

# Disaster Risk Finance for Agriculture

## Module 8

### Risk Finance Instruments 3 – Risk Retention Mechanisms for Agriculture

Disaster Risk Financing  
& Insurance Program





# Structure of Webinars



Total of 8 Factsheets & 90-minute Webinar for each Fact Sheet



Different guest speakers



Live audience polls & interactivities: Please participate



Q&A: Please share your questions via chat



Breakout sessions at the end of each Webinar: Please register



Certificate of participation from the World Bank\*

\* Based on attendance & participation.



# Certificate from World Bank

Completion Survey



Participants will have an opportunity to obtain "Certificate of Informed Policymaker" from the World Bank on successful completion of following criteria:

## **Participation Certificate:**

Participants need to attend 4 out of the 5 webinar sessions and complete a short mid-term survey/quiz.

## **Program Completion Certificate:**

Participants need to attend 6 out of the 8 webinars and complete a short completion survey/quiz.

# Webinar Road Map



SESSION

1

Introduction to DRFA

2

Reducing & Preparing for Risks in Agriculture

3

The Role of Financial Market Solutions for Building Resilience to Shocks in Agriculture

4

Structuring an Agriculture Financial Protection Scheme

5

Implementing an Agriculture Financial Protection Scheme

6

Risk Finance Instruments 1 – Agricultural Insurance

7

Risk Finance Instruments 2 – Macro and meso-level Risk Transfer for Agriculture

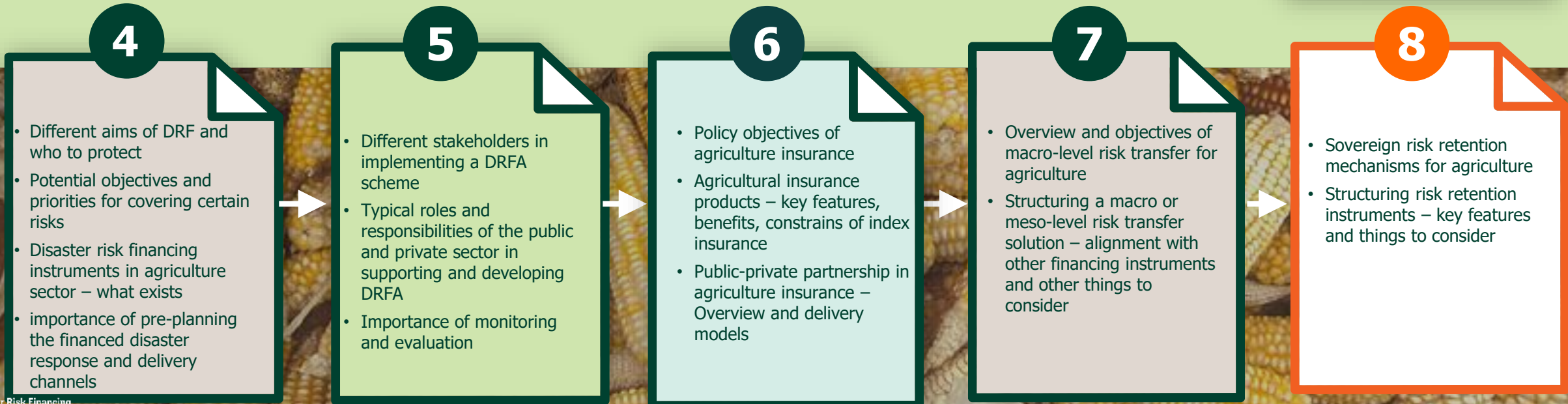
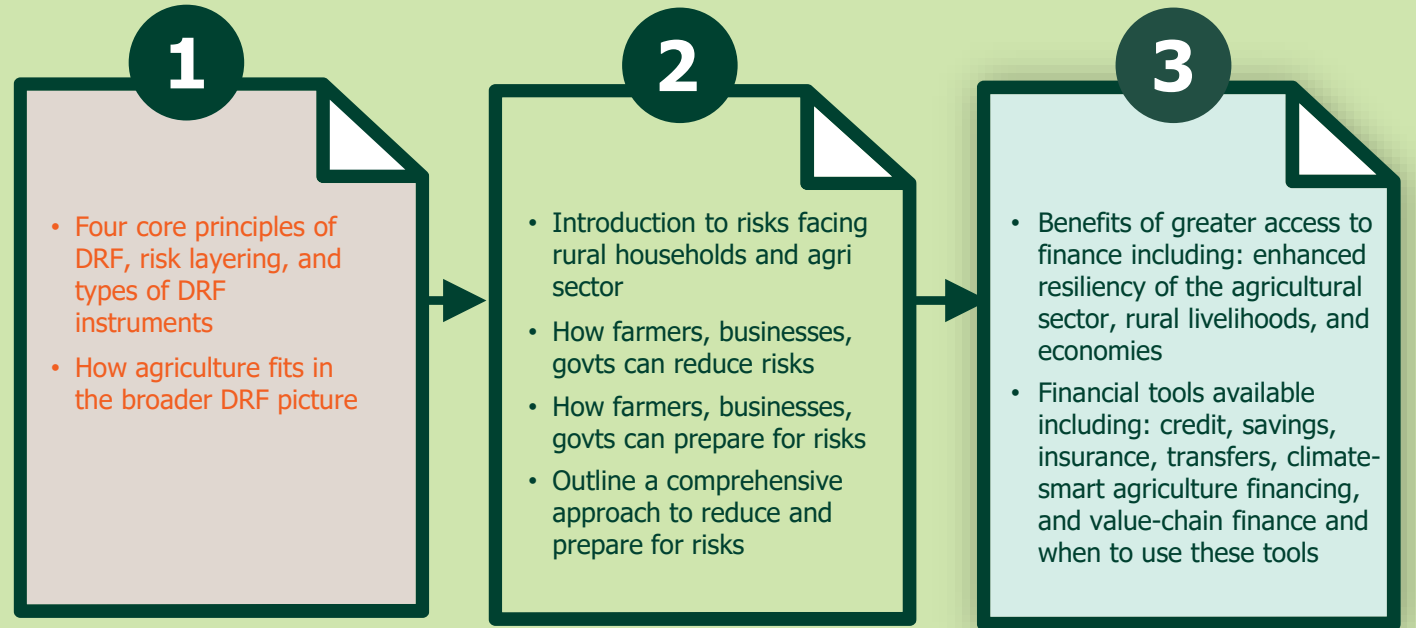
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Risk Finance Instruments 3 – Risk Retention Mechanisms for Agriculture



# Overview of fact sheets

FACT SHEET #



**For more  
information and  
regular updates...  
Join our**

**COMMUNITY OF PRACTICE**



**Scan the QR code to join the  
Disaster Risk Finance  
Community!**





RECAP OF  
Module 07  
**Macro and  
meso-level  
risk  
transfer**





# Key takeaways of Module 7



- **Design of meso and macro risk transfer programs should consider the specific challenges and risks faced by target beneficiaries**
- **Macro and meso-level risk transfer programs can be structured differently to achieve different objectives** such as: ensuring supply of financial services after disasters, reducing basis risk relative to micro insurance, or protecting aggregators or other value chain actors
- **Meso and macro-level index insurance can reduce basis risk compared to micro insurance.** However, it remains critical to ensure that the index and payout distribution is designed carefully
- **Partial credit guarantee (PCG) schemes provide a direct way of protecting financial institutions from credit risk, including that from disasters.** This can be used in place of, or alongside insurance for agricultural borrowers to increase willingness and ability to lend for productive activities. Schemes must be very carefully designed to manage moral hazard and covariate risks



Sovereign  
risk retention  
instruments





# Content

- **Sovereign risk retention mechanisms for agriculture**
  - Risk retention in the risk layering framework
  - Why keep money in reserves?
  - Design of reserve funds
- **Case study: Government of Mozambique**
- **Case study: Start Network**





# How do risk retention mechanisms fit within the risk layering scheme?



When a disaster strikes, domestic public finance is the first port of call



Reserve funds usually provide a source of quick liquidity but can finance response through reconstruction



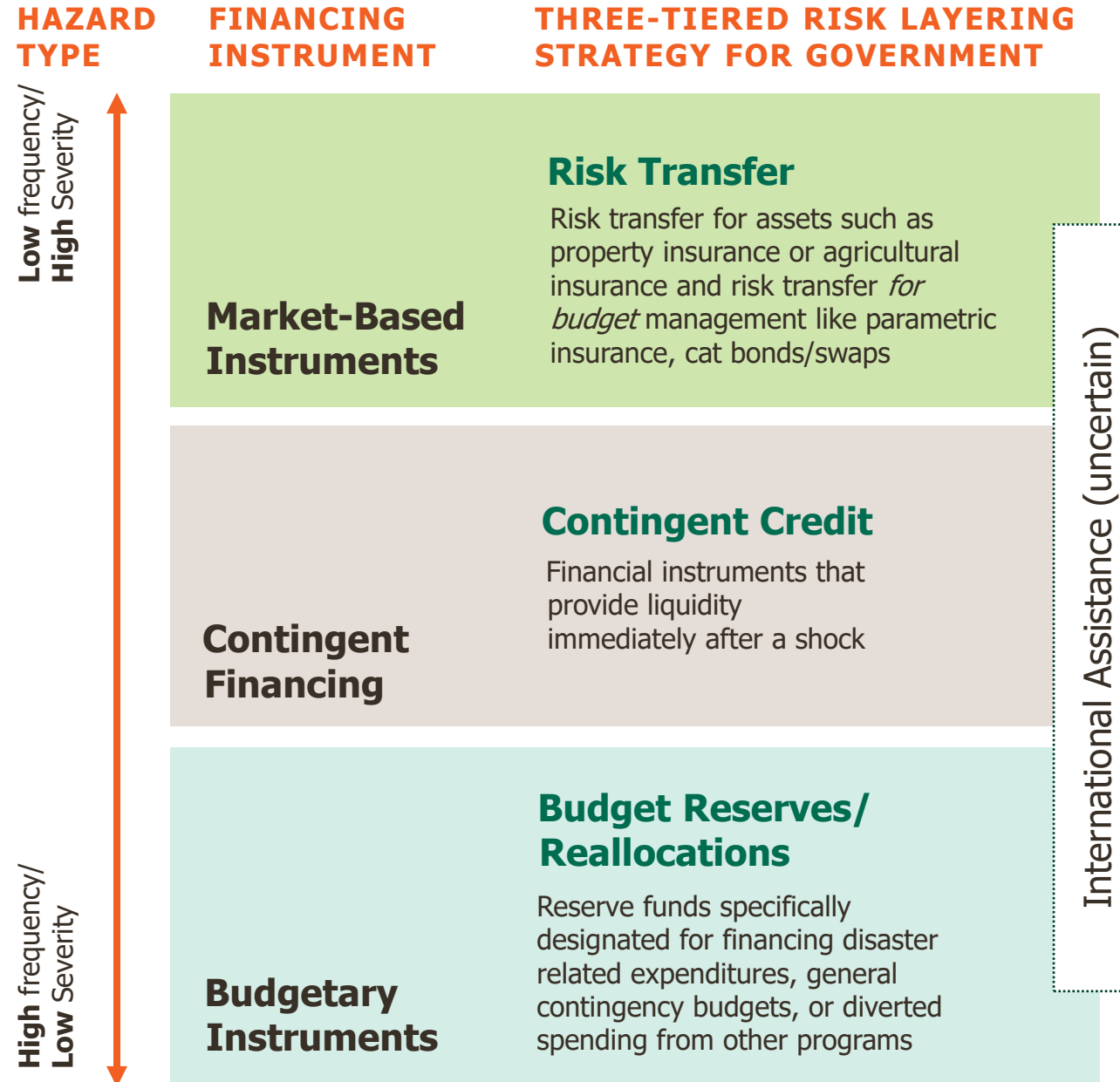
Used for spending that cannot be anticipated



Have opportunity cost of revenues foregone because of money not invested elsewhere



Other risk retention sources of funds: budget reallocations, contingent financing and borrowing, grain reserves



# Why keep money in reserves?



## Be prepared

Considerations such as how much money we will need immediately or how we will spend it, and on what, make regular budget planning a challenge. Saving for the worst case can help manage this uncertainty.



## Act early

Governments' resources are depleted day by day and an absence of reserves may worsen the crisis. Setting money aside will help governments to have the means to act early.



## Save

**A reactive approach is more expensive.** Preparing in advance requires thinking about how to manage financial costs before those costs materialize.



# Reserve funds need to be carefully designed

Some of the key considerations for establishing a disaster reserve fund:



**Legal structure**



**Governance**



**Disbursement  
modalities**



**Financing and  
sustainability**

**Risks: financial management, procurement and financial control**

# Cases of reserve funds used for supporting farmers



In agriculture, general reserve funds are often used to provide ad hoc assistance to farmers, such as Government Reserve Fund in Kazakhstan



Such funds can also be established ad hoc: Farm Service Agency Salaries and Expenses Fund (US\$9.5 billion) were established in USA to provide financial aid to farmers for losses associated with the pandemic

## They can exist at central or agency level:



In the Philippines, Quick Response Fund (QRF) of the Department of Agriculture can provide financial assistance to the affected farmers for their rehabilitation – it exists along with agricultural insurance administered through PCIC (Philippines Crop Insurance Corporation) and DA seed reserve



In Moldova, central government level Subsidy Fund can finance post-disaster needs of farmers



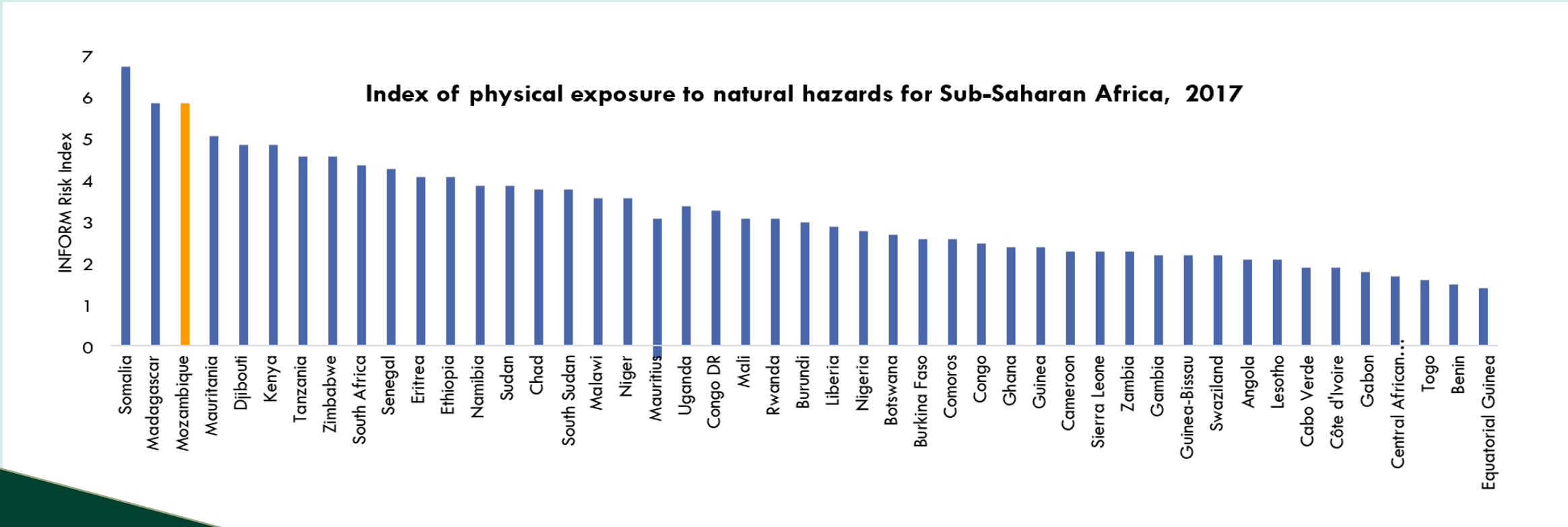


CASE STUDY:  
**Government of  
Mozambique**



# Mozambique is highly prone to natural hazards

Mozambique ranks third among African countries most exposed to multiple weather-related hazards and suffers from periodic cyclones, droughts, floods, and related epidemics





# A large financing gap



In the past, the Government of Mozambique has **struggled to mobilize financing** for post-disaster response, recovery and reconstruction



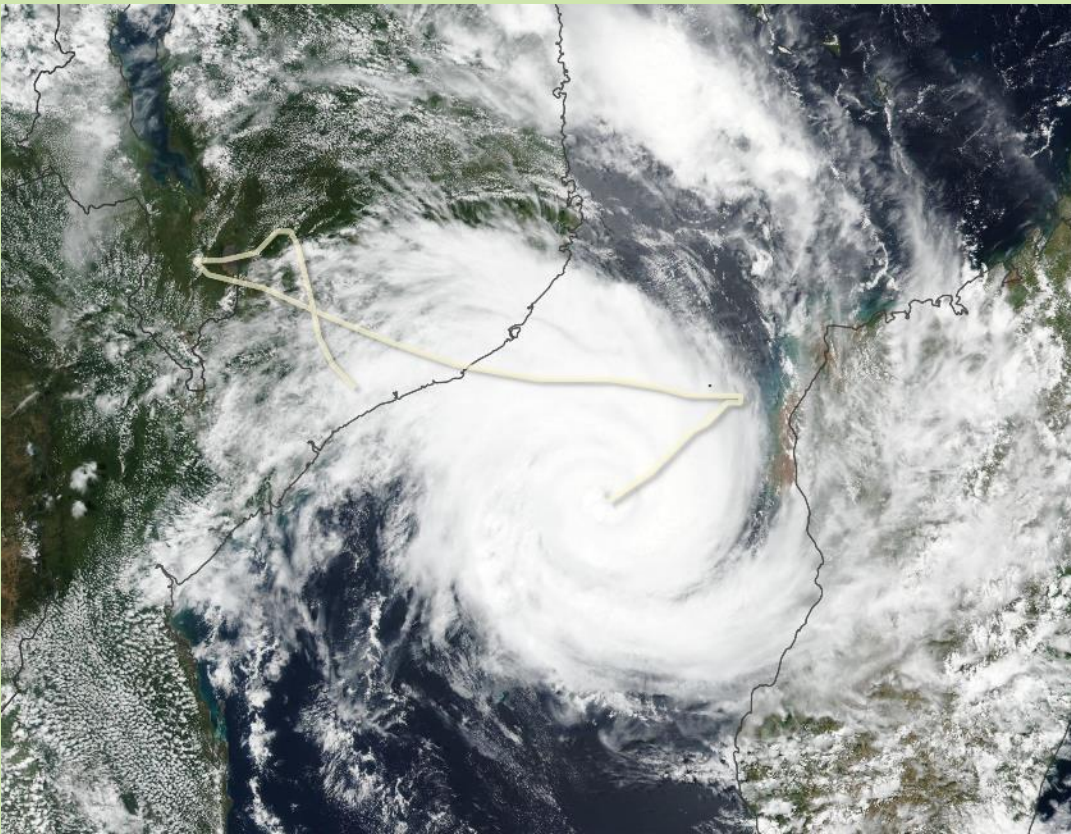
Major flood events in 2013 and 2014 caused losses to the public sector of MZN 11,582 million. Disbursements after these disasters only reached MZN 1,405 million (12%), leaving a **financing deficit of MZN 10 billion**





# Cyclone Idai

One of the strongest cyclones ever recorded in the Southern Hemisphere affected 1.7 million people and caused \$3 billion in damages





# Mozambique Disaster Risk Management (DRM) and Resilience Payment for Result (PforR)



**Program Objective:** To strengthen the capacity of the Government of Mozambique to respond to disasters and increase the resilience of key public infrastructure in risk-prone areas



**Financing:** US\$90 million IDA + US\$8 million from Global Risk Financing Facility



**Bank approval:** March 19, 2019

## Disaster Risk Financing (\$46m)



Capitalization and operationalization of the DRM Fund



Sovereign Risk Insurance

## Disaster preparedness and response (\$10m)



Strengthening network of functioning DRM Local Committees



Strengthening Early Warning systems and Emergency response

## Resilience of Public Infrastructure (\$22m)



Schools



Rural and urban water supply systems

## Technical Assistance (\$10m)

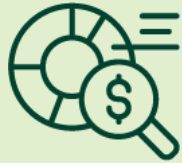


Support to Fiduciary, Socio-environmental and Institutional Capacity of INGC, MINEDH, DNGRH, AIAS, DNAAS

# DRM Fund – Rationale



Part of wider DRF strategy being implemented by GoM.



In the past, disaster response was financed with a budget for a national “Contingency Plan” covering on average only 15% of the response cost of small to medium events.



Unspent funds returned to the national treasury.



**Costs of large emergencies were funded with budget allocations and donor funding.**





# Institutional arrangement & Objectives

The DMF is a dedicated account managed by the National Disaster Management and Risk Reduction Institute (INGD) of Mozambique

The Government of Mozambique set up a Disaster Management Fund to:



Increase the predictability of funds



Increased transparency



Increase the speed (through immediate availability of funding) and efficiency of response

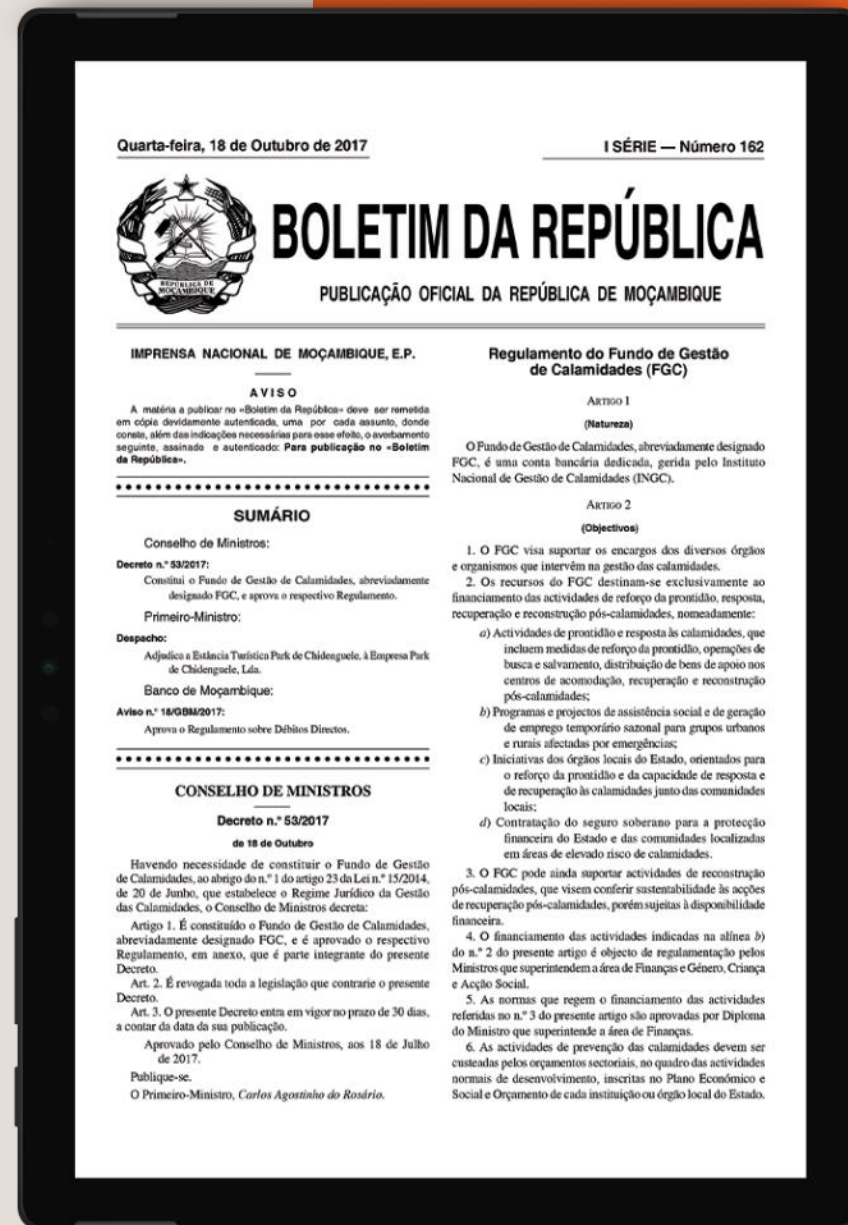
## The DMF finances:



Immediate preparedness and emergency response



Premiums of sovereign insurance that back-stops the DMF



# Governance



The use of DMF resources and its operations are governed by dedicated Manual of Administrative Procedures and Financial Management



A dedicated Fund Management Unit composed of 10 staff manages the Fund



Goods and services are competitively procured before the occurrence of disasters, rather than after disaster as was the case in the past



The Fund is audited annually, and the audits are published





# Capitalization



From 2019 – 2021 the DMF received and used US\$58 million.



It received funds from the Government of Mozambique, the World Bank, the People's Republic of China, and the African Development Bank



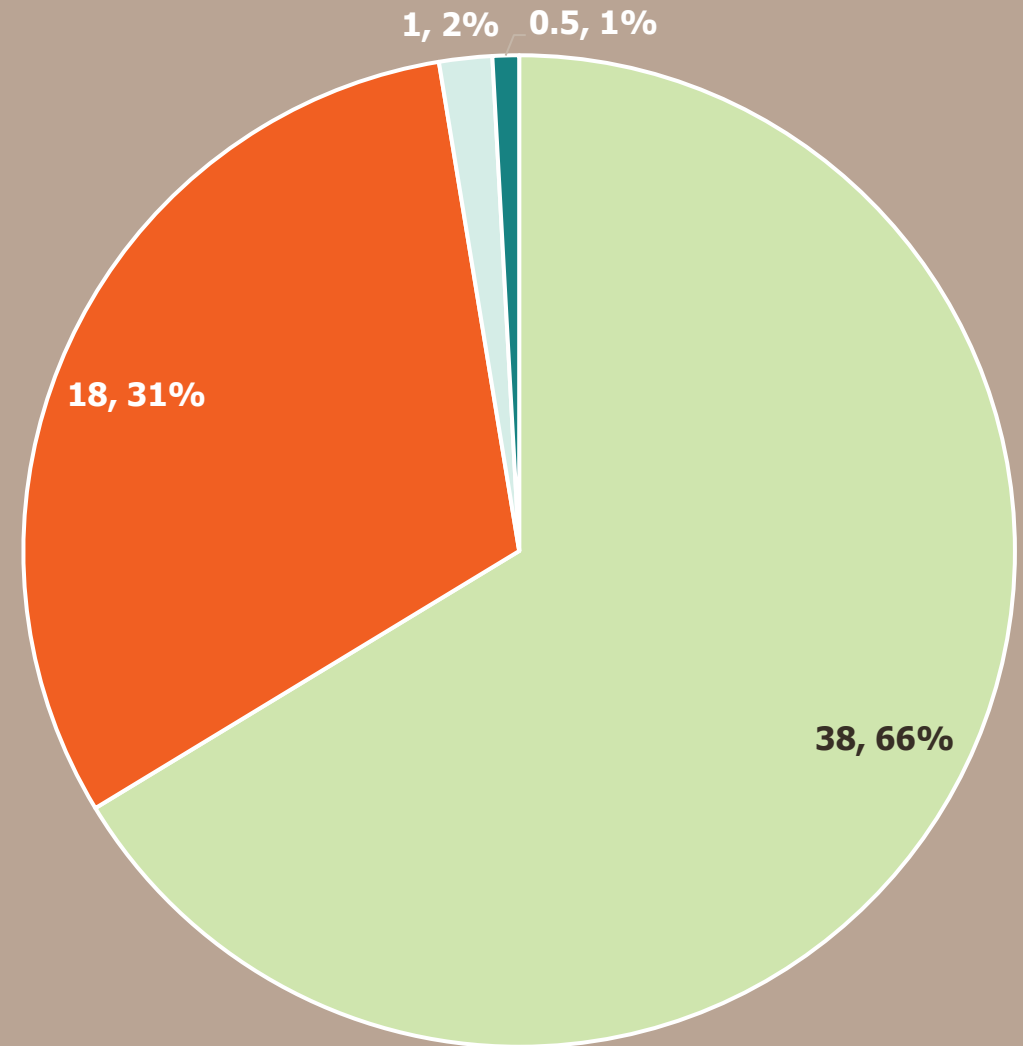
The major contributor is the GoM which contributes a minimum 0.1% of the State Budget every year (as stipulated in the decree establishing the Fund).



The WB is the most important external financier of the Fund

Contribution (in Millions of USD) from the Government and Partners to the capitalization of the DMF (2019-2021)

■ Governo ■ Banco Mundial ■ BAD ■ RP China



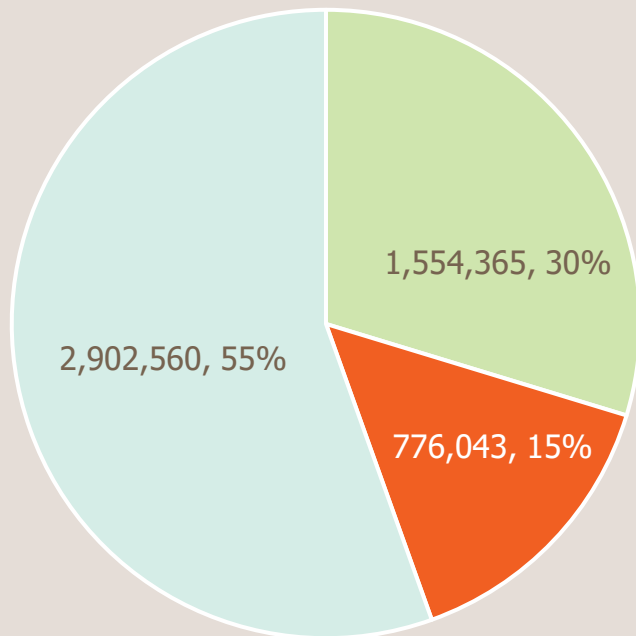
# Beneficiaries

Since 2019, the DMF was the main financing instrument for the response to different emergencies.

5.23 million people have benefited from DMF support related to the response to natural disasters, the humanitarian crisis caused by the insurgency in the north of Mozambique, and the COVID-19 pandemic.

## DMF beneficiaries by type of event (2019-2021)

■ Internally displaced people ■ COVID-19 ■ Natural Disasters





CASE STUDY:  
**Start  
Network**





# Start Network Origins

The Start Network was formed in 2010. Our aim was to bring together NGOs (non-governmental organisations) to tackle the systemic problems faced by the aid sector – including slow and reactive funding, centralised decision-making, and an aversion to change.



# A paradigm shift catalysing change through national networks and hubs

**Start Network** is evolving into a distributed network of national and regional hubs made up of collectives of local, national and international organisations operating in the same country or region.

Power, decisions, resources and collective action will be closer to crises – making disaster prevention and response faster, more efficient and more cost-effective.

This presents an opportunity to provide a financial infrastructure to support and scale these country-led efforts to get ahead of crises.





# The start network had two approaches to humanitarian financing



## Start Funds

Providing flexible, pooled contingency funding for small to medium-scale crises.

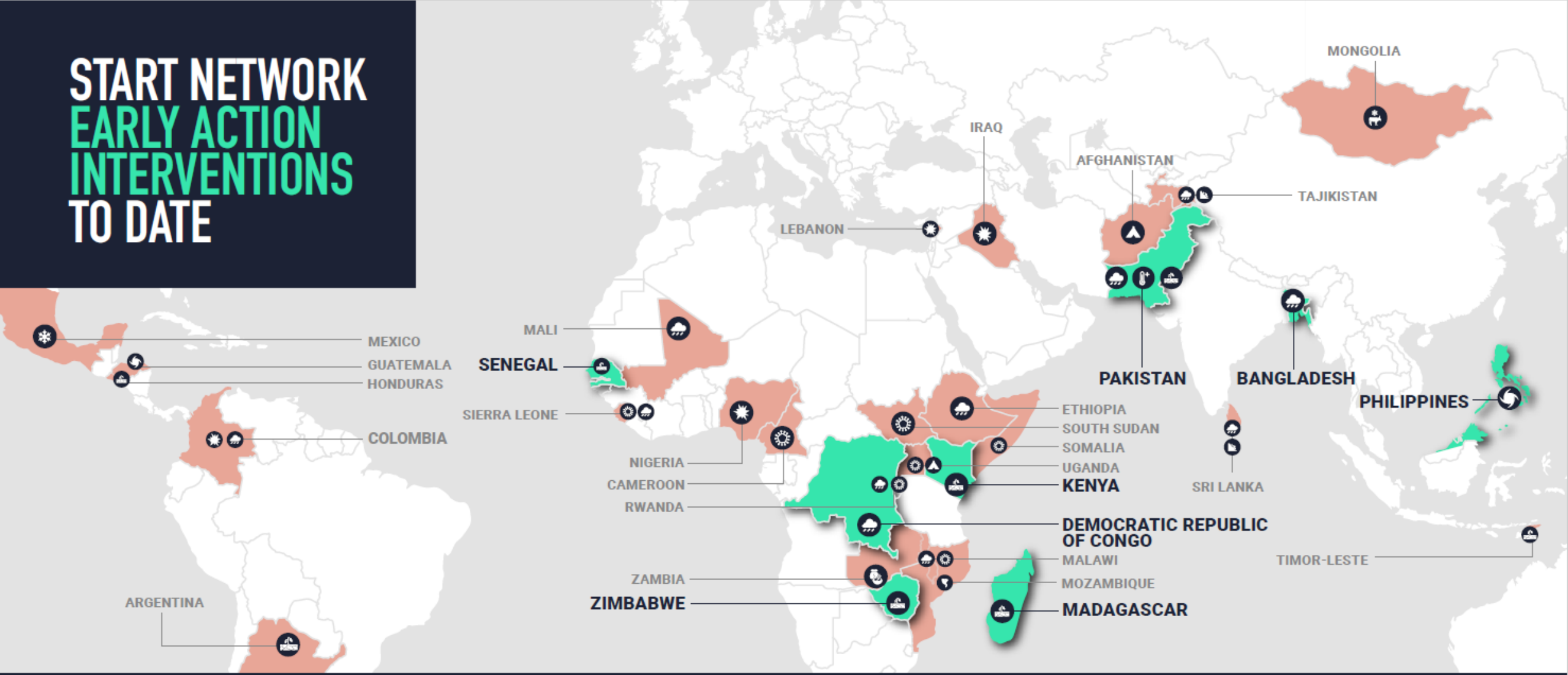


## Start Ready

A new service, providing predictable triggered funding at scale for predictable crises – using innovative risk analysis, collective planning and pre-positioned financing.



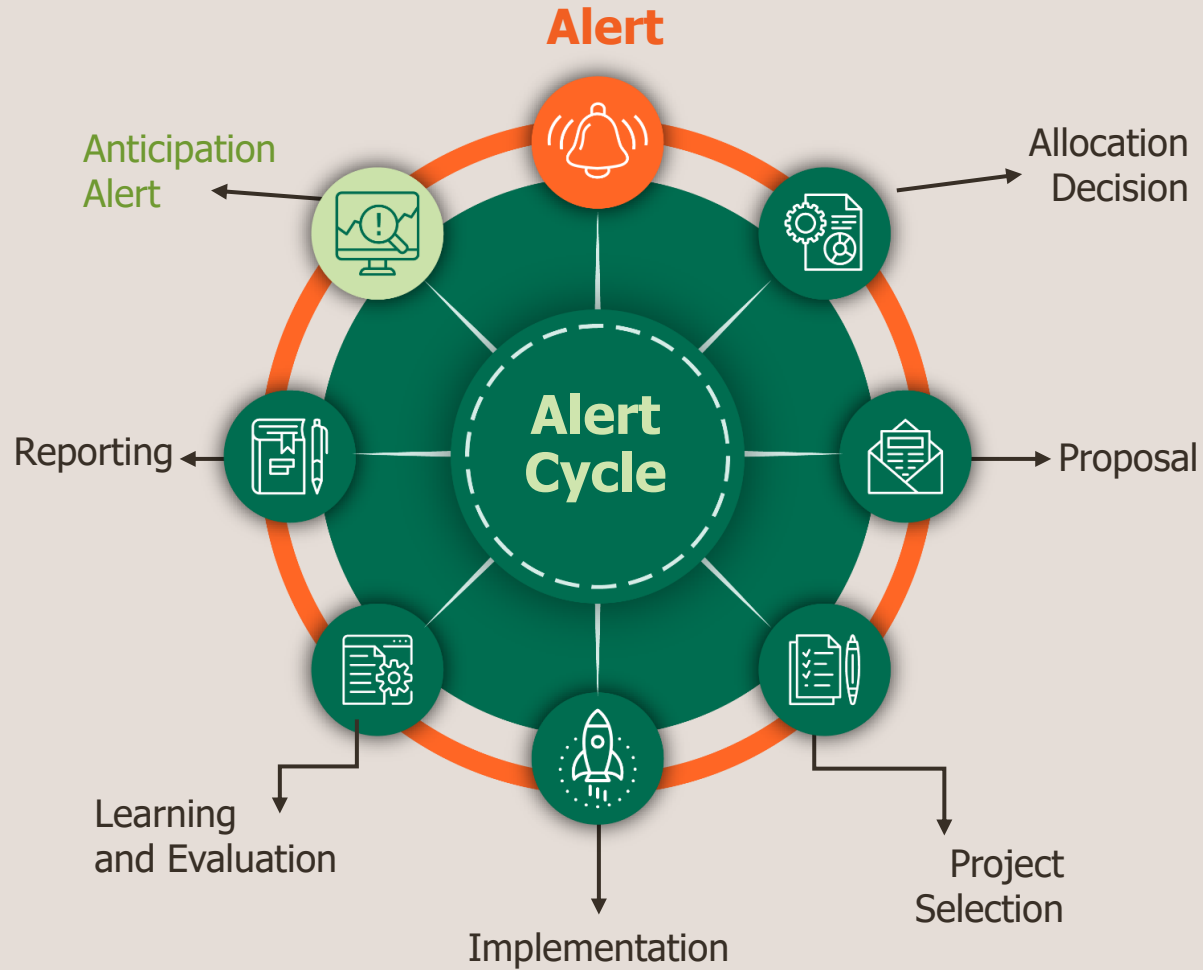
# START NETWORK EARLY ACTION INTERVENTIONS TO DATE



- Potential Start Ready countries\*
- Start Fund anticipation alerts
- Heatwave
- Volcanic eruption
- Flooding/rains
- Cold snap
- Dزد
- Refugees/ Forced refugee returns
- Conflict, displacement, election violence
- Hurricanes/Severe winds
- Landslides/ River Bank Erosion
- Drought
- Disease/Dengue/ Covid outbreak
- Livelihood/food insecurity
- Cyclones
- Tropical Storm

\*these countries may also have had anticipation alerts, not featured in this map

# Start Fund - Alert Cycle



**Rapid, Effective Finance**

FOCUSING ON 3 TYPES OF HUMANITARIAN NEED

**Underfunded small to medium scale crises**

**Spikes in chronic humanitarian crises**

**Forecasts of impending crises**

LINK [HERE](#) FOR START FUND HANDBOOK



# Start Ready

Made up of three components



Analyzing risks and  
setting triggers



Pre-agreed plans



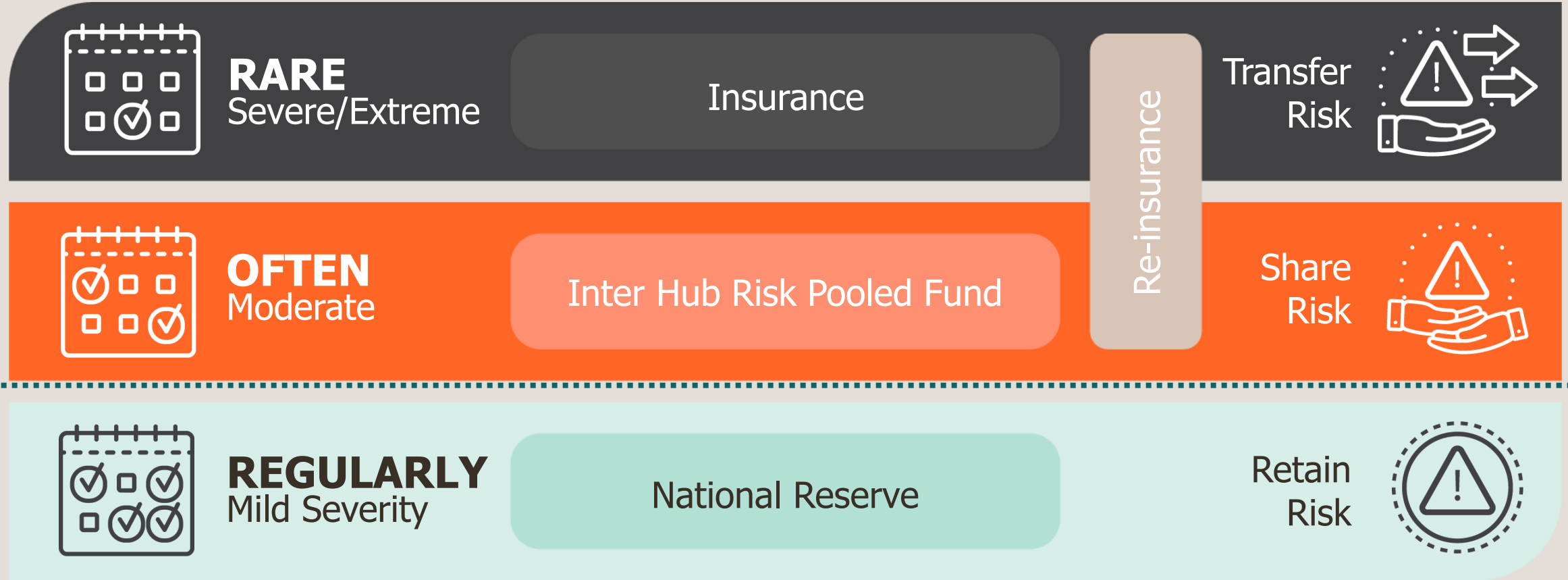
Pre-positioned  
financing

**Funding is predictable/guaranteed**

Members collectively decide in advance for scenario X, what funding will be released, for what actions, where and by whom



# Start Ready



- *Low impact, high frequency*
- *Contingency funds, contingency loans, budget reallocation - provides immediate liquidity following a national disaster*



# Discision making – pre-release of funds

The hub steering committee of that country, which is made up of national appointed local NGO's and INGO members will need to decide:



How and when should the funding be released?



The amount of funding



The activities the funding will support

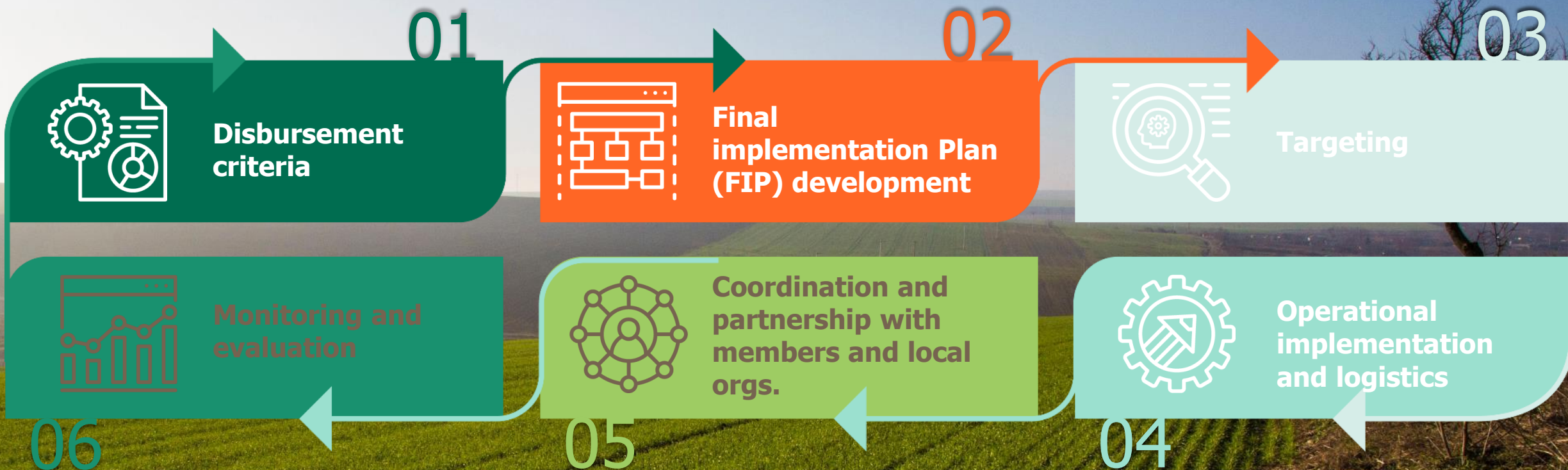


Who will carry out these activities and where?





# How it works – post release of funds





**CASE STUDY:**  
**Insurance**  
**Against**  
**drought in**  
**Senegal—**  
**Contingency**  
**Fund 2019**



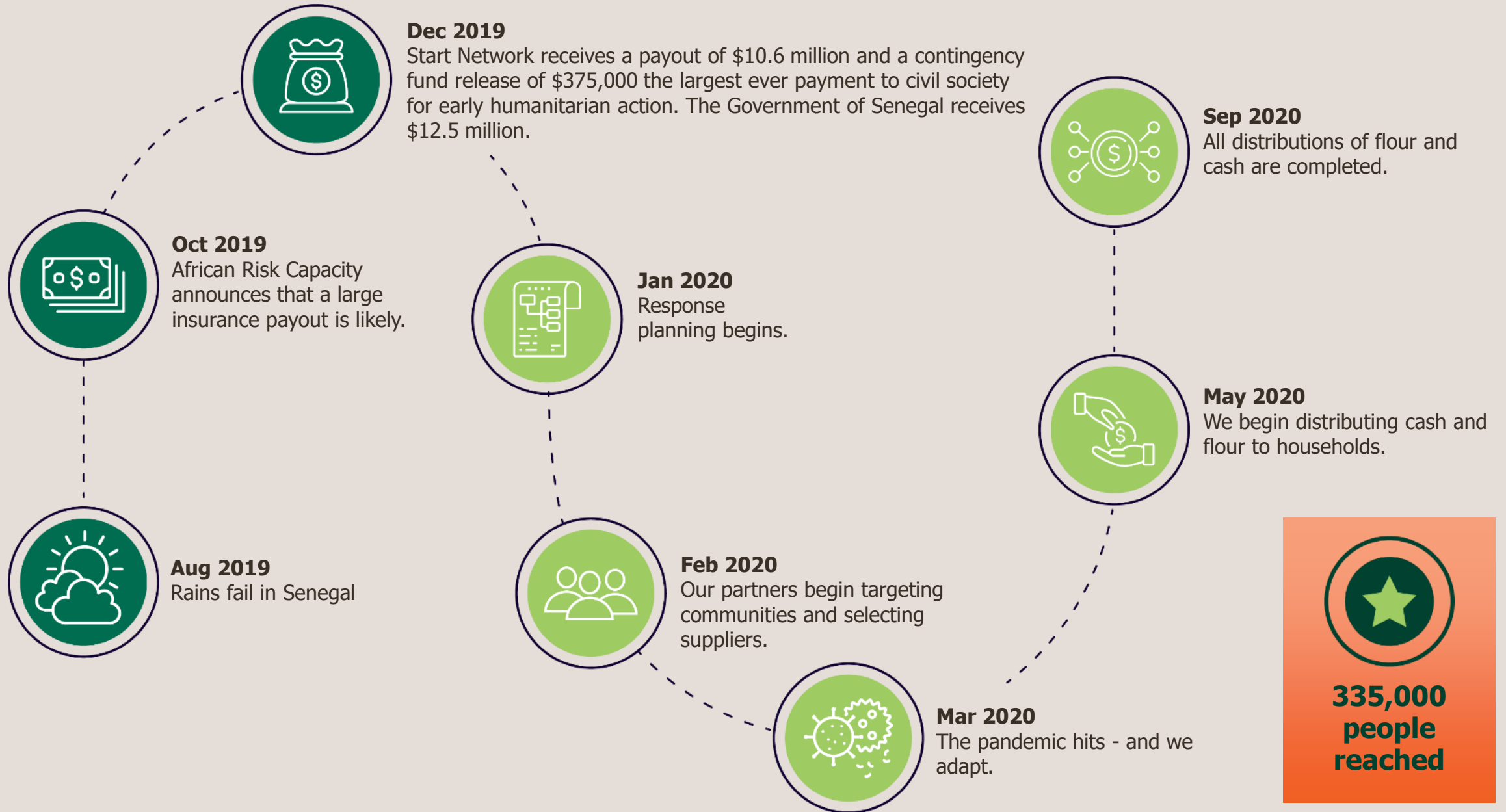


## Late 2019: Rains Failed

After a poor rainy season in 2019, Senegal's harvest in 2020 was at risk – threatening farmers with serious difficulty

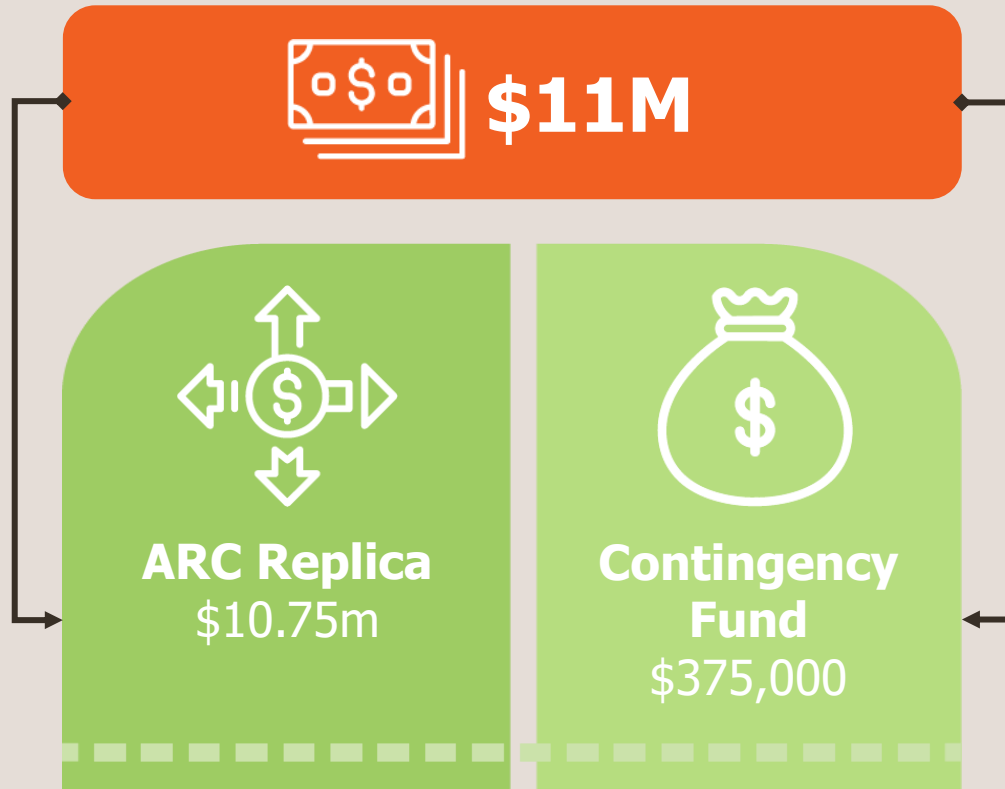


# How it worked in practice



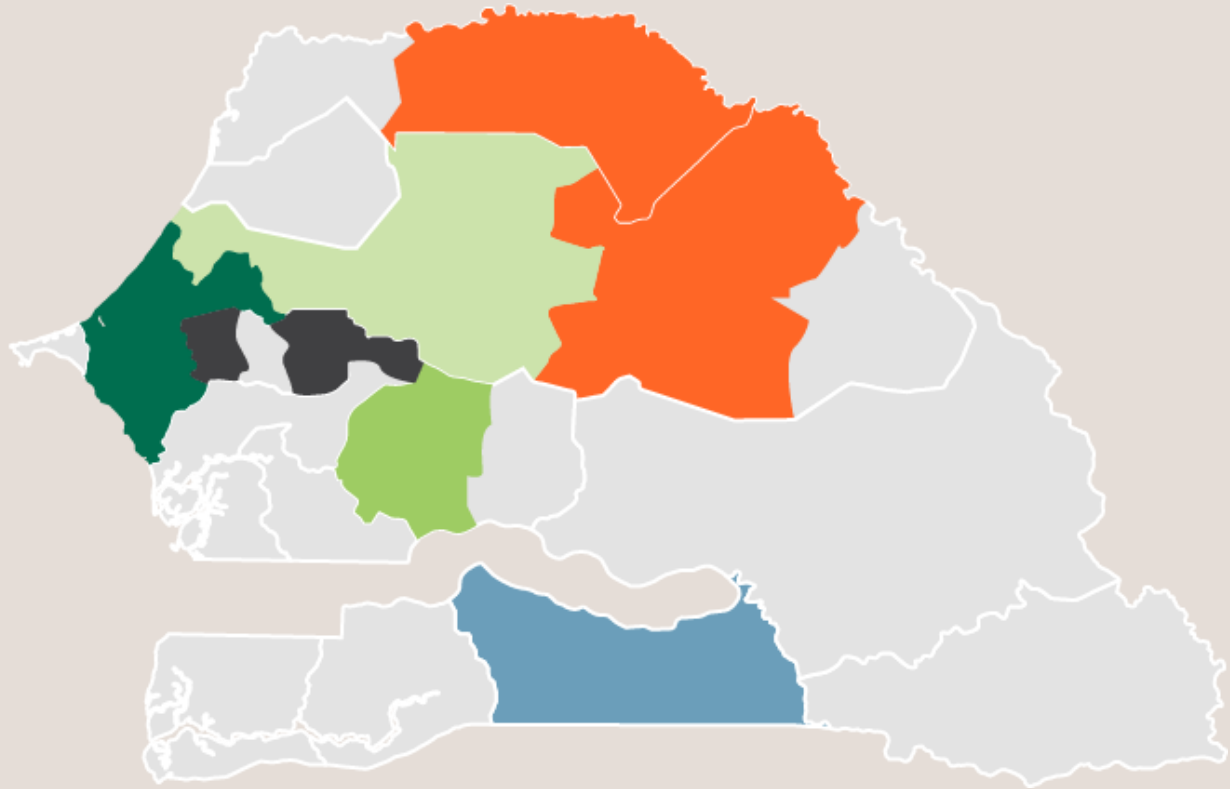
# How it worked in practice

Senegal 2019: 1 in 10 year drought in ARC





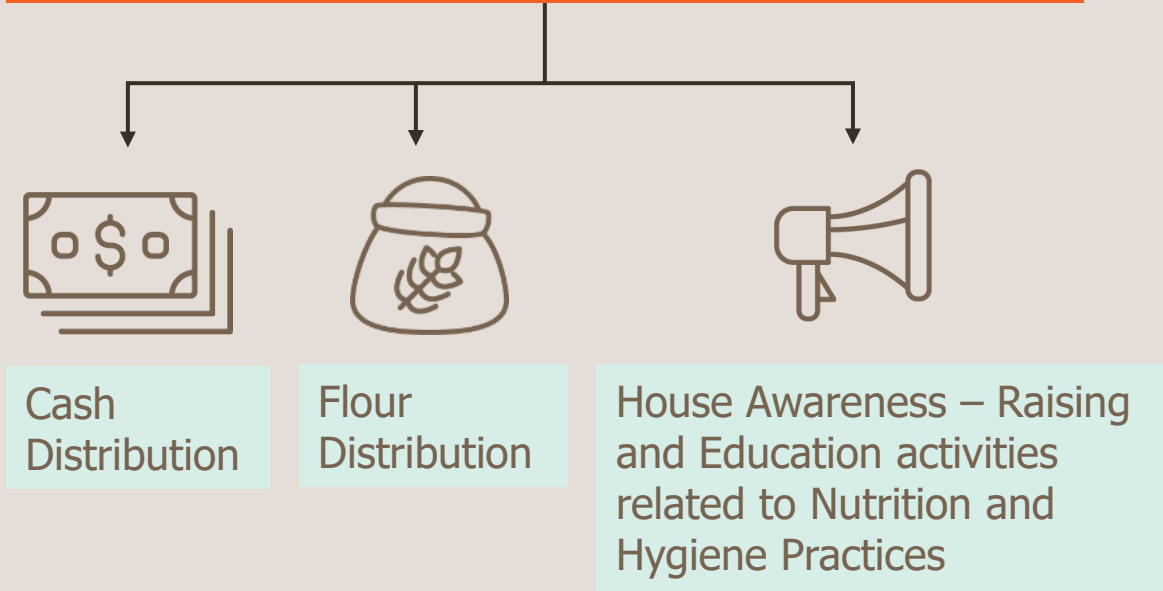
# How it worked in practice



- Action Contre La Faim
- Save the Children
- Oxfam
- Catholic Relief Services
- World Vision
- Plan International
- Government Support (ARC)

## Contingency Fund \$375,000

**As ACF were the main agency operating in this region the Contingency Fund was released in full to them.**  
 The Contingency Fund supported 8,693 people with cash grants and fortified flour distributions.



Each of our partner agencies has a wealth of experience in delivering disaster response, as well as specific expertise. By playing to their strengths, we were able to plan the most appropriate assistance to the communities in greatest need

# Risk Layers Working in Practice

## Challenges:



Covid-19



ARV only objective model that can be used for the release of drought-specific funding



Contingency fund does not trigger if the country experiences yield loss from devastating floods



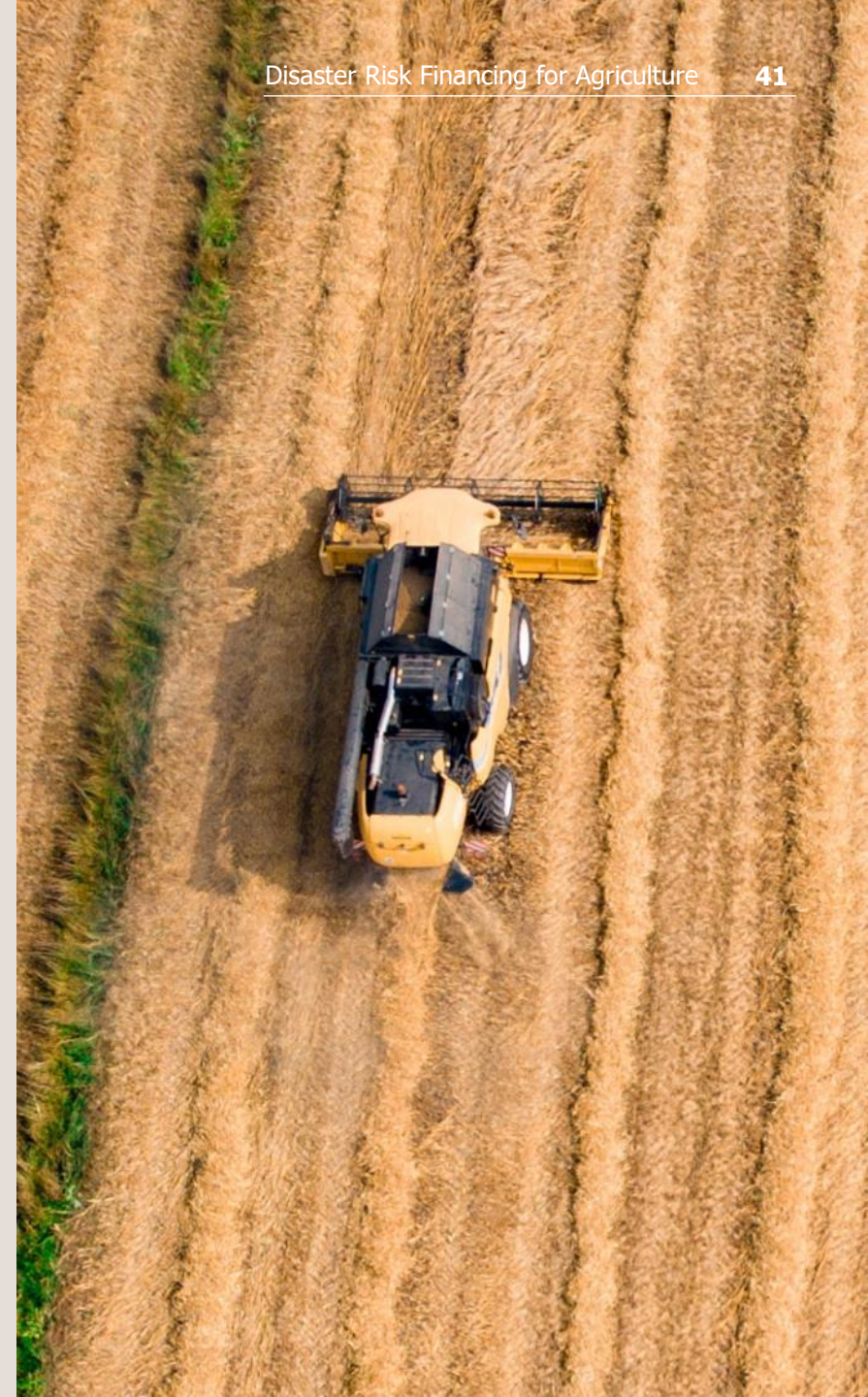
**Senegal 2021:** 1 in 3 year drought – just below ARC attachment point. Slow start to the season and some crops have failed. Contingency fund triggered - \$300,000 to support over 9,000 people with cash and food.

Info for 2019 Scrolling Story

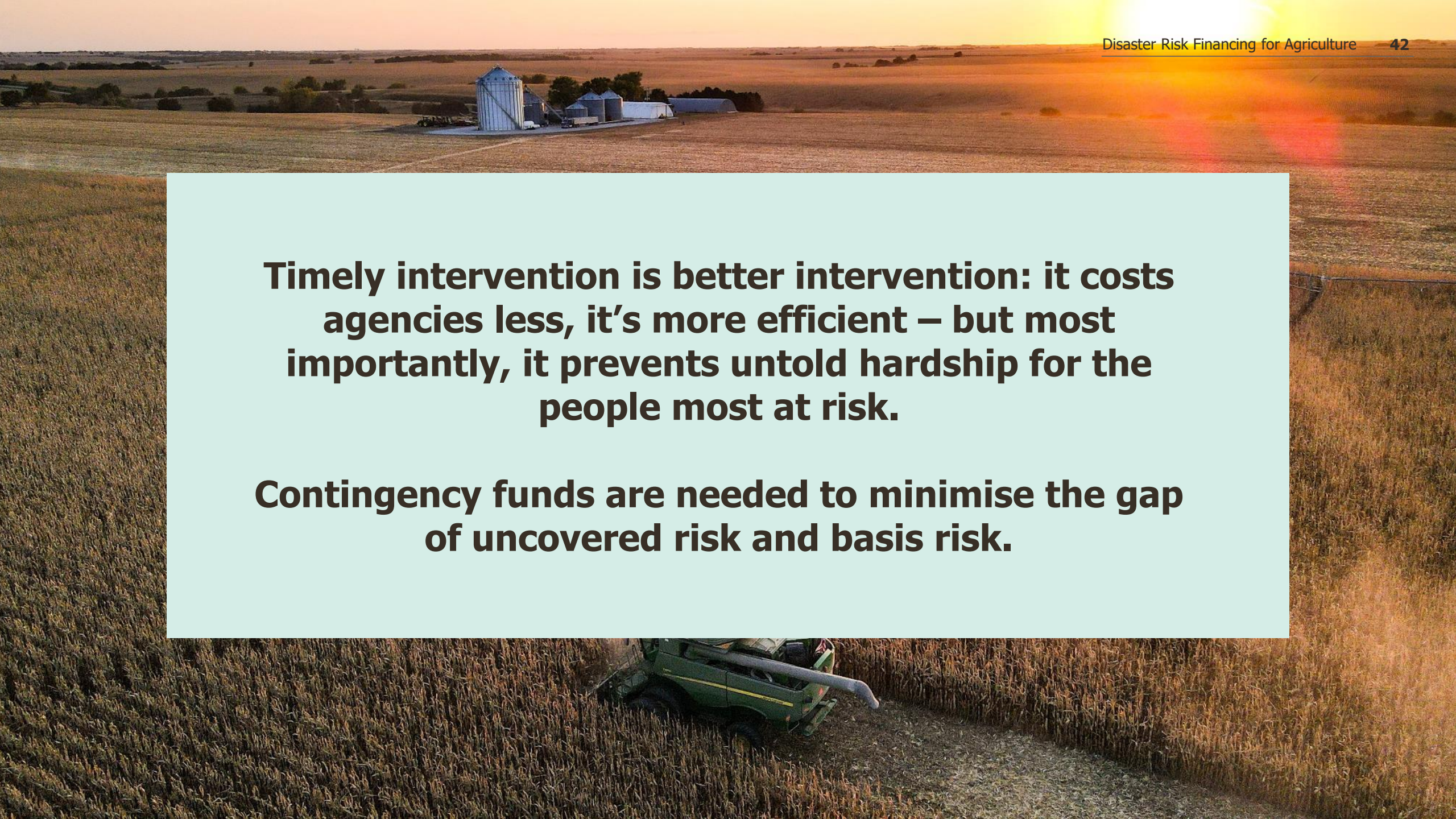
<https://startnetwork.org/news-and-blogs/defeating-drought-crisis-averted-senegal>

YouTube video of payout

<https://www.youtube.com/watch?v=5AULsiO5yWE&t=3s>







**Timely intervention is better intervention: it costs agencies less, it's more efficient – but most importantly, it prevents untold hardship for the people most at risk.**

**Contingency funds are needed to minimise the gap of uncovered risk and basis risk.**



LESSONS  
LEARNED AND  
**final**  
**conclusions**





## Key takeaways of Module 8



- Reserve funds can be used for financing a variety of different post-disaster costs – these are the costs that cannot be anticipated and planned. They help to act early, be prepared and save costs (if compared with relying only on ex post-financing)
- Reserve funds, while important, should be considered as part of broader risk management strategy
- Reserve funds require careful design and implementation to avoid being used ineffectively where funding does not reach those most in need quickly
- Timely intervention is better intervention: it costs agencies and governments less, it is more efficient – but most importantly, it prevents untold hardship for the people most at risk and where negative coping strategies may be employed
- Reserve funds can be used to minimize the gap of uncovered risk and basis risk from other products such as risk transfer



# Questions?

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