



Collecting data, assessing risk, seeing the big picture — and insuring the residual risk

Weeks of heavy rainfall, severe flash flooding, unusually long hot spells, and violent thunderstorms can all cause great amounts of damage; those who are caught unprepared do not have much of a chance of saving their life possessions. These dangerous weather events are just as treacherous to those in the growing urban settlements as those in rural areas. As the frequency and severity of these events continue to rise, it becomes increasingly imperative for societies to start preparing for climate change and its serious consequences. To deal with these climate risks proactively, a high degree of self-responsibility is needed to strengthen the community.





This self-responsibility in turn strengthens the community and is a prerequisite for insurability. To prepare for the consequences of climate change, all sectors need to make changes, including: city infrastructure, water and energy infrastructure, as well as the transport, tourism, and agricultural sectors. However, the effectiveness of such preparation measures is limited and their economic viability cannot be guaranteed. More importantly, some residual risk always remains from rare yet catastrophic events like flooding. The question is thus: How can we best deal with this residual risk?

On behalf of the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB), Advancing Climate Risk Insurance Plus (ACRIPIUS) is developing concepts tailored to the local needs of cities and countries in cooperation with its partners. ACRIPIUS focuses particularly on the sectors that are heavily affected by climate change.





Together with the public and private sector partners, ACRIPlus is developing integrated solutions for climate risk management that enable people and their governments to better deal with the consequences of climate change. ACRIPlus even goes one step further by planning for residual risk in its sustainable climate risk management approach by strengthening risk awareness, thereby increasing the readiness to adapt to climate change.

Integrated Climate Risk Management = ICRM — Our Approach

In the past, when there was an extreme weather event, the main questions on people's minds were: What can be done to ensure a quick response (= respond) as well as a fast recovery [= recover]? Due to the increase in both the frequency and intensity of extreme weather events, the question of what can be done to minimize damage (= prevent) as well as what preparation is needed to keep these weather hazards from becoming a disaster (= prepare) have become increasingly important. Even when these measures are taken, however, some risk

remains. Climate risk insurance, or more accurately, extreme weather insurance can play a central role in protecting against these residual risks.

Insurance, as a tool, holds the potential to incentivize people to start adapting to climate change and develop strategies to reduce their own risk. By being prudent and planning with a long-term perspective in mind, the costs of insurance premiums can go down, thus easing the financial burden on the policyholders.

Innovative insurance solutions, which are integrated into the individual phases of climate risk management (respond, recover, prevent, prepare, and residual risk), help strengthen people's resilience before an extreme weather event hits. By investing in (re-)construction measures to protect the land and property, a household can keep future damage to a minimum and will enable themselves to recover more quickly after a flood disaster.

Outer circle

Prevent

This phrase comprises all the measures that help prevent or minimize possible damage from an event. Example: (Re-)building streets so that they are high enough to be used in a flood

Recover

After a natural extreme event hits, infrastructure and other parts of society must be rebuilt, so that people can resume their livelihoods as quickly as possible

Respond

This phase comprises all emergency measures aimed at saving human lives in the event of a natural disaster. This includes: humanitarian help, first aid training and supplies, food and feed storage, as well as restoration and transport infrastructure.

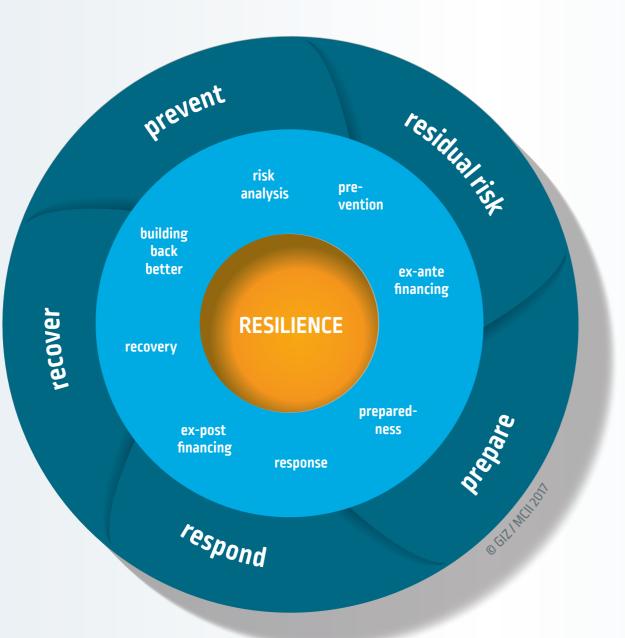
Prepare

Those who prepare themselves can react calmly and wisely when a natural hazard strikes. Early warning systems are needed to warn people in advance and community emergency plans outline what steps to take during an emergency as well as who should preform which actions and when.

Residual risk

Residual risk can be transferred to third parties using financial instruments for disaster risk management. Here we differentiate between classic risk transfer solutions, like insurance, and alternative risk transfer mechanisms.

Disaster Risk Management Phases



Building back better

This approach goes beyond the basic reconstruction of destroyed buildings and infrastructure. It is an opportunity to rebuild homes, buildings, and infrastructure in ways that will make them resistant to future weather events.

Recovery

This includes all the necessary measures to restore infrastructure and services after an extreme weather event. The fundamental needs of the society should be secured as quickly as possible.

accessing donor support.

Inner circle

Risk analysis

This comprises all the measures that help identify the dangers and risks of extreme weather events and quantifies the potential damage. Developing a comprehensive risk map for floods is an example of such an analysis.

Prevention

Climate change is taken into account when making new investments, implementing large-scale projects, and planning urban spaces. Damage can therefore often be reduced or avoided altogether.

Ex-ante financing

Pre-disaster financing instruments require planning in advance. These include contingency debt facilities and catastrophe funds, budgetary provisions, credit financing, and other risk transfer solutions. Traditional indemnity (re) insurance, parametric insurance, and alternative risk transfer instruments (catastrophe bonds) are examples of transferring risk to a third party.

Preparedness

Early warning systems and municipal emergency plans can only reach their full potential if they are implemented by efficient institutions and the necessary legal and administrative frameworks are in place.

Preparatory measures allow for a quick and effective response during the peak of an extreme weather impact.

Ex-post financing

Post-disaster financing instruments do not require preliminary planning and can be carried out ad-hoc. These include redistributing the budget, taking out credit, increasing taxes, and



How we work

ACRIPIus is breaking new ground: Together with local authorities and private sector partners, new insurance solutions that are linked to all of the phases of the disaster risk management cycle are being developed. Based on a comprehensive risk analysis of extreme weather events and their direct and indirect effects on people, the environment, and the economy, new measures are also being devised. These are designed to have a positive impact on all of the phases in disaster risk management – an integrated, effective approach which uses the full potential of each phase. Through this approach, we create the opportunity to prepare long-term for climate change and its serious consequences. This project works towards long-term solutions for urban development, industrial zones, renewable energy, and water infrastructure.

The second key focus of ACRIPIus is to gather the experiences of different international organizations and channel them to the international dialogue on climate change. Relevant, comparable information is provided in partnership with PreventionWeb, the Global Index Insurance Facility (GIIF), and the World Bank's Climate Change Knowledge Platform (CCKP). The information is freely accessible to everyone. This creates transparency and provides the basis for further analyses and response to key guiding questions. ACRIplus actively brings these experiences to the international climate dialogue by participating in conferences, climate negotiations, and talking to experts from the public, private, and political sectors.





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