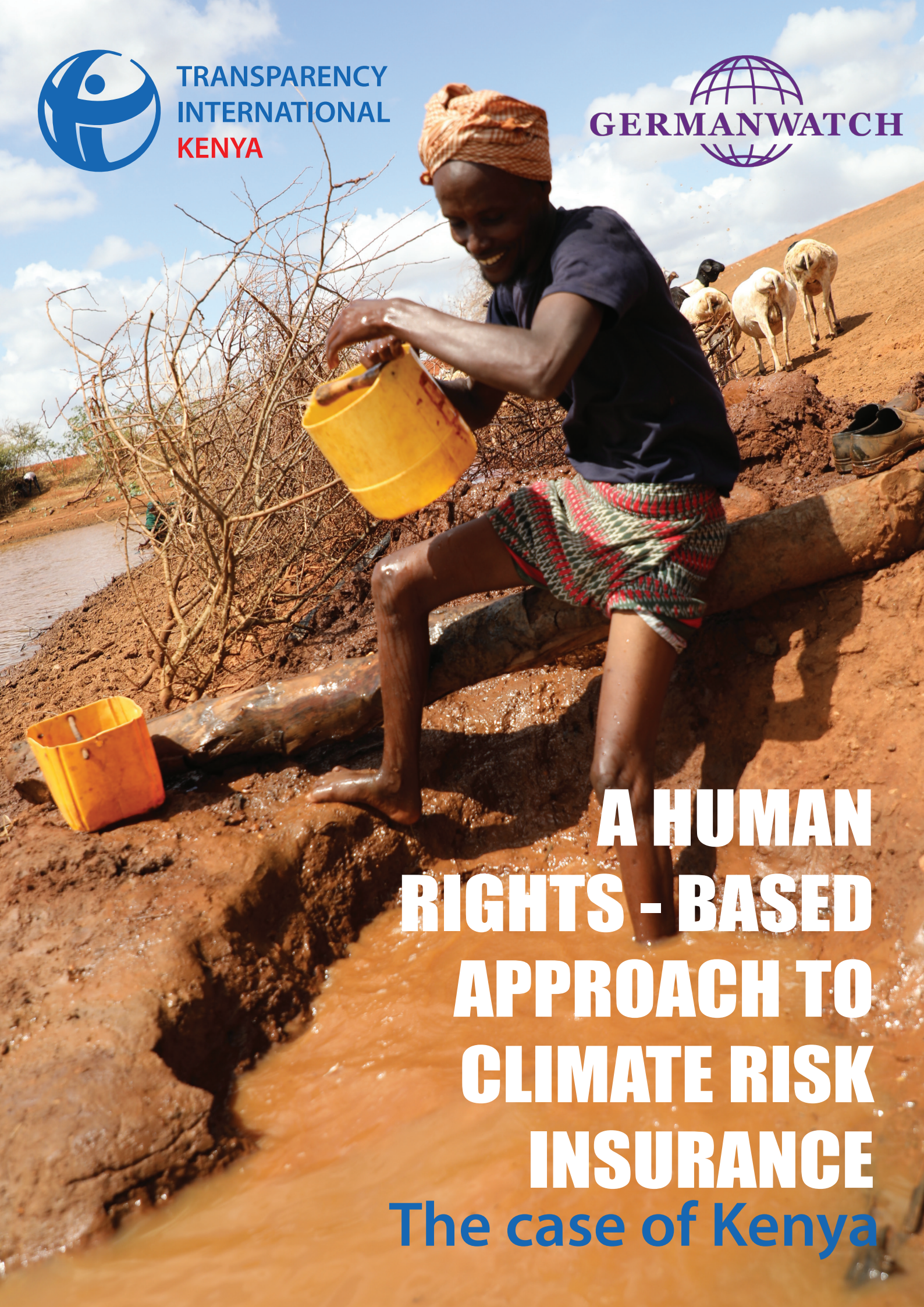




TRANSPARENCY  
INTERNATIONAL  
KENYA



**A HUMAN  
RIGHTS - BASED  
APPROACH TO  
CLIMATE RISK  
INSURANCE**  
The case of Kenya



TRANSPARENCY  
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KENYA



**A human-rights based approach to  
climate risk insurance:  
The case of Kenya**



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# ACRONYMS

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ARC	African Risk Capacity
ARV	Africa RiskView
AU	African Union
CAT Bonds	Catastrophe Bonds
CAT DDO	Catastrophe Deferred Drawdown Option
CRI	Climate Risk Insurance
CRM	Climate Risk Management
DRM	Disaster Risk Management
HSNP	Hunger Safety Net Programme
KLIP	Kenya Livestock Insurance Programme
LDCs	Least Developed Countries
INGOs	International Non-Governmental Organisation
NCCAP	National Climate Change Action Plan
NDMA	National Drought Management Authority
NGO	Non-Governmental Organisation
UNISDR	United Nations International Strategy for Disaster Reduction

# **BASIC DEFINITIONS**

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## **Disaster**

A serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts.

## **Disaster Risk**

The potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.

## **Disaster Risk Management**

Disaster risk management is the application of disaster risk reduction policies and strategies to prevent new disaster risk, reduce existing disaster risk and manage residual risk, contributing to the strengthening of resilience and reduction of disaster losses.

UNISDR glossary 2018

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# 1. EXECUTIVE SUMMARY

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This report looks at ways of covering risks that come with climate change and subsequent disasters. It dissects climate risk insurance into wider contexts of the disaster risk financing landscape and climate risk management cycle. It also lays out requisite framework conditions that ensures that it not only works effectively and efficiently but also serves the poorest and most vulnerable population. The report applies these framework conditions to the African Risk Capacity (ARC) processes with special focus on Kenya. Broadly, the report examines several aspects of climate-related risks including; Disasters and Climate Risk Management, Risk Financing Instruments, Climate Risk Insurance as a tool for Climate Risk Management, the Variety of Climate Risk Insurance (CRI) Approaches, Potentials, Challenges and Unmet needs as well as the role of CRI as part of a comprehensive risk management. Further it dichotomises the relevant framework conditions for CRI as a tool for the poor and vulnerable and the human-rights-based approach for climate risk insurance. It also looks at how Climate Risk Insurance can be a nuisance if not designed carefully, with specific reference to issues such as lack of transparency and corruption during compensation payouts.

The report finds that insurance-related instruments can support the protection and promotion of human rights. However, this requires careful implementation and management through a comprehensive risk reduction, risk management – most importantly, a human-rights based approach that focuses on the most vulnerable. It postulates the four principles that should be followed carefully namely; inclusion

and participation in the process in all phases, non-discrimination and empowerment such as capacity building, transparency and accountability and availability of complaint mechanisms as well as consideration of and respect towards existing structures.

Further, it posits that the African Risk Capacity includes some promising elements such as the contingency planning process which can be used as a platform to ensure the integration of human rights in climate risk insurance and broader disaster risk management strategies. However, there is need for enhanced capacity building and awareness creation on insurance instruments as avenues to deal with the calamities of climate change. Additionally, integration of human rights should form a prerequisite for climate risk insurance mechanisms to ensure their effectiveness.

However, many questions remain to be answered. Hence, it is, inter alia, crucial to have a closer look at the technical working groups that govern the contingency plans and therefore the impact of a payout. These include how to ensure inclusion if the instrument is little known and/or understood, how to empower people that for a lack of knowledge show little interest in the instrument, establishing complaint mechanisms that work when policyholders and beneficiaries are not identical, how local structures can be respected and utilised better and how integration with other instruments can create the highest benefit for the most vulnerable.



## 2. INTRODUCTION

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Humanity always faces (not only) weather-induced disasters. However, frequency and severity of extreme weather events are increasing due to climate change. Even if the 1.5 degrees Celsius goal (agreement by parties at the Conference of the Parties (COP) 21 in Paris in 2015 to pursue efforts to strengthen the global response to the threat of climate change by keeping a global temperature rise to 1.5 degrees Celsius) is achieved and adaptation efforts are ramped up drastically, these weather events will continue to strike and pose a risk especially to the already poor and vulnerable people in developing countries that see their livelihoods at risk.

Climate change is a disaster risk key driver (Schipper et al., 2016). In order to tackle the risks, different instruments are available. In recent years, climate risk insurance has particularly been promoted as a tool to cushion the effects of extreme weather events.

The rationale of this paper is threefold. First, it embeds climate risk insurance into wider contexts of the disaster risk financing landscape and climate risk management cycle. Second, it lays out indispensable framework conditions that ensure that it not only works effectively and efficiently but also serves the poorest and most vulnerable population. Finally, we will apply these framework conditions to the African Risk Capacity (ARC) processes with a special focus on Kenya.

# 3. CLIMATE RISK INSURANCE AS A TOOL FOR CLIMATE RISK MANAGEMENT

## 3.1 Disasters and Climate Risk Management

Societies, communities and individuals face an increased risk of extreme weather events and potentially resulting disasters due to climate change (Hutflits, Eckstein and Winges 2018). A **disaster** does not simply refer to a physical occurrence. It must rather be understood as the (potential) result of a complex interplay between a damaging *physical event* (e.g. floods, storms, droughts), the *vulnerability* of a society, its infrastructure, economy and environment as well as its exposure and its *capacity*, i.e. its ability to reduce the potential negative consequences of the event (Birkmann, 2006; UNISDR, 2018).

**Risk** is an uncertain potential for consequences of an event with something that humans value (including lives) at stake (IPCC, 2014; Renn, 2005). It is often measured as probability of an event multiplied by its potential impacts. As frequency and severity of future events are in many cases far from clear, the risk itself is to a large extent uncertain. As such uncertainty-induced risks and the associated events are not preventable, the main objective should be to strengthen the system's ability to withstand or even tolerate an unforeseen event (Renn, 2005).

Even though approaches dealing with preparing for and dealing with catastrophic events have been developed and redefined over decades, the amplified magnitude of the issue, new technologies, more available data – this is not to say there is sufficient data – and a more nuanced focus on what to protect and who to support, the discussion is far from over. Among others, **financial instruments** have multiplied and evolved over the years. While there are no-cost measures to approach disaster risk and money alone is not sufficient, availability of funds is a necessary condition in preparing for and coping with disasters. Climate risk insurance is just one way to make funds available.

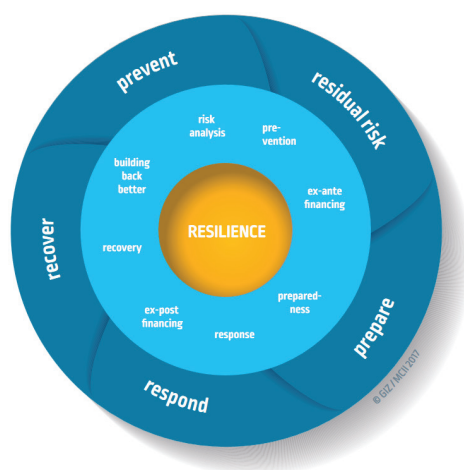
When dealing with a (potential) disaster, there are two main phases: the **pre-disaster phase** in which

looming harm is assessed, damage is prevented and preparations for a swift reaction – involving setting up early warning systems, developing contingency plans, stockpiling and training – are made and the **post-disaster phase**, which entails the reaction to a disaster event. A post-disaster phase can be further split into (at least) three different sub-phases: relief, recovery and reconstruction (Ghesquiere & Mahul, 2010). Relief is about meeting the basic needs ensuring survival. Reconstruction aims at regaining a community's full functionality. It covers, among others, critical infrastructure, housing and services (UNISDR, 2017). Subsequently during recovery, livelihoods and health are being improved and physical, social, cultural and environmental assets are restored (ibid).

**Disaster risk management** and the closely related **climate risk management** that exclusively focusses on weather related disaster events, are based on the insight that each phase requires action in order to minimise harm. The comprehensive approaches aim to avoid and reduce risk before it manifests in damage and to manage the residual risk, i.e. risk that cannot be avoided. In addition, these approaches aim at better preparation for disasters and include mechanisms to quickly respond in emergency situations and facilitate recovery. Ultimately, the goal is to increase resilience and reduce (climate) disaster losses (Le Quesne et al., 2017). In order to achieve that, these mechanisms need to be carefully integrated in other policies. For instance, the role of social protection systems in increasing resilience towards disasters has been stressed recently (Hirsch, Minninger, & Wiebe, 2017). An important question is how to integrate social protection systems into other instruments, where they are complementary and where they are contradictive. Efficiency has to be considered. Ultimately all instruments compete for the same scarce financial resources and, hence, bear opportunity costs, which means the money is unavailable for other, potentially more efficient purposes (Daniel Clarke, Mahul, Poulter, & Teh, 2016). Preparing for disaster requires trade-offs. It is impossible to protect everyone against

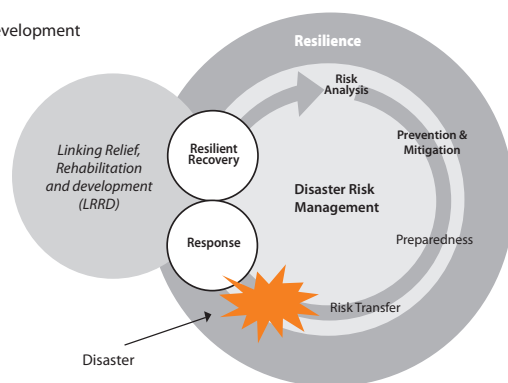
every conceivable disaster. Hence, a discussion and decision on who to protect against what is necessary (Daniel Clarke & Dercon, 2016).

Figure 1: Integrated Climate Risk Management Framework / Disaster Risk Management Framework



Source: Le Quesne et al 2017 / (BMZ, 2015)

Sustainable Development



### 3.2 Risk Financing Instruments<sup>1</sup>

It is important to note that numerous non-financial (regulation) or low-cost solutions are available within Climate Risk Management. Still, sufficient funding before and after a disaster is necessary. Often, disaster risk financing and insurance-based solutions are criticised for not contributing to prevention and mitigation directly. However, they are essential in financially protecting affected countries, communities and individuals (WBG & IFC, 2012). The availability of funds immediately after a disaster can alleviate this effect. Financial instruments can even push for more risk mitigation and prevention if coupled with incentives (e.g. lower insurance premiums) or requirements (e.g. contract conditions).

Financing instruments can be distinguished by several characteristics such as risk level (low to high), risk strategies (retention, transfer etc.), financier (local community, national government, international donors etc.), recipients (individuals, national government etc.), just to name a few. Reverting to the disaster management phases, one can distinguish between ex-ante and ex-post financing. The former includes instruments established before a disaster appears while the latter comprises of instruments set up afterwards. Ex-post financing measures are thus extraordinary and ad hoc. Most often they comprise emergency relief payments, compensation, reconstruction work, extraordinary or suspension of credits (World Bank., 2011). Ex-ante financing measures usually have a rule-like character of who bears the risk in case of a catastrophe. Forms of such ex-ante means are insurance schemes, funds (or a mix of these two), savings and formal lending (World Bank., 2011).

The biggest advantages of **ex-ante instruments** are their speed and certainty - they do not require deliberation after disaster if proper plans have been set up. (Clarke & Dercon 2016). Further benefits are the generally higher amount of total available funds after a disaster as well as the lower total losses if embedded in proper planning for disaster (Kirchner & Phaup, 2009). Depending on the instruments, the debt burden can also be lower and for the most part, the level of uncertainty decreases. However, these instruments pose high analytical requirements to determine perils and costs. The capital commitment is especially challenging for lower income countries who do not only lack funds but suffer disproportionately from disasters (G20/OECD, 2012). In addition, they might fear crowding out donor assistance (Kirschner & Phaup, 2009). Disclosure of risk without budgeting accordingly does not qualify as an ex-ante measure (Kirschner & Phaup, 2009).

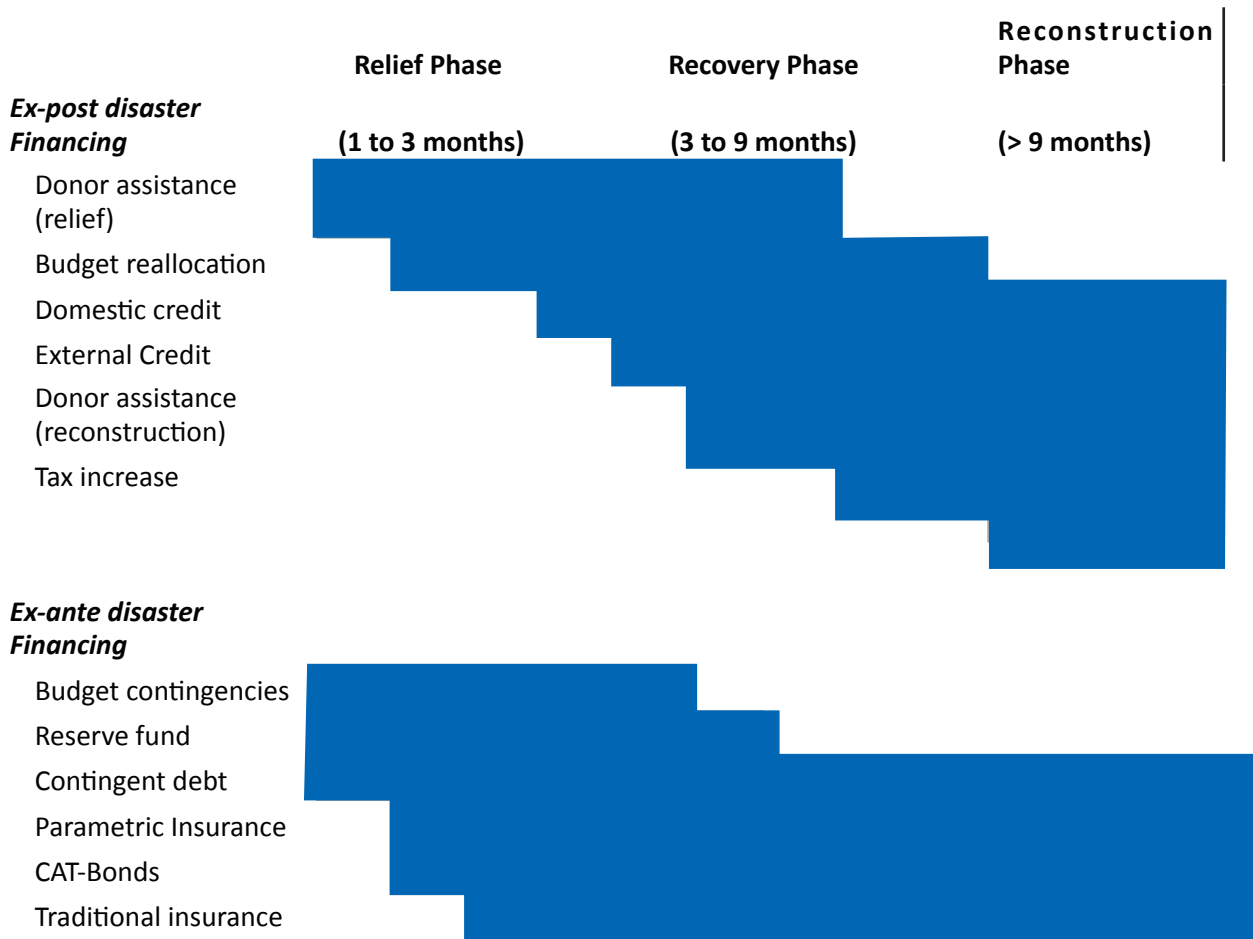
**Ex-post financing** via donor relief, budget adjustments and redistribution, taxation and borrowing do not require financial commitments in advance. This ad hoc model for funds generally does not work well (Clarke, 2016). It usually takes time to get instruments in place and to organise pay-outs. As a consequence of this time lag they are often not able to support early enough within the relief phase, resulting in aggravated damage and, subsequently, higher

<sup>1</sup> Please see a list of selected instruments in the appendix.

recovery and reconstruction costs. Further, it can lead to the loss of lives and health of the most vulnerable and poor population and increase the likelihood of human-rights violations. Still, they are suitable for

recovery and reconstruction, although even then pure reliance on ad hoc measures can undermine economic capacity of states, regions, cities, groups, or individuals (Ghesquiere & Mahul, 2010).

Figure 2: Sources of post-disaster financing and their availability



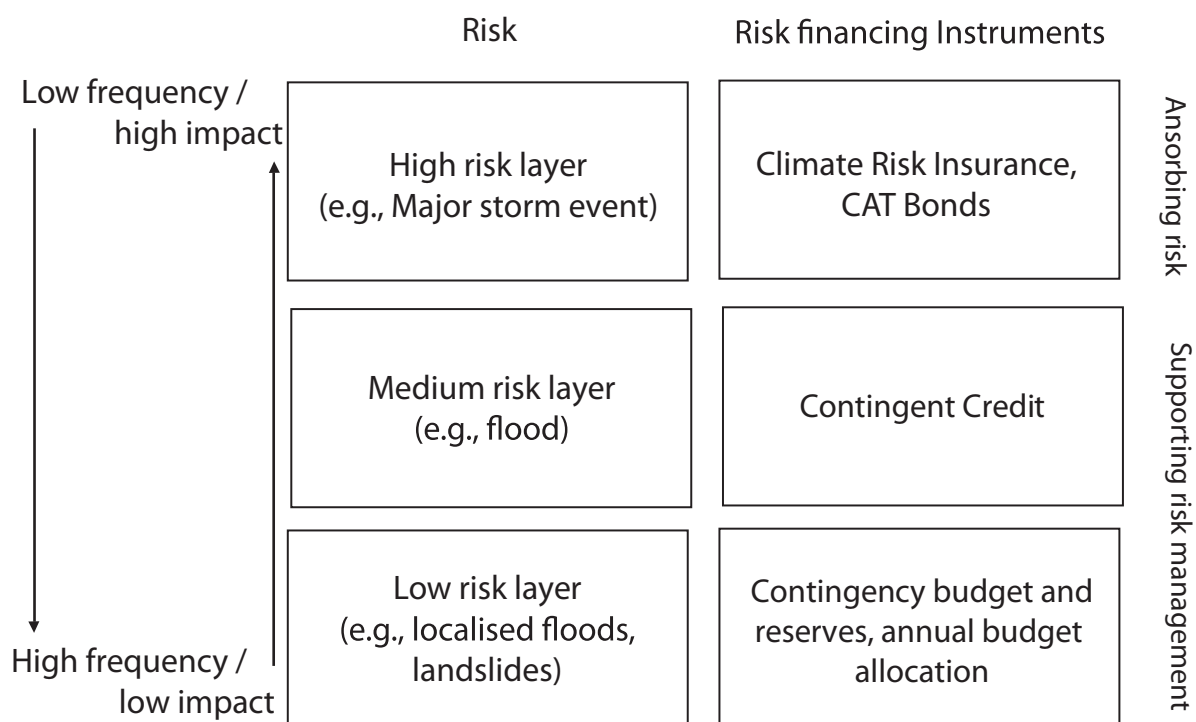
Source: Ghesquiere & Mahul 2010

Different risks require different **risk strategies**. These strategies are not mutually exclusive but complementary. The first step is using a risk reduction approach, which tries to mitigate the risk before a disaster happens. However, risk cannot be (economically) eliminated completely. To spread risk, risk transfer mechanisms are designed to pay out to the policyholder when defined climate related events take place, thus diversifying losses across people and time. Risk retention, on the contrary, is the acceptance of potential losses and the defrayment of costs of a potential disaster. In the latter case, risk financing secures repayable financial means for a post-disaster situation.

Risk strategies also have to be tailored to the specific risks. Not every instrument can cover every risk.

Insurance solutions are not suitable for regular or almost certain disaster events with high impacts (such as slow-onset events like sea-level rise due to climate change). Even with premium support such a model would not be economically viable. Low impact events that appear regularly such as minor flooding are dealt with most cost-efficiently via risk reduction or if not possible pre-allocated funds. High-risk events will regularly not be covered by insurances or result in too high premiums. Public and donor support are necessary in these cases (Mechler, Bouwer, Linnerooth Bayer, Aerts, & Surminski, Williges, 2014) The approach of selecting the instrument based on frequency and impact is called risk layering. Climate risk insurance instruments play an important role in absorbing the risk for events low in frequency and high in impact for individuals but also for governments as a policy holder.

Figure 3: Risk layering approach



Source: Modified from WBG & IFC (2012b) and Mechler et al. (2014)

However, policy decisions are often subject to political considerations that have little to do with the subject matter at hand. Incumbent parties benefit from effective disaster relief during elections (A. Fuchs & Rodriguez-Chamussy, 2015). Nonetheless, the effect seems to be the greatest when they appear as benefactors. Preparation and planning exercises seem to be much less suitable to gain political support (Clarke & Dercon, 2016). To overcome this challenge, politicians should be supported in explaining to their constituents the benefit of planning ahead, Clarke & Dercon (2016) argue. This means that if constituents are well informed and reward planning for disasters, indifferent politicians can be incentivised to support such policies.

### 3.3 Climate Risk Insurance – an Overview

Climate risk insurance for developing countries aims at reducing the economic risks of people in the face of an increase in extreme weather events (Renn, 2005; Smit & Skinner, 2002). Insurance can buffer at least the financial implications of extreme weather and climate events through its risk transfer role. Currently, most public private programmes in developing countries offer crop and sometimes livestock insurance. Insurance can spread and smooth the risk, may allow

farmers to recover faster and more efficiently, provides certainty about post-disaster support, can reduce immediate welfare losses and consumption reduction as well as reduce the need for budgetary changes (Swenja Surminski & Thielen, 2017).

#### 3.3.1 The Variety of Climate Risk Insurance Approaches

Expressly the poorest and consequently often most vulnerable people are usually ignored by mainstream insurance solutions (Franzke, 2017). Traditional **indemnity-based insurance** usually has high administrative costs and demands reliable data and information to assess the losses and damages in a specific household. As the latter point is often problematic in developing countries, it is usually not attractive for insurance companies to offer indemnity insurance in rural areas.

In a bid to tackle these challenges **index-based insurance** (or sometimes also referred to as parametric insurance) has been developed. It is designed to reduce difficulties and administration and delivery costs as well as to overcome incentive obstacles (Hess, Hazell, & Kuhn, 2016).<sup>2</sup> As the name already

<sup>2</sup> Index-based insurance is usually priced lower than indemnity insurance as verification costs are lower and the potential for moral hazard is reduced as verification costs.

implies, this form of insurance is based on an index instead of a certain damage or yield. Like traditional insurance, "index insurance seeks to provide cover against specific perils, but in this case, contracts are written against events defined and recorded at regional levels rather than at individual farm levels" (ibid.: 13). Payouts are triggered automatically if a certain threshold is reached. Index insurance should be objectively and easily quantifiable. Neither the insurer nor the policyholder can manipulate the result as they are publicly verifiable (Carter et al. 2014; Burke, Janvry and Quintero, 2010). As the insurance companies do not have to monitor highly dispersed farms, monitoring costs are way lower, which provides an incentive for companies to step into the risky market (cf. ibid.). Index insurance can thus be an option even for rural communities in developing countries where reliable data and mutual trust between the insurance company and the insured is often an issue (cf. Hess, Hazell and Kuhn, 2016; Carter et al., 2014).

The main challenge of index insurances is the remaining **basis risk** for the insured. The fact that payouts and the actual situation of the farmer are not necessarily linked means that even though a farmer experiences a loss, no or too little payment will be triggered. Basis risk thus describes the potential discrepancy between the measured risks and the actual impact of an extreme weather event for the policy holder. While a farmer, for instance, living far away from the weather station suffers losses from a drought, following the index there might have been enough rainfall at the station itself. The farmer then has to deal with the extra costs by herself as no payments would be triggered in this case (Carter et al., 2014).

Climate risk insurance can be distinguished furthermore as **micro-, meso - or macro-level insurance** according to who takes the policy. Micro-level insurance is provided to individuals directly, i.e. farmers themselves are the policyholders and thus legally entitled to compensation. An example for this is the **R4 Rural Resilience Initiative** that was launched in 2011 by the World Food Programme and Oxfam America providing insurance for farmers in Ethiopia, Senegal, Malawi and Zambia, and piloting in Kenya and Zimbabwe. In the case of **meso-level insurance** a risk aggregator serves as the policyholder. Risk aggregators can be communities or community-

based organisations, microfinance institutions, non-governmental organisations or cooperatives. An advantage of meso-level insurance is that it can build on existing structures and distribution channels. An example is the recently launched **African and Asian Resilience in Disaster Insurance Scheme (ARDIS)** by VisionFund. It allows existing microfinance institutions to provide post disaster recovery lending to smallholder farmers—mostly women—in Cambodia, Kenya, Malawi, Mali, Myanmar and Zambia. In the case of **macro-insurance**, governments may be provided insurance as sovereign entities or through multinational risk pools. States insure themselves (responsible indirectly also to their vulnerable populations) against the potential impacts of climate-related risks. The **African Risk Capacity (ARC)** established by the African Union is an example for such a multinational risk pool. Combined with other elements of disaster risk management, it provides (so far) drought insurance for African governments so that they can better meet the needs of people facing climate risks.

### 3.3.2 Potentials, Challenges and Unmet Needs

Climate risk insurance can be a powerful tool to make poor and vulnerable people more resilient in the face of climate risks – if designed carefully. For low-income households, farmers and local businesses being insured can mean **livelihood security, more dignity and less dependency on donor generosity**. Furthermore, insurance mechanisms can **strengthen households' creditworthiness** therefore **facilitating new investments in productive assets and higher-risk/higher-yield activities** (Linnerooth-Bayer et al., 2009).

Climate Risk Insurance may not only foster the affected persons directly but – in the case of sovereign risk pools – may also enable the government to effectively respond to disasters whose severity is beyond their capacity. Sovereign risk pools allow governments to transfer risks beyond their threshold for efficient and effective response. Insurance schemes need to identify potential economic losses from extreme weather events before the implementation phase. This needs assessment and knowledge about priorities can be very useful to **improve national policies** as they can inform such policies. Insurance designs can also provide **risk assurance for public and private investment** and encourage investors to keep their

money in places affected by changing weather patterns (InsuResilience, 2017).

Insurance instruments can have a positive influence on risk management strategies and risk reduction on the level of the vulnerable if the right incentives are provided (Smit and Skinner, 2002; Linnerooth-Bayer et al., 2009). Insurance contracts for instance could entail the fulfilment of certain preconditions for coverage that foster preventive risk behaviour. Examples of incentive mechanisms could be risk-based pricing, deductibles, no-claims bonuses or the provision of hazard information (Swenja Surminski & Thieken, 2017). Instead of cash payments, policies could be issued in exchange for labour on risk reduction activities for the community (Charles, 2016).

Fostering resilience should be regarded as an indispensable necessity rather than a mere side-effect. Facing ever-increasing climate risks, it should be a priority because if farmers, other members of the society and the state do not become more resilient, access to insurance will run out as they become too expensive with climate change nurturing more severe and more frequent weather events (Surminski, 2017). By covering parts of economic losses rapidly after damage occurs due to extreme weather, climate risk insurance is an efficient mechanism to **assist and reconstruct, save lives and protect livelihoods** (InsuResilience, 2017). According to Schipper & Hudson, (2017) other risk transfer measures could potentially foster resilience to natural hazards more effectively than disaster aid.

Despite the aforementioned potentials, climate risk insurance can also lead to **riskier farming production methods and technology use** if no incentives for risk reduction are provided. So-called moral hazard is a long known problem in insurance and describes the phenomenon where people may undertake riskier behaviour when they are insured, which in turn leads to increasing losses and higher costs for the insurers (Mobarak and Rosenzweig 2013).

Müller, Johnson, & Kreuer, (2017) argue that **socio-ecological side effects of insurance** are often overlooked. For example, farmers might choose to or will even be incentivised to cultivate (insured) 'cash crops' that typically offer a high yield and are grown

for sale while being less resistant to extreme weather conditions than traditional subsistence crops. (Müller, Johnson and Kreuer, 2017). As insurance products are often bundled with agricultural input like hybrid seeds or fertilizers to increase uptake this effect might even be strengthened.<sup>3</sup> The cultivation of such cash crops and abandonment of non-insured crops can result in increased **monocultures and overspecialisation**, both having crucial effects on natural capital (ibid.; Hillier, 2018, Fuchs and Wolff 2011). Increased cultivation of cash crops does not only have questionable consequences on biodiversity, agricultural sustainability and food security but may also **increase farmers' vulnerability to price fluctuations of crops** (Müller, Johnson and Kreuer, 2017: 25). Another effect of insurance on land use could be "the expansion of cultivated areas into environmentally sensitive marginal lands of lower agricultural value" (Müller, Johnson and Kreuer, 2017: 28). On the flipside, the **link between agricultural insurance and productivity gains** has been documented well (Weingärtner, Simonet, & Caravani, 2017). In addition, it should be noticed though that the introduction of **CRI – if designed carefully – can also have positive impacts on sustainability**.

The influx of money in post-disaster situations bears some additional risk. The high amount of cash coupled with a high demand e.g., food coinciding with low supply can lead to price surges that partly neutralise the positive effect (Climate Policy 2018) and could have devastating effects on those not participating in the payout.

The introduction of climate risk insurance schemes may also impact the existing social structures and traditional risk management approaches in the community. Isakson, (2015) for instance, argues that local communities use risk sharing networks for crop varieties important to them. However, if only these varieties and not commercial crops

<sup>3</sup> Insurance products may not only be bundled with seeds or fertilizers but also with (additional) loans. A well-known example is the Kilimo Salama index insurance initiative, launched by the Syngenta Foundation and the Global Index Insurance Facility (GIIF). The initiative develops and distributes index insurance "so that they feel confident investing in quality seeds and fertilizer for their farms, and can access agricultural loans" (Kilimo Salama, 2014: 1).

Though not bundling the purchase of seeds and fertilizers directly with insurance, also the big seed and agrochemical company Monsanto recognised the potentials of insurance solutions for agriculture. In 2013 for \$930 million Monsanto acquired "The Climate Corporation", that seeks to supply farmers with weather and agricultural data as well as with insurance products. The out-spoken aim of the acquisition was to continue "[offering] its current risk-management products including an online service that provides crop planning, monitoring, and recommendations, and insurance offerings through its network of independent agents" (Monsanto, 2013).

are covered by insurance, it may **exclude insured farmers using commercial crops from existing risk-sharing arrangements**. Hence, CRI poses a risk to well established traditional risk - sharing mechanisms if ill-designed or inadequately implemented. However, if designed and implemented properly it might support such systems in times of climate change (Huffils, 2018).

Furthermore, insurance products are often bundled with agricultural input (like seeds or fertilizers) and/or loans in order to improve the uptake of insurance (Hess, Hazell and Kuhn, 2016; Isakson 2015). Most commonly, hybrid seeds are bundled. While they offer a higher yield, they display **lower resistance to extreme weather conditions** (Müller, Johnson and Kreuer 2017). This contradicts the need for agrobiodiversity as a key element to increasing the adaptive capacity of small farmer and as a present and future source of genetic variety (ibid). Insurance based solution presents high analytical requirements to determine perils and costs. Furthermore, they require a transparent, well-performing public financial management system, which is a crucial step in strengthening a countries' governance and, therefore, an important part of development assistance (Klingebiel & Mahn, 2011). Based on that, it has been argued that climate insurance could potentially create relevant co-benefits for the fight against **corruption** or at least yield synergies with other projects' efforts in that field. Contrarily, payouts have to be distributed carefully and should be based on objective and transparent selection criteria. Otherwise conflicts or corruption may be unintentionally reinforced if distribution criteria for instance are defined by tribal or political leaders or security forces (Scherer, 2018).

In recent years, several African countries have tightened rules for civil society organisations. From 2012 to 2016, 29 restrictive laws have been introduced only in Sub-Saharan Africa (Oxfam & CCP-AU, 2016). In many countries, civil society organisations are not considered partners in achieving positive development but as political opposition that needs to be stringently controlled through means such as **mandatory or burdensome registration practices, exhaustive monitoring and restrictions on foreign funding** (Faris, 2012). These developments pose a

significant challenge to the requirements for a human rights-based implementation of insurance-based solutions. These solutions require contribution from civil society which, in turn, is based on a certain level of organisation and coordination of actors from this sphere.

### **3.3.3 Role of CRI as part of a comprehensive risk management**

In order to approach climate risks holistically climate risk insurance should be understood as only one part of a comprehensive risk management strategy. **As has been pointed out earlier above, insurance can play an important role in the broader climate and disaster risk management cycle but "cannot substitute for the social and ecological foundations of security [...]. [It] is one element in a dynamic process of planning, implementing and adapting to build societal resilience to disasters and climate change"** (Le Quesne et al., 2017: 49).

Insurance mechanisms should be **combined with other ex-ante climate risk management strategies with the objective of preventing losses**. Measures should include risk identification and assessment, risk prevention and reduction and preparation for future extreme weather events. This could be done through the implementation of **early warning systems, information-sharing, or capacity-building** to improve the financial and insurance literacy and risk awareness of the insured, local insurers, distribution channels and governments. In this scenario, insurance schemes would come after all these measures have been taken, as a subsequent financial instrument, addressing the remaining residual risk (Le Quesne et al., 2017; Schäfer, Waters, Kreft, & Zissener, 2016).

Another important aspect of a comprehensive risk management approach is the full understanding of local needs. If the demand for insurance products, the potential clients' budget constraints or the already existing informal coping mechanisms within communities are not well taken into account, the risk is so high that insurance schemes will not be adapted or bears negative impacts for both insurers and insured (Schäfer et al., 2016).. This is why completing a full needs assessment – which must be highly participatory and inclusive - before implementing insurance tools is necessary.



The **R4 Rural Resilience Initiative** is a good example of how a comprehensive risk management framework can be applied. It is based on four integrated risk management strategies: **risk transfer, risk reduction, prudent risk taking and risk reserves**. The risk transfer component allows for farmers to purchase weather index insurance against drought. Farmers can pay insurance premiums in cash or – if they lack financial capacities to do so – may pay with their labour through **Insurance-for-Assets (IFA)** schemes. In case of the latter farmers will get an insurance premium if in exchange they take part in disaster risk reduction activities. Prudent risk taking gives farmers the possibility to obtain credit and use the money to invest in productive assets e.g. seeds, fertilizers or new technologies. Finally, the risk reserves mechanism enables farmers to self-insure individual members of the community or groups with specific needs (R4 Rural Resilience Initiative, 2016; Schäfer et al., 2016).

In the long term, reducing risk through broader comprehensive risk management strategies should have the beneficial effect of lowering expensive insurance premium costs, therefore giving access to insurance to more poor and vulnerable people. Indeed, for now insurance premiums are still quite expensive for two main reasons: First because of risk

insurance costs in themselves and secondly due to operational, capital-related and product design costs, mainly caused by data gaps and scale effects in small countries with a low insurance pool and poor data availability (Hirsch, 2017). Addressing the latter costs, for example, by improving data and administrative processes could broaden access to insurance for far more people.

Another aspect to bear in mind with regards to long-term planning is the involvement of private companies. Being dependent on the market private actors must of course have a financial or at least strategic (e.g. gaining access and information of a new market) interest when engaging in climate risk insurance. With intensifying climate change and consequently more and more severe extreme weather events, climate risk insurance may become very cost-intensive. This bears the risk of insurers and other private enterprises to leave the market, if they cease to see a valid business case in a certain area or for a certain peril. As a result a protection gap may arise. While sole dependency on insurance is to be avoided it needs to provide (long-term) reliability. Even with sophisticated modelling, exits remain a potential threat. In order to obtain long-term commitments from private companies, public pledges may be needed.

# 4. RELEVANT FRAMEWORK CONDITIONS FOR CLIMATE RISK INSURANCE AS A TOOL FOR THE POOR AND VULNERABLE

## 4.1 A human-rights-based approach for climate risk insurance

*“Managing the risk of disasters is aimed at protecting persons and their property, health, livelihood and productive assets, while promoting and protecting all human rights, including the right to development.”*

Sendai Framework for Disaster Risk Reduction, 2015: Para 19c

Climate change is already interfering with human rights and will increasingly do so in the future. It puts people under immediate and far-reaching risks that can have direct and indirect implications on their rights. Broadly speaking, human rights can be impacted by climate change in two ways: by the direct physical impacts and rather indirect by climate change policies – both of which are relevant in the context of insurance-related instruments for dealing with climate-related risks.

Firstly, the physical impacts of climate change can directly influence people's human rights. The physical impacts of extreme weather events such as droughts, floods or cyclones and their increase in frequency and severity pose a threat to human rights. Basic human rights such as the right to life, water, food, shelter, health, subsistence or social protection can be affected by direct climate change impacts. When a disaster occurs, impacts vary drastically, also depending on the degree of exposure prior to a catastrophe. Pre-existing vulnerabilities and patterns of discrimination are usually aggravated if a disaster strikes (IASC, 2011). While direct impacts of extreme weather events might be insurable, indirect impacts of extreme weather events and more long-term physical impacts from slow-onset events like sea-level rise or changing weather patterns are largely not insurable but can lead to displacement or famine, too. In many cases, countries that contributed very little to climate change are less equipped to deal with the consequences and suffer disproportionately from extreme weather events (Eckstein, Hutfils, & Winges, 2018).

Secondly, climate change policies can affect (positively or negatively) people's human rights conditions. Measures to mitigate climate change may infringe human rights, for instance renewable energy projects that may implicate forced evictions. Apart from the general state obligation, specific frameworks like the “Aarhus Convention” and the “UN Guiding Principles on Business and Human Rights” aim to protect affected populations rights in that regard (Hirsch et al., 2016). Any programme that aims at combating climate change or its impacts shall not infringe human rights. As explicitly mentioned in the Paris Agreement:

*Parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity.*

Paris Agreement, 2015

In developing countries, an increasing number of climate risk insurance programmes are being implemented through public-private partnerships aiming at insuring the poorest – and often most vulnerable – people. In order to ensure that indeed the poorest and most vulnerable benefit from these schemes, the call has been made to follow a human rights-based approach (cf. Schäfer et al. 2016). Still, it remains vague how to apply such an approach to climate risk insurance systems and other related disaster risk financing tools. A human rights-based

approach aims at protecting and promoting the basic human rights of the poorest and most vulnerable in two ways. First, fostering human rights should be an objective of climate risk insurance. Secondly, the achievement of human rights outcomes through climate risk insurance is not, in itself, enough. The process through which these outcomes are achieved is equally important. Therefore, it should be ensured that the process of setting up a climate risk insurance scheme respects and fosters human rights. The **process** itself should follow human rights principles, which inter alia means the poorest and most vulnerable need to be identified, involved via participation and be given access to complaint and redress mechanisms, to enable their empowerment.

#### 4.2 The Objective: Fostering Human Rights

Well-designed climate risk insurance schemes and insurance-related instruments can **potentially** enhance the resilience of those facing climate-related risks in at least four different ways:

- Firstly, improving resilience through receiving a payout (e.g. financial or other like seeds) can help those affected by disaster refrain from coping strategies that could threaten the fulfilment of their rights, such as changing their spending patterns or taking children out of school in order to safeguard basic nutrition (cf. Schäfer et al., 2016). Consequently, climate risk insurance can contribute to protecting and promoting the right to life, water, food, shelter, health, subsistence and social protection in the aftermath of an event.
- Secondly, by providing planning security, the policy holders can engage in longer term economic activities that require investment (such as more sustainable irrigation methods) but promise a more stable income (regardless whether a disaster occurs or not) and would contribute to fostering the right to food.
- Thirdly, holding an insurance policy or having access to an insurance-related instrument can furthermore empower people to exercise their

rights, as they are not solely being dependent on the charity of their own governments or donor states in case of a disaster. It is a right of the people and an obligation of the state to protect their human rights; and in this context the policy equips people with a tangible tool to claim their right to a payout.

- Fourthly, a well-designed insurance scheme/instrument can provide incentives for risk reduction and prevention activities, i.e. offering reduced premium rates if certain practices like adopting improved irrigation systems or connection to an early-warning system is given – or even making it a condition for insurance uptake. This in turn can contribute to the protection of human rights, e.g. to food, shelter and water.

The first principle underpinning the claim for support is the principle of *common but differentiated responsibilities and respective capabilities*, which is anchored in UNFCCC Art 3.1. According to this Article “[...] the Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof” (UNFCCC, 1992).<sup>4</sup> The second relevant principle in this context is the *no-harm rule*, which demands states to prevent, reduce and control the risk of environmental harm to other states. If harm is caused nonetheless, the wrongful conduct must be ceased and full reparation shall be made. This rule is widely recognised in customary international law and is also anchored in Principle 2 of the Rio Declaration (ibid.).<sup>5</sup>

#### 4.3 Rights Holders and Duty Bearers

A key element to any human rights-based approach is that it recognises people as individual holders of human rights and states as bearers of duties, which

<sup>4</sup> A dynamic interpretation needs to be applied, i.e. the respective capabilities and responsibilities of the countries should be revisited regularly.

<sup>5</sup> Principle 2 of the Rio Declaration (UNCED, 1992) reads: “States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”

are accountable for the realisation of human rights. In the case of extreme weather events, which are exacerbated in severity and frequency, rights holders are those affected by the impacts of extreme weather events. The duty bearers are first and foremost the states that are required to protect everyone within their jurisdiction and public actors acting on behalf of their governments. However, human rights due diligence obligations also apply to companies. Local decisions and actions related to exposure and vulnerability such as spatial planning have a high impact on the scope of climate risk. As a study on disaster risk reduction by the Human Rights Council (2014) highlights:

*Natural hazards are not disasters in and of themselves. Whether or not they become disasters depends on the exposure of a community, and its vulnerability and resilience, all factors that can be addressed by human (including State) action. A failure (by governments and other actors) to take reasonable preventative action to reduce exposure and vulnerability and to enhance resilience, as well as to provide mitigation, is therefore a human rights issue.*

Human Rights Council, 2014

To a large extent it is in the control of national and local authorities within affected countries to manage where people work and live as well as the quality of construction and disaster risk reduction services – all of which are crucial in order to respect and promote human rights and have a direct impact on the protection of rights. In the cases in which attribution to man-made climate change can be shown, responsibility should – in line with the *polluter pays principle* anchored in the Rio Declaration (UNCED, 1992)<sup>6</sup> – shift to those who have contributed to the anthropogenic climate change (cf. also OECD, 1997)). Accordingly, big emitters like companies or states should bear at least parts of the costs of managing the related risks. In the case of insurance-related instruments, this could for instance mean providing premium support as well as financial and technical support to setting up schemes.

<sup>6</sup> Principle 16 of the Rio Declaration (UNCED, 1992) defines the polluter pays principle as follows: "National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution, with due regard to the public interest and without distorting international trade and investment."

International human rights law provides a basis for the claim of support for the most vulnerable (cf. Hirsch, Minninger and Wiebe, 2017). The *International Covenant on Economic, Social and Cultural Rights* of the United Nations that came into force in 1976 binds its parties to support other affected states with technical and financial support if they do not have the resources to safeguard these basic rights themselves. Article 2.1 asks the parties to "[...] take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realisation of the rights recognised in the present Covenant by all appropriate means [...]" (UN General Assembly, 1975: 2). Article 11 of the same covenant specifies the fundamental right to an adequate standard of living and freedom from hunger, to which end the parties "shall take, individually and through international co-operation, the measures, including specific programmes, which are needed" (11.2). These principles of international human rights law back the claim for (financial and technical) support of affected developing countries in dealing with the risks and consequences of climate-related losses and damages (Schäfer, Künzel, & Bals, 2018).

Based on the aforementioned principles and due to their extraterritorial obligations, e.g. defined in the *International Covenant for Economic, Social and Cultural Rights*<sup>7</sup> or the *International Convention on the Rights or Persons with Disabilities*, states have a legal obligation to stop damaging and protect the affected. However, not only are there no agreed-upon measures of implementation, the existence of these economic, social and cultural rights are disputed by some governments altogether, such as the US Government (Humphreys, 2012). Apart from the legal difficulties of extraterritorial duties political challenges arise. Climate change requires cooperation among states. Choosing the legal route bears the risk of harming negotiations or even exclusion of economic cooperation from powerful partners. Developing countries and Least Developed Countries (LDCs) might therefore refrain

<sup>7</sup> Art.2.1 focuses on extraterritorial rights: "Each State Party to the present Covenant undertakes to take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means, including particularly the adoption of legislative measures." Available at: [www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx](http://www.ohchr.org/EN/ProfessionalInterest/Pages/CESCR.aspx) [31.10.2018].

from supporting legal proceedings of their citizens against countries they deal with in other policy arenas fearing retaliation. By way of contrast, it can also be a way of dissolving negotiation gridlocks (Schäfer, Künzel & Bals 2017).

The *United Nations Guiding Principles on Business and Human Rights* that were adopted in 2011 provide 31 principles on how to respect, protect and remedy human rights in the context of transnational corporations and other business enterprises. According to these principles, not only states are bound to respect, protect and fulfil human rights and fundamental freedoms. Business enterprises, too, are required to comply with all applicable laws and to respect human rights. Furthermore, it states that victims of business-related abuses should have access to appropriate and effective remedies (Ruggie, 2011)

#### 4.4 The Process: In Line with Human Rights Standards

Positive human rights outcomes of climate risk insurance and related instruments – no matter how noble the ends – will only be achieved if the process of establishing them is in line with human rights principles (Orellana, 2012: 54; Uvin, 2007: 172). Any scheme should be designed on the basis of the four basic principles of the human rights approach to climate risk insurance (see Figure 5).

*Figure 4: Principles of a human rights-based approach to climate risk insurance and insurance-related instruments<sup>8</sup>*

1. The process should be non-discriminatory and inclusive, especially with regard to marginalised groups. In the case of climate risk insurance, a special focus should be put on the poorest and most vulnerable, especially poor women. Furthermore, poor people not owning any land such as seasonal workers lacking continuous income necessary for regular premium deserve attention. As it has been pointed out by several authors (e.g. Hillier, 2017 and Akter, Krupnik, Rossi, & Khanam, 2016, women, even if equally exposed to risks regarding reduced production and income, are often more vulnerable and have less adaptive capacity to climate change-related risks. In the face of fewer economic options and limited access to resources, services and decision-making processes, their ability to recover from disasters is lower. Insurance solutions should take into account that women and men are often responsible for different crops and livestock as well as agricultural tasks (Müller, Johnson and Kreuer, 2017). In order not to exclude women and exacerbate gendered power imbalances even more, insurance programmes should furthermore examine possible gaps in financial literacy. As Akter et al. (2016) found out in a study among farmers on an island in Bangladesh, lack of understanding and trust was a main reason for women to refrain from index insurance. It is imperative to make climate risk insurance and related instruments available to the poorest and most vulnerable and to avoid aggravating already existing social inequalities.



<sup>8</sup> Source: Gesellschaft für Menschenrechte (modified and extended)

2. The design, implementation and review of any climate risk insurance programme should be working towards participation and empowerment of the affected people, i.e. the rights holders. In order to do so it is crucial to empower all stakeholders to get actively involved. Thus, it is not enough to simply include those people in the process. In order for people vulnerable to extreme weather events to actively engage in the process as well as to gain decision making power and competence, the capacities of the right holders must be strengthened. In the case of climate risk insurance strengthening the policyholder's insurance literacy does not suffice. Efforts should be directed towards understanding the risks that people face, their current risk management strategies, analysing the existing gaps and opportunities. Through providing accessible information, people should gain knowledge and decision making power of how insurance can be integrated in a more holistic approach towards climate risk management.

3. The process should be transparent and include accountability mechanisms. Hence, the implementation of a climate risk insurance scheme should include transparent financial structures to avert corruption and incorporate compliance mechanisms and procedures. A complaint and redress mechanism guarantees the empowerment of the rights holders and provides an effective way to claim rights (cf. also Orellana, 2012). As the poorest and most vulnerable often do not have access and financial means to legal advice, such a complaint and redress mechanism must be easy to access, efficient and comprehensive information of the procedure must be given beforehand. In order to fulfil their human rights obligations, the role of the state should be to put in place the legislative and administrative framework, i.e. insurance regulation based on international human rights standards and norms and building the capacity of state institutions to set up transparent public financial management systems: "Without specific insurance regulation, many of the elements of insurance institutions cannot be recognised and enforced by law, including the right to issue insurance policies or to claim on insurance contracts in the event of a loss." CISL, 2015: 24) In some rare cases, like

India and South Africa, governments have instructed regulators to incorporate compulsory targets for private sector insurers to reach out to the low-income market" (CISL, 2015: 23). Yet over-regulation can also hinder the access to insurance for the poorest and most vulnerable people if the regulatory framework imposes excessive costs and complexity on offering insurance (CISL, 2015). If insurers for instance have to fulfil disproportionate capital requirements this may impede the insurers' capacity to enter a new and risky market (ibid.). Especially in countries where insurance companies did not exist for a long time, extreme regulations may pose disincentives for international investors as well as for domestic entities (ibid).

4. It is important to respect the existing structures in the country or region and to establish ownership. In the absence of insurance, farmers have traditionally developed several coping mechanisms for dealing with weather-related risks, such as risk-sharing arrangements (Fuchs & Wolff, 2011). Insurance-related instruments should be carefully integrated with traditional climate risk management to further strengthen them. A thorough assessment of existing structures as well as investigating the needs and wants of the community is required before putting an insurance scheme in place. Insurance then might become a complementary part to a broader climate risk management that integrates both traditional and formal approaches (Hutflil, forthcoming).

#### **4.5 How Climate Risk Insurance can be a Bane if not Designed Carefully**

If not designed and implemented carefully, climate risk insurance and related instruments may cause more harm than good. The most important aspect in this regard is the accessibility of those financial instruments for the poorest and most vulnerable people. If, for instance, they do not have access to insurance due to high premium costs, already existing social inequalities will be exacerbated. A special focus of any project must thus be the active inclusion of marginalised populations, people with disabilities, indigenous peoples, women and children as well as migrants. Next to that, the implementation of insurance-related instruments can potentially create new dependencies

for smallholder farmers – which would run counter to empowering resilience. As insurance is often bundled with commercial products like hybrid seeds or fertilizers farmers might become dependent on commercial retailers. For instance, “[hybrid] seeds typically do not reproduce the desired traits in the second generation and thus cannot be saved from one season to the next” (Müller, Johnson and Kreuer, 2017: 29). Farmers thus have to buy seeds again and again, leave alone the questionable consequences for biodiversity and the resilience of the broader ecosystem.

Furthermore, if insurance is not sufficiently integrated in a broader disaster risk management strategy and next to complementing mitigation and adaptation means, the negative impacts on human rights might increase even more in the long run. With ongoing climate change and extreme weather events increasing in severity and frequency insurance premiums may become unaffordable in future – leaving the poorest and most vulnerable without cover if insurances and related instruments remain the only risk management tool applied. Finally, it is important to acknowledge and find responses to the presence of losses and damages that cannot be insured but will be affected by climate change. It must be recognised that insurance-related instruments cannot be an answer to non-economic losses and damages. Such non-economic losses include inter alia the losses of indigenous and traditional knowledge and biodiversity or human mobility – all of which cannot be insured. Further, slow-onset events like sea level rise or salinisation trigger losses and damages, too, which can hardly – if at all – be insured. But these risks also negatively impact

human rights such as cultural heritage, or the right to health and water and hence need to be addressed. All of the aforementioned aspects should highlight that any insurance-related programme, project or framework that is set up should be analysed for its contribution to upholding human rights.

#### 4.6 Way forward

If implemented carefully and managed through a comprehensive risk reduction and risk management strategy, insurance-related instruments can support the protection and promotion of human rights. In order to apply a human rights-based approach in this context, four basic principles should be followed carefully: **Firstly**, inclusion and participation in the process of designing and implementing insurance schemes and in the further course are indispensable. **Secondly**, it must be guaranteed that the instrument is not discriminatory and foresees measures for empowerment such as capacity building. **Thirdly**, transparency and accountability need to be ensured and complaint and redress mechanisms must be in place. As there are no one-size-fits-all approaches, it is **lastly** important to consider and respect existing structures. In the following chapter we will look more closely on a specific climate risk insurance scheme at the macro level: the African Risk Capacity. With its contingency plans, it is among the most ambitious solutions of that kind and goes beyond a purely financial instrument. But does it already fulfil the requirements laid out here. We will answer that question by using the case of Kenya.

# 5. THE AFRICAN RISK CAPACITY IN KENYA

## 5.1 The need for Climate Risk Insurance in Kenya

The impacts of catastrophes like the torrential rains and severe flooding from March to May 2018 experienced in Kenya are more compounded in developing and least developed countries due to their inability to predict and respond in a timely manner. Kenya's Second National Climate Change Action Plan (NCCAP) 2018-2022 – Which is provided for by The Climate Change Act, 2016 as the principle government planning instrument for key priority areas for climate change mitigation and adaptation - identifies climate change as a potential threat to Kenya's future development and achievement of the goals outlined in Vision 2030 (Kenya's development blueprint for the period 2008-2030). It also recognises the threat posed by climate risks in the realisation of the Government's Big Four development agenda 2018-2022 (Government's strategic focus areas), which focuses on ensuring food and nutritional security, affordable and decent housing, increased manufacturing and affordable healthcare.<sup>9</sup>

According to the action plan, the impacts of these disasters are felt at the household level through food insecurity, loss of life, damage to property and increased prices of food and fuel; and at the national level, where scarce government resources are re-allocated to address the impacts of floods and drought at the expense of social programmes such as health and education.

Kenya is a member of the Climate Vulnerable Forum (CVF), which was established in 2009 as an 'international partnership of countries highly vulnerable to a warming planet.'<sup>10</sup> Kenya is also one of the 48 members of the Vulnerable 20 (V20) Group of Ministers of Finance of the CVF. According to USAID's climate projections, temperatures in Kenya are projected to increase from 1.2-2.2°C by 2050. Moreover, there will be increase in frequency and intensity of heavy rainfall, severity of

dry spells and duration of heat waves, and a projected rise of 16-42cm in the sea level within the same period.<sup>11</sup> These climate projections, if not mitigated, are expected to have serious impacts on different sectors with significant contributions to the economy; agriculture, water, human health, ecosystems, energy and infrastructure.

## 5.2 Kenya's Institutional Arrangements

According to an assessment done by the Independent International Development Organization in 2017 on Kenya's preparedness to disasters caused by natural hazards, disaster preparedness in Kenya is perceived to be fragmented.<sup>12</sup> Each organisation has its own political and institutional interests and allegiances, which may be more powerful than the incentives for collaboration and partnerships. There are eight main agencies responsible for disaster preparedness in Kenya:

- National Drought Management Authority (NDMA) (Drought preparedness)
- Water Resource Management Authority (Floods preparedness)
- Ministry of Health (Human Disease preparedness)
- Ministry of Agriculture, Livestock and Fisheries (Livestock Disease preparedness)
- National Disasters Operations Centre
- National Disaster Management Unit
- Kenya Meteorological Department (Early Warning Systems)
- The Kenya Red Cross (Works closely with the government on disaster response)

The overall coordination of drought management is done by the NDMA. There are two coordinating

<sup>9</sup> Government of Kenya, (2018). *The National Climate Change Action Plan 2018-2022*

<sup>10</sup> (Buhr et al., 2018) *Climate Change and the Cost of Capital in Developing Countries: Assessing the impact of climate risks on sovereign borrowing costs*. Imperial College Business School.

<sup>11</sup> [https://www.climatelinks.org/sites/default/files/asset/document/2018\\_USAID-ATLAS-Project\\_Climate-Risk-Profile-Kenya.pdf](https://www.climatelinks.org/sites/default/files/asset/document/2018_USAID-ATLAS-Project_Climate-Risk-Profile-Kenya.pdf)

<sup>12</sup> Development Initiatives, (2017). *Assessment of Kenya's preparedness to disasters caused by natural hazards: Floods, drought and disease outbreak*.



bodies at the national level bringing together various stakeholders in drought preparedness. These are the Kenya Food Security Meeting (KFSM) and the Kenya Food Security Steering Group (KFSSG). At the county level, this is organised under County Steering Groups (CSG). CSGs are always comprised of directors and focal point technical officers from line ministries, UN agencies, NGOs and relevant stakeholders and always chaired by the Governor and County Commissioner as the Co-chair. In cases of disaster response, there are always also the Sub-County Steering Committees.

The National Disaster Operations Centre (NDOC) is responsible for coordinating all disaster response operations in the country. The National Disaster Management Unit (NDMU) on the other hand was established through a presidential directive in 2013 and sits within the Ministry of Interior. NDMU has established the country's emergency response plan and Standard Operating Procedures (SOPs).

### **5.3 The legal framework**

Kenya does not have a firm legal regime that guides its disaster preparedness/management operations. Disaster risk management is sectoral and fragmented. The process of enacting a Disaster Risk Management (DRM) Law dates back to 1999. Currently, there is a private members bill in parliament that if passed, will provide for a more centralised and coherent system of disaster preparedness in the country. Notable however is the fact that there already is in place a Disaster Risk Management Policy, 2018 and The Public Finance Management (National Drought Emergency Fund) Regulations, 2018. The disaster risk management policy framework together with climate change related policies and laws guide the government's response to climate risks through adaptation and mitigation actions and disaster response.

### **5.4 African Risk Capacity (ARC)**

Sub-Saharan Africa has been portrayed as the most vulnerable region to the impacts of global climate change because of its reliance on agriculture; which is highly sensitive to weather and climate variables such as temperature, precipitation, and light and extreme

events and low capacity for adaptation (Kotir 2010). Extreme weather events driven by climate change will result in increased risk of hunger and malnutrition in Africa's most vulnerable populations. Cognisant of this and the fact that systems for responding to natural disasters must be timely and equitable, the African Union established the African Risk Capacity (ARC) in 2012<sup>13</sup>. As a specialised agency it aims to help member states improve their capacities to better plan, prepare and respond to extreme weather events and natural disasters.<sup>14</sup> According to its establishing agreement, the Agency's main objective is to assist the member states reduce the risk of loss and damage caused by extreme weather events and natural disasters affecting Africa's populations by providing targeted responses to disasters in a more timely, cost-effective, objective and transparent manner.<sup>14</sup>

Though there are many extreme weather events that can be attributed to the negative impacts of climate change, the ARC focuses, at least for now, on droughts as a climate change disaster. In order to benefit from the scheme, parties must enter in contracts for insurance with the ARC Agency and join the ARC Risk Pool. ARC works with countries to calculate their premiums and allocate payouts based on pre-determined and transparent rules for payment. Countries select the level at which they wish to participate by selecting the amount of risk they wish to retain and that which they wish to transfer - financing they would want from ARC for droughts of varying severity. The contingency planning, which is meant to optimise ARC disbursements, is a prerequisite for participation and considers existing mechanisms, priorities and needs of each participating government. Therefore, operations plans are evaluated by the ARC Board's Peer Review Mechanism according to standards set by the Conference of the Parties to the ARC.

Members of the ARC risk pool receive a payout when the rainfall deviation is sufficiently severe such that the predictable cost as estimated by the Africa RiskView (ARV) crosses a certain pre-defined threshold. ARV is a proprietary software application that uses satellite-

<sup>13</sup> <http://www.africanriskcapacity.org/2016/10/29/how-arc-works/>

<sup>14</sup> <http://www.africanriskcapacity.org/wp-content/uploads/2016/11/AUDecisiontoEstablishARCSA-1.pdf>

based rainfall data in combination with vulnerability data in order to estimate drought-related response costs and define triggers for their index-based insurance. When the risk transfer threshold is crossed, the risk pool member country should receive a payout within 2-4 weeks thereby allowing the country to begin early intervention programmes before vulnerable populations take negative coping actions.

### **5.5 ARC Governance**

The African Risk Capacity is composed of two arms: The Specialised Agency and the ARC Insurance Company Limited. The Specialised Agency is a cooperative mechanism that supervises development of the institution's capacity and services. It also provides general oversight of the facility as well as capacity building to member countries on disaster risk management and contingency planning. A key function of the Specialised Agency is approving contingency plans and monitoring their implementation.

The ARC Agency has three organs as defined by the Memorandum of Understanding:

- a) The Conference of the Parties: the supreme organ of the ARC Agency with powers to undertake such functions as are provided for in the Agreement.
- b) The Governing Board: Establishes the timing and mode of payment of contributions; sets standards for development and updating of Contingency Plans; approves initial, updated or revised Contingency Plans, among other functions as defined by the Memorandum of Understanding.
- c) the Secretariat: headed by the Director General with specific functions as defined by the Memorandum of Understanding.

The ARC Limited Company is the financial affiliate that carries out commercial insurance functions of risk pooling and risk transfer in accordance with national regulations for parametric weather insurance.

Within the risk pool member country, there has to be an ARC Programme Supervisor (NDMA CEO – Kenya),

Programme Coordinator, host Institution (NDMA), and the ARC Technical Working Groups (TWGs) – draws members from relevant line ministries, government agencies, civil society organisations, UN agencies and INGOs among other stakeholders as decided by the government based on relevance.

### **5.6 The African Risk Capacity and framework conditions in Kenya**

In the Constitution of Kenya, 2010, it is the fundamental duty of the State and every State organ to observe, respect, protect, promote and fulfil the rights and fundamental freedoms in the Bill of Rights.<sup>15</sup> Under article 21(3), all State organs and all public officers have the duty to address the needs of vulnerable groups within society, including women, older members of society, persons with disabilities, children, youth, minority groups, marginalised communities and members of particular ethnic, religious or cultural communities. With the provision of right to life in article 26(1), and protection of right to property in article 40, the State is obliged to protect vulnerable communities from the losses and damages resulting from the negative impacts of climate change. According to the National Climate Change Action Plan 2018-2022, drought conditions in late 2017 and early 2018 left 3.4 million people severely food insecure and an estimated 500,000 people without access to water. The cyclical nature of drought disasters and incomplete recovery from the climate-related impacts of drought means that some households have become increasingly vulnerable, losing their ability to spring back.

The Government of Kenya has been making steady improvements to its drought management system with the work currently led by the NDMA, a state cooperation established in November 2011 to provide leadership and coordination of drought management and climate change adaptation.

NDMA also doubles as the focal point for the ARC in Kenya. Coordination of its work is done both at the national and county levels by the Kenya Food security Meeting (KFSM), the Kenya Food Security Steering Group (KFSSG), and the County Steering Groups (CSG).

<sup>15</sup>[http://www.icla.up.ac.za/images/constitutions/kenya\\_constitution.pdf](http://www.icla.up.ac.za/images/constitutions/kenya_constitution.pdf)

Within the climate change space, Kenya has an elaborate policy and legal framework that provides for climate change adaptation and mitigation with a strong focus on adaptation. Some of these policies include:

- a) The Climate Change Act, 2016: provides for the development of an action plan;
- b) Nationally Determined Contributions: outlines Kenya's commitment to enhance resilience to climate change and climate risks towards the attainment of Vision 2030 by mainstreaming climate change into the Medium-Term Plans and implementing adaptation actions;
- c) The National Climate Change Action Plan 2018 – 2022: identifies disaster (drought and flood) risk management as a key priority area for the country with targeted action points to adapt to the risks impacts and where possible mitigate;
- d) The National Adaptation Plan 2015-2030: analyses Kenya's vulnerability to drought as a climate hazard and proposes sectoral adaptation actions and;
- e) The third medium term plan for the implementation of Vision 2030 (MTP III): mainstreams climate change towards the attainment of vision 2030.

All these policy documents prioritise climate related disaster response and resilience for vulnerable communities.

With significant exposure to catastrophic drought events and with agriculture as the backbone of its economy, Kenya joined the first ever ARC risk pool with a vision of improving the management of this risk and, if disaster strikes, enable a more-timely humanitarian response. According to Kenya's Drought Operations Plan 2013-14 through which it started its engagement with the ARC, droughts significantly threaten GDP growth in Sub-Saharan Africa.<sup>16</sup>

While there is substantial research on impacts of climate change in developing countries, there has been very little work to date on translating estimates of economic loss into fiscal measures. Climate impacts like rising sea levels, increased coastal flooding, and increased incidence of drought generate economic costs. According to an Imperial College Business School publication titled "Climate Change and the Cost of Capital in Developing Countries," Kenya has lost an average of USD 354.7 million (capital costs) over the period 1997-2016 due to annual weather-related human fatalities and economic losses. This translates to an average GDP loss of 0.4%.

Despite an elaborate drought operations plan, and payment of premiums more than the other three countries combined, Kenya did not benefit from the first risk pool (2014/2015). It subscribed to the second risk pool (2015-2016) but did not get a payout despite being faced with a drought. Kenya failed to customise the tool in the right manner that even when the country experienced drought in 2015, it could not trigger any payouts. This prompted the political decision by the government, against the advice of the national ARC Technical Working Group, to withdraw its membership from the risk pool until such a time that the country will decide to purchase the premiums again.

Kenya is in the process of reviewing its drought operations plan and contingency plan in preparation to join the ARC risk pool again. In 2016, the ARC Technical Working Group advised the government, after a successful review of Africa RiskView customisation, to buy premiums and stop its withdrawal plan.

The government did not heed the TWGs advice and what followed was one of the worst droughts that cost the government 11 billion shillings (US\$ 110 million).

Interestingly, the drought surpassed the set threshold as defined in the Africa RiskView tool triggering payouts of up to USD 23 million. Unfortunately, Kenya had not purchased premiums hence could not receive the payout. Subsequently, the government decided to get back to the risk pool.

<sup>16</sup> [http://www.africanriskcapacity.org/wp-content/uploads/2016/11/OP\\_Pool1\\_Kenya-Operational-Plan.pdf](http://www.africanriskcapacity.org/wp-content/uploads/2016/11/OP_Pool1_Kenya-Operational-Plan.pdf)

There is already a budgetary allocation in the 2018-2019 financial year and as soon as the Technical Working Group is done with the review of the Drought Operations Plan and the Africa RiskView customisation, the government plans to purchase the premiums.

## 5.7 Challenges

### a) Lack of Resources

Kenya's purchase of the ARC Insurance policy in the first two risk pools was largely informed by its expectations of a payout. This made the establishment of the institutional framework such as constitution and operationalisation of the Technical Working Group (TWG) easy. Many organisations, both State and non-state, were included in the TWG as there were enough resources to facilitate it to achieve its mandate. Due to Kenya's experience which was against its expectations, there has been a challenge in constituting a representative TWG as the government no longer allocates resources for this stream of work. Resultantly, this has limited the number of organisations being involved in the TWGs with the focus being on government institutions that can facilitate their staff to participate. TI Kenya is the only non-state actor participating in the current TWG (2018-2019). Another factor that has affected government's commitment to the ARC is the competing interest between ARC and the Kenya Livestock Insurance Programme (KLIP) which is also being implemented by the government in partnership with insurance companies and other stakeholders. Since it is the government that has been paying premiums for this programme, there has been a lot of lobbying from some stakeholders calling on the government to avoid ARC and focus on KLIP. Moreover, the area covered by KLIP programme forms part of the area covered by ARC.

### b) Indicators used

Even though the country has decided to purchase the ARC insurance, there are concerns especially with the number of indicators relied on by ARC for customisation of Africa RiskView. Since the insurance is index based, the country is of the opinion that a single indicator like the Water Resource Satisfaction Index

(WRSI) used by ARC would be enough other than having a combination of indicators. Reflecting on Kenya's experience with the KLIP which uses only one indicator, Normalized Difference Vegetation Index (NDVI), any insurance policy that uses more than one indicator like the ARC alarms key decision makers especially the legislators from the targeted region.

### c) Peer-to-peer learning

Kenya has not had experience with ARC payouts hence the review of the Operations Plan and the Contingency plan could be aided significantly by peer-to-peer learning. The challenge however is the fact that within the Eastern Africa region, only Kenya and the Republic of Sudan have signed the Memorandum of Understanding with Africa Risk Capacity with Sudan having signed recently in July 2018. Peer-to-peer learning has therefore been a challenge in this part of Africa. However, Kenya has a lot to learn from countries that have received ARC payouts in the previous risk pools most of which are from West Africa.

## 5.8 Contingency and Implementation Plans

### 1) Contingency Plans

Through the ARC contingency planning process, countries submit an Operations Plan that outlines the different ways in which the money will be spent in case of a payout. Countries then must submit a final implementation plan describing the use of an ARC Ltd payout when a payout is likely, which is defined as:<sup>17</sup>

- 1) When the certainty of an insurance payout is greater than 70% within 60-70 days of the potential payout date; or
- 2) If, at the end of the sowing window defined in the insurance contract, it is determined that a country will be entitled to an insurance payout, regardless of the rainfall conditions for the remainder of the insured season.

The country Contingency planning is developed by the Technical Working Group - with the support of

<sup>17</sup> [http://www.africanriskcapacity.org/wp-content/uploads/2016/12/GB6\\_RevisedCP-Standards-and-Guidelines\\_EN\\_20151123\\_v-15.docx](http://www.africanriskcapacity.org/wp-content/uploads/2016/12/GB6_RevisedCP-Standards-and-Guidelines_EN_20151123_v-15.docx)

the ARC secretariat if so requested - as part of the Operations Plan. Review of the Contingency Plan is done annually before the country buys insurance for the following season or seasons which involves updating the intervention strategy (target, size and location). When an Operations Plan is finalised through in-country processes, the country submits it to the Secretariat, which in turn submits it to the Technical Review Committee (TRC) comprised of seven independent experts. The TRC reviews and evaluates the Operations Plan and provides a report of its assessment to the Peer Review Mechanism (PRM) of the Board.

The PRM then issues a report, after conducting its own independent evaluation, to the full Board with its recommendations regarding whether the Operations Plan has met the criteria set by the Board. Once approved by the Board, a Certificate of Good Standing (SGS) is granted to the country.

While the 2014-2015 Operations Plan was clear on the institutional framework, listing all the stakeholders, both government and non-government, the 2015-2016 Operations Plan was too general. Even though Kenya did not get a payout, it would have been much easier

implementing a payout with the 2014-2015 Operations Plan compared to the 2015-2016 Operations Plan. Since the Government of Kenya has no experience with an ARC payout, it is challenging to evaluate the effectiveness of Kenya's contingency plan for the previous risk pools it has been part of. The Technical Working Group reviewing the Operations Plan for the next risk pool 2018-2019 lack an informed basis to undertake the exercise effectively hence are only guided by Kenya's experience on drought response.

## 2. Final Implementation Plans

Prior to an ARC Ltd payout, a country is required to submit a Final Implementation Plan through a process similar to the Operations Plan submission process, with the support of the Secretariat if so requested. The Final Implementation Plan, which includes detailed information on how an ARC Ltd payout will be deployed during a specific natural disaster, should only include activities that have already been approved as part of the country's Operations Plan, unless there is a clear justification provided, for example, in the case of a rapid-onset disaster or in the identification of specific unforeseen needs outside of those considered in the Operations Plan.

# 6. A HUMAN RIGHTS-BASED APPROACH TO CLIMATE RISK INSURANCE: A CASE OF KENYA CONCLUSION

## 6.1 Introduction

The pull out by Kenya and its decision to buy the policy again provides a good opportunity to evaluate the Africa Risk Capacity with regard to its effectiveness, successes, challenges, and opportunities, and for this case, whether it already follows a human rights-based approach to climate risk insurance for the most vulnerable people to benefit or what is still lacking of it. Despite Kenya having not received a payout from ARC, this paper assesses the contingency planning process, guidelines and the drought operations plans with a view of future climate risk management and establishing the application of the human right-based approach in the ARC processes as explained in the previous section. The paper also looks at the Independent Evaluation of the African Risk Capacity undertaken by the e-Pact consortium led by Oxford Policy Management and co-managed with Ifad<sup>18</sup>. The assessment is conducted against the principles of the human rights-based approach to climate risk insurance that have been developed by Germanwatch and Transparency International Kenya based on the overarching framework developed by Internationale Gesellschaft für Menschenrechte. These principles include:

- a) Non-discrimination and active inclusion of marginalised groups, especially the poorest, women and people not owning land, for example, should not be overlooked;
- b) Transparency, accountability and mechanisms for complaint e.g. putting in place insurance regulation;
- c) Participation and empowerment of those affected e.g. through capacity building, fostering financial literacy and knowledge in climate risk management and;

- d) Respect towards existing structures in the country or region e.g. careful integration with traditional climate risk management approaches in order to strengthen them.

## 6.2 Non-discrimination and active inclusion of marginalised groups

The e-Pact evaluation report noted that ARC was undertaking many activities across a broad range of AU countries, and was engaging a wide range of stakeholders including political decision-makers and technical personnel within member and non-member states. Against the broad progress, the report observed that there are still some areas for future adjustment. The report noted that ARC has not managed to engage successfully with all relevant organisations. Specific to country level engagement, it observed that the story of ARC engagement was less positive and generally uneven, with strong evidence to suggest that civil society and NGOs have often not meaningfully been involved.

While the Constitution of Kenya, 2010 recognises participation of all people in decision making processes as a national value and principle of good governance and further that, minorities and marginalised groups should participate and be represented in governance and other spheres of life, Kenya continues to experience challenges in bringing together key actors especially CSOs, NGOs and marginalised/vulnerable communities around climate risk insurance. The e-Pact evaluation report points to a sense of exclusion of civil society and humanitarian organisations in decision making processes around ARC. Though some minimal participation from some NGOs has been recorded in the past through the TWGs and the contingency planning processes, it remains inconsistent. Meaningful engagement of marginalised

<sup>18</sup> [http://www.africanriskcapacity.org/wp-content/uploads/2018/03/Formative-Phase-1-ARC-Evaluation\\_merged.pdf](http://www.africanriskcapacity.org/wp-content/uploads/2018/03/Formative-Phase-1-ARC-Evaluation_merged.pdf)

groups is crucial in the implementation of any human rights-based approach to climate risk insurance. This could be achieved for instance through engagement of representatives from the marginalised groups or targeted communities and organisations working on DRR/M in the target locations.

### **6.3 Transparency, accountability and mechanisms for complaint**

ARC processes should include measures to enhance transparency, deter corruption and ensure compliance and accountability. This means clear disclosure of information, rules, plans, processes and actions, timely access to information and existence of functional compliant handling mechanisms.

Existing institutional arrangements for disaster risk management in Kenya provide a governance framework both at the National and County levels. The NDMA Act, 2016 provides for the Authority to ensure that action taken by all stakeholders in response to drought and climate change risks is timely, harmonised and effective. The County Steering Groups, for example, co-ordinate and oversee drought related interventions in drought prone counties. They therefore have to be accountable to the affected persons whenever there is disaster response. These institutional arrangements should serve the ARC and its engagements in the country.

Kenya has gained experience from the Hunger Safety Net Programme (HSNP) where the government has been working with Transparency International Kenya to ensure transparency and accountability during cash transfers to affected communities. In its ARC operations plan, Kenya also outlines a monitoring and evaluation framework and plan which provides for a means of verification in case there is a payout. In the case of the disbursement of cash transfers to drought-affected households, the means of verification is the monthly and final monitoring reports from NDMA to ARC which enhances accountability.

According to the e-pact evaluation report, experiences in Kenya and Malawi suggest that it has been challenging to adhere to a consistent and

transparent process for selecting policy parameters closely informed by frontline technical staff and well understood by a broad enough group of key government stakeholders. In Kenya, the lack of understanding of ARC among different stakeholders and inconsistent participation points to a deficiency in transparency and timely access to information. According to the e-Pact report, the World Food Programme (WFP) highlighted a lack of transparency and communication in decision making processes around ARC in Kenya.

The ARC process in Kenya is guided by the established insurance regulatory framework. This ensures that climate risk insurance is anchored on and adheres to insurance regulation. Additionally, the Insurance Regulatory Authority sits in the technical working groups to provide guidance on adherence to insurance regulations.

According to the Kenya Drought Operations Plan 2015-2016, a mandatory requirement when a country plans to buy ARC insurance policy, Kenya has developed a Common Programme Framework for Ending Drought Emergencies (EDE-CPF 2014-2022) at the national level. The framework provides a roadmap for all actors to align planning and investment in drought risk reduction and resilience. The operations plan also notes that Kenya is in the process of putting in place County Preparedness & Response Plans setting out priority actions to end drought emergencies. The Operations Plan also highlights the existing assessment processes, describing the workflow around each of the processes. Even though ARC is an AU product, it has to fit within the policy, legal and institutional arrangements of the individual country buying the policy.

The e-pact evaluation states that there is strong evidence to indicate that ARC's current efforts in terms of transparency and communications are perceived as weak. This has been attributed mainly to a lack of effective external communication on ARC's part, in informing stakeholders and broader audiences. Additionally, there is a general lack of understanding of insurance across Africa and a pervasive scepticism

and distrust of the insurance industry which further hinder successful communication.

The Hunger Safety Net Programme has established a decentralized Case Management System where beneficiaries can lodge complaints. It provides five avenues through which complaints can be registered:

1. Via SMS to toll free number
2. Via call free helpline
3. Via case management form on the HSNP website
4. Via case management book at the Chiefs' or NDMA office
5. HSNP Complaint Management forms with staff of NGOs, INGOs, Huduma centers within the counties

Kenya identifies the HSNP as the first intervention in the operations plans for ARC. Therefore, the systems put in place by the HSNP would serve the ARC. Existing mechanisms for complaint handling in the country would still be applicable in the context of ARC i.e. the Judiciary, the Commission on Administrative Justice (Office of the Ombudsman), the Ethics and Anti-Corruption Commission and others.

#### **6.4 Participation and empowerment of those affected**

According to the e-pact evaluation, there was strong evidence to suggest that ARC does implement a broad capacity-building programme covering early warning, contingency planning, disaster risk management and disaster risk financing. However, it further noted that the approach taken by ARC was not particularly innovative, relying on traditional tools like PowerPoint presentations and manuals. It was also observed that ARC staff, while having certain technical strengths, are not necessarily qualified educators.

On the question of stakeholders' awareness of ARC's products and services, the e-pact evaluation report noted that there was evidence to suggest that while there is a relatively good level of awareness of ARC's

existence amongst stakeholders in Africa, there is a very limited understanding of how ARC's products and services work, as well as on the respective roles of the ARC Agency and the ARC Limited. This was linked to the lack of effective external communication on ARC's part, in informing stakeholders and broader audiences.

Effective participation goes hand in hand with capacity building and timely access to information by all. Kenya has made efforts to build the capacity of stakeholders on ARC processes but this is only limited to members of the Technical Working Groups. Outside of these, there is a general lack of awareness not only on ARC and its processes but also on climate risk insurance. Despite this, there is no capacity building initiative for ARC or CRI in Kenya.

#### **6.5 Respect towards existing structures in the country or region**

Climate risk insurance should be integrated within existing national and traditional/informal structures for risk management. ARC's operations in Kenya are well incorporated within the national disaster management institutional framework at the national level. ARC operates through the NDMA, established under the NDMA Act, 2016. The Authority is charged with the mandate of disaster risk assessment and response in the country. Other government ministries, departments and agencies are included in the technical working groups based on their mandate and expertise in disaster risk management. Additionally, the ARC process in Kenya takes advantage and leverages on existing disaster management strategies and programmes such as the HSNP and KLIP which are captured in the country's ARC operations plan.

Despite this, there are significant gaps in terms of inclusion of traditional/informal institutions in the discourse. This could be attributed to the misconception and lack of awareness of the ARC programme coupled with poor coordination among various disaster risk management and financing institutions.



## **6.6 ARC Payout in case of Disaster**

Beyond the principles outlined above, there are other components that are central to fostering a human rights-based approach within ARC and where there are still evident gaps, like the modalities of an ARC payout in case of a disaster.

In order to protect the fundamental rights of citizens in areas affected by climate related disasters like drought, payouts should be utilised in a transparent, reliable and efficient manner targeting the most vulnerable. According to the ARC Contingency Planning Standards and Guidelines, there are different screening stages that a country has to go through before a payout is effected. Prior to an ARC payout, a country is required to submit a Final Implementation Plan (FIP). The FIP, which includes detailed information on how an ARC Ltd payout will be deployed during a specific natural disaster, should only include activities that have already been approved as part of the country's Operations Plan, unless there is a clear justification provided, for example, in the case of a rapid-onset disaster or in the identification of specific unforeseen needs outside of those considered in the Operations Plan. The screening assesses the eligibility of the country and looks at the:

- a) Time sensitivity of the activity
- b) Critical services and impacts
- c) If the activity can be completed within 6 months

The purpose is to ensure livelihoods of beneficiaries, that would be negatively impacted if they need to wait to receive assistance or face a gap or inconsistency in their assistance, are protected.

ARC uses Africa RiskView (ARV) to track weather patterns against defined indicators and triggers payouts whenever the tool detects a drought that is of the defined threshold for an ARC payout. According to the e-pact evaluation, there is mixed evidence as to the reliability of ARV and ARC processes to ensure that ARC consistently triggers payouts following droughts for the countries that have implemented

the ARC payout. In Kenya, the Kenya Food Security Steering Group (a multi-agency, multi-sectoral group) is responsible for coordination of drought response at national level while the County Steering Group is responsible at the county level. The role of the Group is to coordinate the implementation of food security assessments and develop reports and plans for decision making. The body develops interventions and mobilises resources for response within government and partners, monitoring and evaluation, lessons learnt and capacity building of County Steering Group. The County Steering Group is also multi-agency and multi-sectoral whose major role is to participate in the food security assessments and implement the recommendations from the assessment reports. This governance structure is always used by NDMA during drought response and will therefore be the default governance structure for ARC payout in case Kenya buys the policy in future and encounters a drought disaster that triggers a payout. Since the approach has active engagement of local institutions and organisations with first-hand experience of the situation, it can be considered responsive to the human rights-based approach. Several Civil Society Organisations (CSOs) (Oxfam GB, CARE International, Save the Children International, World Vision International, Arid Lands Development Focus (ALDEF) and WASDA) were engaged in the earlier contingency planning process.

## **6.7 Preliminary verdict**

The analysis above indicates some steps have been taken to integrate some aspects of the different principles of the human rights-based approach to climate risk insurance though minimal. Active engagement of the marginalised and the most affected in the decision making processes should be enhanced. This should be coupled with continuous capacity building and enhancement for all stakeholders to ensure meaningful engagement. Engagement of CSOs is vital in this processes and should be enhanced as it ensures representation and participation of interest groups and enhances transparency and accountability.

Looking at the climate change impacts on human rights as outlined in the Sendai Framework and the need for Parties to take action to address climate

change, respect, promote and consider their obligations on human rights, (the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development as well as gender equality, empowerment of women and intergenerational equity) as highlighted in the Paris Agreement, the human rights-based approach should be considered within the climate risk insurance frameworks both at the national level and regionally.

With the existing institutional frameworks and governance structure for climate risk insurance

in Kenya, a human rights-based approach can be achieved throughout all ARC processes (e.g. contingency planning) by ensuring meaningful participation of all relevant stakeholders, ensuring transparency and accountability and, providing avenues for grievance redress. There is however need to have an insurance specific policy/legislation to reinforce this approach. Considering the Disaster Risk Management Bill has not been enacted into law, the only major policy guiding disaster risk management in the Sessional Paper No. 8 of 2012 which is not sufficient to protect the rights of affected citizens.

## 7. WAY FORWARD

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Insurance-related instruments can support the protection and promotion of human rights. However, this requires careful implementation and management through a comprehensive risk management and risk reduction strategy and – most importantly, a human-rights based approach that focuses on the most vulnerable. Four principles should be followed carefully: Firstly, inclusion and participation in the process in all phases. Secondly, non-discrimination and empowerment such as capacity building. Thirdly, transparency and accountability and availability of complaint mechanisms. Fourthly, consideration of and respect towards existing structures.

The African Risk Capacity includes some promising elements such as the contingency planning process which can be used as a platform to ensure the integration of human rights in climate risk insurance and broader disaster risk management strategies.

However, there is need for enhanced capacity building and awareness creation on insurance instruments as avenues to deal with the calamities of climate change. Additionally, integration of human rights should form a prerequisite for climate risk insurance mechanisms to ensure their effectiveness.

Furthermore, many questions remain yet to be answered. Hence, it is, *inter alia*, crucial to have a closer look at the technical working groups that govern the contingency plans and therefore the impact of a payout. How can you ensure inclusion if the instrument is little known and/or understood. How can you empower people who for a lack of knowledge show little interest in the instrument? How can complaint mechanisms work when policyholders and beneficiaries are not identical? How can local structures be respected and utilised better? And how can integration with other instruments create the highest benefit for the most vulnerable?

# BIBLIOGRAPHY

- Akter, S., Krupnik, T. J., Rossi, F., & Khanam, F. (2016). The influence of gender and product design on farmers' preferences for weather-indexed crop insurance. *Global Environmental Change*, 38, 217–229. <https://doi.org/10.1016/j.gloenvcha.2016.03.010>
- Birkmann, J. (2006). Measuring vulnerability to promote disaster-resilient societies: Conceptual frameworks and definitions. *Measuring Vulnerability to Natural Hazards: Towards Disaster Resilient Societies*, 01, 9–54.
- BMZ. (2015). Disaster Risk Management Approach and Contributions of German Development Cooperation Approach and Contributions of German Development Cooperation. *Minister for Economic Cooperation and Development*.
- Buhr, B., Donovan, C., King, G., Yuen, L., Murinde, V., Pullin, N., & Volz, U. (2018). Climate Change and the Cost of Capital in Developing Countries. Assessing the impact of climate risks on sovereign borrowing costs. *Imperial College Business School and SOAS/University of London*.
- Charles, G. (2016). Is insurance a climate cure-all? It's complicated. *Oxfam America. Article from 26 July 2016*.  
<https://politicsofpoverty.oxfamamerica.org/2016/07/Is-Insurance-a-Climate-Cure-All-Its-Complicated/>.
- CISL. (2015). Insurance Regulation for Sustainable Development: Protecting Human Rights against Climate Risk and Natural Hazards. Available at [www.cisl.cam.ac.uk/resources/sustaina](http://www.cisl.cam.ac.uk/resources/sustaina).
- Clarke, D. (2016). Dull Disasters? How Planning Ahead Will Make a Difference. In: *Disaster Risk Financing and Insurance Program, Disaster Risk Finance as a Tool for Development. A Summary of Findings from the Disaster Risk Finance Impact Analytics Project*. WGB: Washington D.C.
- Clarke, D., & Dercon, S. (2016). *Dull Disasters? How Planning Ahead Will Make a Difference*. Oxford University Press.
- Clarke, D., Mahul, O., Poulter, R., & Teh, T. L. (2016). *Evaluating Sovereign Disaster Risk Finance Strategies*. Policy Research Working Paper; No 7721.
- Eckstein, D., Hutfils, M., & Wings, M. (2018). *Global Climate Risk Index 2019: Who Suffers Most From Extreme Weather Events? Weather-related Loss Events in 2017 and 1998 to 2017*. German Watch.
- Eisensee, T., & Strömberg, D. (2007). News Droughts, News Floods, and U. S. Disaster Relief. *The Quarterly Journal of Economics*, 122(2), 693–728.
- Faris, E. (2012). Restrictions on the operation of civil society organizations in Africa violate freedom of association. *AfricLaw, Advancing*.
- Fuchs, A., & Rodriguez-Chamussy. (2015). Effective disaster relief significantly benefits the incumbent party in elections. In: *Clarke, D., Janvrey, A., Sadoulet, E., Skoufias, E. (Eds.). Disaster Risk Financing and Insurance: Issues and Results Voters Response to Natural Disasters Aid: Quasi-Experimental Evidence from Drought Relief Payment in Mexico*. Ferdi: Clermont-Ferrand, 93–98.
- Fuchs, A., & Wolff, H. (2011). Concept and Unintended Consequences of Weather Index Insurance: The Case of Mexico. *American Journal of Agricultural Economics*, 93(2), 505–511.
- G20/OECD. (2012). Disaster Risk Assessment and Risk Financing. OECD: Mexico City.
- Ghesquiere, F., & Mahul, O. (2010). *Financial Protection of the State against Natural Disasters A Primer*. Policy Research Working Paper 5429.
- Hess, U., Hazell, P., & Kuhn, S. (2016). Innovations and Emerging Trends in Agricultural Insurance. *Deutsche Gesellschaft Für Internationale Zusammenarbeit*.
- Hirsch, T., Minninger, S., & Wiebe, N. (2017). Protected Against Climate Damage? The Opportunities and Limitations of Climate Risk Insurance for The Protection of Vulnerable Populations. *Brot Für Die Welt Policy Brief 72*, 12–43.
- Hirsch, T., Minninger, S., Wirsching, S., Kreft, S., Künzel, V., Schäfer, L., ... Shiblee, K. (2016). Making Paris Work for Vulnerable Populations – Closing the Climate Risk Gap. *Brot Für Die Welt Analysis 65*.
- Humphreys, S. (2012). Climate change and international human rights law.
- Hutfils, M.-L. (2018). A Community Lense to Climate Risk Insurance. *MCII/UNU-EHS Publication Series, Discussion Paper*, (Bonn: United Nations University).
- IDB. (2016). Contingent Debt Facility for Natural Disaster Emergencies. *Inter-American Development Bank, IADB: Washington D.C*.

- Insurance Information Institute. (2018). Facts + Statistics: Catastrophe bonds. <https://www.iii.org/Fact-Statistic/Facts-Statistics-Catastrophe-Bonds>.
- Insurance Journal. (2018). Global Catastrophe Bonds Set Q1 Record: Aon. *Article from 2 May 2018*.  
<https://www.insurancejournal.com/news/international/2018/05/02/487860.htm>.
- InsuResilience. (2017). Climate risk insurance for poor and vulnerable people in developing countries. [https://www.bmz.de/En/Zentrales\\_downloadarchiv/Cop23/BMZ\\_Factsheet\\_insuresilience\\_EN.Pdf](https://www.bmz.de/En/Zentrales_downloadarchiv/Cop23/BMZ_Factsheet_insuresilience_EN.Pdf).
- IPCC. (2014). Climate change 2014: Impact, adaptation, and vulnerability.
- Isakson, S. R. (2015). Small farmer vulnerability and climate risk: Index insurance as a financial fix. *Canadian Food Studies. La Revue Canadienne Des Études Sur l'alimentation*, 2(2), 267–277.
- Kirschner, J. W., & Phaup. (2009). Catchments as simple dynamical systems: Catchment characterization, rainfall-runoff modeling, and doing hydrology backward.
- Kreft, S., Eckstein, D., & Melchior, I. (2016). Who Suffers Most From Extreme Weather Events? Weather-related Loss Events in 2015 and 1996 to 2015. *Global Climate Risk Index 2017, Germanwatch*, 33–43.
- Le Quesne, F., Tollmann, J., Range, M., Balogun, K., Zissener, M., Bohl, D., ... Kreft, B. W. and S. (2017). The role of Insurance in Integrated Disaster & Climate Risk management: evidence and lessons learned. *Institute for Environment and Human Security*, (22), 33–54.
- Mamuji, A. (2011). Understanding Donor Behaviour: Actors and Processes in Disaster-Relief Decision-Making. *Revenue Gouvernance*, 91(1).
- Mechler, R., Bouwer, L.M., Linnerooth Bayer, J., H., S., Aerts, J. C. J. H., & Surminski, S., Williges, K. (2014). Managing unnatural disaster risk from climate extremes. *Nature Climate Change*, 235–237.
- Müller, B., Johnson, L., & Kreuer, D. (2017). Maladaptive outcomes of climate insurance in agriculture. *Global Environmental Change*, 46, 23–33.
- OECD. (1997). Glossary of Environment Statistics, Studies in Methods. *Series F, No. 67, United Nations, New York*, Available at <https://stats.oecd.org/glossary/detai>.
- Oxfam, & CCP-AU. (2016). Putting Citizens' Voice at the Centre of Development: Challenging Shrinking Civic Space across Africa. *Oxfam Policy Paper November 2016*.
- R4 Rural Resilience Initiative. (2016). At a glance R4. Available at [www.indexinsuranceforum.org/Sites/Default/Files/R4factsheetUNU\\_final\\_SZ.Pdf](http://www.indexinsuranceforum.org/Sites/Default/Files/R4factsheetUNU_final_SZ.Pdf) (Retrieved 1 July 2018).
- Renn, O. (2005). *Risk Governance and Resilience : New Approaches to Cope with Uncertainty and Ambiguity*. <https://doi.org/10.1007/978-94-017-9328-5>
- Ruggie J.G. (2011). Guiding Principles on Business and Human Rights: Implementing the United Nations “Protect, Respect and Remedy” Framework.
- Schäfer, L., Künzel, V., & Bals, C. (2018). The significance of climate litigation for the political debate on Loss&Damage. *Germanwatch*,  
[www.germanwatch.org/sites/germanwatch](http://www.germanwatch.org/sites/germanwatch).
- Schäfer, L., Waters, E., Kreft, S., & Zissener, M. (2016). Making Climate Risk Insurance Work for the Most Vulnerable: Seven Guiding Principles. *Munich Climate Insurance Initiative/UNU\_EHS Publication Series., Policy Rep.*
- Scherer, N. (2018). How to advance the monitoring of climate risk insurance. *Climate Diplomacy. Article from 21 June 2018. Available from: https://www.Climate-Diplomacy.Org/News/Last-Mile-Problem-Unintended-Side-Effects-Climate-Risk-Insurance, https://www*.
- Schipper, L., Thomalla, F., Vulturius, G., Davis, M., Johnson, K., Thomalla, F., ... Johnson, K. (2016). International Journal of Disaster Resilience in the Built Environment Article information : *International Journal of Disaster Resilience in the Built Environment*, 7(7), 216–228.
- Smit, B., & Skinner, M. (2002). Adaptation Options in Agriculture to Climate Change: A Typology. *Mitigation and Adaptation Strategies for Global Change*, 7(7), 85–114.
- Surminski, S., & Hudson, P. (2017). Investing the risk reduction potential of disaster insurance across Europe, The Geneva papers on risk and insurance – issues and practice. *An Official Journal of the Geneva Association*, 42(2), 247–274.
- Surminski, S., & Thieken, A. H. (2017). Promoting flood risk reduction : The role of insurance in Germany and England. *Earth's Future*, 5, 979–1001. <https://doi.org/10.1002/eff2.236>
- UNCED. (1992). The Rio Declaration on the Environment and Development.

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- UNFCCC. (1992). United Framework Convention on Climate Change. Available at: <https://unfccc.int/Resource/Docs/Convkp/Conveng.Pdf>.
- UNISDR. (2017). Build Back Better in Recovery, Rehabilitation and Reconstruction.
- UNISDR. (2018). Making community A handbook for development and assessment British Library Cataloguing in Publication Data, 234–321.
- Uvin, P. (2007). From the right to development to the rights-based approach: how ‘human rights’ entered development. *Development in Practice*, 17(4–5), 597–606.
- WBG, & IFC. (2012). Disaster Risk Financing and Insurance Concept Note. *World Bank Group & (International Finance Corporation)*.
- Weingärtner, L., Simonet, C., & Caravani, A. (2017). *Disaster risk insurance and the triple dividend of resilience. Shaping policy for development, Working paper 515*.
- World Bank. (2011). *Weather Index Insurance for Agriculture: Guidance for Development Practitioners [Technical Report. Agriculture and rural development discussion paper ; no. 50. Washington, DC: World Bank.*

# APPENDIX:

## DISASTER FINANCING INSTRUMENTS

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### Ex-post disaster Financing

**Donor assistance (relief):** Voluntary assistance from donors is still an indispensable source of funds for disaster-stricken countries. Yet, it is unreliable. The speed and scope of aid provided is very case-specific as it is often based on media coverage (depending on the non-availability of other newsworthy events such as major sports events (Eisensee & Strömberg, 2007), the type of disaster as well as the proximity of the donor country to the recipient (Strömberg 2007) and other uninfluenceable factors such as temporal proximity to other catastrophic events elsewhere (Mamuji, 2011, Ghesquiere & Mahul 2010). Funds are often earmarked and, therefore, inflexible (Ghesquiere & Mahul 2010). Then again, it is often available relatively quickly compared to other ex-post instruments (ibid.) – though much slower than ex-ante instruments (Clarke & Dercon 2016) – and remains the cheapest funding source to disaster stricken countries (ibid.). This is not to mention the more general debate about official development assistance. In a nutshell: Humanitarian aid remain indispensable as a back-up system is plans fail but only as a fall-back option, but its unpredictability makes in unsuitable to base planning on it (ibid.).

**Budget reallocation:** Reallocations require significant funds to be available for reallocation, which are often very limited. Furthermore, with lower funds for other areas, development efforts will very likely be undermined.

**(External and domestic) Credits:** Credits have to be negotiated which takes some time. Negotiated in a time of crisis, interest rates might be higher as the estimations on default risk will be influenced by that. Credits affect future availability of funds and therefore can endanger development efforts.

**Donor assistance (reconstruction):** The time lag of donor assistance plays a less important role during reconstruction which makes it a potentially suited instrument for that phase. However, the relation between media coverage and willingness to assist becomes even more disadvantageous, since interest of the press might be significantly lower even though financial need is higher.

**Tax increase:** The higher demand for liquid funds can also be covered by increasing the taxes, which comes with all the well-documented disadvantage of an increased financial burden for citizens and businesses. Besides the potential imposed economic handicap, tax increases require time to be passed by parliaments.

### Ex-ante disaster Financing

**Budget contingencies and reserves:** A government sets aside liquid funds at the beginning of the fiscal year. They are only disbursed in the event of the disaster (Clarke et al. 2016). For developing countries, especially those, who are most affected by climate change, it is impossible to set aside sufficient amounts. Besides the lack of financial capacity, the financial opportunity costs of short-term liquidity disincentivise this kind of provision. Nevertheless, they can be one part of the solution as they are rather cheap due to their low transaction costs (Ghesquiere & Mahul 2010).

**Contingent debt:** In case of a natural disaster, funds for the affected national governments are made available – predominantly but not exclusively by development banks – on pre-negotiated terms. In contrast to insurance it is no form of risk transfer. Contingent debt can be provided through loans, debt purchase, and equity securities. Its advantage is the quick extension of fiscal room of manoeuvre since terms do not have

to be negotiated. However, premiums might still be substantial. Contingent debt facilities are especially suited for events with low probability and rather high impact and are therefore an alternative to insurance (IDB, 2016)

**Insurance:** Insurances offer protection against a peril for a regular fee called premium. Indemnity based insurance offer link the payment with a specific damage. Its drawback are the high transaction costs and the time lag between disaster and pay-out. Insured items have to be registered and damage has to be verified. As opposed to indemnity based insurances, index-based insurances (often also referred to as parametric insurances) are triggered by thresholds being surmounted which reduces transaction costs and makes payments available faster after a disaster but bears the risk that damages and payments are not congruent. Climate risk insurances require risk assessments and can be coupled with incentives that increase adaptive capacity and reduce risk.

**Catastrophe bonds:** Bonds are debt securities. The issuer (usually insurance or reinsurance companies) owes the holders (i.e. investors) a debt and pays interest to them until maturity date – the pay-back date of the debt. In case of a catastrophe bond the risk for defined disaster is transferred. The holders are paid back their money should this not occur, however, if it does the money is used for pay-outs. Since the risk has to carefully evaluated transaction costs are high (Le Quesne et al, 2017). To date, the instrument is mostly utilised in countries of the global North (Insurance Information Institute, 2018). For investors they offer risk diversification since they are not linked to economic risk or the stock market. Interest rates are typically rather high but

partial or total loss is possible. Even though 2017 has seen a number of natural disaster events, the global catastrophe bond issuance covered more risks than ever on the first quarter of 2018 (Insurance Journal, 2018).

Different risks require different **risk strategies**. These strategies are not mutually exclusive but complementary. The first step is using a risk reduction approach, which tries to reduce the risk before a disaster happens. However, risk cannot be (economically) eliminated completely. To spread risk, risk transfer mechanisms are designed to pay out to the policy-holder when defined climate related events take place, thus diversifying losses across people and time. Risk retention, on the contrary, is the acceptance of potential losses and the defrayment of costs of a potential disaster. In the latter case, risk financing secures repayable financial means for a post-disaster situation.

Risk strategies also have to be tailored to the specific risks. Not every instrument can cover every risk. Insurance solutions are not suitable for regular or almost certain disaster events with high impacts (such as slow-onset events like sea-level rise due to climate change). Low impact events that appear regularly such as minor flooding are dealt with most cost-efficiently via risk reduction or if not possible pre-allocated funds. High-risk events will regularly not be covered by insurances or result in too high premiums. Public and donor support are necessary in these cases (Mechler et. al 2014). The approach of selecting the instrument based on frequency and impact is called risk layering. Climate risk insurance plays an important role in absorbing the risk for events low in frequency and high in impact.





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