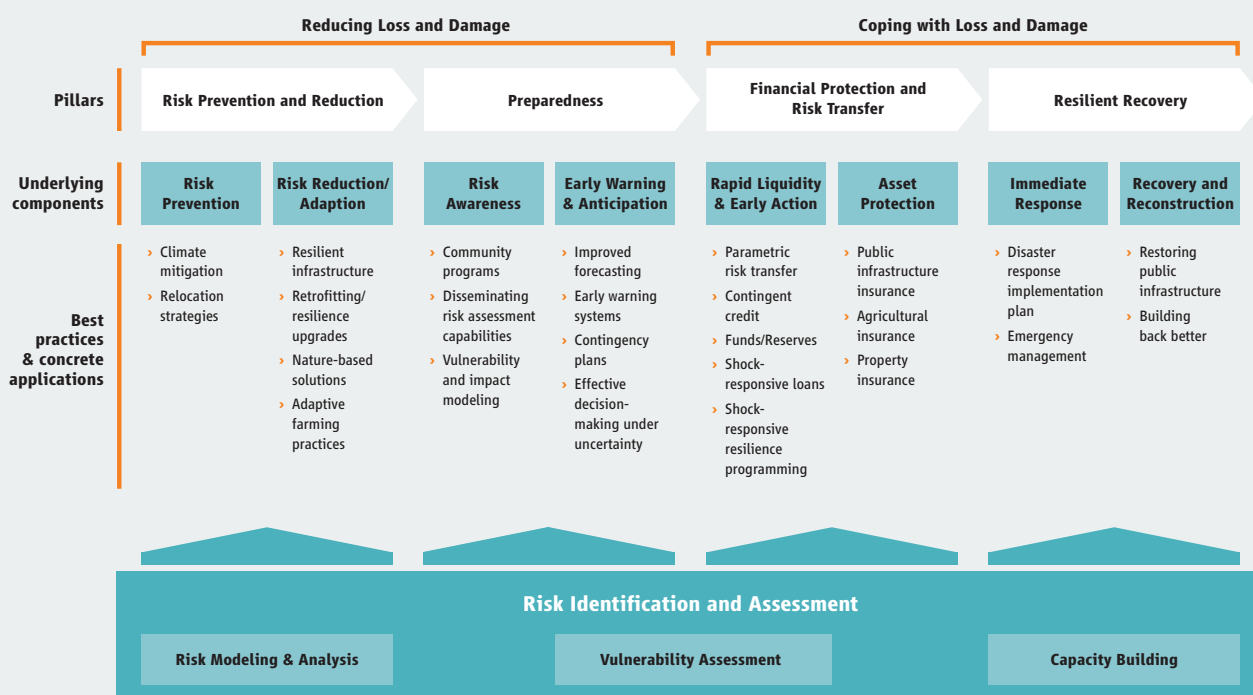
No.	Name	Organization
109	Menzinger, Ivo	Swiss Re
110	Meza Murillo, Andrea	Ministry of Environment and Energy (MINAE)
111	Minninger, Sabine	Brot für die Welt – Evangelischer Entwicklungsdienst - Evangelisches Werk für Diakonie und Entwicklung e.V.
112	Montesi, Carla	European Commission
113	Mookerjee, Agrotosh	
114	Morongei Orre, Sunya	National Drought Management Authority
115	Mukherjee, Sucharita	kaleidofin
116	Mullan, Michael	Organisation for Economic Co-operation and Development (OECD)
117	Muller, Andrea	Ministry of Foreign Affairs
118	Murakami, Hiromichi	JICA
119	Murken, Lisa	Potsdam Institute for Climate Impact Sciences (PIK)
120	Mursajew, Olga	KfW Development Bank
121	Muto, Megumi	JICA
122	Namagiri, Rajeswari	Mahila Housing SEWA Trust
123	Nel, Deon	Global Resilience Partnership
124	Nowak, Isabelle	VisionFund International
125	Ogbachristos, Selamawit	World Food Programme
126	Ohmann, Meike	Willis Re GmbH
127	Quinakonhan, Comlan Médard	Direction Générale de l'Environnement et du Climat
128	Patel, Sabbir	ICMIF
129	Paul, David	Ministry of Environment
130	Pelanda, Teresa	Access to Insurance Initiative (A2ii)
131	Philipps, Jennifer	United Nations University
132	Pitzer, Lara Jo	Brot für die Welt – Evangelischer Entwicklungsdienst - Evangelisches Werk für Diakonie und Entwicklung e.V.
133	Primeau, François	Government of Canada
134	Prystav, Andreas	Swiss Re
135	Quast, Oliver	Social Impact Partners
136	Ramos, Carlos	Ministerio de Ambiente y Recursos Naturales

No.	Name	Organization
137	Randriarimanana , Harison	Republic of Madagascar
138	Rashid, Nasreen	
139	Rattinger, Michael	Asian Development Bank (ADB)
140	Rayar, Arnaut	French Ministry of Foreign Affairs
141	Recinos, Julio	Ministerio de Ambiente y Recursos Naturales
142	Restrepo, Daniella	Inter-American Development Bank (IADB)
143	Ricker, Max	InsuResilience Secretariat
144	Rioux, Rémy	International Development Finance Club (IDFC)
145	Ronen, Tal	YK Center
146	Roome, John	World Bank Group
147	Roth, Michael	Munich Re
148	Ruiz, Aida	Ministerio de Ambiente y Recursos Naturales
149	Sadler, Marc	World Bank Group
150	Schmidt, Laura	Federal Ministry for Economic Cooperation and Development (BMZ)
151	Schnell, Barbara	KfW Development Bank
152	Scholz, Vera	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
153	Schroeter, Joachim	Allianz Climate Solutions
154	Schwebel, Charlotte	Colorado College
155	Seifert, Viktoria	Munich Climate Insurance Initiative (MCII)
156	Shamsuddoha, Md	Center for Participatory Research and Development-CPRD
157	Shrestha, Juna	ClimateRe
158	Shrivastava, Aparna	Mercy Corps
159	Siahaan, Kara Devonna	International Federation of Red Cross and Red Crescent Societies
160	Silsbe, Erin	Government of Canada
161	Simmons, Andrew	Ecological Sequestration Trust
162	Souvignet, Maxime	Munich Climate Insurance Initiative (MCII)
163	Spiegelburg, Saskia	InsuResilience Secretariat
164	Stadtmüller, Daniel	InsuResilience Secretariat
165	Starke, Sabine	World Food Programme

No.	Name	Organization
166	Suarez, Pablo	Red Cross Red Crescent Climate Centre
167	Suenaga, Haruna	JICA
168	Talukder, Md Foezullah	Christian Commission for Development in Bangladesh
169	Taraonza, Marcela	Ripple Economics
170	Tarwillin, Malie	Ministry of Finance, Banking & Postal Services
171	Tellro Wai, Nadji	Ministry of Environment, Water and Fishery
172	Tembo, John	Alliance Gineries
173	Väänänen, Elina	A2R / UNEP
174	van Aalst, Maarten	Red Cross Red Crescent Climate Centre
175	van Bronkhorst, Bernice	World Bank
176	Vasquez, Maria-Jose	
177	Vega, Lilian	Bank for Rural Development
178	Vianen, Inge	CARE Nederland
179	von Falkenhayn, York	Hannover Re
180	Wagle, Sanjay	The Lightsmith Group
181	Wase, Brenson S.	Ministry of Finance, Republic of the Marshall Islands
182	Weingaertner, Lena	ODI
183	Whalley, Karina	AXA
184	Wijenayake, Vositha	SLYCAN Trust
185	Williams, Scott	Resilience Brokers
186	Winges, Maik	Germanwatch e.V.
187	Yoshida, Toru	JICA
188	Zapata Wills, Camilo	Ciudad de Medellín
189	Zhakata, Washington	Ministry of Lands, Agriculture, Water, Climate and Rural Resettlement
190	Zissener, Michael	Munich Climate Insurance Initiative
191	Zuñiga, Silvia	Ministry of Natural Resources and Environment (NRE)
192	Zwick, Astrid	InsuResilience Global Partnership Secretariat

# Integrated Resilience Solutions Reference Model

## Climate Risk Management – an integrated model\*



\* Drawing from Climate Risk Management, Policy and Governance (Mechler, Surminski 2018), Pillars of Climate Risk Management (World Bank, 2013), and Integrated Climate Risk Management (MCI/GIZ, 2017)

The Secretariat gratefully acknowledges the inputs from multiple partners from the World Bank, Kreditanstalt für Wiederaufbau, Insurance Development Forum, National Insurance Trust Fund of Sri Lanka, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, National Disaster Risk Management Fund (NDRMF) Pakistan, Global Communities, World Food Programme, the World Resources Institute, the Start Network, the UN Climate Resilience Initiative A2R and the Munich Climate Insurance Initiative (MCI).

The report greatly benefitted from the input of Raúl Fernandez, Jennifer Philipps, Michael Zissener (Munich Climate Insurance Initiative); Caroline Euler, Livia Fischer, and Saskia Spiegelburg (InsuResilience Secretariat).

**Editors**

Max Ricker (external consultant),  
Iddah Awiti, InsuResilience Secretariat  
René Kieselhorst, InsuResilience Secretariat  
Dr. Astrid Zwick, InsuResilience Secretariat





**Published by**  
**InsuResilience Secretariat**

**Registered office**  
InsuResilience Secretariat  
c/o Deutsche Gesellschaft  
für Internationale Zusammen-  
arbeit (GIZ) GmbH  
Friedrich-Ebert-Allee 40  
53113 Bonn, Germany

[secretariat@insuresilience.org](mailto:secretariat@insuresilience.org)  
[www.insuresilience.org](http://www.insuresilience.org)

As of June 2019

**Design and layout**  
kipconcept GmbH, Bonn

**Photo Credits**  
InsuResilience Secretariat/Ralf Rühmeier