



POLICY BRIEF

Protected against climate damage?

The opportunities and limitations of climate risk insurance
for the protection of vulnerable populations

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Foreword

Climate change is not a problem of a distant future; it is already a bitter reality for millions of people around the world today. Bread for the World (Brot für die Welt) and ACT Alliance's partner organisations report that the regions in which they operate are increasingly experiencing the impacts of climate change. These effects are even worsening in regions that have put numerous climate change adaptation measures in place. Clearly, global warming has been causing increasing levels of climate-related loss and damage for many years. At the same time, discussions about the consequences of climate change have been taking place at the political level for more than 20 years - particularly within the United Nations Framework Convention on Climate Change. However, it was not until the 2015 Paris Agreement that a global institutional framework for the collective management of climate risks and climate-related loss and damage was concluded. Until this point, industrialised countries had repeatedly delayed the negotiations due to concerns about compensation claims.

Despite its importance, there are gaps in the Paris Agreement. Although climate-related loss and damage is recognised within its scope, and the Agreement also provides the Warsaw International Mechanism with a mandate to develop solutions to loss and damage, it does not define any specific commitments on the levels of financing that will be needed to implement these measures.

Given the responsibility and the economic output of the countries and companies that are mainly responsible for climate change, this is unacceptable. For years, non-governmental organisations and the countries most affected by climate change have been demanding that the companies and countries throughout the world that are causing these CO₂ emissions take responsibility for climate-related damage in accordance with the precautionary principle. Climate justice would mean that they would have to provide financial support at least to the poorest and most vulnerable countries so that they can cope with climate-related loss and damage. A fund similar to the Green Climate Fund would be well suited for this purpose.

The poorest and most vulnerable are neither adequately protected against the impact of climate change nor are they being relieved of the burden by those responsible. This is not only unjust; it is a scandal. We welcome the fact that the German government has taken the political initiative and places high priority on climate risk reduction and climate risk transfer. It did so during its last G7 presidency, and it is continuing to do so during its

G20 presidency. However, it is essential that this work involves a specific focus on the most vulnerable populations and countries.

Civil society has often been critical towards the introduction of climate risk insurance. Although insurance is not enough to gain justice, it can help to fight against the growing levels of poverty that are being caused by climate-related loss and damage, and to close the gaps in protection. However, in order to do so, insurance must form part of a broad resilience strategy that complements - without seeking to replace - social protection systems and humanitarian aid. In the case of climate risk insurance, there is a need for the state to provide safeguards, as well as for insurance supervision and independent monitoring to guarantee that insurance remains aligned with public needs. Moreover, this needs to be done in a manner that is similar to other instruments that protect people's livelihoods such as social security schemes. If marginalised groups are to be reached at all, experience with insurances in the poverty context shows that it is essential to ensure a good level of state support and an appropriate regulatory framework.

This publication aims to provide a constructive contribution to a debate that has become ever more significant. It particularly stresses the importance of climate risk insurance and discusses the opportunities and limitations of insurance, particularly in the face of demands for climate justice and the fight against poverty, as well as the debates on vulnerability and resilience.

We would like to thank the experts from civil society, think tanks, insurance companies, international organisations and policy makers who have contributed to this publication with critical comments and important information.

People in the poorest countries are currently being left to suffer the consequences of global warming alone. It is a basic issue of justice that the global community ensures that risks and risk management are borne fairly by everyone.

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Summary

In autumn 2015, the international community drew up 17 Sustainable Development Goals (SDGs). These were followed by National Action Plans established at the national level to ensure the goals could be achieved by 2030. However, climate change now stands in the path of achieving the SDGs and will specifically affect the poorest populations in the countries that are most at risk from climate change.

Although extreme weather events such as tropical storms, droughts and floods threaten these people's harvests, income and livelihoods, climate risk insurance can help to reduce their vulnerability. In the event of a disaster, insurance can quickly provide funds to help the injured parties deal with their situation as well as to bolster emergency responses and strengthen social protection systems.

Despite the opportunities it provides, climate risk insurance has yet to be implemented widely in developing countries. In many places, there is little awareness of risk, sometimes people do not even realise that insurance exists, and if they do, insurances are viewed as too expensive, or the country lacks an appropriate regulatory framework. The InsuResilience initiative, which was founded in 2015 during the German G7 presidency, is an attempt to change this situation. InsuResilience aims to provide 400 million additional poor and vulnerable people with climate risk insurance by 2020. Clearly, risk transfer has now become an integral part of resilience strategies. Moreover, under the German presidency of the G20, InsuResilience could even be expanded to include further stakeholders and instruments as part of a Global Partnership for Climate and Disaster Risk Finance and Insurance Solutions. In addition, the most vulnerable countries - the so called V20 (Vulnerable Twenty) - intend to establish a common risk pool to improve their level of protection.

Be this as it may, if climate risk insurance really is to protect the poorest and most vulnerable populations, it has to focus on people's needs, be easily accessible and, above all, affordable. The issue of affordability is closely linked to questions of climate justice: who should be viewed as liable for the costs - those responsible for climate change or the people who suffer most from it? Until now, the polluter pays principle has yet to be applied consistently during attempts to tackle climate-related loss and damage. Risk insurance and risk financing, however, could lead this to change. At the same time, solidarity is widely employed in climate risk transfer - a situation in

which all insured countries take on the costs of the risks associated with extreme weather events (this is also the case with InsuResilience). InsuResilience is committed to focusing on poverty, and is currently testing options for 'smart support' aimed at ensuring that poor people can afford insurance. This focus on the poorest people could be lost, however, if the planned expansion towards a global partnership is not implemented with care.

Bread for the World and ACT Alliance recommend that the German government and the G20 turn insurance into an effective mechanism to better protect poor and vulnerable populations against risks associated with climate change. In order to do so, we recommend: 1) a priority on raising awareness about insurance; legal regulation, capacity building and transparency; 2) integrating climate risk insurances into risk management strategies; 3) implementing the focus on poor and vulnerable populations as guiding principles; 4) reducing the costs of risk financing; 5) progressively ensuring that risk insurance reflects the principles of solidarity and the polluter pays principle; 6) promoting innovation through pilot projects; 7) securing ownership for vulnerable countries and civil society participation; 8) guaranteeing long-term financial support to InsuResilience; 9) ensuring that no support is provided to risk insurances that endanger food security, 10) drawing up guidelines that focus on poverty for cooperation with the private sector, and, 11) addressing the gaps in protection that cannot be closed through insurance.

Chapter 1

Introduction

Throughout the world, climate change is leading to increasing numbers of extreme climate- and weather-related events and these are causing rising levels of climate-related loss and damage. The World Bank argues that the economic costs of extreme weather events are often much higher than are usually assumed, at least once the indirect costs have also been taken into account. In fact, it estimates that these losses amount to several hundred billion US dollars annually.

Climate risks also stand in the way of achieving the Sustainable Development Goals. The World Bank has calculated that climate-related extreme events are pushing more than twenty million people back into poverty every year (World Bank Group 2017a). At the same time, the refinancing costs incurred by vulnerable countries are rising because worsening climate risks lead them to receive poorer credit ratings. In turn, this results in higher interest rates and thus less money for development.

What can be done about this situation? The G7's InsuResilience initiative along with current efforts to launch a Global Partnership for Climate and Disaster Risk Finance and Insurance Solutions with the inclusion of the G20 are testament to the growing awareness of climate risks among political decision makers. InsuResilience is focused on risk reduction and expanding insurance protection to the poorest populations. The planned Global Partnership will extend InsuResilience to

incorporate additional stakeholders such as the G20 countries, and provide it with a focus on risk financing with the aim of reducing the costs of risk insurance. The most vulnerable states, represented by the V20, have also made similar proposals.

Even if there is a large level of interest at the political level, in many developing countries and in civil society, knowledge about climate risk insurance often remains limited. This problem increases the likelihood of misunderstandings. This publication provides an overview of climate risk insurance options and describes the opportunities and limitations insurance provides in terms of protecting vulnerable populations. It begins by explaining how extreme weather events are jeopardising the achievement of the Sustainable Development Goals, and the role insurances can play within integrated climate risk management systems. It goes on to discuss the issue of insurances from a climate justice perspective, and the requirements insurances will have to meet in order to respond effectively to the needs of poor populations and the countries most at risk. This is followed by an overview of the most widely available climate risk insurances, before it describes the G7's InsuResilience initiative and evaluates the work it has undertaken until now. It subsequently discusses alternative hedging instruments alongside the G20's Global Partnership before concluding with Bread for the World and ACT Alliance's policy recommendations.



The Philippines is considered to be one of the countries most at risk from the consequences of climate change and natural catastrophes. Many people in the island state also live in bitter poverty.

Chapter 2

Climate risks threaten sustainable development

The figures are alarming: 26 million people every year are being pushed back into poverty by natural disasters; this is equivalent to the entire population of Mozambique (Halle-gatte et al. 2017). As such, alongside the more than one billion people who have overcome poverty during the last fifteen years, 390 million additional people would have been able to do so if it had not been for natural disasters (World Bank Group 2017a). Moreover, if no more climate-related catastrophes and natural disasters were to occur, the Agenda 2030's first development goal (ending extreme poverty by 2030) could be achieved five years earlier.

Be this as it may, vulnerability to extreme weather events is increasing, not decreasing. Alongside violent conflict, climate change now poses the greatest threat to the SDGs. Whereas the average incidence rate and levels of damage caused by non-climate-related natural disasters, such as volcanic eruptions and earthquakes, have hardly changed over the last few years, both the frequency and intensity of climate-, weather-related and hydrological disasters have increased significantly since the 1990s, subsequently leading to increased levels of loss and damage.

The World Bank's study *Sovereign Climate and Disaster Risk Pooling*, which was commissioned by the German G20 presidency, estimates that extreme events such as hurricanes, heavy rains, floods and droughts, as well as heat waves and the shifting of the seasons, are causing economic losses of more than USD 300 billion every year (see World Bank Group 2017a). The losses caused by climate-related and natural disasters, however, amount to as much as USD 520 billion annually, once indirect damage such as the drop in consumer spending has been taken into account.

Moreover, these figures do not include the non-economic consequences of climate-related disasters such as the loss of human life, biodiversity, resource access, security, homeland and identity. However, these issues are just as restricting to development and can become important drivers of violent conflicts and migration when they occur alongside rapidly growing populations, weak statehood and ethnically or religiously fuelled conflicts (Schleussner et al. 2016).

The NatCat-Service run by the reinsurer Munich Re (Munich Re 2017) identified a total of 12,494 climate-related natural disasters between 1990 and 2016. The majority occurred in tropical and coastal regions, particularly in South and South-East Asia, North and Central America and the Caribbean. The most deaths occurred in Asia,

with the highest economic losses suffered in North and Central America. The long-term global climate index shows that the ten most affected states are developing countries; six from Asia and four from Central America and the Caribbean (Germanwatch 2016). Three of these countries (Bangladesh, Haiti and Myanmar) are also among the Least Developed Countries (LDCs) and six are vulnerable countries that are members of the Climate Vulnerable Forum (CVF).

Climate-related damage adds up to a two percent loss in gross domestic product (GDP) over the long-term average, particularly in poverty-stricken and vulnerable high-risk countries (such as in Honduras between 1996 and 2015). In addition, in terms of estimated total loss, in 2015, the Caribbean state of Dominica lost 77 percent of its GDP to climate-related damage (Germanwatch 2016). Climate-related damage can therefore have a severe impact on a country's economic development over many years. Furthermore, accumulated risk can lead to a reduction in a country's credit rating. Rating agencies such as Moody's are increasingly taking climate risks into account and expect long-term negative climate trends to lead to falling credit ratings. Moody's is particularly focused on the countries facing the most risk from climate change - Central America and the Caribbean, South Asia and Sub-Saharan Africa (Moody's 2016a and b). By having their credit rating downgraded, these countries - and their citizens - are therefore being subjected to a more severe punishment than the oil and coal industry (the main contributors to climate change). However, these countries' high dependence on fossil energy is increasingly being regarded as an economic risk. Downgrading vulnerable countries may seem plausible from an economic perspective, but it is a far cry from (climate) justice. As vulnerability towards climate change, and therefore refinancing costs, will increase in the coming years (Standard & Poor's 2015), it is only a matter of time before the countries who, through no fault of their own, are facing loss and damage and high credit costs raise compensation claims against the countries that have caused climate change.

Why are some countries so vulnerable to the impact of global warming and what makes them 'high risk' countries? A combination of geographical risk exposure and vulnerability leads a hurricane in one country, such as the Philippines, to cause unequally higher numbers of fatalities and greater economic losses than a storm of the same magnitude in Japan. Vulnerability results from the combination of several factors, such as the quality of

Groups such as the Afar nomads in Ethiopia are particularly affected by the effects of climate change such as increased droughts.

building structures and building codes, the ability to warn the population in advance and the capabilities of disaster relief, economic performance, living conditions (particularly of the poorest populations) and the factors on which people's livelihoods are based. The higher the level of vulnerability, the more likely an extreme weather event will lead to disaster. Therefore, strengthening resilience is essential if successful sustainable development is not to be jeopardised.

However, measures to adapt to the changing climate are not enough. Increased global temperatures will push urgently needed climate adaptation measures, which are already in need of further strengthening, to their limits. Resolute emission reductions provide the best protection against climate-related damage. However, even steadfast decarbonisation, effective climate adaptation and improved disaster protection will not be enough to prevent more climate-related damage from occurring over the coming decades; damage that will be caused by more frequent and severe weather patterns, and gradual changes such as sea level rise.

Providing protection against elementary climate-related damage is an essential means of closing the gaps

in protection, improving climate resilience and preventing climate change from jeopardising the achievement of the SDGs. However, while the protection afforded by climate risk insurance (such as in agriculture, and to buildings and critical infrastructure) is relatively strong in industrialised countries – and when catastrophes do occur, these countries are also able to provide assistance via social protection systems, emergency relief and financial aid for reconstruction – the gaps in protection in developing countries, and particularly in countries that are vulnerable to the impact of climate change, are immense. Whereas almost 40 percent of the climate-related damage that occurred between 1980 and 2012 was insured in high-income countries, the same can be said of just four percent of damage in low-income countries in the same period (Brot für die Welt 2015a).

In low-income countries, the coasts, high mountains, agricultural areas and fisheries are the most strongly affected by climate change, as are the people who rely on them for their livelihood. These people are faced with massive threats to their lives, health and economic existence. Providing them with better protection against climate risks, therefore, must have absolute priority.

Chapter 3

Climate risk management as the main aspect of resilience strategies

In order to provide people with better protection from climate change, it is important to identify the risks that climate change entails. The 2015 report *A New Climate for Peace*, which was commissioned by the G7 under the German presidency, identifies seven areas where climate change exacerbates crises. These are local resource conflicts, livelihood uncertainty and migration, extreme weather events and disasters, volatile food prices and provision, transboundary water management, sea-level rise, coastal degradation and the unintended effects of climate policies (Adelphi et al. 2015).

Overall, the report stresses that climate risks threaten peace and security. This point becomes particularly clear when we look at the breadth of the sectors that are affected by climate risks. Moreover, limiting vulnerability through climate protection and strengthening resilience requires a comprehensive form of climate risk management. In accordance with the ‘prevent – reduce – absorb’ maxim, climate risk management can be ideally separated into five main phases (see Figure 1).

Climate risk analysis is used to detect climate risks, cause-effect relationships, and to estimate predicted loss and damage as well as the financial cost. The requirements of climate risk analyses differ significantly depending on their purpose. Whereas organisations that provide

humanitarian aid such as Diakonie Katastrophenhilfe (Bread for the World’s sister organisation) need to identify potential hazards and future hot spots of emergency relief as early as possible, development cooperation organisations use climate risk analysis to plan adaptation projects. The geographical scale (local to global), the forecasting period (short-term to long-term), the risk assessment (qualitative or quantitative) and the meteorological data bases (ground-level data, satellite data and data projections from climatic models) differ significantly. However, all approaches are similar in that they attempt to identify climate risks and their possible consequences and costs – at least as far as is possible in view of the uncertainties linked to forecasting (such as inadequate data bases and the limits of climate models with regard to modelling complex and dynamic human-environmental systems). Finally, risk analysis merely forms the foundation for climate risk management and climate risk insurance.

Climate risk prevention involves avoiding damage by eliminating the causes of risk: an ambitious climate protection programme that limits global warming to no more than 1.5 °C is the best way of preventing climate-related damage. However, there are many other preventive measures, including the preservation of natural flood lands and vegetation belts that help protect against erosion, the

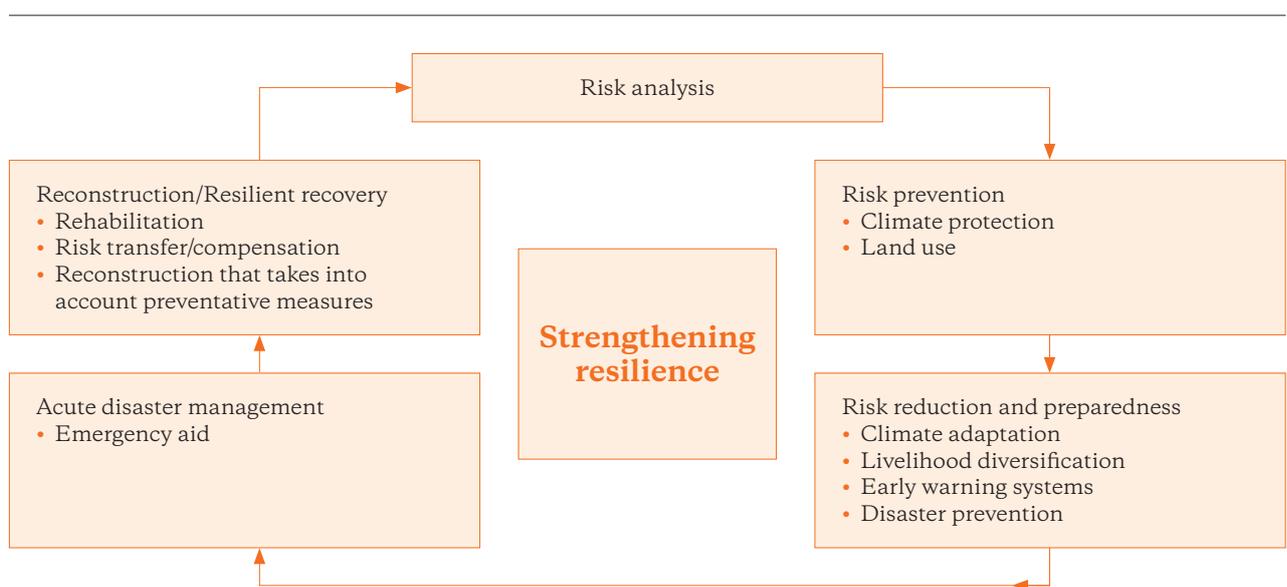


Figure 1: The cycle of climate risk management

containment of agricultural land seizures in fragile ecosystems or the colonisation of hazardous zones.

Climate risk reduction and disaster preparedness involve measures that limit unavoidable risks as far as possible in order to minimise the amount of damage that occurs. This includes the broad issues covered by climate adaptation, such as the cultivation of crops that are more resistant to drought or the creation of more efficient irrigation systems. In addition, it also includes preventive measures to protect against catastrophes (such as increasing the height of dikes, constructing protective structures against tropical storms and the preparation of emergency plans, etc.), as well as the establishment and expansion of early warning systems in order to warn the population sooner in the event of an extreme occurrence. Risk insurances also contribute to prevention measures because they insure against risks and mobilise financial support when damage occurs.

Acute disaster management, including civil protection and emergency relief, ensures emergency care can be provided and attempts to keep losses to a minimum after an extreme event has occurred. A rapid response – and this also includes the speedy provision of the required financial resources – is crucial to effective disaster control and to saving lives.

Resilient recovery after or during a climate-related catastrophe focuses on rapid recovery and the compensation of those affected for the damage caused, as well as robust reconstruction.

Risk transfer refers to the transfer of the financial costs and the potential future damage caused by climate risks to third parties, either in accordance with the liability principle (where risk is transferred to the responsible parties), the insurance principle (risk is transferred to the collective of those insured/the insurance company), the solidarity principle (risk is transferred from social protection systems to society/international cooperation), or the humanitarian principle of providing emergency aid (risk is transferred to the world community). In all of these cases, individual risk is at least partially transferred to a collective level in order to restore the individual capacity to act through the provision of material compensation. In the case of insurances, risks are transferred to insurance companies that are contractually

obliged to make a disbursement in the event of loss or damage. Insurance companies have to provide the capital to do so themselves. As a rule, they transfer part of the risk they take on themselves to larger insurance pools via reinsurance with broader levels of risk diversification, or use capital market instruments to limit their own risk.

This brief overview demonstrates that climate risk management involves a large number of highly diverse stakeholders that belong to different institutions or organisations, pursue different objectives and that are subject to different rules and political reference systems. At the international level, this means that disaster preparedness that reflects the Sendai Framework for the reduction of disaster risks, development policy that is aligned with the SDGs and climate policy that is in line with the Paris Agreement are linked to one another to some extent. However, the areas in which they are connected are still not particularly clear and the various debates fail to use a common language. ‘Climate risk management’ is not a common term used in the negotiations on implementing the Paris Agreement, whereas ‘climate adaptation’ and ‘climate-related loss and damage’ are. Nevertheless, political reasons mean that the latter two have been separated from one another instead of being treated as linked and, subsequently, combined during the negotiations. These factors do not help foster successful climate management; instead, much stronger integration and coherence is needed if the resilience of the poorest population is to be strengthened.

Nevertheless, if adaptation and climate-related damage are being discussed separately on the international climate policy agenda, this is because the issue of who should take responsibility for risk reduction and residual damage remains unresolved. Therefore, solving this key question is not just a legal and political matter; it is also paramount to protecting human rights and, above all, delivering climate justice.

Chapter 4

Climate risk transfer as a question of justice and human rights

The first calls for an international insurance-based risk transfer mechanism for climate-related loss and damage were raised in 1991 by the Pacific island state of Vanuatu, long before the UN Framework Convention on Climate Change (UNFCCC) came into force. Nevertheless, it was not until the Bali Action Plan was drawn up 16 years later that the UNFCCC finally issued a mandate to find ways of addressing climate-related loss and damage. In 2013, the process was institutionalised within the UNFCCC's Warsaw International Mechanism. Until this point, the negotiations had been continually delayed by industrialised countries concerned that they would soon be faced with compensation claims. In fact, the industrialised countries only changed their position once it became clear that an agreement would not be concluded unless they did so.

In 2015, the vulnerable states managed to anchor climate-related loss and damage within Article 8 of the Paris Agreement (see UNFCCC 2016). Together with Article 7 on adaptation, Articles 9-11 on climate finance, technology transfer and capacity building as well as the provisions on implementation, the Agreement provides an international framework for the establishment of a form of resilience architecture that has never existed before.

Importantly, the Agreement frequently raises the solidarity principle of 'common but differentiated responsibility and respective capacities' and calls on countries to provide cooperation and support to one another. It also prioritises vulnerable groups with the aim of strengthening their resilience (see Article 7.5) and the preamble stresses the Agreement's close links between the SDGs, the primacy of food security, human rights, a just transition and intergenerational equity. Finally, a comparison with the preamble to the 1992 UNFCCC clearly demonstrates the progress that has been made over the last decade: even if no sanctions are foreseen for non-fulfilment, the Paris Agreement is still characterised by a transformative, human rights-based approach to development.

Nevertheless, the vulnerable states were unable to ensure that compensation for climate damage was enshrined within the Agreement. At the same time, although it calls for cooperation and support, the Agreement remains vague with regard to the financing that would be required to do so. During the negotiations, the US, with the support of the majority of other industrialised countries, ensured that Paragraph 51 was included within the resolution adopting the Paris Agreement.



Climate-related sea level rise is leading people in some Pacific island states to lose their homes and forcing them to move to other islands.



Hurricane Matthew destroyed Pierre Vania's (left) family house in Haiti. 80 percent of the people in Haiti live in poverty.

Paragraph 51 clearly states that Article 8 of the Paris Agreement provides no basis for liability or compensation claims for climate-related loss and damage. However, because the industrialised countries did not explicitly exclude such claims, a contractual language has been found that leaves the status quo both intact, and, ultimately, unresolved. As such, the courts have been left to decide on questions of compensation, as was the case before the Agreement came into force.

As all resolutions taken at the UNFCCC need to be adopted unanimously, the Paris Agreement reflects the lowest common denominator to which all states could agree. Despite this, it remains ambitious in its aims. Industrialised countries have committed themselves to transferring payments to developing nations worth at least USD 100 billion annually from 2020; this far exceeds current levels of climate financing. Nevertheless, these commitments are voluntary and were decided upon by the donor states themselves on the basis of the principle of common but differentiated responsibilities and their respective national circumstances. In other words, the funding needed to fulfil the Agreement's aims – and hence future contributions to climate risk

transfer – is to be provided on a voluntary basis. Moreover, the Agreement makes no mention of the fact that the liability principle (or the polluter pays principle) should apply to the parties responsible for climate change. This is because developing countries abandoned their demands for compensation months before the Paris Summit even took place; however, doing so cleared the way for an agreement on climate-related loss and damage. Despite the fact that it confers no legal obligations on the responsible parties towards those suffering the most from climate change, this section of the Paris Agreement can still be regarded as one of its greatest successes (Brot für die Welt 2016a).

But can a climate agreement that fails to establish a legal basis for claims for those affected by climate change really be considered fair? Of course not. The Paris Agreement does not go far enough to achieve climate justice; the remaining gap in protection is simply too great. Realpolitik and the power relations at the time led the costs of climate change to be largely socialised, and meant that the fossil energy economy escaped the burden of facing taxes on emissions – taxes that could be flowing into a fund to compensate for climate-related loss and damage.

As we have seen, when it comes to redistributing the burden during risk transfer, the Paris Agreement creates no legal basis for claims on the part of those who suffer the most from climate-related loss and damage. Nevertheless, it makes great progress with regard to moral and political justice by recognising the special situation of the high-risk countries (small island states and LDCs), as well as institutionally strengthening the Warsaw International Mechanism and providing it with a mandate that covers all issues that are viewed as important from today's point of view. Finally, the international community has come to recognise that overcoming climate risks is a shared responsibility that requires solidarity with the affected countries. The InsuResilience climate risk insurance initiative, which was launched and financed by the German government in 2015, explicitly refers to the most vulnerable populations. This initiative is an attempt to ensure that the burden of global warming and the loss and damage caused by it are distributed more fairly. Although the mounting challenges posed by climate risk mean that InsuResilience will not be enough by itself, it does at least represent a first step towards strengthening resilience and achieving climate justice.

Closing the gaps in the protection provided to the most vulnerable populations - in other words, the populations facing an existential threat in the high-risk areas of all (developing) countries - prioritising this issue and employing all available resources to achieve it is a fundamental matter of justice. However, it is also an obligation enshrined in relevant international human rights and humanitarian conventions that applies to all states, including developing countries. All countries are therefore obliged to mobilise the maximum available levels of resources to assist their populations during emergencies, protect them from human rights violations and to ensure their human rights are respected; this includes their economic, social and cultural rights. The ratification of the International Covenant on Economic, Social and Cultural Rights has led countries to enter into binding obligations under international law. The UN Committee on Economic, Social and Cultural Rights has confirmed that any right derived from the International Covenant on Economic, Social and Cultural Rights (see Bundesgesetzblatt 1976) contains justifiable grounds that confer individuals with legally enforceable rights and that this applies to all signatory countries (see General Comment 3, Paragraph 5). However, many parties to the International Covenant are hesitant to recognise these judicially

enforceable individual human rights (Brot für die Welt 2015c). Therefore, the international community - in other words, all countries that are capable of doing so, irrespective of their geographical location in the North or South - is obliged to grant technical and financial assistance to affected states where they have exhausted their own resources. This obligation under international law can be derived from Article 2.1 in conjunction with Article 11 of the International Covenant.

The international community's human rights-based obligations to provide protection in emergencies also apply to climate risk. In fact, the countries that are most vulnerable to climate risk have a right to expect international solidarity as well as technical and financial assistance, provided they have already done everything within their power to respond to the disaster. As such, the international community is obliged to provide protection irrespective of the terms set out in the Paris Agreement and any liability claims that the countries affected may have against the parties causing climate change. Furthermore, the people living within these countries also have a right to social protection when faced with emergencies. Subsequently, their countries and the international community must ensure that social security instruments have been put in place to safeguard these people's livelihoods. This could involve the creation of a framework to provide the poorest and most vulnerable populations with free access (or at least access they can afford) to climate risk insurance and thus prevent them from facing emergencies in the first place. The groups at risk should participate in the development of these instruments, and the instruments need to be embedded within a comprehensive resilience strategy and be designed to reflect people's needs. As a human rights issue, climate risk transfer should not exclude any population group, which means it also needs to provide populations that have been marginalised due to their ethnicity, culture or financial circumstances with access to insurance.

How can these abstract requirements be implemented in practice? The next chapter discusses the factors that need to be considered if climate risk insurance and other instruments for risk transfer are to reach vulnerable populations and effectively contribute to ensuring that climate-related disasters can be overcome both rapidly and sustainably.

Chapter 5

Which factors need to be considered when developing poverty-focused climate risk insurance?

It is not enough to make climate risk insurance available: the extent to which insurances help to close the demonstrable gaps in the protection of vulnerable groups against climate risks depends on the way in which these insurances are structured. The bywords in this regard are a focus on poverty and on vulnerability. Focusing on poverty means that climate risk insurance needs to be designed to effectively protect vulnerable populations against insurable climate-related loss and damage; focusing on vulnerability means that vulnerability needs to be defined before vulnerable target groups are identified and subsequently reached by the insurance scheme in question. Combined, these two factors help ensure that climate risk insurance can protect particularly vulnerable populations and therefore contribute towards the achievement of the resiliency and adaptation objectives set out in the Paris Agreement and embedded within the SDGs. However, it is important to recognise that even if climate risk insurance is perfectly structured and seamlessly implemented, the inherent limitations of the insurance-based approach mean that it can never cover all forms of climate risk. Damage that is highly likely to occur, such as that caused by sea level rise, is uninsurable. Therefore, in order to provide protection against these forms of damage, climate risk insurance needs to be supplemented by additional instruments.

The provision of poverty-focused climate risk insurance enables countries to comply with their international obligations under human rights conventions and treaties in terms of the protection of vulnerable groups. In 2014, Navanethem Pillay, the UN High Commissioner for Human Rights, discussed a number of violations to human rights that are linked to climate risk – these included violations to the rights to food, water and health – and argued that these could at least be partially resolved through the provision of suitably structured climate risk insurance (see OHCHR 2014).

A human rights-based approach to closing the gap in protection needs to focus on the people who need protection. The Human Rights Commissioner's report stresses that the task of the international community – as codified in international law – is to protect individuals against predictable climate risks that could result in human rights violations. This, of course, presupposes that risks, and the populations threatened by them, are known in advance. Unfortunately, most climate risk analyses have

a geographical or socio-economic focus on individual economic sectors. As a result, no data are usually collected that would make it possible to clearly identify and protect the most vulnerable populations. Be this as it may, in order for poverty-focused climate risk insurance to fulfil its human rights requirements, the vulnerable groups in need of protection first need to be identified. Once this has been done, insurance has to be designed to protect the respective population against climate risks to ensure that these people no longer face threats to their basic human rights in the event of a disaster.

Germany, as a signatory state to the relevant human rights conventions and agreements, must implement its human rights obligations; this also applies whenever the German government relies on climate risk insurance as part of its commitment to resilience. Consequently, climate risk insurance schemes that are funded as part of German development cooperation must have a poverty

The people of eastern Kenya are also increasingly affected by drought. In order to access water, they have to build

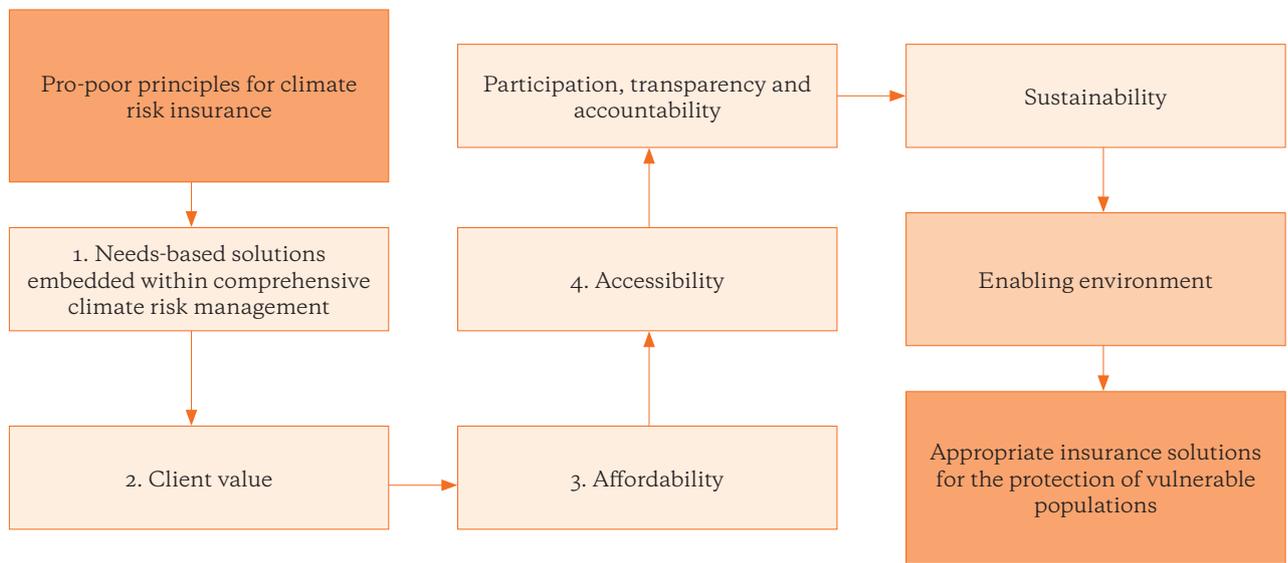


Figure 2: The MCII's pro-poor principles for climate risk insurance
 Source: based on MCII 2016a, p. 31ff.

and vulnerability focus. Unlike private insurance providers, human rights conventions mean that the German government is obliged to employ the maximum available levels of resources to protect populations wherever it is clear that climate risks threaten these people's human rights. In addition to the international human rights conventions, the German Federal Ministry for Economic Cooperation and Development (BMZ) has also developed its own human rights approach that takes into account the 1948 Universal Declaration of Human Rights: 'Human rights are a guiding principle for German development policy. They play a key role in shaping Germany's development policy objectives, programmes and approaches in cooperation with partner countries and at international level' (BMZ 2011, p. 3). Accordingly, the BMZ's 'Guidelines on Incorporating Human Rights Standards and Principles, Including Gender, in Programme Proposals for Bilateral German Technical and Financial Cooperation' (see BMZ 2013) is binding for Germany's implementing organisations (the Deutsche Gesellschaft für Internationale Zusammenarbeit, GIZ, and the Kreditanstalt für Wiederaufbau, KfW), whenever these organisations plan or implement projects on behalf of the BMZ. In addition, the Guidelines also apply to climate risk insurance. Therefore, they act as guidance for civil society-, church-based or private economic development measures that are not financed by the BMZ but that

are undertaken by the GIZ, the KfW, and the Deutsche Investitions- und Entwicklungsgesellschaft (DEG), which is a subsidiary of the KfW (BMZ n.d.). The BMZ's guidelines are intended to ensure that the human rights approach is applied to all development cooperation projects; in other words, that the measures financed by the BMZ ensure that 'civil and political, economic, social and cultural rights as well as human rights standards and principles are systematically referred to' (BMZ 2013, p. 1). This focus is accompanied by 'special protection and the targeted support for disadvantaged or marginalised groups. Very often, these are people living in poverty, women, children and youth, indigenous peoples, sexual minorities and persons with disabilities' (ibid.).

Therefore, implementing organisations have to assess the risks to and impact on human rights during the planning and implementation of development cooperation projects and to ensure they comply with human rights standards and principles. When applied to climate risk insurance, this means that the GIZ and KfW, whether as part of the InsuResilience initiative or other measures, have to do everything they can to ensure the human rights-based approach and the BMZ's guidelines are adhered to. This means that human rights standards (as codified in human rights conventions), and the six procedural human rights principles (participation, empowerment, non-discrimination, equality of opportunity,

transparency and accountability) need to be identifiable within the work conducted by InsuResilience and other funded measures.

Finally, with regard to InsuResilience, the BMZ commissioned the Munich Climate Insurance Initiative (MCII), a non-profit think tank specialised in climate protection insurance that includes NGOs, academics, independent experts, and specialists from the insurance industry, to develop principles for poverty-focused climate risk insurance. The MCII examined the entire range of existing climate risk insurance schemes in

developing countries and the experiences that have been gained from them. It then used this analysis to develop seven principles for poverty-focused climate risk insurance (see MCII 2016a, 2016b). During the 22nd UNFCCC Conference of the Parties (COP22) in Marrakesh, the German Parliamentary State Secretary for Economic Cooperation and Development, Thomas Silberhorn, explained on behalf of the German government that the MCII's 'pro-poor' principles were to be applied to InsuResilience in the future, including during the development of new insurance products and partnerships.

Seven principles of poverty-focused climate risk insurance

First principle: Needs-based solutions embedded within comprehensive climate risk management

Insurance to protect the poor and vulnerable population from extreme weather events must be tailored to local needs and conditions. It is imperative that insurance is embedded within comprehensive climate risk management strategies that improve resilience.

Second principle: Client value

Providing reliable coverage that is valuable to the insured is crucial for the widespread take-up of insurance products.

Third principle: Affordability

Measures to increase the affordability of insurance for poor and vulnerable people are paramount to the success of insurance schemes and to satisfy equity concerns.

Fourth principle: Accessibility

In order for insurance to reach people promptly and efficiently, they must reflect the local context and use cost-effective distribution channels, such as existing cooperatives and self-help groups.

Fifth principle: Participation, transparency and accountability

Successful insurance schemes are based on transparency, accountability and the meaningful involvement of (potential) beneficiaries and other relevant local level

stakeholders in the design, implementation and review of insurance solutions. This creates trust and provides a basis for local ownership and political support.

Sixth principle: Sustainability

Safeguarding economic, social and ecological sustainability is crucial to the long-term success of insurance solutions.

Seventh principle: Enabling environment

It is vital to actively build an enabling environment that accommodates and fosters pro-poor insurance solutions. This particularly includes establishing legal frameworks, state regulation and insurance monitoring.

The pro-poor principles provide a firm basis with which to develop insurance products for vulnerable populations living in poverty. The next step would be to expand the principles, but this would have to be done in a manner that specifically reflects the particular form of insurance. Therefore, it would be useful to continue assessing the experiences that have been made with various climate risk insurances until now. However, since almost all existing insurances are quite new, and relatively few claims have been made to insurers, this learning process will continue for several years. Finally, all stakeholders, including civil society, should be involved in this process.

Adapted from MCII 2016a, pp. 31

Chapter 6

Types of risk, insurance instruments and gaps in protection

There are numerous types of climate risk. In fact, risk is just as associated with extreme events as with gradual changes. There are also considerable differences between the populations who are affected by climate risks and between the conditions in which insurance cover is required. Furthermore, some insurances do not provide affordable cover for certain risks or populations. Therefore, it is essential to develop forms of insurance that reflect these specificities. However, this also means that other forms of risk transfer, risk financing and risk retention need to be considered and that a blend of instruments will often be required.

In order to keep loss and damage and the costs of risk transfer as low as possible - and this also applies to risk transfer through insurance - it is essential that all reasonable measures are taken to mitigate and reduce risk. Doing so normally leads to a considerable reduction in the damage that is caused in the event of a disaster. **Risk-layering** can be helpful here but it needs to include a cost-benefit analysis in order to find the best ways of dealing with the remaining residual risk. The various types of climate risk are described in the following.



Because the low-lying island state of Tuvalu is strongly threatened by rising sea levels, a fund should be put in place by those who have caused climate change to pay for coastal protection and possible resettlement.

Types of climate risk and the most affordable forms of protection

(Based on MCII 2016a, p. 21)

- **Disasters that happen often but that cause minor damage**
Risk prevention + risk reduction + risk retention
Example: Losses to harvests of around ten percent roughly every three years due to increased drought in northern Bangladesh.
— *Recommendation:* Use more drought-resistant seeds and accept a slightly lower average yield.
- **Disasters of medium frequency that cause moderate levels of damage**
Risk prevention + risk reduction + risk financing/social protection
Example: Increased storms in the Gulf of Bengal lead to a moderately smaller total catch by the local fishing industry due to the fact that fewer days can be spent at sea.
— *Recommendation:* Improve the equipment on fishing boats; expand marine rescue together with a state aid programme for the fishing industry implemented with risk financing.
- **Disasters that rarely occur but cause moderate to severe levels of damage**
Risk prevention + risk reduction + risk insurance/social protection systems
Example: Severe drought-related losses to the corn harvest in northern Malawi (2015/2016)
— *Recommendation:* Implement climate adaptation measures in agriculture; improve early warning systems and disaster prevention combined with the establishment of climate risk insurance. This enables social protection systems to access financing quickly during crises.
- **Disasters that rarely occur but that cause very severe levels of damage**
Risk prevention + risk reduction + risk insurance + risk retention/social protection systems
Example: Typhoon Haiyan (Yolanda), which devastated parts of the Philippines in 2013 and killed 10,000 people, made over a million people in the country homeless and caused USD 3 billion worth of damage.

— *Recommendation:* Change building codes and land use (reforestation, mangrove rehabilitation), improve coastal protection, early warning systems and disaster prevention; conclude climate risk insurance for the Philippines through a regional insurance pool; increase the capital provided to the National Calamity Fund.

— In these cases, the insured sum does not cover the level of damage caused during extreme disasters. However, climate risk insurance is still useful in these cases, but it can only cover part of the costs of the damage caused. In order to keep insurance premiums low, it is sensible to form a large risk pool with other countries/policyholders that have as different risk profiles as possible. In addition to climate risk insurance, additional instruments to provide compensation and fund reconstruction are also needed.

- **Disasters (and damage) that are very likely to occur**

Risk reduction + risk retention/social protection systems

Example: The Carteret Islands (Papua New Guinea) sink due to a sea level rise and 3,300 people become homeless and lose their homeland.

— *Recommendation:* Improve coastal protection. Establish an early warning system and emergency response procedures. Implement adaptation measures for drinking water and in the agricultural sector to gain time for a planned resettlement. Implement a resettlement and rehabilitation programme financed by a fund to which the responsible parties contribute.

— Damage that is very likely to occur cannot be insured at low cost as the insurance premiums would have to be at least as high as the expected damage.

This overview shows that different instruments are needed for risk management depending on the risk assessment and type of risk in question. A combination of instruments will usually be needed. Although climate risk insurance can play an important role in risk management, it cannot replace other instruments. This leads to the question as to which other insurance instruments exist.

Climate risk insurance can be divided into two main types: **direct** and **indirect** climate risk insurance. **Direct** insurance involves a direct contractual relationship between the policyholder, such as a farmer who is compensated for loss or damage, and the risk-taking entity, usually an insurance company. The latter draws up the insurance policy and defines the conditions that give rise

to a claim, and is also responsible for paying out the funds in such an event. Policyholders who are directly insured pay an insurance premium for this coverage. In Europe and North America, direct climate risk insurance, whether property insurance or, as is often the case, agricultural insurance or to cover crop failure, is common in agriculture and fishing as these industries are the most affected by climate risk (FAO 2015). However, insurance is almost unknown in developing countries, particularly among small-scale farmers.

In the case of **indirect** climate risk insurance, the policyholder - and therefore the institution that pays the premium - is generally a country, state institution or an intermediary such as a microfinance institution or agricultural cooperative. However, in the event of a claim, the disbursement is not paid out to the policyholder, but to a target group such as a poor rural population. Indirect insurance is particularly attractive to vulnerable countries with very few financial reserves. In the event of a disaster, climate risk insurance can provide rapid liquidity and thus enable emergency aid to be distributed quickly and it can also fund reconstruction measures to protect the population. The African Risk Capacity (ARC), which was established in 2012 by 18 African Union members and which was capitalised with interest-free loans, is a good example. The loans it received were provided by the KfW, on behalf of the BMZ. In order to take out insurance, prospective policyholders have to submit a contingency plan in accordance with guidelines drawn up and overseen by the ARC. These guidelines are intended to ensure that insurance products benefit the parties affected in the best possible manner. Contingency plans also need to state exactly how disbursed funds are to be used in the event of a disaster. In addition to other aspects, they also need to include the preparation of risk, vulnerability and needs analyses, as well as proposals for improved risk reduction, a review of national risk management structures and often need to identify the areas in which work can be conducted jointly with domestic social protection systems in order to provide them with additional resources in the event of an emergency and benefit the affected population. Clearly, the ARC not only offers insurance coverage; it also helps to improve climate risk management. Nevertheless, it is never really clear whether the insured sum will be enough to cover the necessary assistance during a bridging period that can last from between three to six months (until international humanitarian aid arrives). Above all, the policyholders

are responsible for correctly calculating the costs of the support that they will need, and research shows that there are considerable gaps in the contingency plans drawn up by many African countries insured by the ARC.

Once again, this demonstrates that climate risk insurance should be viewed as one among several instruments that are needed to provide protection against climate risks. Risk insurance such as the cover offered by the ARC can speed up emergency relief because it enables funds to be made available much more quickly. Consequently, although climate risk insurance cannot directly replace humanitarian aid, it can make it more effective and help save lives. In future, more funds – not fewer – will need to be invested in disaster relief and humanitarian aid in order to tap into this additional potential. This applies to the local, national and international level. In a country affected by drought, a government also needs to be in the position to rapidly distribute the resources it receives from an insurance pay-out to the affected population either as financial or food aid. As such, investment is also needed in structural aspects of social protection systems and their staff. In many cases, improved cooperation with civil society and church-based entities specialised in the provision of emergency aid is also essential, if target groups really are to be reached. Many governments are not in a position to access these populations themselves, and international organisations are often limited as to what they can do, especially in countries with high levels of corruption and limited levels of statehood.

Climate risk insurance can be implemented as **micro-**, **meso-** and **macro-**insurance depending on the policyholder in question. Micro-insurance directly insures private individuals and companies (an example is the R4 initiative with about 40,000 insured farmers in Ethiopia, Malawi, Senegal and Zambia). Meso-insurance provides insurance to intermediaries, such as cooperatives, companies, rural development banks and microfinance institutions. In this case, members, customers and suppliers of intermediaries benefit from risk protection, for example by having their loans secured against loss in the event of a disaster. Finally, macro-insurance directly insures states (and indirectly insures vulnerable populations) against damage to critical infrastructure such as schools, hospitals, bridges, roads and dykes (such as the National Disaster Fund – FONDEN) in Mexico, or against damage caused by droughts, as is the case with the ARC.

Climate risk insurance can also be divided into **different types of insurance**, with the main differentiation

made between **index-based insurance** and **indemnity-based insurance**. In the case of index-based insurance, a claim is triggered automatically if certain indicators (usually meteorological indicators such as the length of a dry period, the quantity of rain, wind speed) defined in the policy are reached or exceeded at the measurement site. Index-based insurance that works with data gathered about extreme weather events can, assuming these data are available, be combined with models of estimated levels of damage. The majority of insurance products supplied to developing countries (measured by the number of policyholders) are index-based, because they cost significantly less. At the same time, index-based insurance policies often lead to faster disbursements because they do not require elaborate and time-consuming estimates to be made of the actual level of damage that has occurred. However, as index-based insurance provides no cover for **basis risk**, it results in a gap in protection as damage may occur that is not covered by the insurance. The size of the basis risk depends, on, for example, the way in which the indicators that trigger a disbursement are defined. In addition, and this is often closely linked to the problem of basis risk, many regions also face problems with data collection due to the lack of a closely-meshed network of measuring stations. In these cases, satellite data can be used instead. In principle, this is a valuable approach, because the alternative of establishing a network of terrestrial meteorological measuring stations is both costly and time-consuming. However, this approach is less accurate and more error-prone because instead of relying on actual measurements of the situation on the ground it relies on simplified models to simulate a complex reality. Nevertheless, by continuously improving the models that are used, errors can be reduced to lead to improved risk assessments.

There are also significant differences in terms of **the types of loss** that insurance policies can cover. The range extends from agricultural losses (for example, crop loss, loss of livestock) to financial loss insurance and insurance for buildings and other infrastructure. At the same time, **insurable risks** are also product-specific. Droughts, floods, heavy rain, hail and storms are the most commonly insured risks, and these may also be combined with geological risks (volcanic eruptions and earthquakes).

Insurance can provide cash payments or goods such as food aid. In the case of direct insurance schemes, **supplementary services** such as consultancy or non-cash benefits such as seeds or 48-hour emergency packages,



Storms are becoming more frequent in Bangladesh, which means fishing boats can spend fewer days at sea. This leads to lower incomes for fishing communities. Risk financing would help them to provide their boats with better equipment.

which would be provided anyway, may be supplied in addition to cash payments when a claim is triggered. However, supplementary services are controversial (see, for example, the contrasting assessments in ETC 2016 and KfW 2016, p. 7). On the one hand, they can provide useful additional services, as is the case with the R4 Rural Resilience Initiative, which many different stakeholders consider to be a very good example of direct insurance provision to poor populations. They can also include agricultural advisory services and the provision of equipment for disasters as is planned by the Bank for Rural Development in El Salvador together with the Lutheran World Federation. In addition, supplementary services are sometimes offered in order to provide the insured with an equivalent value immediately upon taking out an insurance policy. This makes insurance more attractive and can thus increase its attractiveness in regions where insurance is otherwise almost unknown. This is important, because insurance - which has at its core a payment for the promise of help during a disaster (that hopefully never occurs) - is anything but a guaranteed success in

countries that are characterised by uncertainty and very little trust in the state.

However, supplementary services can also be abused, for example to sell expensive agricultural packages (that include seeds, fertilizers and pesticides), and can therefore result in dependency, excessive levels of debt and unsustainable agricultural practices. **ACRE Africa (Agriculture and Climate Risk Enterprise, formerly Kilimo Salama)** is an example of a company that supplies supplementary products. It was founded in 2009 and is active in countries such as Kenya, Rwanda and Tanzania. ACRE Africa is owned by the Syngenta Foundation, which, in turn, is linked to the Swiss Syngenta AG, one of the largest agricultural companies in the world. Syngenta AG employs controversial practices and is also involved in many disputes over land (see Brot für die Welt 2015a; Multiwatch 2016). This demonstrates that supplementary products need to be examined in detail. If they endanger food security, do not contribute to resilience or do not comply with the principles of responsible finance, they should be rejected and excluded from any form of

support or cooperation within the InsuResilience, development cooperation or humanitarian aid framework.

All forms of insurance follow the same mantra: the higher the risk - irrespective of whether this is caused by the policy holder - the higher the insurance premium. It is important to note that the price of an insurance premium poses the main obstacle once all other issues related to risk insurance have been overcome, as poor countries, institutions and individuals may still be unable to afford insurance. Therefore, it is essential that the costs of insurance are lowered if the promise of focus on poverty and vulnerability is to be taken seriously.

The costs of insurance premiums depend on two main factors: the costs of risk protection, and the operational, capital procurement and product-design costs. Whereas the first factor demonstrates the inherent price linked to climate risks (and this is extremely important for both the political debate and for development planning), the operational, capital procurement and product-design costs are much easier to influence. These costs are particularly high in small countries with limited insurance pools and are worsened by gaps in the data and scaling effects. This is especially the case with small island states and the least developed countries, in other words, precisely the groups that are most at risk from climate change. Furthermore, as the insurance market is not lucrative or because the legal, political or regulatory framework is viewed as unfavourable, insurance companies are hardly present in these countries and also have little interest in becoming involved in them in the future. Instead, they prefer to focus their businesses on emerging markets.

Without public investment, in particular on the part of donor countries, and the direct political interest of vulnerable states to create appropriate frameworks, this situation is unlikely to change. Therefore, reducing insurance costs through 'smart support', in other words providing risk capital and, ultimately, funding insurance premiums for particularly vulnerable and poor policyholders, is essential if climate risk insurance is to become established in developing countries. This is why premium-based and smart support are integral aspects of the pro-poor principles.

Providing premium-based support to high-risk and vulnerable states and populations is also a central matter of justice. When disasters occur, insurance cover can constitute an existential issue for people who are exposed to climate risks through no fault of their own. In accordance

with the environmental 'polluter pays principle', it is the main emitters of climate-damaging greenhouse gases - as the main causers of global warming - who should provide premium-based support. However, even if this approach is rejected, for example on the grounds that not every extreme weather event can be attributed to climate change alone as other factors also play a role such as inappropriate land use, it is impossible to put a price on the value of risk insurance to the hundreds of millions of people who live on less than USD 1.90 a day. Therefore, it remains a matter of justice, solidarity, and an obligation under international human rights law, that climate protection insurance is made affordable to the people who are most at risk.

One way to do this, which is also employed by InsuResilience, is to reduce the non-risk-related costs of insurance. This involves partially taking on the costs of product development, streamlining transaction and administration costs, providing data and technical knowledge, assisting with the development of appropriate legal and other frameworks, and financing pilot projects or the initial capitalisation of insurance, such as the ARC, through interest-free loans.

As right and welcome as this approach may be, in the long term, it will not be enough to make climate risk insurance affordable to the poorest populations. The direct costs of risk insurance, in other words, the second factor that affects the cost of a premium, also need to be reduced. In addition to the recommendations discussed above, improved **risk pooling** is a further way of reducing costs: the more heterogeneous the risks and risk exposures faced by the policyholders in a particular insurance pool, the lower the cost of insurance cover. It is easier to distribute risk, when, for example, an African Risk Capacity risk pool includes diverse risks such as droughts and floods and different geographic exposures as well as the countries involved being located far away from one another. This lowers the premiums for each policyholder participating in the risk pool and the same procedure can also be applied to direct insurance.

However, even after this has been done, many people will still be unable to afford insurance. In these cases, additional smart support is required. Based on case studies, MCII concludes that solutions need to be context-specific and argues that there is no perfect, universal solution for all cases. Nevertheless, the MCII makes three key **recommendations concerning the provision of premium support** (MCII 2016a, p. 93f.):

- Direct support to help pay for premiums needs to be smart. This means that risk awareness should be maintained and no disincentives should be provided to implementing climate adaptation and risk reduction measures. In addition, smart support should be flexible and reliable.
- Smart support, in other words the provision of financing to help cover the costs of insurance premiums, is essential if the poor populations are to gain access to climate risk insurance.
- Additional measures, such as the capitalisation of insurance products or establishing risk pools to indirectly reduce the cost of insurance are further key means of making poverty-focused insurance solutions affordable and contributing to comprehensive and long-term risk management.

Bread for the World believes that the support provided in relation to premium payments should be based on the solidarity principle. This means that a policyholder's economic position should play a central role in

calculating the price of the premium, with the risk level playing a subordinate role. This is the same way in which the prices of social health insurance are calculated – these insurance policies do not punish people who have a high risk of illness (due to age or pre-existing diseases) by demanding higher premiums. A higher risk should only affect the cost of a premium if the policyholder (an individual or a country) can actively influence the level of risk they are facing by changing their own behaviour. In many cases, the problems caused by the fact that insurance can act as a disincentive to mitigating risk can be minimised by other features designed into the insurance product and through flanking measures; this is especially the case with index-based insurance as disbursements are based on estimates of expected loss. Consequently, if the policyholder succeeds in minimising damage through valuable preventive measures, the insured party benefits from a positive balance between the losses suffered and the disbursement by the insurance and vice versa.

Financing will be needed to implement these recommendations. Bread for the World supports a **long-term**

	CRIF (Caribbean)	CCRIF (Central America)	ARC (Africa)	PCRAFI (Oceania)
Insurance type	Parametric model of damage	Parametric model of damage	Parametric model of damage	Parametric model of damage
Insured risks	Tropical storms, heavy rain, earthquakes	Tropical storms, heavy rain, earthquakes	Drought, tropical storms (flood insurance under development)	Earthquakes, tsunamis, tropical storms
Ownership form	Trust	Trust	Mutual insurance	Foundation
Participating countries	20 countries are insurable; 16 have already participated; 14 had policies in 2016	Six countries are insurable; one country has already participated	32 countries are members; eight have already participated; six had policies in 2016/17	15 countries are insurable; six have already participated; five had policies in 2016/17
Initial capital	Multi-donor grant via World Bank	Multi-donor grant via World Bank	Interest-free loans from development financing (Germany and UK)	Multi-donor grant via World Bank
Start of insurance	2007	2015	2014	2013
Average annual revenue from premiums	USD 20 million	USD 1.5 million	USD 22 million	USD 2 million
Mean aggregate cover	USD 622 million	USD 28 million	USD 150 million	USD 45 million
Total disbursements until 2016	USD 67.3 million	USD 700,000	USD 34 million	USD 3.2 million

Figure 3: Overview of the most important indirect climate risk insurances
Source: based on World Bank Group 2017b

Insurance	Country/Region	Insurance type	Insured risks	Number of insured
MNAIS	India	Index-based insurance	Tropical storms	1,794,259 (2014 to 2015)
ACRE Africa	Kenya, Rwanda, Tanzania	Index-based insurance	Droughts, heavy rains, storms, accidents (and more)	394,426 (2015)
R 4	Ethiopia, Malawi, Zambia, Senegal	Index-based insurance	Extreme weather events, climate extremes	37,058 (2016)
PlaNet Guarantee	West Africa	Index-based insurance	Droughts	About 31,000 (2014)
SANASA	Sri Lanka	Index-based insurance	Droughts, heavy rains	14,514 (2014)
IBLIP	Mongolia	Index-based insurance	Extreme weather events	14,000 (since 2009)

Figure 4: Overview of the most important existing direct climate risk insurances
Source: based on MCII 2016a

international financing solution that reflects both the polluter pays and the solidarity principle. The search for an appropriate solution will no doubt be accompanied by difficult negotiations. In principle, the responsible parties - the companies and countries responsible for climate change, including the oil-exporting countries - must be obliged to provide financial resources to the poorest and most vulnerable countries to enable them to overcome climate-related loss and damage. This could involve new financing instruments such as a fund for climate damage but the existing Green Climate Fund could also be considered. From the point of view of those affected, however, a message that credibly demonstrates that no one is to be left behind in the climate crisis is required as an intermediate step. The creation of an **international fund** in which states, companies and other stakeholders voluntarily contribute with the aim of promoting model projects that test different forms of smart support in practice would send just such a message.

The results of model projects can be used to develop existing climate risk insurance in a manner that focuses on poverty and closes the existing gaps in protection. However, not all forms of loss and damage are insurable, and other instruments will definitely be required if these gaps in protection are to be closed. These include **non-insurable damage** caused by events that are almost certain to occur and are often gradual, as well as long-term events, such as **sea level rises** and the **acidification of the oceans**. Here, too, a long-term sustainable solution needs to be found that is based on the polluter pays principle, the solidarity principle and the obligations set out in human rights conventions.

Chapter 7

InsuResilience: checking the facts about its aims, instruments and achievements

The German government launched the InsuResilience initiative at the 2015 **G7 Summit in Elmau** (Bavaria, Germany) with the aim of significantly improving the protection afforded by climate risk insurance in the Global South: **by 2020, 400 million additional poor and vulnerable people are to be provided with insurance against climate risks.** This should ensure a fivefold increase in the number of people with climate risk insurance (currently just 100 million: 55 million through direct and 45 million through indirect insurance) within five years (BMZ 2015).

InsuResilience sees the greatest potential for climate risk insurance in sub-Saharan Africa, and above all through the expansion of the existing insurance provider - the African Risk Capacity (ARC). InsuResilience estimates that insurance could be provided to between 50 and 55 percent additional poor and vulnerable people than are currently protected in the region. In the Caribbean, InsuResilience intends to expand the oldest regional insurance provider - the Caribbean Catastrophe Risk Insurance Facility (CCRIF-SPC) - and extend it to Central America (CCRIF-CA), a region that is also highly at risk from climate change. According to InsuResilience, this could provide three to five percent more people with insurance against climate risks. InsuResilience is also planning to extend an independent, regional insurance pool for the Pacific island states, under the auspices of the World Bank - the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI). This could enable between 17 and 22 percent more people to access insurance. In South Asia, InsuResilience hopes to extend coverage by between 20 and 25 percent. In contrast to the other three priority regions, InsuResilience envisages direct insurance as the most appropriate for South Asia (GIZ 2015).

In the run-up to the establishment of InsuResilience, consultations were conducted with potential partner countries, existing insurance initiatives and development banks as well as with the private insurance industry, insurance experts and NGOs. InsuResilience has always argued that it will not be successful without broad participation. However, the private insurance sector is particularly sceptical about whether InsuResilience can develop into a profitable business model in the short to medium term. Many insurance companies view poor and vulnerable countries as having very little potential due to the fact that they often have small populations, are in isolated locations, and require comparatively high levels of

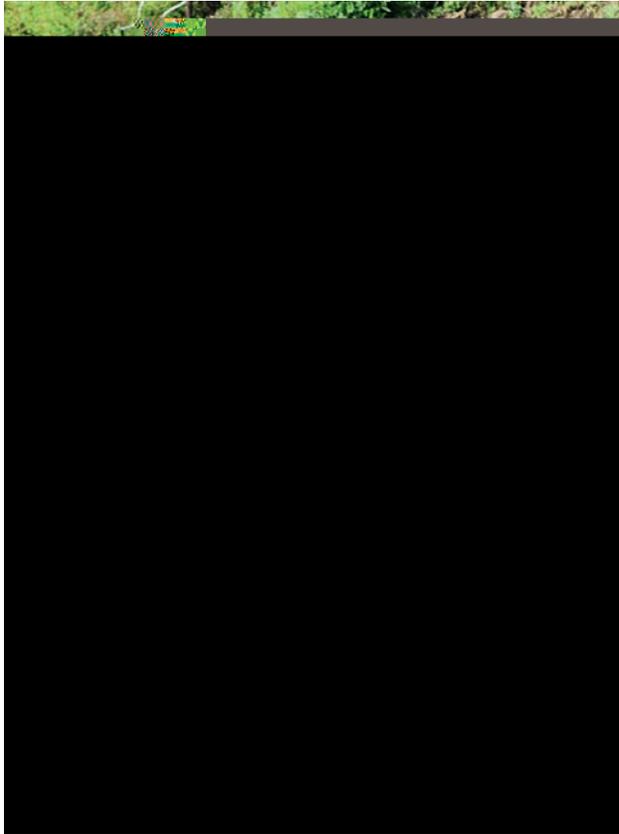
investment. This issue became particularly clear at the high-level event on climate risk insurance held in Berlin in May 2015, which preceded the G7 summit in Elmau.

Regarding its **governance structure**, InsuResilience is run by a G7 steering group that includes experts and other partners. It has also established working groups on topics such as smart support (financing discounted insurance premiums). A broader stakeholder forum as a platform for exchange had already been announced several times, but it is now set to take place for the first time at COP23 in Bonn.

At the Paris Climate Summit in December 2015, the G7 renewed its commitment to InsuResilience and promised to provide the initiative with USD 422 million. At the same time, it announced a rapid package of measures to expand insurance coverage to a further 180 million people and significantly improve the resilience of high-risk countries, in particular. The package includes measures to strengthen the ARC, CCRIF and PCRAFI,



InsuResilience intends to insure another 400 million poor and vulnerable people by 2020.



African countries can already insure their agricultural sectors against extreme weather risks with the African Risk Capacity Insurance Company.

the Climate Insurance Fund (CIF), the Climate Risk and Early Warning Systems Initiative (CREWS) and other bilateral projects (G7 2015). The Netherlands and the EU joined InsuResilience as supporters one year later in November 2016 at the 22nd session of the Conference of the Parties (COP22), which was held in Marrakech. In addition, the World Bank, which plays an important role in institutions such as the PCRAFI and the CCRIF, as well as the World Food Programme (WFP), which is involved in the implementation of the ARC, and the Insurance Development Forum (IDF), in which private insurance companies are organised, have also received associated partner status. At the same time, the total amount of funds that have been committed have risen from USD 420 million to USD 550 million (InsuResilience 2016). Funding was also expanded to institutions such as ARC Replica, the Global Index Insurance Facility (GIIF) and others (see below).

From the very beginning, Bread for the World and the ACT Alliance have welcomed the goal that InsuResilience has set itself of providing vulnerable people with better protection against the impacts of climate change. The initiative could act as a **financial lever** for the introduction of compensation mechanisms, provided it is implemented in a manner that benefits and is accessible to poor populations who are living in climate risk zones (Brot für die Welt et al. 2016b).

As discussed in the previous chapters, the poorest populations usually cannot afford to pay the full insurance premiums by themselves, even once premiums have been made relatively cheap, such as once the non-risk-related costs have been minimised (see above). As such, poor populations either need additional payments (as is the case with direct insurance) or **indirect insurance** provision through providers such as the ARC; in these cases, the premiums are paid by a country and not the insured population. However, indirect insurance shifts the problem of financing, to a certain extent, to the government level, and thus this issue remains unresolved. Moreover, for the 2016/17 period, only six of the 30 ARC member countries - Burkina Faso, Gambia, Mali, Mauritania, Niger and Senegal - have joined the risk pool (see above). The issues of acceptance (How do member states assess the benefits provided by climate risk insurance?), the opportunity costs, and, above all, the issue of affordability (Can policyholders afford the costs?) remain particularly relevant.

However, if some NGOs and government representatives have already begun speaking about the failure of climate risk insurance and are calling for a moratorium on InsuResilience (see ActionAid 2017), these calls come too short: a lot of climate risk insurance, including the ARC, which was founded in 2012 under the aegis of the African Union by African states, or the PCRAFI, which was launched in 2016, are still prototypes to some extent and, therefore, are still in the early stages. Consequently, in order to fairly evaluate these schemes it is important to analyse whether and the extent to which these institutions learn from their mistakes. Alongside the many cases of what the insured countries view as successful claims, one case - Malawi, which was insured by the ARC - was the first time where insurance protection initially failed. Numerous corn farmers in the country suffered heavy crop losses but did not receive a fast pay-out because the data used for the ARC's parametric risk model had not been updated. During the 2015/2016

season, many farmers had begun cultivating a different type of corn with a short growth cycle. Although, this crop was particularly affected by drought, the risk model was based on a type of corn with a longer growth cycle. The real losses were therefore many times higher than had been expected. However, the ARC went on to rectify the mistake nine months later and the farmers received about USD 8 million. Moreover, the ARC has stated that it intends to constantly update the data it uses for risk modelling (ARC 2017). Consequently, the ARC seems to be learning from its mistakes. Be this as it may, it took a long time to clarify the details of the case and the insurance only covered about two percent of the loss; this constitutes around twice the price of the premiums (as critics point out with reference to Malawian government representatives - see ActionAid 2017). Clearly, the ARC still needs to answer a number of questions if it is to protect its own reputation.

To date, far fewer African countries have acquired insurance than could do so. This means that there are still major gaps in the protection against climate risks provided to the African population. The question of **risk awareness, insurance acceptance** and **insurance costs** needs to be addressed further if InsuResilience is to achieve its own aim of providing indirect insurance to 300 million more people by 2020 via the ARC, CCRIF-SPC and PCRAFI and, more recently, ACLIFF in South Asia (see below).

InsuResilience also aims to extend **direct insurance** coverage to a further one hundred million people during the same period. In order to do so, however, certain conditions will have to be fulfilled (as is also the case with indirect insurance): target groups must be made aware of the opportunities and limitations of insurance and be prepared to place their trust in the transparency and usefulness of the available products. Furthermore, they also need to be offered affordable insurance.

Irrespective of the quality of the products on offer, unless third parties at least partially cover the costs of insurance, the vast majority of small-scale farmers, shepherds and people involved in the fishing industry in the areas most at risk of the effects of climate change will not be able to afford any protection at all. This means that they will continue to be left unprotected and remain in a vicious circle of poverty.

InsuResilience has established a working group that aims to develop proposals for **smart support** during summer 2017. Alongside the G7, the working group also

includes development banks and independent insurers as well as experts from the London School of Economics. The working group will initially focus on indirect insurance before moving on to direct insurance at a later date. It will probably begin by investigating the options that exist to provide support and the context in which the relevant solutions can be applied in the long term. The aim is to support decision-making and enable countries to decide which solutions are appropriate in which context. Important principles for this undertaking could include avoiding the creation of dependencies and disincentives to do less in terms of disaster prevention, while stressing the exceptional nature of disaster relief. These factors are not to be equated with the demands made by some developing countries and NGOs that the parties responsible for climate change should always bear the costs of insurance against climate risks. If the working group were to advise against a one-size-fits-all approach to smart support, and, instead, advocate country-specific and individual solutions, these recommendations would probably provide a good basis for discussion with civil society.

The Central American Office of the Lutheran World Federation (LWF), together with the Rural Development Bank (Banco de Fomento Agropecuario), has initiated an innovative model project that provides for the gradual introduction of climate risk insurance for subsistence farmers in El Salvador's vulnerable dry belt. In the start-up phase, the insurance premium is to be paid in full by the farmers, before being gradually reduced. At the same time, resilience is to be strengthened through a climate adaptation programme, which should also improve farmers' yields so that they can eventually afford to pay the insurance premium themselves. The LWF believes that model projects such as these are necessary to practically test smart support in order to find out which options provide valuable and sustainable results that can close the gap in protection. The example from El Salvador also shows that there is great interest among subsistence farmers and in politics for climate risk insurance.

Year	Insurance	Capital employed/planned capital	Purpose
COP21 Paris commitments of over EUR 150 million			
2013 and the COP22 announcement made in 2016	KfW Climate Insurance Fund (CIF)	EUR 68 million	Expansion of direct insurance
2015	ARC	EUR 42,183,451 (EUR 32,183,451 equity stake in ARC Ltd and a EUR 10 million grant for the further development of the ARC and accompanying measures)	EUR 32,183,451 equity stake in ARC Ltd EUR 10 million grant for further development
2015	CCRIF	EUR 15 million	Expansion of CCRIF to Central America (CCRIF COSEFIN)
2015	CCRIF	EUR 12 million	Expansion of CCRIF to the Caribbean and a new insurance product to cover loss and damage caused by heavy rain (CCRIF CARICOM)
2015	PCRAFI	EUR 15 million	Establishment of an independent insurance facility in the Pacific
COP22 Marrakech commitments of over EUR 40 million			
2016	ARC Replica, through the World Food Programme	EUR 10 million	The WFP becomes an ARC policyholder and concludes insurance for African countries that have already purchased insurance. The ARC uses its funds to insure the countries through ARC
2016	Global Index Insurance Facility (GIIF)	EUR 10 million	Expansion of index-based insurance particularly in Asia and Africa, advice about insurance, policyholders and governments
2016	InsuResilience Trust Fund at the World Bank	EUR 20 million	Establishment of insurance solutions within the framework of the proposed Global Partnership

Figure 5: German financing of InsuResilience (according to data from the BMZ)
Source: BMZ information

How Germany finances InsuResilience

The German government is one of InsuResilience's largest donors. Its initial commitments of over EUR 150 million, which were made in 2015, were increased by a further EUR 40 million in 2016. This means that Germany has provided almost 40 percent of the funds so far. Germany funds indirect and direct insurance in roughly equal amounts and particularly focuses on risk capital (see Figure 5).

The German government's partners in implementing InsuResilience

In just two years, the number of instruments funded by the German government and the strategic partnerships that InsuResilience has entered into have grown dynamically. This demonstrates that the InsuResilience initiative is attracting a lot of attention from many stakeholders from the development, humanitarian, climate, finance

and insurance sectors in certain regions. However, this rapid expansion of partnerships, initiatives and funding instruments is leading to greater complexity and meaning that it is becoming ever more important to maintain coherence and strategic clarity in the face of diverse and partly conflicting interests. This has become all the more true since the plan to introduce InsuResilience into the incomparably larger context of a new Global Partnership that includes entirely new and very different actors, such as emerging economies, and to do so just two years after the initiative was founded.

The funding provided by Germany for **indirect climate risk insurance** is focused on the following:

- The **African Risk Capacity** (ARC). The ARC was founded in 2012 by 18 members of the African Union as a specialised agency. As of 2017, this has grown to 32 members. In order to strengthen the climate resilience of its members, it establishes pan-African risk pools and provides insurance to cover loss and damage caused by extreme weather events. In the case of a claim, it promises quick disbursements that have to be used in accordance with previously agreed contingency plans, for example the provision of food aid or cash transfers. Doing so strengthens the ability of national social protection systems to provide rapid additional assistance in the event of a disaster. Africa RiskView provides the climate data required to offer the policies. In turn, the insurance business is handled by ARC Insurance Company Limited, based in Bermuda. Britain and Germany have provided the ARC (in the case of Germany, via the KfW) with the necessary start-up capital in the form of favourable, long-term loans and also issued grants during its start-up phase. These were followed by further grants, for example to develop existing insurance policies.
- **ARC Replica** is an additional 'on top' component that makes it easier for humanitarian aid organisations to synchronise their efforts with the support provided by the ARC in the event of a disaster. The aim is to make the provision of humanitarian aid cheaper, more effective and, above all, faster. In order to do so, the German government is promoting a pilot project in which the WFP acts as an ARC insurance policyholder so that it can quickly and inexpensively increase the amount of resources provided during disasters. The ARC can make up to USD 30 million

available in the event of a drought or flood. The limited solvency of the countries involved and their narrow capacities to implement emergency measures are the reasons why they are unable to increase the total amount of their insurance cover by themselves. ARC Replica is attempting to overcome these two obstacles. It involves UN agencies or other humanitarian aid organisations concluding an additional policy for the country in question and therefore increasing the insurance coverage provided to that country by the ARC. This is done by replicating the country's insurance policy using UN or aid agency resources. This can also lead to greater coordination between aid organisations and the structures in the country in question.

- **CCRIF - the Caribbean Catastrophe Risk Insurance Facility** is the oldest regional risk pool and has been providing parametric climate risk insurance against the damage caused by tropical cyclones and heavy rain (as well as earthquakes) in the Caribbean since 2007 (CCRIF-SPC). In 2015, it began providing insurance to Central America (CCRIF-CA). The CCRIF was originally capitalised under the leadership of the World Bank. The BMZ provides financial support for both the growth of insurance policies in the Caribbean and the expansion of the risk pool to Central America.
- **PCRAFI - the Pacific Catastrophe Risk Assessment and Financing Initiative** is an independent self-insurance facility for Pacific island states that was launched in 2013. It was established with a major contribution from the World Bank in the form of a multi-donor grant. The PCRAFI is a foundation that operates its own insurance company and offers parametric insurance to cover losses caused by tropical cyclones and earthquakes. Its establishment was funded by the BMZ.

The following initiative is particularly focused on developing **direct climate risk insurance**:

- The **Climate Insurance Fund (CIF)** has been provided with EUR 68 million by the KfW on behalf of the German government (see www.climateinsurancefund.com), and focuses on direct climate risk insurance for small and medium-sized enterprises as well

as poor households, such as those that are involved in the agricultural sector. Investment funds include **Global Parametrics** (which develops comprehensive instruments for climate risk management), **Planet Guarantee** (a developer of micro-insurance in West Africa) and the microfinance institution **Caja Sul-lana** in Peru. The fund manager **BlueOrchard** from Switzerland, in cooperation with the insurance expert **Celsius Pro**, invests CIF project funds. The world's largest reinsurers **Hannover Re**, **Munich Re** and **Swiss Re** support the fund and its investors on a non-exclusive basis.

The German government funds a number of other **initiatives, financing instruments and strategic partnerships** in the InsuResilience context aimed at **extending climate risk insurance**:

- The **Global Index Insurance Facility (GIIF)** is another multi-donor trust fund. The German government has committed more than EUR 10 million until now to the GIIF for the further development, expansion and provision of technical consultancy on index-based insurance in Africa and Asia. The GIIF is managed by the World Bank and financed by the EU and Japan, as well as other countries and institutions. It aims to expand insurance covering natural disasters and provide insurance to vulnerable groups in the agricultural sector. It claims to have provided insurance to nearly one and a half million farmers, herders and small businesses with a total insurance volume of USD 148 million via its partners.
- The German federal government is providing a further EUR 20 million for the **InsuResilience Trust Fund at the World Bank** to promote the new **Global Partnership for Climate and Disaster Risk Finance, Risk Insurance and Risk Pooling**, which is currently being developed as a multi-stakeholder initiative.
- In order to enable climate risk insurance to be expanded in Asia, a region that currently has no regional risk fund, the German government has promised USD 30 million to a new multi-donor fund (the **Asian Climate Finance Fund - ACliff**), which was launched in Yokohama in cooperation with the Asian Development Bank (ADB 2017). ACliff aims to leverage more private funding for climate protection,

climate adaption and climate risk insurance in Asian and Pacific developing countries. The reinsurer Munich Re has already signalled its interest in investing in the fund.

- The public-private partnership **Remote sensing-based Information and Insurance for Crops in Emerging economies (RIICE)** is a further partner with a regional focus on low and middle-income countries in Asia such as Bangladesh, Cambodia, India, Indonesia, the Philippines, Thailand and Vietnam. The partnership supports the use of remote sensing techniques to monitor rice and to protect it from risks in order to promote food security. The parties involved include the GIZ, the SDC (the Swiss Development Service), sarmap (geographical information systems), IRRI (International Rice Research Institute) and Allianz AG as the insurance company (see www.riice.org/about-riice/9).
- A strategic partnership with the federal government, in particular in the area of 'absorbing shocks', is also being implemented in the form of an initiative announced by the former UN Secretary General Ban Ki-moon at the 2015 Paris Climate Summit with the aim of strengthening climate resilience. The **A2R - Anticipate, Absorb, Reshape** is concerned with the expansion of climate risk insurance and the targeted strengthening of social protection systems in the event of extreme events. As a whole, A2R aims to promote comprehensive climate management (see www.a2rinitiative.org).
- The **Azii - Access to insurance initiative** is an initiative dedicated to raising awareness and distributing information about insurance instruments in developing countries, including to marginalised groups and women, and supporting the development of regulatory frameworks (www.azii.org).

In addition to these more general initiatives aimed at improving the conditions for climate risk insurance, the German government is currently **considering two further possible projects in Africa**:

- The **Extreme Climate Facility XCV** - to support the ARC in setting up a further climate financing instrument for the rapid mobilisation of liquidity in the



Taifun Haiyan devastated the Philippines in 2013; it killed tens of thousands of people and made hundreds of thousands homeless. A just form of risk transfer means that the country would need support in terms of disaster preparedness, disaster management and in coping with climate-related damage.

case of extreme events that cause massive levels of loss and damage.

- Cooperation with the **R4 - Rural Resilience Initiative**, which pursues integrated climate management approaches (risk reduction combined with climate risk insurance, the establishment of reserves and micro-credits) and has so far mainly operated in Ethiopia, Malawi, Zambia and Senegal, including together with the World Food Program.

Lastly, the KfW is currently establishing an **InsuResilience Solutions Fund** to support the development of innovative climate risk insurance products and to provide them with start-up financing.

Where does InsuResilience stand today?

Two years after its inception - and four years after the initial preparations began - InsuResilience's start-up

phase is coming to an end. The main features of its **approach to the multi-actor partnership** have been finalised and the implementation phase has now begun. As such, the ideas developed by InsuResilience now need to be **tested and implemented** in practice.

Furthermore, InsuResilience has to demonstrate that it can learn from its experience and act as a catalyst. Therefore, testing approaches to knowledge management and, above all, **knowledge transfer** to developing countries, have been placed high on the InsuResilience agenda over the next few years. This includes supporting the creation of needs analyses and cost-benefit calculations for climate risk insurance, data analysis, risk modelling and risk pooling, the creation of the necessary framework conditions, and raising awareness about climate risk and protection from climate risks.

Finally, a system of **quality management is also essential**, because insurance is, above all, a question of trust. This means that InsuResilience must provide the highest level of financial transparency, but a good impact assessment is also particularly important, and it needs to answer questions such as: How many people are actually



If InsuResilience is expanded in the form of a Global Partnership, it needs to remain focused on protecting the poorest and most vulnerable populations. This requires a public framework concentrated on the provision of protection and not on maximizing profits.

protected by InsuResilience? Are the most vulnerable people being reached? And, is their resilience being strengthened in the face of disaster? InsuResilience is currently developing a transparency framework and the tools needed for monitoring and evaluation. A reporting system is to be established in the future using standardised criteria and regular surveys of insurance and risk pools that work together with the initiative. This should provide InsuResilience with the information it needs to assess the impact it is having; in other words, to understand whether it is being successful in its attempt to massively expand climate risk protection to the most vulnerable populations. InsuResilience intends to have established a framework for monitoring and evaluation by autumn 2017.

Extending InsuResilience in the G20 context

The German government established the InsuResilience initiative during its G7 presidency. It now uses its G20

presidency to place the issue of climate resilience high on the G20 agenda. It also commissioned the World Bank to draw up a study on the potential and limitations of climate risk insurance. This resulted in the Sovereign Climate and Disaster Risk Pooling study, which recommends the establishment of a Global Partnership for Climate and Disaster Risk Finance, Risk Insurance and Risk Pooling. The study also recommends adopting principles to do so and implementing an appropriate action program. To some extent, this repeats the strategy undertaken at the G7 summit but in a much broader and more mixed environment. Whereas from a development cooperation perspective, the G7 is viewed as a donor community with a long tradition of and vast commitment to international development and climate financing, this is not the case with the G20. In this respect, the InsuResilience approach cannot simply be transferred; it needs to be embedded within a broader context.

The World Bank's study was published, and its recommendations summarised and built into the G20's Final Declaration. As the title of the study suggests, it assesses the establishment of risk pools at the regional,

national and sub-national levels, with the aim of finding ways to reduce the cost of risk insurance (but not the costs of climate risks). In this respect, it presents an approach that could also be applied to South-South cooperation and, above all, to national initiatives in populous countries that face highly heterogeneous risk structures, such as India or China. The study advocates a multi-stakeholder approach that would bring together different actors with partially divergent interests, such as stakeholders from humanitarian aid, development cooperation, academia, the insurance industry and the G20 governments. The level of coordination that this involves would far exceed that which is required for InsuResilience. The negotiations between the World Bank, the UK Department for International Development (DFID), the BMZ, the InsuResilience Secretariat at GIZ, the KfW and other banks, as well as the Insurance Development Forum (IDF) and its members were difficult because of the different views on the future roles of the individual actors. However, the parties finally agreed to set up a Joint Technical Facility to support the Global Partnership. Still, some parties remain critical of what they view as the dominant role played by the World Bank as well as the lack of coherency that could be caused by such a large number of diverse initiatives. It therefore remains to be seen how well the approach can be implemented.

From the perspective of the vulnerable states, the crucial question is whether the Global Partnership can provide them with identifiable added value. In fact, the success of the InsuResilience initiative will be measured on whether it is able to place the primacy of climate risk insurance for the poor and vulnerable populations at the core of the Global Partnership and to strengthen this aspect within such a broad forum.

Moreover, an assessment of the continued development of the Global Partnership needs to take another important criterion into account: the extent to which the vulnerable states – for example, the Climate Vulnerable Forum or their finance ministers, all of whom are members of the V20 – have been involved from an early stage. Until now, it seems that they have seen very little participation. In addition, the large networks of non-governmental organisations that provide humanitarian aid and development cooperation also need to be involved.

A Global Partnership has great potential to reduce the gaps in protection by massively increasing climate risk financing and risk transfer. InsuResilience will have an important role to play in this process by ensuring that

the principles of the focus on poverty and the protection of the most vulnerable people are placed at the heart of the Global Partnership. The issue of risk financing, which is particularly important within the Global Partnership, is closely linked to smart support for premium financing; this is aimed at reducing the costs of insurance so as to ensure that even the poorest populations gain cover, and doing so without removing the incentives to reduce risk or losing sight of the costs of climate risks.

InsuResilience - an interim assessment

InsuResilience should be able to complete its initial phase later this year, as long as smart solutions can be found to funding the costs of premiums, climate risk insurance is integrated into broader climate risk management, a strong transparency framework for impact assessment is established, and, finally, InsuResilience's focus on poverty and vulnerability becomes anchored within the Global Partnership.

Nevertheless, it is too early to predict how successful InsuResilience will be, even if the initiative does seem to be on the right track. Once the initial phase has been completed, it could be followed up – as of 2018 – by implementing the concepts and insurance prototypes that have been developed and that still need to be proven in practice. Intensive cooperation with civil society will be indispensable during this phase.

Chapter 8

Alternative risk transfer instruments

Adaptive and transformative social protection systems, which are supported by an international financing mechanism during disasters, can provide an alternative to insurance as a form of risk transfer. These systems enable risks to be shared by a national, solidarity-based risk community that is supported by the international community.

The Institute of Development Studies (IDS) and the UK's Department for International Development (DFID) have described tapping into the synergies that exist between social protection, risk management and humanitarian aid in terms of **adaptive social protection systems**. Ideally, these systems lead to integrated forms of social protection that can respond appropriately to different crises. In other words, they enable counter-cyclical social expenditure to be disbursed in order to help stabilise economic crises through early intervention, but also limit the damage caused by climate-related natural disasters. They also enable extended coverage to be provided, for example, as a response to an influx of refugees.

Adaptive social protection systems can respond to people's particular needs in a number of ways. They can increase the level of the disbursement or provide it for a longer period of time. They can also take into account additional beneficiaries, and use the institutional framework provided by existing social protection systems to develop specific programmes of emergency aid (see Oxford Policy Management 2016).

However, for this to work, the institutional conditions already need to have been put in place. Coordination and forward-looking planning are also important, and supplementary financing also needs to be made available during disasters. This can be provided through indirect risk insurance, which can help expand social protection systems during climate-related disasters. However, financing can also be provided through a solidarity-based financing mechanism that is employed irrespective of the type of risk in question to ensure a certain level of basic social protection, especially when disaster



Risk insurances cannot make people less vulnerable to climate risks and catastrophes by themselves. Social protection systems also need to be expanded.

hits. Ultimately, this obligation to provide help in disasters is enshrined in human rights law, such as the International Labour Organization's (ILO) Recommendation 202 and is also embedded within SDG 1.4.

One of the advantages of adaptive social protection systems is that they strengthen or contribute towards the construction of national structures and enable them to be used more efficiently, while also reducing administrative costs. Importantly, adaptive systems can be devised before disasters occur so that they can provide a counter-cyclical supply of funds that helps avoid the tendency towards a pro-cyclical limit on performance. Unlike insurance, social protection is not merely provided because of a specific risk; rather, it is employed due to the different risks that people face, and irrespective of whether they can afford the costs of insurance.

Another positive aspect of social protection - regardless of the programme in question - is that it can make modest contributions to various phases of risk management, including prevention, damage limitation, emergency aid provision and the restoration of people's own capacity to help themselves.

A programme of social housing construction, for example, provides an alternative to the illegal settlement of hazardous areas, and thus contributes to **risk prevention**. Furthermore, public employment programmes not only deliver social protection to their employees, they can also help ensure that **climate risk reduction** measures are implemented, for example, through the construction of irrigation systems or dykes. These measures help prevent the negative impact of unavoidable risks such as droughts and heavy rains. The same applies to supplementary social programmes that enhance people's capacities to anticipate climate-related shocks and challenges, adapt to unavoidable changes and to vary their income strategies in accordance with these risks.

Adaptive social protection systems can also play a significant role in acute disaster protection as they help provide rapid and appropriate service provision, for example within the framework of a transfer programme, and help to secure **emergency care**. This means that they can also prevent the development of negative coping strategies. Finally, if it is possible to prevent the sale of a specific means of production (that would otherwise have been sold to help its owners survive), the sustenance and health of those affected can be maintained; this also promotes a faster **recovery**, return to self-sufficiency and reconstruction.

In view of the existing challenges, social protection systems can play an essential transformative role that stretches far beyond the ability to respond and adapt. Essentially, **transformative social protection systems** can particularly contribute to overcoming vulnerability in the long term; vulnerability, of course, is a fundamental factor that turns climate-related extreme events into social catastrophes. However, social protection systems can only promote impacts that result in transformative changes to society if they are rights-based, universal and structured so as to lead to redistribution. Therefore, it is essential that they also ensure that everyone is able to satisfy their basic needs and access opportunities for development (see Sabates-Wheeler/Devereux 2008).

Chapter 9

Climate risk finance: The G20's Global Partnership

Climate risk financing, in other words, the assumption of the costs caused by climate-related loss and damage, can be separated into (collective) **risk retention**, credit-supported **risk financing**, and **risk transfer** to insurances and risk pools, as well as alternative forms of risk transfer (see MCII 2016b).

Collective forms of risk retention

Risk retention means that the injured parties cover the costs of the damage themselves. This can be done in a number of ways.

- **Emergency funds** such as the **National Disaster Fund** (FONDEN) in Mexico or the **National Calamity Fund** (the Philippines) are usually set up by countries that are regularly confronted by natural disasters. However, it takes time to establish the capital for these funds, making them particularly difficult for poor countries to set up. Nevertheless, once they have become established, emergency funds can quickly provide resources in emergency situations.
- **Budgetary reallocation:** if no other financial provisions have been made for risk, in crises, most governments fall back on their current budget and reallocate funds from it. However, this usually leads to problems and is linked to administrative, legal and legislative hurdles. It may therefore take some time before such funds can be made available.
- **Tax increases or raising special levies:** higher taxes and levies are usually difficult to impose and this means that additional resources may only become available after a long period of time.
- **Support from donor countries and organisations:** international aid is often very slow, sometimes only covers parts of the costs, and is difficult to acquire for the vast majority of climate-related damage that gains little international attention.



The inhabitants of the Carteret Islands in the South Pacific have left their island as sea level rise has already made it uninhabitable. Insurance cannot be used to cover the costs of relocation - the international community needs to provide the funds.



Climate risk insurances have the advantage that the people affected by a catastrophe are no longer dependent on the willingness of donor countries and organizations.

Credit-supported risk financing

In the case of credit-supported risk financing, the costs are transferred to capital markets and are contested from external credit lines. This can be done in the following ways:

- **Contingent credit lines for disasters** can be established, such as the World Bank's Catastrophic Risk Deferred Drawdown Option (CAT-DDO), enabling financial resources to be provided quickly in the event of a disaster.
- **Loans**, on the other hand, have to be issued and distributed, which takes more time. Therefore, they are more suited for reconstruction than for the provision of emergency aid.

Risk transfer

Risk transfer in the strictest sense refers to climate risk insurances, reinsurances and financial market instruments that transfer risks such as catastrophe bonds. In

the case of risk insurance, individual risks are bundled and hedged in return for the cost of an insurance premium. The premium costs vary according to the risk, the product and the size of the risk pool in question.

- **Regional risk pools** bundle different types of risks from the largest possible number of policyholders, sometimes beyond national borders (this is the case with the ARC). This reduces the costs of hedging risks for all parties compared to the costs of an individual policy. The speed at which disbursements are made, however, varies according to the type of insurance but is fastest with index-based insurances.
- **National sovereign insurance pools**, such as the **Turkish Catastrophe Insurance Pool**, are comparable to regional risk pools, but are limited to a single country.
- **Micro-insurances** such as **R4** are direct insurances that insure individuals or companies. They often provide the parties with more scope during the structuring of risk coverage, but are usually associated with higher costs compared to indirect insurances.

The more current and future climate risks are identified and the economic costs of adaptation are placed on the political agenda, the higher the priority that will be placed on climate risk financing. Both donors and recipients are currently investigating how best to reduce the cost of insurance. The study Sovereign Climate and Disaster Risk Pooling, which was prepared by the World Bank for the G20, focuses on this issue and comes to the conclusion that **bundling a risk portfolio** and shifting risk to the capital markets in the form of climate risk insurances and other financing instruments provide the most effective means of reducing prices (World Bank Group 2017a; available as a summary in World Bank Group 2017b). This ensures the countries affected become more capable of taking action and gain independence of what is often the slow and inadequate provision of international aid. According to the World Bank, risk pooling can help poor countries place their climate risk financing on a more robust footing.

The World Bank calculates that bundling diversified risks, as part of a risk pool across a large and diverse geographical area and including as many different policyholders as possible, significantly reduces costs compared to independent risk hedging. This is the case with insurance against events that are very rare but that cause serious damage. A broad risk pool that includes around 90 low- to middle-income countries from Asia, Europe, Latin America and the Pacific (countries with high incomes are not included here, other countries are missing due to a lack of comparable data), could therefore reduce costs by up to 50 percent compared to regional risk pooling. However, cost savings can also be made through far less complicated arrangements. This is the case with regional or national risk pools (or risk pools that include large G20 members such as China or India at the subnational level) because the indirect costs incurred for the provision of the data on which the policy is based, as well as for operational and capital costs, decrease despite the fact that the hedged risk remains the same (ibid).

In addition to calculations made using theoretical models, the World Bank views the relatively dynamic development of regional risk pools such as CCRIF-SPC, ARC and, lastly, PCRAFI as an encouraging indicator of a growing trend towards regional risk pooling. However, in order to continue along this path even more successfully, the World Bank concludes that experiences gained from existing risk pools demonstrate that – alongside

willingness on the part of political decision-makers – significant increases in financial support are required, especially during the start-up phase, alongside improved and more intensified technical advice. To meet these challenges, the World Bank calls for the establishment of a **Global Partnership** as a key next step. Including the Global Partnership in the **G20's final declaration** would demonstrate that it is receiving the highest level of political recognition; moreover, the declaration should also include recommendations on financial support as well as on the establishment of a technical advisory facility.

The World Bank also describes a number of further **factors that increase the likelihood of risk pooling and risk insurance being successful.**

First, **crisis response plans need to clearly specify in advance how the funds distributed in crises are to be used, which social protection systems will be strengthened by them and who will profit from them – even down to the level of the private household.** In addition, risk awareness should be strengthened, preventive measures need to be initiated and multi-actor cooperation should be promoted before, during and after a possible disaster. If these measures are properly implemented, they can help improve disaster relief and enable climate adaptation and climate risk management to be better implemented alongside the increased involvement of social protection systems.

Second, experience gained from the existing three supranational risk pools for developing countries, which, until now, only insure a tiny proportion of climate-related damage demonstrate that **international donors should contribute at least temporarily to the direct and indirect costs of climate risk insurance.**

Third, the Global Partnership should be established as a multi-stakeholder partnership involving civil society alongside developing and industrialised countries, international organisations and the private sector. Finally, the World Bank stresses that **the Global Partnership should not seek to replace, but to build upon, existing platforms and initiatives** (ibid).

From a poverty- and vulnerability-focused approach to **sustainability** that takes into account the requirements of the SDGs, the Sendai Action Framework and the Paris Climate Agreement, **the World Bank's recommendations are to be welcomed, because:**

- If innovative ways of financing insurance succeed in **speeding up humanitarian and reconstruction aid**



Bundling climate risks, such as drought, in risk pools that cover larger regions considerably reduces the costs of insurance.

and thus save more lives and livelihoods, they would represent an important step towards closing the gaps in protection.

- If **climate risk insurances can be better integrated than before into a comprehensive climate risk management concept**, they would make an important contribution to strengthening climate resilience.
- If a **Global Partnership is inclusive**, that is, if it supports and seeks to equally involve vulnerable people from the very beginning, it would send an important message demonstrating international solidarity in the face of widespread attitudes of exclusion, national egotism and contempt for international cooperation. Leaving no-one behind, as the Agenda 2030 advocates, is clearly the better alternative to ‘me (and my country) first’.
- If the Global Partnership takes steps to **fund insurance premiums for the poor populations**, it would

represent an important step in practical climate and distributive justice. However, this should not be equated with the provision of alms; instead, it would constitute the implementation of human rights obligations and the steps that need to be taken if the polluter pays principle is to be properly addressed.

Nevertheless, if the G20 follows the World Bank’s recommendations, **further steps to clarify implementation** would be required as part of a work program. First, this would need to emphasise the justice dimension of a common but differentiated cost-transfer in climate risk financing between the main parties that are causing the problem and those who are affected by climate change. Moreover, the impact in terms of distribution would also need to be clarified, in other words, risk management would have to be redistributed between the members of a risk pool. Access for particularly vulnerable countries must be ensured regardless of their risk profile or (lack of) ability to pay the costs of insurance premiums. Consequently, the parties that have caused climate change will



Climate risk insurance is not a cure-all; it cannot insure against recurring damage. As such, the Warsaw Mechanism needs to find a way to do so.

have to subsidise insurance premiums for poor countries and people. Structuring climate risk insurances in a manner that purely reflects risk would be similar to unregulated private health insurances that exclude 'bad risks' by charging higher contributions or restricting coverage. In the same sense, a system of climate risk insurance based purely on risk-oriented premiums would deepen inequalities between countries.

A regulatory and controlling body is required to ensure transparency and fairness with regard to risk sharing between insurers and policyholders, particularly when public welfare-based bodies are involved alongside profit-oriented actors. It is essential that there is a link between the parameters used in insurance policies and the damage that actually occurs: indirect insurances that insure countries, subnational state units or groups of states are usually parametric insurances. In these cases, disbursements are not based on the actual level of damage that has occurred, but on a threshold value having been reached. For example, a parametric drought insurance could pay out when less rain falls over a particular

period than specified in the policy. Parametric insurances provide positive incentives to implement damage reduction measures since disbursement is not linked to the extent of the damage. They also reduce costs, since complex damage assessments are not required. If, however, the parameters and the model calculation employed to set the price of the premium do not correlate with the damage that occurs during a catastrophe, policyholders carry an excessively high level of basis risk. In other words, the country in question receives no or very little compensation despite having suffered huge losses because far more damage has occurred than was estimated in the policy. Drawing up this form of insurance is a complex process that is compounded by issues such as the data situation which is often poor. However, it remains a crucial factor that affects the degree of risk transfer between policyholder and insurer and thus is also relevant to questions of distribution. As such, parametric insurances need to be continuously assessed, and adapted wherever necessary.

Lastly, if the World Bank's recommendations are implemented, it would also be important to estimate the impact (in terms of poverty and questions of distribution) of indirect climate risk insurances on the different populations living in the insured country. This depends to a very large extent on the way in which the disbursed insurance payments are used by the country in question; an issue that needs to be defined within emergency plans in advance. Important indicators of the quality of these plans include the fact that they constitute an integral part of existing national and decentralised disaster plans. On the one hand, stakeholders must coordinate their efforts and involve civil society entities so that social protection systems, risk prevention and risk reduction as well as disaster preparedness are integrated. This applies both to the plans setting out how the disbursed funds are to be used, (plans that are aimed at quickly restoring devastated public infrastructure such as schools, hospitals and roads), as well as to humanitarian aid that is transferred to the affected population in the form of cash or goods. In the case of transfer to the population, disbursements should also be coupled to existing social protection systems and corresponding structures need to be established before disaster strikes.

Even with the best possible implementation, **the inherent structure of climate risk insurance means that it is limited to the hedging of rare but very serious events that cause high levels of damage.** It is neither suitable for insurance against frequently recurring damage, nor as coverage against gradual damage such as that caused by sea level rise. If the gaps in protection are to be closed, **the limits of risk insurance needs to be made clear and additional tools that are better suited to dealing with these forms of loss and damage need to be developed and supported.** However, this means that **additional financing is required;** an issue that will not be resolved even by the successful establishment and promotion of climate risk insurance. Addressing these issues at an early stage, therefore, is an important task for the **International Warsaw Mechanism** as well as an issue that must be taken into account when **devising the future climate financing architecture of the Paris Climate Agreement.** The **German government** should conceptually and **constructively participate** in the **development of a fair financial contribution,** thus underscoring the partnership with the COP presidency of Fiji, a representative of the particularly vulnerable Pacific island states that are partly faced with destruction.

Chapter 10

Conclusions and recommendations for Germany and the G20

In its 2017 Global Risk Report, the World Economic Forum argues that **storms, droughts and floods present the greatest risks to the world at the present time**. Moreover, the report describes the confluence of risks around water scarcity, climate change, extreme weather events and involuntary migration as a potent cocktail.

The German government's approach to prioritise the issues of climate risk reduction and climate risk transfer within its G7 and G20 presidencies should be welcomed, as should its explicit reference to the most vulnerable population groups and countries in particular. **Climate risk insurance can help** mitigate climate-related loss and damage as drivers of poverty and, therefore, **close the gaps in protection** as long as they form part of a broad resilience strategy that includes risk reduction and climate adaptation.

InsuResilience, the climate risk insurance initiative initiated by the German government, **represents a move towards accepting the political responsibility** of climate-related loss and damage. InsuResilience is an important, albeit insufficient, step on the long road to establishing an equitable balance between those who are responsible for and those who are suffering most from the effects of climate change.

Climate risk insurance is not the only (and not always even the best) form of climate risk transfer. It is suited to the cost-effective insurance of rare events that cause serious damage, but is rather less suited to insuring against damage that occurs relatively frequently. As such, it cannot be used to insure against gradual, yet almost inevitable risks, such as those associated with sea level rise or desertification. **Climate risk insurances that are properly regulated and reconciled with national climate risk management systems, and that strengthen - but not replace - social protection systems and humanitarian emergency relief in crisis situations can indeed help vulnerable populations**. However, in order to do so, climate risk insurances must be tailored to the specific needs of poor and vulnerable people while **focusing on needs, transparency, access and affordability**.

InsuResilience focuses on poverty and prioritises the protection of vulnerable countries and populations. However, it is still too early to judge how well its objectives will be achieved using the initiative's current conceptual and financial framework. Nevertheless, the **implementation of the Munich Climate Insurance Initiative's (MCII) pro-poor principles as well as the provision of financial support to help pay for insurance**

premiums are fundamental issues of justice and, therefore, represent a litmus test for InsuResilience.

Bread for the World and ACT Alliance welcome the German G20 presidency's initiative to establish a Global Partnership for Climate and Disaster Risk Finance and Insurance Solutions as this could increase resilience against climate change and speed up the provision of emergency aid in the event of extreme events. **In developing countries, it is the people and regions affected by climate extremes that almost exclusively take on the risks**. The Global Partnership is therefore aimed at establishing a system of risk financing that would transfer risks to more countries and larger risk pools; this would reduce the cost of providing insurance. Second, in the event of loss or damage, **disbursements could be made much faster** than has otherwise been the case; this would partially close the existing gaps in protection that are caused by the lack of pre-financing in humanitarian aid, which delays the provision of aid. In addition, as it would shift more of the costs from the individual and national level to the collective and supranational level it would **help mitigate humanitarian disasters** and therefore constitute



The people who have hardly contributed at all to climate change are currently suffering the most from its consequences. Risk financing would redistribute the costs.



In order to reduce climate-related damage, investment is also needed in disaster preparedness and climate adaptation measures.

a step towards increased climate justice. Calling on the **responsible parties to accept higher levels of climate risk financing in the future, would make risk financing more equitable by shifting more of the burden to those who are responsible for climate change.**

The World Bank was commissioned by the G20 to make proposals on how to structure the initiative. It recommends that the Global Partnership develop instruments that **support the cost of risk protection for people who live in poverty.** This is essential if **the Global Partnership is to benefit the most vulnerable populations and contribute towards achieving the goals of InsuResilience.**

In addition to the issue of an equitable distribution of the costs, **the Global Partnership also needs to help increase awareness of climate risks and the adoption of prevention strategies.** It needs to increase investment in prevention to reduce the level of damage that is occurring; effective technical measures to do so include providing improved data (climatic data as well as

economic calculations of climate risk) and expanding early warning systems. This would enable the Global Partnership to contribute towards a cheaper, faster and hopefully more equitable system of risk financing. In addition, it would mean that it would take the next inevitable step towards risk avoidance and **better integrating climate risk management, which would ensure that the Global Partnership benefits vulnerable countries and populations.**

It is still unclear whether it will be possible to anchor a focus on poor populations, humanitarian aid and the protection of the most vulnerable groups within the Global Partnership - a broad partnership consisting of many different stakeholders such as industrialised countries, large emerging states, development banks, the insurance industry and organisations from both emergency aid and development. However, doing so is essential if the Global Partnership is to achieve its aims, and the success of the initiative will be measured on whether it is able to place the focus on poor and vulnerable people at its core.

In order to do so, Bread for the World and ACT Alliance make the following recommendations for implementation:

1. Prioritise awareness raising, capacity building and transparency

In vulnerable contexts, insurances that provide protection against climate risks are almost unheard of. Moreover, a lack of experience often results in the opportunities and limitations afforded by such insurances being misinterpreted. Therefore, campaigns that provide information should be promoted, and capacity building is needed to develop appropriate approaches in developing countries themselves. Finally, the impacts that insurance can have during disasters need to be made clearer.

2. Integrate climate risk insurance into risk management strategies

Wherever insurance is used, it must be coordinated and integrated with other forms of climate adaptation, disaster preparedness, social protection, humanitarian aid and reconstruction. As such, an overall integrated climate resilience strategy (such as the National Adaptation Plan, NAP) should be drawn up and implemented that defines the links to other policy areas, such as national development planning, plans for the implementation of the SDGs, disaster prevention plans, social protection systems, agricultural planning, national climate agreements and others. In turn, this requires the establishment of databases that can be used by stakeholders from the various sectors as well as the creation of procedures to ensure coherence.

3. Consistently implement the focus on poverty and vulnerability as guiding principles

Insurance products must be tailored to the needs of the poorest and most vulnerable populations because they bear the highest levels of relative risk. Target groups, as well as organisations from humanitarian aid and development cooperation, must be involved in the development of insurance policies.

Non-discriminatory direct or indirect access to insurance policies must be guaranteed to all population groups regardless of gender, ethnicity, social status, income or religion. The integration of national or supranational systems that protect human rights can lead to improved coherency with human rights obligations; an aspect that also needs to be enshrined in law.

Insurance must be affordable, even for very poor (state, collective or individual) policyholders or those with insufficient funds. Therefore, intelligent solutions are needed that subsidise insurance premiums or that completely cover the costs in justified cases. However, the assumption of insurance costs must not discourage policyholders from implementing measures to mitigate climate risk and avoidable risks. On the other hand, risk-based insurance premiums cannot be permitted to exclude vulnerable populations, as these are often exposed to and have no possibility of avoiding the highest levels of risk.

4. Reduce the costs of risk financing

The formation of large, regional and supra-regional multi-risk pools, ideally up to the global level, significantly reduces the cost of risk protection and should be encouraged through incentives. Supra-regional risk pools are particularly worth considering in cases where cost-effective regional risk pools are difficult to establish due to political reasons, poor data sources, small populations or homogenous risk profiles. The G20 should welcome and examine the V20's proposal to establish sovereign V20 climate risk pooling.

It is possible to significantly reduce the costs of structuring and operating insurances. The collection and provision of climate- and risk-related data as well as the modelling of risks and risk costs should be supported and promoted within the framework of the Global Partnership by the G20 and international development banks in cooperation with the World Meteorological Organization (WMO), national meteorological services, scientific institutions, specialised service providers and insurance companies. This could enable data for integrated climate risk management and data that are needed to structure insurance products to be provided as cost-effectively as possible. Best practices should be documented and best-in-class approaches used to define standards so as to reduce operational costs.

5. Progressively adopt the principle of solidarity and the polluter pays principle

Bread for the World and ACT Alliance are committed to working towards a long-term international form of risk financing that gradually implements the principle of solidarity and the polluter pays principle. Due to the huge differences in stakeholder interests, any solution will require a long process of negotiation. From the point of view of the people affected by climate risks, however, indications are already needed to credibly demonstrate that no-one will be left behind in the climate crisis. The creation of an **international fund** to which states, companies and other stakeholders voluntarily contribute to fund model projects that practically test the different forms of ‘smart support’ would send just such a message. The next G20 summit, therefore, should announce the establishment of an appropriate fund.

In the future, this fund could be expanded both in terms of the way its resources are used and the forms of funding it receives. Income from carbon pricing (emissions credits, carbon taxes, air and transport levies, etc.),

which could be put in place internationally, could be used for this purpose. Other levies placed on the causers of climate change could also be used to **ensure that, in the future, risk financing shifts towards the polluter pays principle**. This would favour the people most affected by climate change and provide them with a more just balance between risk and damage. It would also lead to a steering effect in terms of climate-related cost-internalisation that would counteract the problem of limited resources and make the responsible parties pay the price for global warming. In addition, for reasons of fairness, it would be important that the industrialised countries’ high historical levels of emissions are accounted for in the form of special payments. This could include, for example, payments being made to the Green Climate Fund (which has so far been financed mainly by industrialised countries). As it would be useful to establish a **fund** with capital provided by the industrialised countries **to compensate for unavoidable, non-insurable loss** (such as sea level rise), the Global Partnership should **examine suitable options as part of a working program**.



A core requirement of climate change insurance: insurance must reach marginalized groups such as nomads.



Fighting the consequences of climate change also requires innovation, such as through adaptation measures like floating rice fields, and risk-sharing instruments.

6. Promote innovation - develop pilot projects that test more equitable climate risk protection measures

Testing improved models of risk assessment, as well as directly and indirectly reducing and assuming the costs of protection (through smart support), are essential in order to close the gaps in protection against climate risks and to reduce vulnerability. **Relevant pilot projects should therefore be promoted and systematically evaluated.** The **pro-poor principles**, which provide a strong basis for the target group-focused structuring of insurance for vulnerable people living in poverty, also **need to be specified, tested, and impact-assessed in pilot projects** as part of different insurance products. However, the learning process will take several years because almost all current products are in their early stages of implementation and very few insurance claims have actually been made. Therefore, all stakeholders, including civil society, should be involved and the Global Partnership needs to promote an appropriate framework.

7. Promote ownership for vulnerable countries and civil society participation as principles

Ownership by vulnerable states as well as **civil society participation** in the development, implementation and assessment of climate risk insurance is an **indispensable** requirement for building and maintaining trust. In many countries concern is being expressed that climate risk transfer in the form of insurance will end up focusing on the profitability of the insurers instead of protecting the livelihoods of policyholders. The Climate Vulnerable Forum or its finance ministers, which are incorporated into the V20, should therefore be fully involved in the Global Partnership. It seems that this has not been the case until now. The large networks of non-governmental organisations involved in the provision of humanitarian aid and development cooperation have gained huge amounts of experience in providing emergency aid to the most marginalised people; as such, they also need to be included.

8. Guarantee long-term financial support for InsuResilience

Financial security creates trust and is indispensable for the success and sustainability of InsuResilience. Under the German presidency of the G20 Summit, the German government and other donors should therefore make clear that they will **continue to support InsuResilience beyond 2020**.

9. Provide no support to risk insurances that endanger food security

Crop loss insurance can make a meaningful contribution to climate resilience, especially for small farmers in developing countries that are particularly affected by climate change. However, insurance products that impose on farmers the use of an expensive, environmentally and climate-damaging agricultural package are highly questionable. These insurances discriminate against alternative agro-ecological approaches and seed systems that play an important role in climate adaptation and the sustainable development of smallholder farming in Africa. As such, they are unsustainable. Climate risk insurances in the agricultural sector should provide incentives for locally adapted farming methods and minimising risks, instead of endangering the livelihoods of small farmers and making them financial dependent through the use of certified seed, chemical fertilisers and pesticides. Such **supplementary products should therefore be examined in detail: if they endanger food security, do not contribute to resilience or do not comply with the principles of responsible finance, they should be rejected** and excluded from any form of support and cooperation from within the frameworks of InsuResilience, development cooperation or humanitarian aid.

10. Setting public regulatory frameworks to secure the focus on poverty during cooperation with the private sector

If the InsuResilience initiative aims to promote **public-private partnerships** in the climate insurance sector, the basic principles of climate justice and fairness as well as a focus on poverty will still need to be followed. If climate risk transfer through insurance were to be deprived of its origins in solidarity, justice and the polluter-pays principle, and instead eventually focus on opening up new markets for insurers, it would leave the safeguarding

of vital basic functions to actors that primarily concentrate on making profits instead of protecting people. Therefore, it is essential that a public framework and public-private partnerships are devised that guarantee that the provision of the necessary protection is placed at the forefront of the insurance policy, and not the maximisation of profits. There is a good reason why instruments aimed at securing livelihoods such as social protection systems need public regulations, and this must also apply to climate risk insurance – subjecting them to the primacy of private companies that intend to maximise their profits would lead the quality of protection and the needs of the poorest and most vulnerable people to climate change to be viewed as a cost factor that needed to be minimised in the interest of shareholders. Multi-actor partnerships and public-private partnerships, therefore, should be critically and independently monitored to ensure a balance of interests between the good of society and the profits of insurers.

11. Address the gaps in protection that cannot be closed by risk insurance

Risk financing and climate risk insurances **cannot address all forms of risk**. Consequently, it is essential that the Global Partnership openly discusses the remaining gaps in protection, such as the risks associated with sea level rise and desertification, but also in terms of the basis risk of insured losses. Finally, all participating countries need to cooperate towards **developing further financial instruments so these remaining gaps in protection can be closed quickly**.

Abbreviations

A2ii	Access to Insurance Initiative, a global initiative for improved access to insurance
A2R	'Anticipate, Absorb, Reshape', the UN Secretary-General's climate resilience initiative
ACliFF	Asia-Pacific Climate Finance Fund, Asian multi-donor climate fund
ADB	Asian Development Bank
ARC	African Risk Capacity, climate risk insurance for African states
BMZ	German Federal Ministry for Economic Cooperation and Development
CAT DDO	Catastrophe Deferred Drawdown Option, World Bank disaster credit line
CCRIF-SPC	Caribbean Catastrophe Risk Insurance Facility - Segregated Portfolio Company
CCRIF-CA	Caribbean Catastrophe Risk Insurance Facility - Central America
CIF	Climate Insurance Fund, KfW's climate protection fund
COP	Conference of Parties, Summit of the UN Framework Convention on Climate Change
CREWS	Climate Risk and Early Warning Systems Initiative
CVF	Climate Vulnerable Forum, forum of 52 countries at high risk from climate change
DVID	UK Department for International Development
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
GIIF	Global Index Insurance Facility
IDF	Insurance Development Forum, global forum of insurance companies
IDS	Institute of Development Studies
ILO	International Labour Organization
InsuResilience	Climate risk insurance initiative for developing countries
KfW	Kreditanstalt für Wiederaufbau
LDCs	Least Developed Countries, the 48 least developed countries
MCII	Munich Climate Insurance Initiative, a non-profit initiative for climate risk protection
NatCatService	Munich Re's database of natural disasters
NDCs	Nationally Determined Contributions, countries contribution to climate protection 2020-2025
PA	Paris Agreement, the 2015 Paris Climate Agreement entered into force in 2016
PCRAFI	Pacific Catastrophe Risk Assessment and Financing Initiative
R4	Rural Resilience Initiative, a combination instrument for the protection of small farmers
SDGs	Sustainable Development Goals, Agenda 2030's 17 sustainable development goals
SIDS	Small Island Developing States, group of developing countries on small islands
UNFCCC	UN Framework Convention on Climate Change
V20	The finance ministers of twenty vulnerable states
WFP	World Food Programme
WMO	World Meteorological Organization

Bibliography

- ActionAid (2017): The Wrong Model for Resilience: How G7-Backed Drought Insurance Failed In Malawi And What We Must Learn From It. Johannesburg
- ADB (2017): Launch of the Asia-Pacific Climate Finance Fund (ACliFF) and the Future of Climate Finance in Asia. Available at: www.adb.org/annual-meeting/2017/events/approaches-climate-financing, 27.5.2017
- Adelphi et al. (2015): A New Climate for Peace. Taking Action on Climate and Fragility Risks. An Independent Report Commissioned by the G7 members. Berlin
- African Risk Capacity (2016a): Memorandum of Understanding Countries. Available at: www.africanriskcapacity.org/2016/10/29/memorandum-of-understanding, 21.12.2016
- African Risk Capacity (2016b): PRESS RELEASE - Malawi to receive USD 8M insurance payout to support drought-affected families. Available at: www.africanriskcapacity.org/2016/11/14/press-release-malawi-to-receive-usd-8m-insurance-payout-to-support-drought-affected-families, 20.12.2016
- African Risk Capacity (2017): Fact Sheet Extreme Climate Facility (XCF)
- Béné, Chris et al. (2014): Social Protection and Climate Change, OECD Development Co-operation Working Papers, No. 16, IDS, Sussex
- BMZ (2011): Menschenrechte in der deutschen Entwicklungspolitik. BMZ-Strategiepapier 4/2011. Bonn
- BMZ (2013): BMZ-Leitfaden zur Berücksichtigung von menschenrechtlichen Standards und Prinzipien, einschließlich Gender, bei der Erstellung von Programmorschlägen der deutschen staatlichen technischen und finanziellen Zusammenarbeit. Berlin
- BMZ (2015): InsuResilience. The Climate Risk Insurance Initiative. Berlin
- BMZ (n.d.): Das Menschenrechtskonzept des BMZ. Available at: www.bmz.de/de/themen/allgemeine_menschenrechte/deutsche_entwicklungspolitik/menschenrechtskonzept/index.html, 28.12.2016
- BOND (2016): Equitable, effective and pro-poor climate risk insurance. The role of insurance in Loss and Damage. DEG Working Paper. London
- Brot für die Welt et al. (ed.) (2015a): Klimabedingte Schäden und Verluste. Profil 19. Berlin
- Brot für die Welt et al. (ed.) (2015b): Ad Hoc Monitoring Report - Claims of (non-)adherence by Bayer CropScience and Syngenta to the Code of Conduct Provisions on Labeling, Personal Protective Equipment, Training, and Monitoring.
- Brot für die Welt (ed.) (2015c): Mit Recht für mehr Gerechtigkeit. Profil 17. Berlin
- Brot für die Welt et al. (ed.) (2016a): The Paris Climate Agreement. Towards a Climate-Friendly Future. Profile 21. Berlin
- Brot für die Welt et al. (ed.) (2016b): Making Paris Work for Vulnerable Populations. Closing the climate Risk Gap. Analyse 65. Berlin
- Brot für die Welt (ed.) (2016c): Klimapolitik im Faktencheck. Armutsorientierung und Bürgerbeteiligung in der Nationalen Anpassungsplanung (NAP). Berlin
- Bundesgesetzblatt (1976): Internationaler Pakt über wirtschaftliche, soziale und kulturelle Rechte vom 19. Dezember 1966. Available at: www.institut-fuer-menschenrechte.de/fileadmin/user_upload/PDF-Dateien/Pakte_Konventionen/ICESCR/icescr_de.pdf, 2.6.2017
- ETC Group (2016): ETC AgMegaMergers Briefing December 2016
- FAO (2015): The impact of natural hazards and disasters on agriculture and food security and nutrition. Rome
- G7 (2015): Leaders' Declaration G7 Summit, 7-8 June, 2015. Available at: https://sustainabledevelopment.un.org/content/documents/7320LEADERS%20STATEMENT_FINAL_CLEAN.pdf, 28.12.2016
- G7 (2016): A Joint Statement on InsuResilience. Marrakesch
- Germanwatch (2016): Globaler Klimarisikoindex 2017. Bonn
- GIZ (2015): Climate Risk Insurance. A Background Paper on Challenges, Ambitions and Perspectives. Available at: www.g7germany.de/Content/DE/_Anlagen/G7_G20/2015-06-01-g7-climate-risk-insurance.pdf?_blob=publicationFile&v=5, 27.5.2017
- GIZ (2016): Innovations and Emerging Trends in Agricultural Insurance. Eschborn
- Hallegatte, S. et al. (2017): Unbreakable. Building the Resilience of the Poor in the Face of Natural Disasters. Climate Change and Development. World Bank. Washington DC
- InsuResilience (2016): A Joint Statement on InsuResilience. Marrakesch. Available at: www.bmz.de/de/zentrales_downloadarchiv/the men_und_schwerpunkte/klimaschutz/Final_Joint_Statement_InsuResilience_20161114.pdf, 27.5.2017
- KfW (2016): Developing Finance Forum - Insuring the SDGs. Managing Climate and Life Risks. Materials on Developing Finance No. 7. Frankfurt
- MCII (2016a): Making climate risk insurance work for the most vulnerable: Seven guiding principles. UNU-EHS Publication Series Policy Report 2016 No. 1. Bonn
- MCII (2016b): Climate risk insurance for the poor and vulnerable: How to effectively implement the pro-poor focus of InsuResilience. Edited by MCII. Bonn.
- MCII (2016c): MCII COP 22 Debriefing Paper. Bonn
- Minninger, Sabine (2017): Stand und Entwicklung von Klimarisikoversicherungen: Stellungnahme zur nicht öffentlichen Anhörung des Ausschusses für wirtschaftliche Zusammenarbeit und Entwicklung des Deutschen Bundestages am 25. Januar 2017
- Moody's (2016a): Climate Trends Infographic - Climate Change & Sovereign Credit Risk. New York
- Moody's (2016b): Moody's Investors Service (7th Nov. 2016) - Moody's sets out approach to assessing the credit impact of physical climate change on sovereigns. New York

Multiwatch (ed.) (2016): Schwarzbuch Syngenta: Dem Basler Agromulti auf der Spur.

Munich Re (2016): Natural catastrophes 2015. Munich

Munich RE (2017): NatCat-Service. Available at: <http://natcat-service.munichre.com/?filter=eyJ5ZWZyRnJvbSI6MTk5MCwieWVhcl-RvIjoyMDE2LClldmVudEZhbWlseUlkcyl6WzQsNSw3XXo%3D&-type=1>, 21.05.2017

OHCHR (2014): Mapping Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy and Sustainable Environment - Focus Report on Human Rights & Climate Change. Geneva

Oxford Policy Management (2016): DFID Shock-Responsive Social Protection Systems research: Literature review, Oxford

Reeves, Jonathan (2016): Ten concerns about climate and disaster insurance schemes - and one rights-based alternative, ActionAid UK. Available at: www.actionaid.org/2016/05/ten-concerns-about-climate-and-disaster-insurance-schemes-and-one-rights-based-alternative, 21.5.2017

RESULTS UK (2016): Ensuring climate risk insurance works for the poor. London

Sabates-Wheeler, Rachel/Stephen Devereux (2008): Transformative Social Protection. The Currency of Social Justice. In: Barrientos, Armando/David Hulme (Hrsg.): Social Protection for the Poor and Poorest. New York.

Schleussner, C.-F. et al. (2016): Armed-conflict risks enhanced by climate-related disasters in ethnically fractionalized countries. Potsdam et al.

Slater, Rachel/Martina Ulrichs (2016): How does social protection build resilience? Insights from Ethiopia, Kenya and Uganda. BRACED Working Paper, London ODI

Standard & Poor's (2015): Ratings Direct - The Heat Is On: How Climate Change Can Impact Sovereign Ratings. In: Standard & Poor's Rating Services November 25, 2015

Ulrichs, Martina (2016): Increasing people's resilience through social protection. BRACED, Issue no. 3, May 2016

UNFCCC (2016): The Paris Agreement. Available at: <https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>, 21.5.2017

World Bank Group (2017a): Sovereign Climate and Disaster Risk Pooling. World Bank Technical Contribution to the G20. Washington

World Bank Group (2017b): Sovereign Catastrophe Risk Pools. A Brief for Policy Makers. Washington

Ziegler, Susanne (2016): Adaptive Social Protection - linking social protection and climate change adaptation, GIZ: Discussion Papers on Social Protection, No. 27, Eschborn

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