

SAVING  
LIVES  
CHANGING  
LIVES



# Climate Risk Financing

## Early Response and Anticipatory Actions for Climate Hazards

Climate change is not a threat in the distant future but a present-day emergency that is already threatening lives, livelihoods and economies. The global climate crisis is driving more frequent and intense floods, heatwaves, droughts, and storms. The number of these extreme events has more than doubled since 1990, with an average of 213 climate-related disasters occurring each year in low- and middle-income countries. These climate shocks affect food-insecure people disproportionately, destroying crops, livestock and vital infrastructure.

Each year, the humanitarian sector and governments spend billions to prepare for, respond to, and help people recover from increasingly destructive climate-related disasters. Humanitarian responses are typically mobilized only after an extreme weather event has resulted in catastrophic damages and losses for the most vulnerable and food-insecure people. For slow-onset

events, such as droughts, assistance reaches people often months after crops have failed and livestock are lost, and when many households have already resorted to negative coping strategies. Efforts to provide more timely assistance to vulnerable populations, as well as more risk-informed and forward-thinking approaches to humanitarian action are urgently required.

The number of people depending on humanitarian assistance can be reduced through investments in disaster risk reduction activities at the community level, anticipatory action before a hazard materializes and early response after a crisis hits. Particularly in the case of drought, the cost of mobilizing a humanitarian response can be greatly reduced when anticipatory actions and early response systems are in place prior to a failed harvest. A WFP Return on Investment Study for flood hazards in Nepal<sup>1</sup> indicated that when US\$1 is invested in anticipatory action up to US\$3 can



1. WFP, *Forecast-based Financing Return on Investment In Nepal*



be avoided in humanitarian response costs. Through deploying climate risk financing mechanisms that allow for predictable anticipatory and early responses, WFP can significantly reduce the human suffering and capital losses from weather and climate-related disasters.

## MOVING FROM CRISIS RESPONSE TO RISK MANAGEMENT

WFP is collaborating with a range of public and private sector partners to develop climate risk finance programmes that help governments and vulnerable households to anticipate, absorb and rapidly recover from climate shocks. Many of these programmes rely on parametric triggers (see box) that are based on independent, verifiable and frequently reported data points. These triggers enable an early release of funding for predefined action plans that get executed either before or immediately after a shock occurs.

The key benefit of climate risk financing programmes is that they enable predictable management of risks through targeted preventive action at the moment when it is most needed. This reduces reliance on ad-hoc resource mobilization following a climate shock, which is the prevailing paradigm in many humanitarian programmes. Climate risk financing programmes provide donors with an opportunity to invest in approaches that transform the current humanitarian model, which is

focused on repetitive crisis response, and move it to a model which is based on forward-looking and anticipatory risk management.

## COMPLEMENTARITY OF WFP'S CLIMATE RISK FINANCING INSTRUMENTS

The different climate risk financing programmes currently employed by WFP have different comparative advantages. Each mechanism demonstrates efficiencies in addressing a range of climate shocks, depending on their frequency, severity and geographical impact.

1. **Forecast-based Financing (FbF)** is an innovative mechanism that supports countries to mitigate and manage predictable climate-related risks, by linking extreme weather forecasts with anticipatory actions before a natural hazard materializes. This mechanism is changing the way the humanitarian system responds to climate-related disasters by creating an 'anticipatory' system – filling the gap between long-term disaster risk reduction interventions and post-disaster humanitarian relief efforts. WFP leads with the Red Cross in the development of FbF mechanisms in Asia, Africa and Latin America.
2. **Micro or Inclusive Insurance** is a means to protect low-income people, usually excluded from traditional financial services, against specific perils in exchange for regular premiums payments that are calculated

**Parametric triggers** are based on specific weather parameters, such as the amount of rainfall over a given period of time and geographic area. They are measured by weather stations or satellites as well as rely on weather forecast predictions. Using parametric products has the potential to **lower administrative costs** and **allows for more people to access** risk management solutions. WFP is implementing climate risk insurance and forecast-based financing projects that use parametric indices as a proxy for climate-induced losses, such as failed crops or livestock mortality. This allows a timely triggering of activities, including payouts, before or immediately after a climate shock occurs.



based on the likelihood and cost of the covered risk. When applied to rural and agricultural areas, these policies protect households from the risk of drought or floods. Micro-insurance is considered an effective tool for food-insecure smallholder farmers to better manage climate-related risks, overcome vulnerability and achieve resilient livelihoods, while also enabling risk-informed investments and growth in the agricultural sector. Through the R4 Rural Resilience Initiative, WFP currently promotes access to a variety of micro-insurance products for 90,000 farmers in seven African countries as one component of an integrated climate risk management approach. WFP is also providing nearly 10,000 pastoralists with an index-based livestock insurance in drought-prone areas of Ethiopia.

3. **Macro & Meso Insurance** refers to insurance covering a nation state (macro) or institution (meso) to protect vulnerable communities or an entire population. One example is the sovereign insurance product offered by African Risk Capacity Ltd (ARC) to vulnerable African countries prone to extreme drought risks. ARC allows countries to manage climate risk as a group, in a financially efficient manner, by pooling together many country level policies covering diverse climate risks across the continent. Under a WFP and Start Network initiative, humanitarian organizations can complement the insurance coverage of ARC Member States by purchasing an additional 'Replica Policy', which could double the number of beneficiaries receiving assistance when an extreme drought event occurs. When a payout is triggered, pre-defined operational plans identify how resources and assistance will be coordinated and delivered by the respective government and by WFP. This means that all decision-making is done before a disaster strikes, and that WFP's actions complement those of national emergency response agencies.

When climate risk financing instruments are implemented in the same geographic region, they can ensure that all

segments of a population can be protected from a wide range of climate-related risks. For example, after an extreme drought event, ARC insurance payouts can provide timely assistance and safety nets to the most vulnerable members of the population, while micro-insurance covers smallholder farmers who individually and voluntarily subscribed to insurance services. Similarly, anticipatory actions implemented through an FbF approach can reduce the impacts of natural hazards before an insurance payout, offering an integrated risk management approach that allows households to mitigate impacts, and receive a timely response to a severe weather shock. Insurance provides another layer of security for households with payouts delivered after a forecast weather hazard materializes, complementing FbF's actions that enables a faster recovery and increases communities' ability to withstand future shocks.

Climate risk financing mechanisms such as micro & macro insurance and Forecast-based Financing - used alone or jointly - can be linked to national social protection systems to channel assistance, adding a shock-responsive component to these schemes. Providing technical assistance to the appropriate government agencies allows the existing administrative systems and institutional architecture to respond and reduces the need to set up parallel delivery mechanisms for humanitarian assistance. It also allows for better targeting of beneficiaries, improves aid coordination and enables both vertical and horizontal expansion of programmes.

## HOW WFP IS INTEGRATING CLIMATE RISK FINANCING TOOLS

As vulnerable communities are exposed to a wide range of climate-related risks, a comprehensive climate risk financing strategy should combine approaches to anticipate, prepare for and absorb impacts occurring at different risk levels and timeframes.

Micro & macro insurance and Forecast-based Financing have distinct advantages in different contexts in terms of

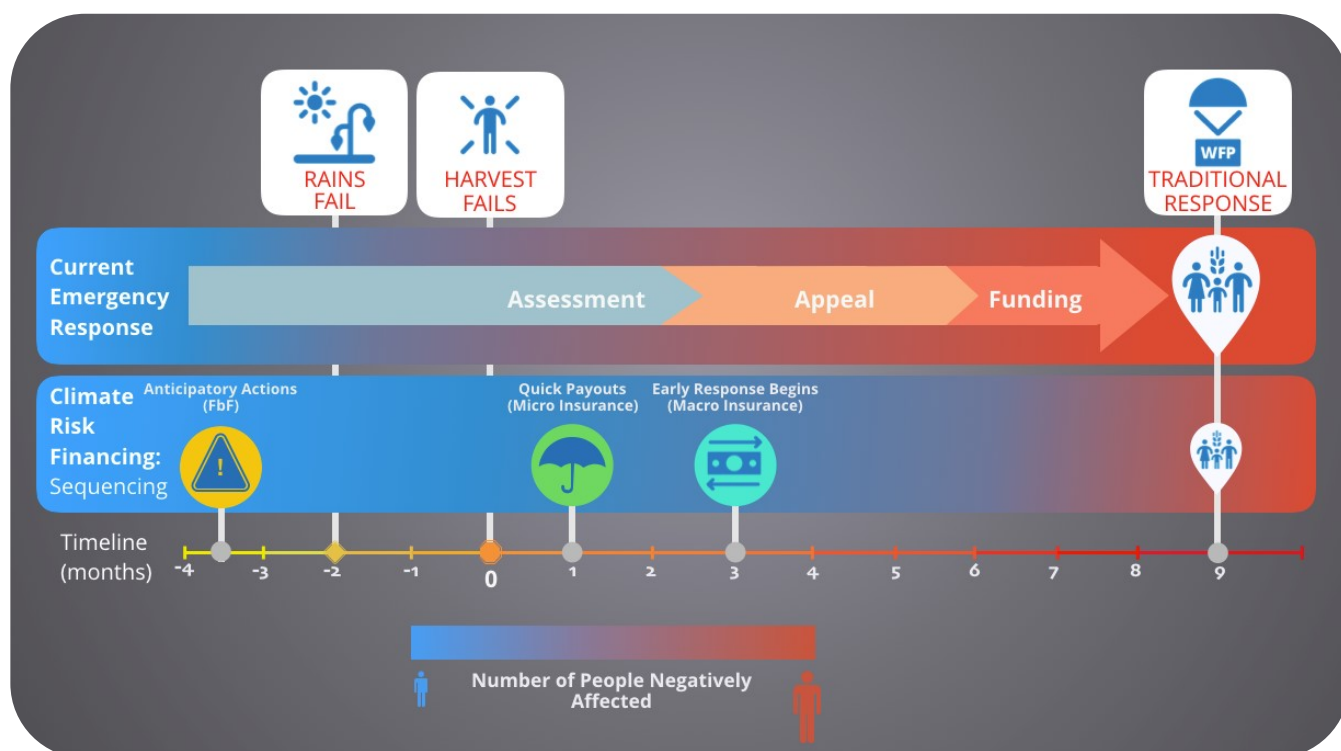


timing, administrative requirements, transfer sizes, geographical reach, vulnerability levels and potential for implementation at scale. These tools can complement each other effectively through:

- **Data sharing:** When implemented jointly, these mechanisms can utilize multiple and complementary data sets that will improve the efficiency of the parametric indices and provide additional sources of information for monitoring, thus potentially contributing to reduce basis risk.
- **Sequencing:** Forecast-based Financing is triggered before a shock occurs in order to reduce and prevent, to the extent possible, the impact of the forecasted hazard. Micro-insurance provides assistance soon after a covered risk materialises with payouts transferred directly to individual households. Assistance received by households through sovereign insurance is distributed through both humanitarian and government agencies, which may be mobilized after FbF and micro-insurance, although still much earlier than a conventional humanitarian response. (See Figure 1)
- **Targeting:** All climate finance instruments aim to protect resource-poor population groups that are vulnerable to climate shocks and food insecurity.

However, by providing a protective layer for income generating activities, such as smallholder farming, micro-insurance may be more appropriate for households that have productive resources (land, labour or capital) as it influences investment behaviour and access to financial services even if a shock does not occur. When FbF and insurance are implemented simultaneously, insurance payouts can support faster recovery if a shock exceeds the mitigation potential of anticipatory actions.

Climate risk finance tools can be more effective when implemented as part of an integrated risk management strategy that promotes investments in reducing disaster risk, with the most appropriate combination of tools for the risk profile of the country. As part of an effort to strengthen this integrated programming approach, WFP is currently assessing the feasibility and potential costs and benefits of integrated climate risk financing in Malawi, Bangladesh and Zimbabwe. Throughout implementation, WFP will ensure that effective monitoring and evaluation mechanisms are in place to measure the impact and analyse how these programmes improve the resilience and food security of WFP beneficiaries.



**Figure 1.** An example timeline of when a rainfall shortage results in a food crisis and when the various climate risk financing programmes provide assistance to affected populations compared to a traditional humanitarian response. This illustrates WFP's specific programmes and when these approaches are triggered (FbF, R4 and ARC Replica).

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