



The role of multilateral climate funds in supporting resilience and adaptation through insurance initiatives

Lena Weingärtner, Alice Caravani and Pablo Suarez – JUNE 2018

KEY POLICY MESSAGES

INSURANCE INSTRUMENTS

can help individuals, communities, businesses, organisations and governments to cope with extreme weather events by releasing post-event payouts in exchange for regular premium payments. They can also provide co-benefits for risk reduction and adaptation. But they are not suited to address all risks related to climate change; they need to be carefully designed to support the most vulnerable; and should minimise the potential for maladaptation.

MULTILATERAL CLIMATE FUNDS

have approved a total of 136.15 million USD in grants and concessional loans to projects that entail an insurance component – including microinsurance and sovereign risk pools – between 2008 and 2017. They have supported the generation and provision of risk information, backed some of the upfront costs that have previously prevented new insurance schemes from being established under market circumstances, have supported the scaling up of existing initiatives, and have contributed to an enabling regulatory environment.

BRACED aims to build the resilience of vulnerable people against climate extremes and disasters. It does so through NGO-consortia working across East Africa, the Sahel and Asia.

However, there is still a long way to go, as only a small fraction of losses related to natural hazards in low and middle income countries are insured.

IN ORDER TO JUSTIFY THE USE OF INTERNATIONAL CLIMATE FINANCE

, projects entailing insurance components should promote comprehensive, ex-ante climate and disaster risk management, effectively incentivising or mobilising resources for risk reduction, anticipatory action and preparedness as part of wider adaptation and disaster risk reduction (DRR) programmes and policies. Where insurance premium subsidies are provided to make coverage more affordable, these should be designed to reduce, rather than reinforce vulnerabilities and exposure to climate risks and they should not create incentives against adaptation investments.

A STRONGER DIALOGUE AND PARTNERSHIPS

between the different stakeholders – international climate funds, governments, insurance companies, multilateral development banks, non-governmental organisations (NGOs) and donors – is essential to establish which parts of insurance development and implementation merit international climate finance, and what the multilateral climate funds are able and willing to support.

INTRODUCTION

The 2015 Paris agreement set out insurance and other risk pooling or risk transfer instruments as a potential area of cooperation and facilitation to help avert, minimise and address loss and damage related to adverse effects of climate change (United Nations, 2015). Climate risk insurance is a term often used in this context for traditional and innovative insurance products offering coverage to individuals, communities, businesses, organisations or governments against losses from extreme weather events (Schaefer and Waters, 2016). The frequency and intensity of such events may increase as a result of climate change, thus requiring new products in some instances or rendering risks too expensive to insure in others. Insurance approaches allow policyholders to share certain weather and climate related risks or transfer them to third parties in exchange for regular premium payments. Payouts are released to the policyholder in response to claims for conventional, indemnity insurance. In the case of parametric insurance, payouts are triggered when the pre-defined threshold of an index (e.g. based on weather, vegetation, soil moisture or yields) has been crossed.

This means, insurance offers important opportunities to provide pay-outs linked to losses from a natural hazard, helping policyholders to avoid harmful coping strategies and thus to reduce further negative, long-term impacts (see for example Bertram-Huemmer and Kraehnert, 2017; de Janvry et al.,

2016 or Janzen and Carter, 2013 for effects related to microinsurance). In addition, it may also stimulate productive investments, for example in farming or pastoralism (see for example Cole et al., 2017; Zhang et al., 2016 or Karlan et al., 2014) and can provide incentives to help governments, companies and individuals to better understand and reduce climate or weather-related risk in the first place. This includes, for instance, better access to risk assessments or early warning information, enhanced emergency planning, and more efficient allocation of government budgets (Clarke and Dercon, 2016).

But insurance is not well suited to address all climate-related risks: while it can help policyholders to cope with extreme weather events, it is not effective for dealing with slow onset processes or events. Changing risk landscapes also mean that certain risks that are insurable now can become too expensive to insure in the future (Miller and Swann, 2016; Dulal and Shahm, 2014). Experience has shown that there are many challenges in making insurance an effective tool that can help those most affected by climate change and that limitations of insurance are especially problematic for the poorest households (Hallegatte et al., 2017; Schaefer and Waters, 2016). In addition, there is a risk of creating maladaptive outcomes when insurance reinforces existing vulnerabilities and exposure (Müller et al., 2017; O'Hare et al., 2016; Frankhauser and McDermott, 2014).

More recently, international climate funds such as the Green Climate Fund (GCF), the Global Environment Facility (GEF) or the Pilot Programme for Climate and Resilience (PPCR) have started investing in insurance mechanisms that aim to cover climate and weather-related risks. At the same time, it is well known that international climate finance is not adequately targeting the most climate vulnerable groups, with a tendency to prioritise lower-middle and upper-middle countries (Caravani et al., 2016).

In this setting, this policy brief aims to discuss whether and how insurance can support smart decisions around

risk reduction, adaptation, and loss and damage for the most vulnerable; and what this means for the role of multilateral climate funds supporting insurance mechanisms. It also presents novel analysis of the amounts of funding that some of the major multilateral and bilateral funds have so far approved for projects that include a climate risk insurance component. The brief further outlines different roles that multilateral climate funds have played, are willing to take, and should consider in supporting insurance mechanisms to effectively support climate resilience for the most vulnerable.

INSURANCE INSTRUMENTS FOR RISK REDUCTION AND ADAPTATION

This section aims to highlight the less commonly addressed aspects of the dynamic field of insurance for climate risks: promoting comprehensive, ex-ante risk reduction and effectively mobilising resources for anticipatory action and preparedness in different ways.

In the face of rising risks, decision-makers are confronted with trade-offs in their allocation of resources for climate risk management. It is of course desirable to invest in DRR and adaptation measures, in order to actually reduce the expected impacts of future hazards. However, not all risks can be cost-effectively reduced or prevented altogether, especially those likely to occur only very rarely. Insurance and other transfer approaches are a potential solution for dealing with the remaining, or residual, risks.

Insurance and other risk-transfer or risk-sharing approaches can move funds across time and space, meaning they can serve individuals, households, communities, businesses, national or sub-national governments, and humanitarian or development organisations to complement ex ante risk reduction through ensuring swift access to financing after an extreme event. That financing can then be used for relief, recovery and reconstruction activities. Insurance instruments lessen the risk of insufficient capital when a disaster strikes, reducing subsequent human and economic impacts. If reliable, they also

reduce risks on governmental balance sheets, inviting investors to commit capital to a country, which can, in turn, contribute to adaptation in the long run.

There can of course be ways in which risk-sharing instruments go against DRR and adaptation. Ill-conceived insurance schemes can be plagued by moral hazard and perverse incentives, encouraging investments in risk-prone areas or sectors, knowing that the insurance payout will cover the costs in case a disaster happens. Subsidies may significantly distort prices or competition – ultimately increasing disaster exposure, vulnerability and losses.

Additionally, because of the costs involved in analysis, holding capital, and profits for the risk taker, the price of insurance is always higher than the expected annual payout (or the insurer will become insolvent) and so can be relatively expensive. This is especially true for the most vulnerable: in the face of clear and urgent needs, it is risky to invest in something that reaps benefits only in the case of a relatively unlikely event. Setting up and sustaining insurance schemes requires investments that could instead be allocated to more tangible options, such as climate-smart development and vulnerability reduction for communities – the key challenge is to find the right balance between risk reduction and risk transfer instruments to manage disaster risks.

Multilateral climate funds must be aware of the prospect of supporting insurance instruments that do not improve the lives of those most vulnerable to extreme events or long-term climate changes – in least developed countries (LDCs) and beyond. A key concern is asymmetry of information: whether at the sovereign level or at micro scale, prospective clients are often unable to fully understand the insurance instruments being offered to them. Causes for this asymmetry can range from capacity constraints to the fact that insurers may choose to not share adequate information given their commercial incentives. It is crucial to develop principles

and practices to ensure that clients are able to challenge assumptions, fully integrating their priorities into the negotiations for design and implementation.

The most vulnerable should benefit from climate finance, but insurance instruments can easily leave them out. Reasons can include inability to secure sufficient, reliable historical data for key variables (such as rainfall or agricultural production – see Barnett and Mahul 2007), as well as unaffordable premiums, lack of appropriate distribution networks, or local cultural and risk knowledge factors (Ranger, Surminski and Silver 2011). These are just some of the issues that need to be better understood and addressed.

Nonetheless, because of its ability to act as a safety net or buffer shortly after an extreme weather event, and because of wider resilience co-benefits it may provide, insurance can contribute to the management of disaster risk in different ways.

Promoting comprehensive, ex-ante disaster risk reduction

By 'pricing' risk, insurance instruments can, in theory, provide incentives for hazard awareness and ex-ante risk-reduction measures. A well-known example is how car owners may be more inclined to install an alarm system if this reduces the cost of theft insurance premium. Similarly – in theory – it is possible to convey price signals that incentivise climate risk reduction. For example, households that build in less risky areas, or households that retrofit their existing homes against flood risk could have exclusive access to lower insurance premiums; and those reduced premiums can act as motivation to take on such investments. Another approach is stipulating risk reduction behaviour in insurance and related contracts: just like house buyers can be required to install smoke detectors to be eligible for a mortgage, diverse financial mechanisms for climate risk sharing could require risk-reduction steps as a condition for participation. In Fiji, for instance, mortgages were made conditional on acquiring cyclone

insurance. Insurance, in turn, could only be obtained upon provision of a certificate confirming compliance with the 1985 National Building Code (Benson and Clay, 2004). Despite their potential value to promote DRR, these links are not always effective nor built in from the start, as is the case with the US National Flood Insurance Program (NFIP) – which has encouraged new construction and rebuilding in highly flood-prone locations and resulted in major indebtedness of the programme. Across flood insurance schemes in low – and middle-income countries, the links between risk transfer and risk reduction are often missing (Surminski and Oramas-Dorta, 2014). In low-income contexts, additional costs related to risk-reduction activities may also present a challenge to policyholders or make the insurance product less attractive.

To support adaptation, insurance instruments therefore need to include incentives for risk reduction based on transparency and price, or as an explicitly designed component. Where necessary, this could be paired with access to finance or other support that enables investments in risk reduction for those most vulnerable to weather and climate extremes and those unable to afford them on their own. It is also crucial to set incentives for risk reduction and adaptation at the right scale; while some actions can be effectively undertaken at household or community level, others such as flood prevention infrastructure or early warning systems require the involvement of national governments, civil society organisations or firms. In either case, micro-level incentives should not disincentivise governments from taking responsibility. More importantly, it is difficult to justify the use of multilateral climate funds for insurance initiatives unless they are designed and implemented to incentivise risk reduction and avoid maladaptation, for instance through pricing or as an integral part of adaptation and risk-reduction programmes that contribute to the comprehensive management of climate risks.

Over the past decade, regional insurance pools such as the Caribbean Catastrophe

Risk Insurance Facility (CCRIF) and the Africa Risk Capacity (ARC) have aimed to provide participating governments with financial risk management tools, funds to manage extreme events, as well as incentives and capacities for DRR, planning and response. In the case of ARC, these links are particularly explicit: countries participating in the risk pool set up national technical committees to monitor drought situations and to coordinate action accordingly. They are also required to put in place contingency plans before being eligible to join, partly aiming to lower costs for what governments or donors would otherwise fund ex-post. In this capacity, insurance schemes can contribute to addressing loss and damage from extreme weather events or other rapid onset disasters. However, they are not well suited to dealing with certain climate change impacts, such as sea level rise and other very slow onset processes and events. Increases in frequency and intensity of extreme events might also make the transfer of related risks unaffordable in the future. Complements to insurance are therefore needed to address loss and damage more comprehensively.

With regards to risk financing options at the household level, insurance instruments can be aligned with comprehensive approaches to climate risk management and resilience. For example, the R4 Rural Resilience Initiative by Oxfam America, the World Food Programme and partners links index insurance with microcredit, savings, and improved natural resource management; farmers in Ethiopia, Malawi, Senegal and Zambia pay for their insurance premiums in cash or through resilience-building labour, such as soil conservation, or work on disaster risk-reduction infrastructure. Financial protection from the insurance, in turn, facilitates access to credit for improved agricultural inputs (World Food Programme and Oxfam America, 2016). Nonetheless, even in such cases, microinsurance may not always be the most efficient option to provide protection to the most vulnerable – putting in place microinsurance infrastructure is expensive, and premiums are rarely affordable

for the lowest income shares of the population without continued subsidies. Insurance premium subsidies could be justified as a reallocation of funding towards loss and damage for those most vulnerable to impacts from extreme weather and climate events – but such approach can also create incentives against adaptation investments aimed at reducing climate risks. If reducing and addressing loss and damage is the central goal, it is crucial to ensure that subsidies do not reinforce vulnerabilities and exposures or stimulate maladaptive behaviour. An alternative option could be to provide subsidies for adaptation to set the right incentive structure for addressing climate risks. Furthermore, it is important to examine whether there are other risk financing instruments – such as contingent credit, catastrophe bonds and reserve funds – that may, in some cases, be better suited to support those most in need (Suarez and Linnerooth-Bayer, 2011). This highlights the importance of comprehensive approaches to risk financing and the need for layering different financial instruments and non-financial support mechanisms to strengthen risk reduction and adaptation for different target groups.

Mobilising resources for early action

While most insurance products are conceived for compensating loss caused by extreme events, risk financing mechanisms can be designed and implemented in ways that actually help eliminate or reduce the magnitude of losses in the short – or long-term. For example, a pilot risk-transfer project in Ethiopia supported by the World Food Programme was designed to pay claims to the government based on a drought index – after observed lack of rain but before actual losses would materialise (Wiseman and Hess, 2007). This allowed stakeholders to prevent the depletion of farmers' productive assets, thus enabling households to produce more food during subsequent seasons. A pilot project in Peru designed contingent index insurance instruments linked to a forecast of imminent, avoidable loss. Peru typically experiences El Niño-related flooding in February, and the project aimed to provide payments to insured microfinance institutions, cooperatives

and other service providers in January. Payouts were intended for a wide range of anticipatory measures, from planning water flow in dam operations to adjusting cash flows in the anticipation of likely income reduction (Wilkinson et al., 2018; GlobalAgRisk Inc., 2010).

The majority of work addressing insurance for climate risk has focused on the post-shock movement of financial resources. While this is important, there is also a window of opportunity for timely DRR investments *before* disasters; as soon as the science indicates that the risk of an extreme event is unusually high, Forecast-based Financing (FbF) can enable early action to reduce losses (Coughlan de Perez et al., 2015). If pre-agreed preventive measures are funded and deployed in that precious window, the value of money can be multiplied, which not only accelerates post-shock work but also reduces the future need for financial resources that address relief, recovery and reconstruction efforts. While insurance can be one instrument to support FbF, others such as contingent finance or dedicated reserves are also options to secure, hold and disburse funding for timely risk management investments. The most suitable option will depend on context and the capacity and risk priorities of decision-makers, but in many cases a combination of financing instruments triggered at different thresholds may be most cost-effective.

SUPPORT OF MULTILATERAL CLIMATE FUNDS TO INSURANCE INITIATIVES

Based on interviews with fund managers of the GCF, GEF and PPCR conducted in March 2018, the following section explores the role the funds have played so far in supporting insurance against weather and climate-related risks, and how their investments aim to support climate resilience.

Multilateral climate funds are increasingly engaging with the private sector, meaning they channel the provision of funds both from and to the private sector (Carbon Brief, 2017; Whitley et al., 2014). About 30% of the total \$8.3 billion of the Climate Investment Funds (CIF) is allocated

to programmes that aim to stimulate private sector participation.¹ So far, a small number of risk-transfer or risk-sharing initiatives have been funded through both the private and public windows of the CIF and other multilateral climate funds. With expectations of insurance helping to address loss and damage related to extreme weather events, its potential to incentivise risk reduction and adaptation, and opportunities to open up new insurance markets, existing insurance initiatives and other stakeholders are advocating that the climate funds increase their investments into insurance.

Insurance projects funded by multilateral climate funds

According to data from the Climate Funds Update (CFU) website, multilateral climate funds have approved a total of 136.15 million USD in grants and concessional loans to projects that entail an insurance component – including microinsurance and sovereign risk pools – between 2008 and 2017. This encompasses 17 projects related to adaptation with the term 'insurance' or 'risk' in the project title or description and an 'insurance', 'risk transfer', 'risk sharing' or 'risk pool' component in project descriptions² (Climate Funds Update, 2018).

Of the total \$136.15 million approved

¹ www.climateinvestmentfunds.org/fund/private-sector

² Figures presented relate to projects listed in the CFU database that mention insurance or risk in the project title or description. Descriptions of all identified project were subsequently screened for the terms 'insurance', 'risk transfer', 'risk sharing' or 'risk pooling' and those with relevant components were included in the analysis. This means, we may not capture other climate fund supported projects that entail an insurance component where insurance or risk are not explicitly mentioned in project description or on insurance, the share made available for investments in supporting insurance may be lower than the figures presented above. Based on information from the CFU website, it was not possible to disentangle resource allocations to insurance from resource allocations to other project components.

for these projects, \$126.15 million. were made available in the form of grants and the remaining \$10 million. as concessional loans. Of the total \$4.1 billion of funding approved by multilateral climate funds for programmes with a focus on adaptation and recorded on the CFU website, about 3.29% have been allocated to projects with a substantial and explicit insurance, risk transfer or risk sharing component.³

An additional \$925 million. have been approved by multilateral climate funds for 109 projects focusing on climate-related risks and ways to better manage them for increasing the resilience of communities, governments or specific sectors. While some of these may further link to or work with insurance initiatives, they also feature a wide variety of other strategies and instruments for risk management and adaptation.

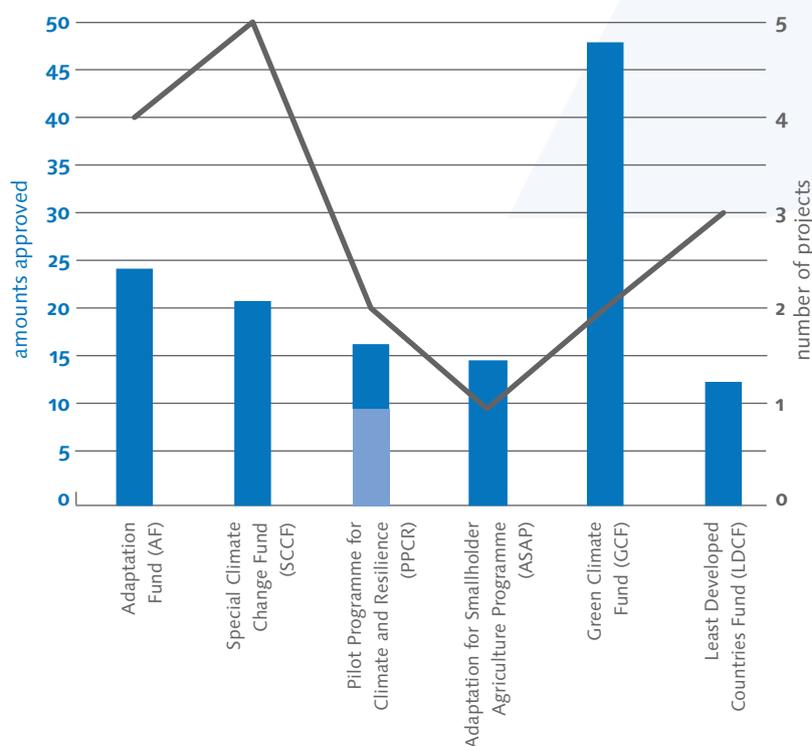
Next to multilateral climate funds, German and UK bilateral international climate funds listed in the CFU database have approved \$14.1 million to the ARC risk pool, microinsurance or innovative insurance approaches for adaptation since 2008.

Insurance and the mandates of multilateral climate funds on resilience and adaptation

The way in which insurance fits within the mandates of the multilateral climate funds around adaptation and loss and damage depends on the specific fund and may differ between those that operate inside or outside the UNFCCC process. As set out in the Paris Agreement, insurance is a potential area of cooperation and facilitation to help avert, minimise and address loss and damage. This means, funds under the Convention, such as the GEF, have recognised insurance as an important potential area of engagement. At the same time, GEF fund managers also highlight the wider adaptation co-benefits that investments in insurance initiatives can have if these are well-designed. This includes, for

³ Note that these calculations are based on the face value of the instruments, not their grant equivalent.

Figure 1: Projects entailing an insurance component approved by multilateral climate funds, 2008 to 2017 (in USD millions)



Source: Climate Funds Update, 2018.

example, the risk data and information generated through insurance schemes. In line with their wider mandate, GEF and GCF fund managers also expressed a recognition that insurance supported by the multilateral climate funds, and more generally, should not lead to maladaptive outcomes, for instance by distorting risk pricing.

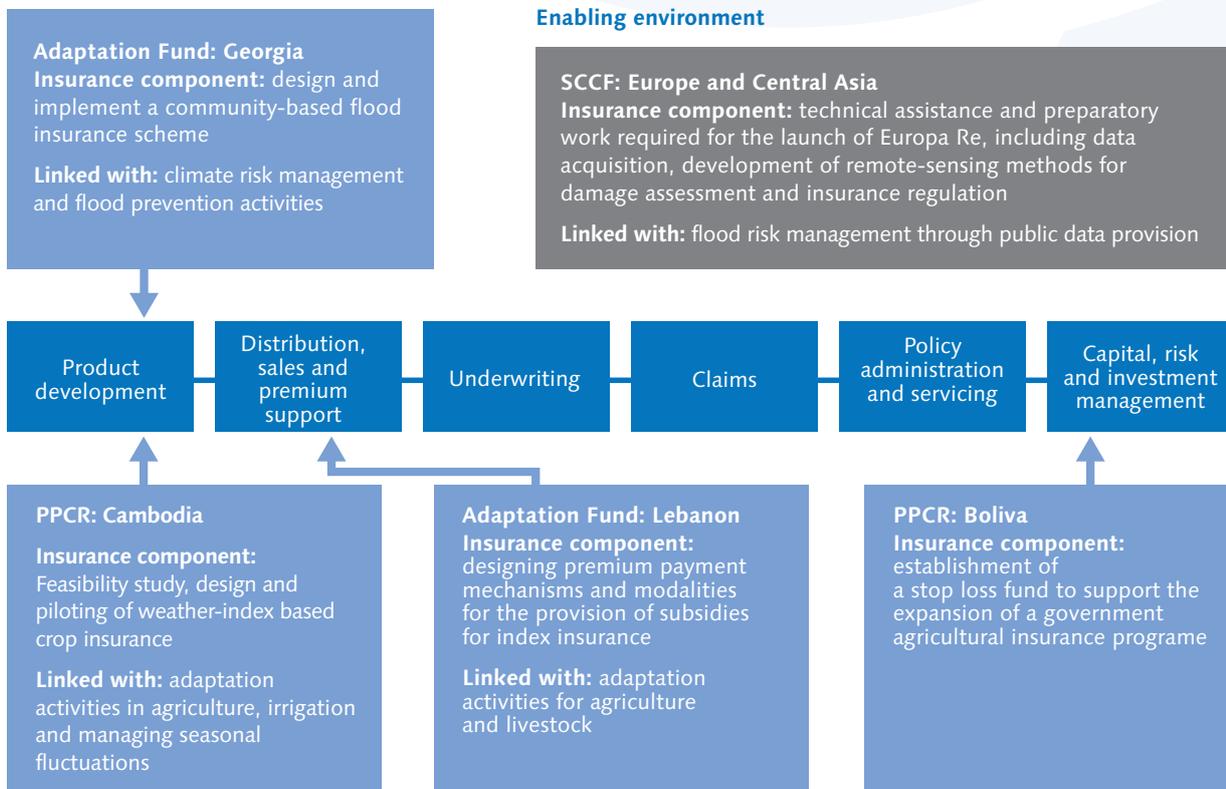
Interviews with PPCR fund managers highlighted that when the fund began considering support to insurance projects in 2015, some of its implementing partners, including the Inter-American Development Bank (IDB) and the Asian Development Bank (ADB), did not consider it a main priority. However, there is an expectation that this is now changing and that the multilateral development banks (MDBs) are starting to reconsider insurance schemes more seriously. In part, this is related to the increased use of concessional finance through which the PPCR operates. Furthermore, governments can consider

insurance mechanisms as targeted financial management approaches that can help them enhance their fiscal responsibilities. This reflects the overall PPCR programmatic approach, whose main objective is to mainstream climate resilience in governments across ministries and departments.

The role of the multilateral climate funds in insurance development and implementation

The majority of funding from multilateral climate funds for climate risk insurance initiatives so far has been in the form of grants rather than concessional loans – the two instruments available to these funds (World Bank, n.d.). Overall, multilateral climate funds appear to be mainly investing in earlier steps of the insurance value chain around data, modelling and product development. Some projects also engage in capital, risk and investment management or in supporting the enabling environment for insurance

Figure 2: Examples of multilateral climate fund investments across the insurance value chain⁴



Source: Authors and project documents from Adaptation Fund, SCCF and PPCR.

approaches (see examples in Figure 2). However, as fund managers highlight, various stakeholders have very different opinions on and understandings of the components in which the multilateral climate funds are able – and willing – to invest when it comes to climate risk insurance. Requests for funding driven by private insurers or existing initiatives often lack national ownership; many funds are unwilling to carry operational costs or provide direct government budget support, and some emphasise the need to generate adaptation co-benefits from investments in insurance.

The following sections present an overview of some of the key aspects related to insurance that the multilateral climate funds have invested in and outlines how their engagement has,

or could, support DRR and adaptation more widely.

Climate and weather risk information

Many of the investments in early development related to risk assessment or data generation may be beneficial for risk management and adaptation regardless of whether insurance is later adopted or not. In Serbia, Macedonia and Albania, for example, property-based flood risk information also used in the GEF supported Europa Reinsurance Facility's SEEC CRIF flood insurance scheme is made freely available online. Governments, businesses and households can access this information and use it to take risk-informed decisions, so this can be transformative (Gurenko and Schinn, 2016). However, these links need to be explicit from the start in order to ensure that the information generated can be effectively accessed and used by institutions and actors involved in risk management and adaptation beyond the particular insurance scheme. Multilateral climate funds supporting

insurance initiatives can have a key role in this by facilitating or enforcing that information generated under the schemes they back are made available in formats useful to decision-makers or the public. Together with communication, capacity building and principles for risk financing, this information can also help reduce information asymmetry and support governments, businesses, organisations or households in better assessing the value proposition of insurance in their specific context.

Risk-based pricing

A key requirement expressed by both the GEF and GCF fund managers is that they will not directly subsidise premiums (though this is not necessarily the case for all of the international climate funds). Their reluctance to finance premiums relates to (1) questions around the sustainability of covering ongoing costs through time-constrained climate funds, (2) to the potential for disincentivising investments in comprehensive risk management or

⁴ Steps in the insurance value chain are based on: [www2.deloitte.com/content/dam/Deloitte/ie/Images/misc/IE_WavesofDisrup_Infographic_webonly_draft6%20\(002\).pdf](http://www2.deloitte.com/content/dam/Deloitte/ie/Images/misc/IE_WavesofDisrup_Infographic_webonly_draft6%20(002).pdf)

adaptation through a focus on insurance, and (3) considerations around the distortion of risk pricing potentially resulting in maladaptive outcomes, for example by reinforcing continued exposure when the insurance incentivises reconstruction in high flood-risk areas. Relatedly, GEF fund managers highlighted the importance of risk-based pricing to set incentives for risk reduction. Direct investments in adaptation, or in insurance components with demonstrated DRR and adaptation co-benefits can also help create more effective incentives.

Enabling market development where insurance is an adequate and viable option

Climate funds have also taken on a role in financing some of the risks related to establishing new insurance schemes – risks which other funders are not ready to bear – so as to stimulate innovative approaches for managing climate and weather-related risks. The specific role of the climate funds then depends on country context, purchasing power, GDP, other financing instruments available, and any additional players involved in supporting insurance in a particular country. The GEF, for instance, provides grants to finance the up-front costs of developing insurance mechanisms that prevented insurers from entering the Eastern European flood insurance market. These up-front costs covered risk modelling capacity, data generation and ensuring adequate regulatory environments. As the premium price is set according to the unique risks households face, there is a need to collect down-scaled data, for example on historic flooding events. These costs do not generate any immediate returns and can therefore present a barrier for investment from private companies, but they are expected to result in public and private returns in the long term through insurance as well as by improving risk-based decision-making more broadly.

However, interviews with GCF fund managers also highlighted that there are questions and opportunity costs related to investing in insurance vis-à-vis other adaptation and risk reduction options; the aim is to see insurance as part of a holistic approach to adaptation rather than an isolated instrument. Both GCF's private and public funding windows are starting to engage with insurance schemes but are still at an early stage. In order to support a holistic approach more broadly, international climate funds should therefore ascertain that their engagement with insurance initiatives builds on evidence and analysis of insurance versus other instruments, for instance within a comprehensive national disaster risk management and adaptation context, to better understand where insurance is a suitable and viable option.

Alignment with national priorities and policies for disaster risk management and adaptation

Insurance is a key theme of one PPCR supported programme in Bolivia. Programme components include the establishment of a stop loss fund⁵ to support scale and sustainability of agricultural insurance in the country, along with other activities related to climate information; the installation of meteorological and weather stations; supporting financial strategies for farmers; and demonstrating how to support the adaptation of vulnerable communities more widely in the agricultural sector. The PPCR project in Bolivia is implemented through the fund's public sector arm and designed to operate as a public-private partnership. As a key implementer, the

⁵ The stop loss fund is designed to cover a portion of the eventual losses. It therefore functions as a complement to the reinsurance backing of the scheme on the international reinsurance markets. The fund is aimed at enhancing the financial efficiency and sustainability of the insurance mechanism, as well as facilitating the participation of international reinsurers and the local insurance market in the scheme (Climate Investment Funds, 2014).

Bolivian government is highly involved to make sure the PPCR-supported project is in line with national priorities and supports the expansion of pre-existing products under its own agricultural insurance scheme (Climate Investment Funds, 2014). However, nationwide insurance schemes offering coverage to households or individual producers (such as the Bolivia example or those supported by the GEF in Eastern Europe) may not always be the most suitable approaches for LDCs. A frequent lack in insurance infrastructure to reach more remote locations, high premium prices or capacity and resource constraints can present a barrier. This means, well-targeted and innovative approaches – including community-based adaptation and risk sharing, the bundling of insurance with other services, risk reduction and anticipatory action based on forecasts, adequate index insurance, or government risk financing mechanisms linked to social protection mechanism – are needed to ensure climate fund investments in risk transfer and risk sharing can support adaptation for the most vulnerable. Some of these alternatives to nationwide microinsurance schemes are also supported by the GEF or other international climate funds.

In other cases where insurance may be a viable option, the GEF highlighted lack of political support and government engagement as the biggest challenges to effective investments in insurance for supporting risk reduction and adaptation. The country-driven approach of multilateral climate funds means that funding priorities depend on country requests, which largely tend to focus on infrastructure and agriculture investment. 'Soft options' such as risk financing instruments tend to not rank high as government priorities. In practice, daily subsistence activities can divert attention from addressing climate and weather-related risks. Knowledge and awareness of short-, medium- and long-term risks can be limited and governments often prefer more tangible investments (e.g. hard infrastructure) to building up financial instruments for risk transfer, risk reduction and adaptation, including, but not limited to, insurance. Nonetheless,

interviewed fund managers highlighted government buy-in and longer-term availability of funding as an important aspect to ensure the sustainability and scalability of insurance schemes.

Therefore, as fund managers have stressed, it is critical to work in coordination with governments and other stakeholders that already have strong connections with national authorities and that can support informed decision-making around risk financing, for example the multilateral development banks or regional organisations. Finally, the overall extent to which insurance is indeed integrated with risk reduction and adaptation components in projects across international climate funds also requires deeper investigation. This would help to better understand what structures and enabling factors are needed to support effective integration and realisation of insurance co-benefits for DRR and adaptation at national and local levels.

RECOMMENDATIONS

Multilateral climate funds and wider stakeholders engaged in climate or disaster risk insurance – including insurers, government, development banks and NGOs – should ensure that insurance is integrated with national disaster risk management and adaptation plans based on evidence and analysis of insurance versus other instruments. This can support local ownership and create effective links to support adaptation for those most vulnerable to climate change. With regards to the role of multilateral climate funds in insurance initiatives, this includes:

- **Identifying sustainable incentives for investment, which make a good business case for the private sector, while supporting public sector strategies and priorities.** This can include trade-offs, as such incentives may be stronger in middle-income countries than compared to LDCs. Though international climate funds can help overcome initial costs and barriers in setting up insurance schemes, this does not automatically mean they will target the most vulnerable.

- **Looking for successful models of collaboration and funding for comprehensive risk management through the multilateral climate funds and sharing experiences.**

There is a need to find the right working modality for different contexts. That way, when – and where – insurance can be the best way to accomplish climate objectives such as strengthening resilience among those most vulnerable to extreme weather events and climate change, it can be replicated and scaled up.

- **Increasing coordination among funds and with existing insurance initiatives.** Establishing strong institutional partnerships around insurance investments among multilateral climate funds, as well as with more targeted approaches such as the InsuResilience Investment Fund, could help support insurance development in climate action more effectively. It could also help to reduce misconceptions around what the funds can, will and should finance.

In order to best support those most vulnerable to climate-related risks in grappling with them, multilateral climate funds should take into account the following:⁶

- **Considering insurance as one of many risk financing instruments** potentially suitable for climate needs and layering it with other instruments (e.g. contingent credit, catastrophe bonds and reserve funds at sovereign level; or microfinance, informal risk sharing, and access to social safety nets for individuals and communities) where needed to manage risks more comprehensively.

- **Effectively tailoring insurance design** and delivery to specific contexts and different target entities. For instance, individuals or households may access microinsurance directly or could benefit from social protection schemes backed by sovereign insurance mechanisms, depending on their diverse needs and capacities.

- **Ensuring swift and reliable payouts from insurance and designing insurance and other risk-transfer or risk-sharing instruments in ways that also promote timely and adequate investments in risk reduction,** as opposed to merely moving funds after shocks.

- **Preventing maladaptation to long-term climatic changes** by adequately communicating and pricing risk, supporting risk-informed decision-making, providing additional support to compatible adaptation investments where needed, and ensuring co-benefits from up front investments in insurance mechanisms, for example towards data and modelling, can be used for risk reduction and adaptation more widely.

- **Investing in alternative mechanisms to cope with impacts from slow-onset climate-related events** and exploring how they could be better linked with insurance, thus supporting adaptation and addressing loss and damage more comprehensively.

⁶ See Oxfam, 2018; Le Quesne et al., 2017; Weingärtner et al., 2017; and Schaefer and Waters, 2016 for further challenges, opportunities and principles.

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ACKNOWLEDGEMENTS

Parts of this policy brief build on interviews with representatives of multilateral climate funds conducted in March 2018. The authors are grateful to Dustin Schinn (GEF); German Velasquez and Tony Clamp (GCF); and Lorie Rufo, Scott Andreas and Christopher Head (PPCR) for participating in interviews and providing additional project information and comments on the draft brief. We also thank Maarten van Aalst (Red Cross Red Crescent Climate Centre), Neil Bird (ODI), Rebecca Nadin (ODI), Nicola Ranger (DFID), John Ward (Vivid Economics), Charlene Watson (ODI) and Erin Roberts (ODI) for reviewing an earlier draft of the brief and providing valuable comments. Finally, we are thankful to Charlotte Rye for supporting the production of this policy brief.



Published June 2018
Designed and typeset by
Soapbox, www.soapbox.co.uk

Website: www.braced.org
Twitter: @bebraced
Facebook: www.facebook.com/bracedforclimatechange

The BRACED Knowledge Manager generates evidence and learning on resilience and adaptation in partnership with the BRACED projects and the wider resilience community. It gathers robust evidence of what works

to strengthen resilience to climate extremes and disasters, and initiates and supports processes to ensure that evidence is put into use in policy and programmes. The Knowledge Manager also fosters partnerships to amplify the impact of new evidence and learning, in order to significantly improve levels of resilience in poor and vulnerable countries and communities around the world.

The Knowledge Manager consortium is led by the Overseas Development Institute and includes the Red Cross Red Crescent Climate Centre, the Asian Disaster Preparedness Center, ENDA Energie, ITAD, Thomson Reuters Foundation and the University of Nairobi.