

Drought Financing Facility



Executive summary

The vision for the Start Network Drought Financing Facility (DFF) is of an NGO-led network of interconnected national facilities that enables faster and more coordinated humanitarian response to major droughts as they emerge.

Each facility will be based on a risk management approach that involves scientific modelling of drought risks, focused scenario-based contingency planning and ground monitoring, and pre-positioned financing. Both the scientific remote sensing and country teams will monitor signs of emerging agricultural drought crises against pre-agreed indicators and triggers which, when reached, would prompt the automatic and predictable release of funds for early action.

The objective is to protect communities at risk of major droughts by deploying funds to organisations on the ground in a faster, more efficient way. The DFF mechanism is not meant to replace traditional funding mechanisms for responding to a major drought: it is meant to enable early effective action while other funding mechanisms begin to mobilise. By intervening earlier, we hope to prevent losses and to reduce the amount of funding needed.

The aim is to shift humanitarian response away from its current model, which is reactionary and based on voluntary contributions. Instead, we will have an anticipatory model that enables early, pre-planned and pre-financed responses that will save lives, livelihoods and costs.

The purpose of this report is to give an overview of the way the Drought Financing Facility is designed, including two proposed pilots in Zimbabwe and Pakistan.



Background and context

Climate change, population growth, increased urban densities and the complex nature of today's social conflicts have led to humanitarian crises becoming ever more frequent and complex. They can also be more protracted and this can erode both the coping mechanisms and the assets of vulnerable communities, working against efforts to build resilience.

Despite improvements in our ability to model and anticipate disasters, the humanitarian system still often reacts to them as an unexpected surprise, responding only afterwards and almost always too slowly. This problem is particularly acute in droughts. Despite advances in forecasting techniques, delay has become a defining characteristic of our response to food security crises, with aid arriving many months too late.¹

We know that it is more effective to respond earlier to an emerging food crisis: through protective cash transfers, interventions to protect livelihoods, seed distribution etc. Major droughts tend to affect vulnerable families slowly over several months as their coping strategies gradually become less effective. Research suggests that earlier response can protect communities, bolster their resilience and do all this at lower cost than traditional late humanitarian response.^{2,3} However, even when a crisis is unfolding, funds of sufficient quantity usually do not materialise until too late.

HOW DO WE GET FROM THIS...



**WE RECEIVE
A WARNING**



**WE DON'T
REACT**



**PEOPLE
SUFFER**



**AND IT IS
EXPENSIVE**

TO THIS...



**WE RECEIVE
A WARNING**



**WE ACT
EARLY**



**LIVES ARE
SAVED**

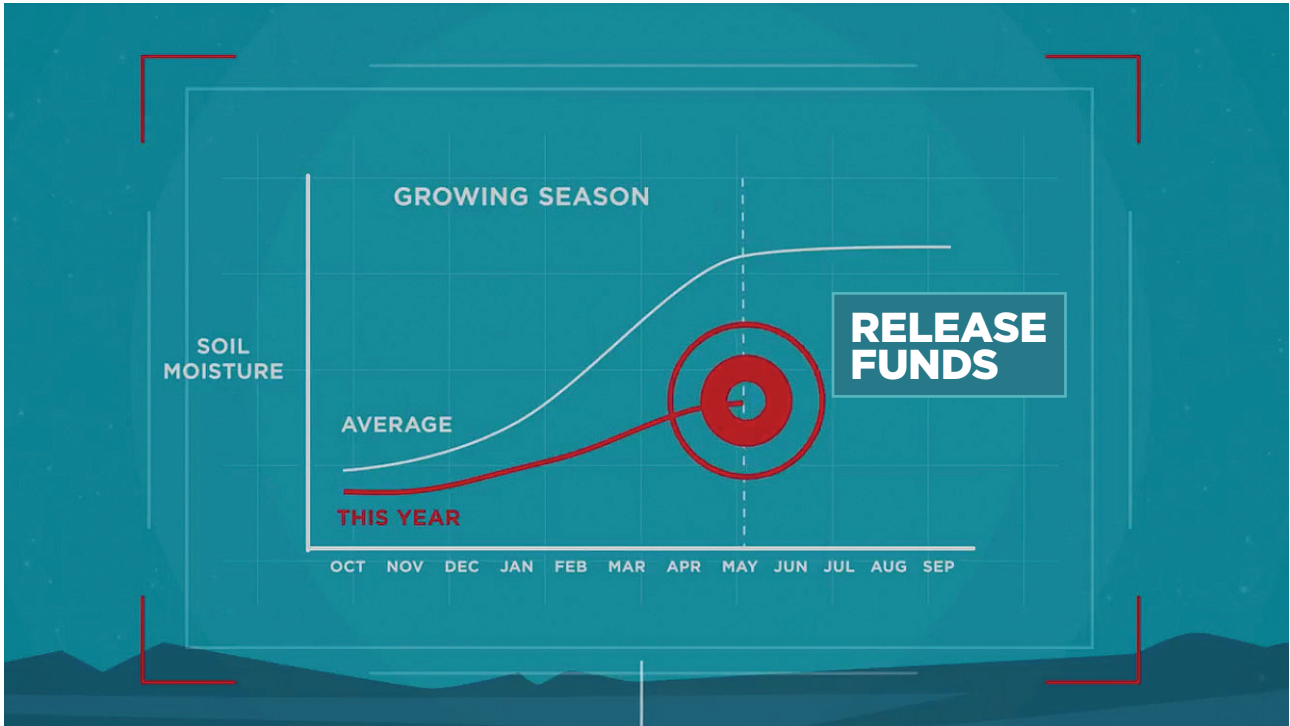


**AND IT
SAVES COSTS**

¹ Bailey, R (July 2012). *Famine Early Warning and Early Action: The Cost of Delay*. Chatham House.

² Cabot Venton, C with Fitzgibbon, C, Shiterek, T, Coulter, L and Dooley, O (2012). *The Economics of Early Response and Disaster Resilience: Lessons from Kenya and Ethiopia*. Department for International Development https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67330/Econ-Ear-Rec-Res-Full-Report_20.pdf

³ Clark D and R V Hill (2013) 'Cost-Benefit Analysis of the African Risk Capacity Facility', IFPRI Discussion Paper 01292 www.IFPRI.org



The Start Network has taken a significant step towards enabling faster, more proactive humanitarian responses by setting up the world’s first NGO-managed multi-donor pooled fund. Over three years the Start Fund has responded to 127⁴ underfunded crises, including several droughts, that would otherwise receive little attention.

However it has become clear that the Start Fund alone cannot provide the level of support required in situations where major drought has caused a slow-onset food crisis: it was not set up to provide funds large enough or for long enough to prevent the evolution of a large-scale food crisis where it may take several months until other funds arrive.

This problem led the Start Network to search for complementary financial structures that would allow funding to be released fast, on a predictable continuum and at sufficient scale, in the early stages of emerging food crises.

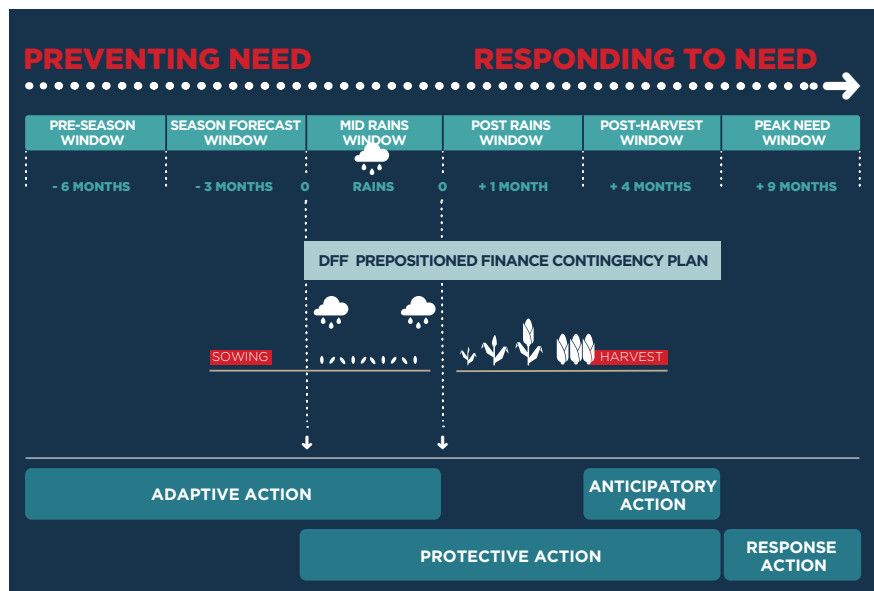
The Drought Financing Facility is part of a wider suite of financing tools being designed by the Start Network to address different types of risks. We see the DFF as an additional ‘window’ to national Start Funds, using different funding instruments to address the specific complexities and operational requirements of responding to major slow-onset droughts.

⁴ As of September 2017

Overview of approach

The Start Network Drought Financing Facility (DFF) allows donors and those working on the frontline to take a proactive risk management approach to drought. Each facility will build a system that signals emerging agricultural drought crisis through pre-agreed triggers. When these are reached, they will prompt the fast and predictable release of funds, allowing early action to be taken.

The advantage of this approach is that it is data-driven and objective so it circumvents long debates around potentially conflicting early warning signs, which tend to paralyse action. It puts in place a robust, predictable process for releasing funding, which can counter the risk-averse position that currently inhibits most decisions to respond to early warning signs.



The DFF is typically primed to trigger funding payments at the end of the key growing period for staple crops. This funding can enable rapid scale-up of protective activities to prevent poor communities from having to resort to negative coping strategies (selling assets, reducing food consumption, etc) which can undermine their longer-term resilience. Ideally the DFF should sit within a continuum of support, preceded by forecast-triggered financing for adaptive action and followed by traditional response funding for critical humanitarian needs.

In countries where there is an existing social safety net or resilience programme, the DFF can be structured to offer surge financing⁵ to protect the resilience of communities that are already part of the initial programme and hence to protect the programme investments. In circumstances like this, it can be seen as a form of collective crisis modifier (budget contingency), allowing existing programmes to scale up seamlessly to deal with unexpected shocks. Over time, as communities build their resilience, they will also increase their ability to absorb shocks. This will lessen their need for prepositioned DFF financing, which can be strategically reduced and targeted instead at residual risk in larger droughts.

⁵ Surge financing is used to manage shocks during an ongoing programme providing services to a community to help them build resilience. When a shock happens the project is 'surged' with more funds to prevent the programme being thrown off course. For example, vulnerable people may be receiving a cash transfer over the 'lean season' to ensure adequate nutritional intake, but if there is a drought food prices will go up. That cash will no longer be enough, and the project goals (eg, reducing malnutrition) are compromised. This will require an increase in the amount given to families and/or the number of families receiving assistance, using pre-agreed surge financing. The DFF could enable this.

Design components

The basis of each facility is a risk management approach that involves three key components:

1. SCIENCE

TO MODEL AND QUANTIFY DROUGHT RISKS AND TO SET TRIGGERS.

The DFF draws on scientific risk models based on publicly available global forecasting models that go back 37 years. These are adapted to capture drought risk in any country using estimates of soil moisture combined with knowledge of agricultural cropping patterns and overall land use.

This allows us to quantify the risks of drought in the areas where we work, and to price that risk. We can also use the same technology to monitor ongoing signs of emerging drought in near real time.

The risk models are put onto an open access platform that allows the NGOs and partners to visualise and adjust the exposure to risk.⁶ The model is then tested by comparing the results of the model adjustments against past humanitarian droughts. This process, called hindcasting, gives confidence that future drought conditions are also likely to be picked up through the same system.

2. CONTINGENCY PLANNING

TO IDENTIFY WHAT IS NEEDED TO PROTECT COMMUNITIES AT RISK OF DROUGHTS.

The contingency planning process allows groups of NGOs and wider partners to collectively design and cost the actions needed to protect communities within different drought scenarios. This will ensure that the right amount of funds are ready to be released, at the right time, under scenarios of varying severity. It also ensures that coordination structures and capacities are in place to release funds quickly and effectively.

The intention is to enable not just a timely response, but also a more effective response that avoids duplication and inefficiencies between humanitarian agencies and wider partners (including government).



⁶ See examples here: Pakistan http://global-agrisk-hif.com/HIF_Group/zimbabwe and Zimbabwe http://ec2-52-39-137-50.us-west-2.compute.amazonaws.com/HIF_Group/pakistan/



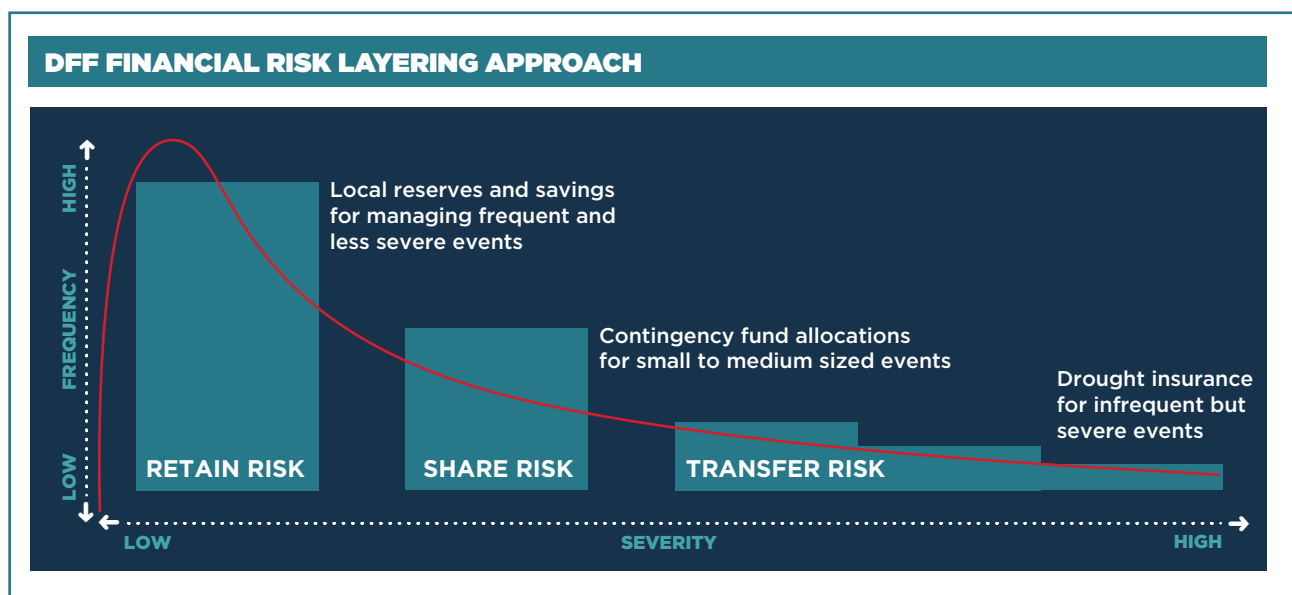
3. FINANCING

TO BE RELEASED ACCORDING TO AGREED TRIGGERS.

The DFF pre-positions donor financing so that it can be released rapidly and predictably when triggers of an emerging drought are reached.

The financing takes a risk-layering approach, with different funding instruments used for different severity of events:

- Smaller, frequent events will be funded from national contingency funds. These will be pooled across countries allowing them to benefit from sharing and diversification of risks.
- The risks for more severe, low frequency events will be transferred to (re)insurance companies or other capital market entities which are better placed to hold this size of risk, given their large amounts of capital and diversification of risks.
- In the long run, as the number of national funds grows, we envisage that we will be able to increase the amount that we can 'self-insure' across national contingency funds, as well as purchasing one risk transfer contract that will save costs. This means that scale can bring about further cost savings over time.
- The contingency funds will also act as a buffer to manage basis risk in the insurance contracts⁷ by absorbing over-payments and providing 'top-up' funding where required.



⁷ Basis risk occurs when there is a mismatch between insurance payments and the anticipated loss that is detected through observation on the ground.

PUTTING THE CONTRACT INTO OPERATION

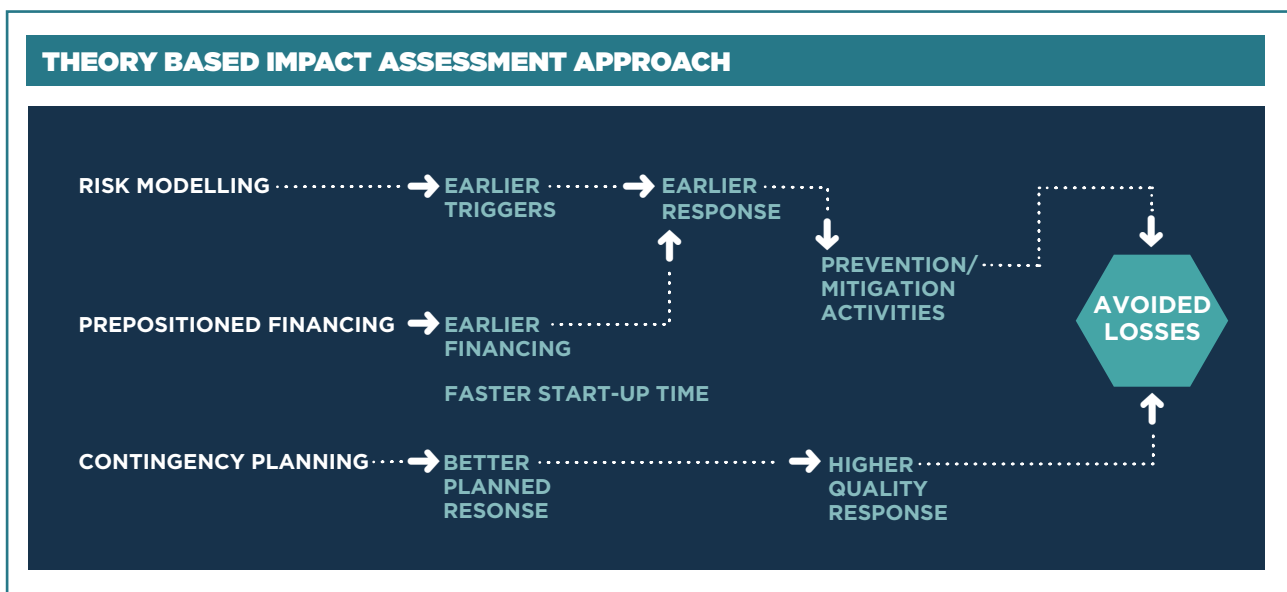
The DFF will sit within wider Early Warning Early Action frameworks at national level so that it can be triangulated by information on the ground. This will allow us to assess performance of the drought model on an ongoing basis, and to target funds effectively once they are released. In a large scale event, when a trigger is met the (re)insurance company would automatically release the funding agreed for the relevant trigger level (according to the agreement in the contract and the premium paid). In a small scale event, the payment would be released from the contingency fund. Any mis-match with the situation on the ground identified through the Early Warning framework (basis risk) would be addressed through clear processes that enable the contingency fund to absorb over-payments and provide ‘top-up’ funding where required.

Funds will be distributed to the Start Network of frontline NGOs, prepared and ready to scale up their activities to protect communities at risk. These will be allocated through established Start Network processes, combining collective response planning and design with a transparent process for submitting proposals that ensures funding is allocated to the organisation best placed to respond. All Start Network national and international NGOs have been through a rigorous due diligence process, and will be supported by the Start Network’s standard operating procedures. This will promote the sound financial and technical management of funds.

INNOVATION AND LEARNING

Because the DFF is a new and experimental approach to humanitarian action, it will need strong monitoring and feedback. It is not enough simply to assess whether it fulfils its function (pays out on time, delivers response plans etc). We also need to measure its impact for the most vulnerable communities compared to a ‘traditional’ reactive humanitarian response. Monitoring and evaluation will take place even in years where there is no pay-out. This will use a theory-based impact assessment approach^{8,9} which starts with the theory of change behind each intervention. Part of the rationale of the DFF is that early aid can be transformative in its impact on people’s own ability to cope with a crisis. A theory-based impact assessment can examine the extent that this is true.

Examples might include stockpiling food before prices rise; paying school fees to prevent children dropping out of education; and helping prevent a family from having to sell land to buy food, or from borrowing money at exploitative rates. We can assess the impact of timing by evaluating our contingency plans and whether they enabled different types of preventative action. We can test this further following a payout by seeing how far we were successful in achieving this, and to what effect. Rather than making a single connection between project and benefits, the learning approach for the DFF takes the theory of change and breaks it down into individual links. Each of these can be tested much more simply and will allow for much faster generation of knowledge, even in years or countries where the mechanism was not actually triggered.



⁸ Funnell, SC, and Rogers, PJ 'Purposeful Program Theory', San Francisco, CA: Jossey-Bass, 2011

⁹ White H 'Theory Based Impact Evaluation: Principles And Practice', Working paper 3. New Delhi: International Initiative for Impact Evaluation, 2009

Policy context and value for money

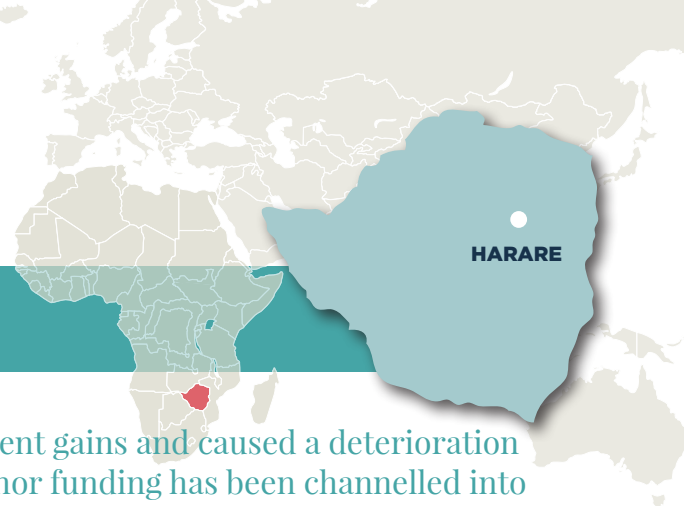


The Drought Financing Facility depends on the donors that contribute funding to this initiative. Donors can commit funding through direct contributions to the fund/premiums, or indirectly through crisis modifiers built into existing multi-year development or resilience projects. Crisis modifiers can be pooled into the common DFF, helping NGOs and donors to smooth the pattern of losses across different budgets, ensuring better coverage and better protection the investments in development and resilience.

This mechanism offers a rigorous and cost-effective way to enable predictable and timely financing in droughts that will go directly to frontline NGOs. It also offers an opportunity to work towards the G7 InsuResilience target of 400 million poor and vulnerable people protected from climate shocks, as well as the World Humanitarian Summit 'Grand Bargain' commitments to greater localisation and decentralisation of aid.

A key motivation for investing in the DFF is in the timing of the payments – several months before the usual mobilisation of response funding – and the efficiencies this can bring. Research suggests that on average \$1 of early action funding is worth \$4 in late response funding.¹⁰ The earlier intervention can prevent the loss of both assets and health, reducing the need for more expensive emergency assistance (such as treatment for acute malnutrition) at a later stage.

The early action enabled by the DFF can be most effective if positioned as one component of a comprehensive risk management strategy that combines long-term risk reduction and resilience building with humanitarian response.



Zimbabwe pilot

In Zimbabwe recent droughts have eroded development gains and caused a deterioration in resilience across the country. While significant donor funding has been channelled into multi-year resilience programmes, disasters such as drought and flood have created a ‘one step forward, two steps back’ dynamic.

In early 2017 a group of NGOs in Zimbabwe submitted their interest in becoming a pilot site for the Drought Financing Facility. The DFF pilot has been designed to offer a crisis management approach in Zimbabwe that enables investments in resilience, helping communities to become more shock-resistant to droughts. The aim is to offer an end-to-end solution that begins with modelling and quantifying the risks of natural hazards (starting with drought but could eventually be expanded). This is followed by support with planning for mitigation activities, as well as ensuring predictable financing that will protect these resilience programmes, even for larger scale crises.

By layering the DFF on top of long-term resilience programmes, we can protect the investments already made in building communities’ resilience.

The pilot design drew on data regarding the vulnerability of households that are already part of an existing resilience building programme in Zimbabwe. In the most extreme drought events, if 100% coverage is purchased, up to \$32.7million would be available to meet the additional needs of 154,000 vulnerable households within this existing programme.

A proportion of the funds will be held in reserve and allocated according to insurance-like principles, and a proportion transferred away to an insurance provider to cover the risks of major events.

Funding will be released within ten business days of the end of the rains in March. This is six to eight months earlier than the traditional humanitarian response, which reacts to loss and damage already accumulated over the drought year. This type of protection will be put in place to keep households from falling further into poverty and seeing their resilience undermined.



IF THE DFF HAD BEEN IN PLACE IN THE 2001/02 & 2015/16 ZIMBABWE DROUGHTS.

If the DFF had been in place during these two crises, it could have been a very different story. In March 1991 the soil moisture dropped to 0.14, the index depicted just above a 1 in 50 year event. Based on the parameters selected by the NGOs during the design process, this would have triggered the DFF to release \$17.5 million. In 2015, with similar soil moisture values, \$17.5 million would also have been released. Protective cash transfers could have taken place starting from March, and this would have gone a long way in preventing the deterioration of nutritional levels, escalating death tolls, and cattle and asset loss. A response to the crisis would have started six months earlier. It is conceivable that implementing the DFF earlier could have reduced the subsequent acute humanitarian needs considerably.

IN THE MOST EXTREME DROUGHT EVENTS, IF

100%

COVERAGE

IS PURCHASED, UP TO

\$32.7million

WOULD BE AVAILABLE TO MEET THE NEEDS OF

154,000

HOUSEHOLDS

Pakistan pilot



Pakistan is among the most disaster-prone, climate change-affected countries in the world. In face of chronic drought conditions, the poorest and most vulnerable communities have extremely low coping capacity, meaning that any further shocks could have a high impact on them. There is great appetite within the government, civil society and the wider humanitarian community to develop more effective, predictable and timely ways of managing these risks.

In late 2016 a number of NGOs in Pakistan submitted their interest in becoming a pilot site for the Drought Financing Facility. Following this, design work was enabled by a number of in-country workshops, including an official consultation event overseen by the National Disaster Management Authority.

The Drought Financing Facility in Pakistan is designed to offer an efficient and timely mechanism to quickly identify signs of emerging major droughts, and to deploy pre-positioned funds to targeted pre-identified response plans to protect communities at risk. The intention is to avoid losses and to save lives and costs.

The Drought Financing Facility will be managed by NGOs, in close alignment with the National Disaster Management Authority. Funding released through DFF will be available at the end of the growing period, many months earlier than the traditional humanitarian response system..

In the most extreme drought events, if 100% coverage is purchased, up to \$31.5 million would be available to meet the needs of 60,000 households.

Starting with the single hazard of drought (a pervasive threat to poverty alleviation efforts in Pakistan), this initiative will enable earlier and more predictable response to protect the lives and livelihoods of vulnerable communities. This will be achieved through a 'safe' testing environment, in which a proportion of funds are held in reserve and allocated according through insurance-like principles, and a proportion transferred away through insurance contracts to cover the risks of major events. If successful, there is significant potential to scale up this approach to include other hazards or expand to other contexts.



**IN THE MOST EXTREME DROUGHT
EVENTS, IF**

**100%
COVERAGE**

IS PURCHASED, UP TO

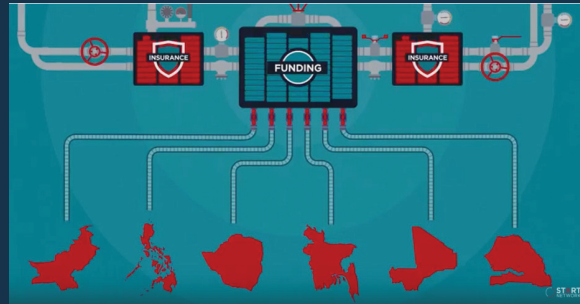
\$31.5million

**WOULD BE AVAILABLE
TO MEET THE NEEDS OF**

**60,000
HOUSEHOLDS**

Next steps

The Drought Financing Facility pilots give us a significant opportunity to generate learning and to grow our experience of a more predictable, risk management approach to managing civil society responses to protect communities in emerging droughts. In the future, we envisage expanding this approach to a wider range of natural hazards including flooding, heatwaves and earthquakes. Through the use of contingency funds, insurance and new technology we are looking to shift humanitarian response to drought by moving to early action based on protective and anticipatory action. This will enable the humanitarian system to be on the front foot in responding to crises whose likelihood is predictable, keeping pure 'response' funds for more complex socio-economic events (like conflict) that are harder to model and anticipate. We are testing new approaches that will save more lives, livelihoods and assets and can significantly reduce costs.



TO FIND OUT MORE VISIT: <https://startnetwork.org/drought-financing-facility>

The Partners



The Start Network is a transformational network of 42 leading national and international NGOs with a shared belief that the current humanitarian system is not fit for purpose. These organisations are united in understanding that they need to collaborate in order to improve the way that aid is delivered. They are working together to transform the system for the better. The Start Network promotes a way of working that enables international and local humanitarian agencies to co-exist, complement and support each other. The vision is of a self-organising system that empowers the agencies best placed to respond to a crisis, based on needs identified locally. Through its 42 members, the Start Network extends to thousands of partner agencies with over a quarter of a million staff working in 200 countries and territories. The Start Network has initiated and manages the Drought Financing Facility.



Global Parametrics is a for-profit social venture with investments from the UK's Department for International Development and the InsuResilience Investment Fund created by KfW, the German Development Bank. It is part of the G7 InsuResilience climate risk insurance initiative. Specialising in financial disaster risk management, it provides data services and risk transfer products aimed at increasing resilience and improving recovery in emerging economies threatened by natural disasters and extreme weather events. Global Parametrics has provided scientific drought modelling services and financial structuring advice for the DFF, and is well positioned to underwrite any potential risk transfer for this initiative.



The Humanitarian Innovation Fund helps organisations and individuals to identify, nurture and share innovative and scalable solutions to the issues that prevent effective humanitarian assistance. The Humanitarian Innovation Fund supported the design and prototyping of the Drought Financing Facility with two grants in 2015 and 2016/17.

