







# REPORT

6<sup>th</sup> Global Dialogue Platform on Forecast-based Financing

26-28 September 2018



Berlin, Germany











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#### **List of Abbreviations**

LINKS TO

**DOCUMENTS** 

ADAM	Automated Disaster Analysis and Mapping system	ForPAc	Forecast-based Preparedness Action
CBA	Cash-based Assistance	GIS	Geospatial Information Systems
CPP	Cyclone Preparedness Programme	IARP	Innovative Approaches to Response Preparedness
CTP	Cash Transfer Programming	ICA	Integrated Context Analysis
DFID	Department for International Development (United Kingdom)	IEC	Information, Education and Communication
DMMU	Disaster Management and Mitigation Unit (Zambia)	IFRC	International Federation of Red Cross and Red Crescent Societies
DREF	Disaster Relief Emergency Fund	OSM	Open Street Map
EA	Early Action	RCCC	Red Cross Red Crescent Climate Centre
EAP	Early Action Protocol	RCRC	Red Cross Red Crescent Movement
ENSO	El Niño-Southern Oscillation	SME	Small and Medium Enterprises
EWEA	Early Warning Early Action	SOP	Standard Operating Procedure
FATHUM	Forecasts for Anticipatory Humanitarian Action	UK NERC	United Kingdom Natural Environment Research Council
FbF	Forecast-based Financing	CEMS	Copernicus Emergency Management Service

# BACKGROUND

From September 26<sup>th</sup> to 28<sup>th</sup> 2018, 170 people from 36 countries met in Berlin to attend the Global Dialogue Platform on Forecast-based Financing in Berlin. The Platform facilitated discussions and knowledge-sharing between representatives from 24 Red Cross Red Crescent National Societies, IFRC Africa, Europe, Asia-Pacific and Geneva offices respectively, UN agencies like WFP, FAO, UNOCHA and CERF Secretariat, donors from the public and private sector, among them DFID, the German Federal Foreign Office, Austrian and Netherlands governments, NGOs and Start Network, as well as researchers from universities and institutes and scientists working on issues such as climate, EWEA, data use, natural hazards and trigger development.

The three-day Dialogue Platform was a great success, covering topics such as developments in the urban context, Forecast-based Cash, inter-institutional cooperation, return on investment and evidence for FbF and methodology for developing triggers for Early Action. Discussions also centred on identifying and selecting the "right" Early Actions and research needs in order to identify the most suitable actions.

Disaster risk financing was a topic of particular interest for the audience, and this opened the floor for discussions about the broader landscape of different financing instruments, insurance mechanisms and relief funds.



The third day of the Platform was dedicated towards data preparedness and how to better use data and information management tools to make more informed decisions about where, when, and how to act. Initiatives such as Missing Maps, the IFRC GO platform and Start Network presented their approach of collecting, analysing, disseminating and using of data; the American Red Cross sparked intensive debates about the use of Facebook data to trace population movements during disasters to better serve their needs.

This Dialogue Platform was the final chapter in the 2018 Dialogue Platform series. The series consisted of Three Regional Platforms organized for the discussion of region-specific issues involving regional stakeholders and for the fostering of close regional cooperation; as well as one Global Dialogue Platform designed to consolidate the findings and experiences from the regions into the development of a more global, forward-looking approach. The Regional Dialogue Platforms were organised in Nairobi/Kenya in March, Kuala Lumpur/Malaysia in May and Arequipa/Peru in June.

In 2019, the Regional Dialogue Platforms will be held in Mozambique, Dominican Republic and in the Philippines.





6<sup>th</sup> Global Dialogue Platform on Forecast-based Financing

# DAY ONE

## Welcome Remarks



#### Mr. Peter Felten

Head of Division for Humanitarian Assistance, Federal Foreign Office

Mr. Peter Felten opened the Dialogue Platform with a word of thanks for the work of the German Red Cross, the International Federation of the Red Cross, the Red Cross Red Crescent Climate Centre, and the World Food Programme respectively in organizing the Platform. He stressed the relevance of the Regional Dialogue Platforms which address the different regional perspectives on FbF. Mr. Felten acknowledged that the increasing occurrence of extreme weather events can overwhelm the coping capacities of countries and communities and that these events create growing challenges for humanitarian assistance. He highlighted the positive influence that FbF has on the delivery of humanitarian aid in the context of these rising climate change risks, while at the same time acknowledging the important roles that preparedness for response processes and anticipatory risk financing play in shaping responses to such risks. Mr. Felten pointed out that more anticipatory risk financing approaches are needed to ensure a predictable, reliable, and sustainable implementation of preparedness actions before disasters strike. Furthermore, he emphasised FbF as the centre of such innovative risk financing approaches.

Mr. Felten stated that FbF is increasingly introduced into existing financing instruments of the humanitarian system, for instance to the DREF. In May 2018, the new Forecast-based Action by the DREF was launched, a window to the DREF to enable Early Actions. Mr. Felten also recognized the importance of key actors such as the UN World Food Programme, their cooperation with governmental DRM authorities, and the Start Network's own Crises Anticipation Window. He acknowledged, however, that the humanitarian system as a whole is not fully structured for systematic early action. He proposed supporting measures to be taken: to intensify the strategic cooperation with the Red Cross Red Crescent Movement to correspond with early action financing instruments and approaches in the UN context like the CERF and to strengthen the cooperation with the Start Network. Moreover, Mr. Felten called for a joint effort to enable governments and organizations to support communities in terms of adapting to climate change, using scientific information, and reducing disaster risk in the short, medium and long terms. He concluded by encouraging everyone to make a difference for the benefit of people.





#### Mr. Christof Johnen

Head of International Cooperation Department, German Red Cross

Mr. Christof Johnen honoured the trust the Federal Foreign Office puts in the German Red Cross to create a broad and qualified cooperation around FbF. He recognized the importance of diverse actors in a well-functioning mechanism. He thanked the efforts of the donors and the private sector, the national governments, and the national humanitarian actors who best know the realities of their countries as well as the needs, problems, and solutions for those who are most vulnerable. He also pointed out that FbF, like any good humanitarian action, relies heavily on local expertise and wisdom. Mr. Johnenalso highlighted the importance of the IFRC, WFP and UN-OCHA as "enablers" of FbF, and gave credit to the science community as "the brain" since their work on improving forecasts and data preparedness is crucial for a well-functioning FbF mechanism and often takes place out of sight, in the background.

Mr. Johnen referenced the Dublin speech from Mark Lowcock, Under-Secretary General for Humanitarian Affairs and Emergency Relief Coordinator, who stated that the greater use of pre-agreed contingency financing windows would improve crisis response. In that regard, Mr. Johnen highlighted the launch of the "Forecast-based Action by the DREF" fund which permits the submission of Early Action Protocols by National Societies in high-risk countries in order to reduce humanitarian impact ahead of a disaster. By giving a specific example of a cash distribution in Bangladesh, he pointed out that a simple cash grant could contribute to the recovery and resilience of the affected communities, offering choice and dignity to the people struck by a humanitarian crisis. Mr. Johnen concluded by urging everyone to look to the future as the humanitarian system will continue to change rapidly and must constantly adapt, learn, and innovate.

Dialogue Platform
ON FORECAST-BASED FINANCINC

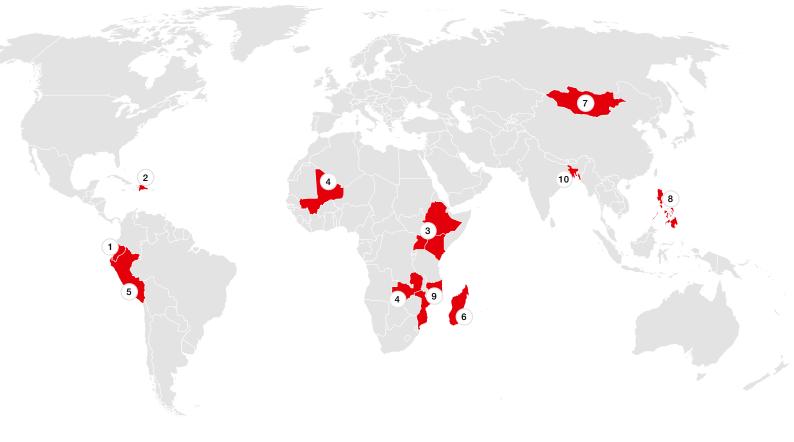
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Most of today's children will work in professions not existing today. There is change and the humanitarian system has to change rapidly – that's why we have to constantly adapt, learn and innovate.

**Christof Johnen** 

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## Ignite Talks

→ Short, focused presentations on the status of FbF projects and initiatives worldwide

## **1** ECUADOR

Who? Alejandro Terán, Ecuadorian Red Cross

What? Ecuador has 24 potentially active volcanoes, 6 of them representing a high threat to thousands of vulnerable families. The Early Action Plan for Volcanic ash fall is being developed by the Ecuadorian Red Cross in partnership with the Meteorological Service and the Geophysical Institute of Ecuador. With the participation of the local government, the document has generated maps of intervention to pinpoint and optimize humanitarian assistance with regard to health and livelihood. Volcanic ash fall threatens the population, which suffers from severe respiratory tract infections, contamination of drinking water, loss of crops and livestock (which represent the livelihood of the provinces located near the volcano), and human life.

## **2 DOMINICAN REPUBLIC**

Who? William Vigil, World Food Programme Dominican Republic

What? WFP and the Emergency Operations Centre from Dominican Republic work together to develop initiatives to strength the country's capacities on Early Action Systems and risk management. Given that the topography of the Dominican Republic is prone to extreme hydro-meteorological events such as hurricanes, and 22 institutions have performed emergency simulations. These help in revising protocols and procedures, to get prepared for the next hurricane season, to see what is lacking and what is working and what is not and to actualize the already existing contingency plans. The experts concluded that this simulations have helped them to improve their knowledge and to the better share of information and understanding of roles and responsibilities.

## 3 KENYA/UGANDA/ETHIOPIA

Who? Maurine Ambani, Red Cross Red Crescent Climate Centre

What? The Innovative Approaches to Response Preparedness (IARP) programme, funded by the IKEA Foundation and implemented by The Netherlands Red Cross, is supporting the establishment of a national scale Early Warning Early Action system for extreme climate events in Ethiopia, Kenya, and Uganda. A feasibility study conducted for IARP revealed opportunities to implement such as system. Institutions increasingly want to use forecasts to help plan early action, forecasts that take into consideration who could potentially be affected and the potential costs. The forecast supply side also wants to have greater impact, and the opportunity to develop forecasts designed to trigger early action. IARP will need to figure out how best to engage with these FbF opportunities.

## 4 ZAMBIA/MALI

Who? Irene Amuron, Red Cross Red Crescent Climate Centre

What? The cooperation between the Red Cross Red Crescent Movement and the Zambian government has succeeded in making the integration of the FbF mechanism a government priority. The government Disaster Risk Management Agency (DMMU) has taken a leadership role in this. The project is funded by the Netherlands Red Cross, with technical support from the Climate Centre. Responsibility for implementation rests with the Zambian Red Cross in partnership with the DMMU,

the Meteorology Department and the Water Resources Management authority. In order to ensure sustainability and local ownership of the FbF approach, the relevant government agencies must be involved in its development process.



Who? Mathieu Destrooper, German Red Cross Peru

What? The activation of FbF for snowfall in the Peruvian Andes last June was based on an Early Action Protocol (EAP) developed by the Peruvian Red Cross, GRC and the Climate Centre. The trigger mechanism, showing approximately 10 risk element maps, was created beforehand and semi-automatically overlaid atop the meteorological office's snowfall forecast map. Within the 4-day lead time, the Peruvian Red Cross reached over 400 families in 10 communities above 4000 meters altitude, and distributed veterinary kits, shelter support for alpacas and personal protection kits for children, elderly and alpaca farmers. FbF acted 21 days before the official emergency declaration of the government and a month before the "traditional" response.

## 6 MADAGASCAR

Who? Matthias Amling, Welthungerhilfe

What? Welthungerhilfe and the Start Network are working jointly on a FbF project for drought in Madagascar. The project brings together forecasting, scientific modelling, risk analysis, and conditional financing to enable earlier, timelier humanitarian action that mitigates the harmful impact of large-scale droughts in Madagascar. The drought model is informed by historical precedent and integrates triggers that can be used to identify emerging droughts. The initiative seeks to form national and sub-national risk panels that can triangulate the model's information and assess the scale and impacts of predicted drought. The groups will also assist in the development and approval of preagreed contingency plans that will then be rolled out as early actions.

## **7** MONGOLIA

Who? Dunja Dujanovic, UN Food and Agriculture Organization

What? FAO's EWEA projects have been implemented across the globe in Latin America, Africa, and the Asia-Pacific region. Key lessons learned highlight the importance of partnerships, the criticality of protecting livelihoods ahead of shocks, and how to concretely apply the development/humanitarian nexus in early action. Crucial evidence has also been gathered to showcase the cost-effectiveness of early actions. Four case studies were presented with Return-of-Investment ratios ranging from USD 2.5-7.2 for every USD 1 spent on early interventions. Secondary insights further highlighted how early actions safeguard dignity, food security, education, and health. Looking ahead to 2018/19, programme focal points will be appointed in regional hubs to strengthen country-level activities. Finally, the potential impact of El Niño in 2018/2019 was touched upon and partners were encouraged to think about how to act ahead of possible impacts.

## 8 PHILIPPINES

Who? Isabelle Lacson, World Food Programme Philippines

What? WFP supports 10 provinces and developed SOPs for preparedness and early action. These SOPs are being institutionalized at the provincial level in the Philippines. WFP is also examining use of local disaster funds, and where FbF could be further integrated into local policy and practice. In addition, Typhoon Mangkhut struck two FbF pilot areas. Early actions outlined in the provincial SOPs included: warning message/information dissemination, early harvesting of crops, pre-emptive evacuation, pre-positioning of food, activation of agreements on food and non-food items, and house strengthening.



## 9 MOZAMBIQUE

Who? Hanne Roden, German Red Cross Mozambique

What? Individual households in the coastal areas of Mozambique are threatened by cyclones. Through interviews and data collection, the Mozambique Red Cross (CVM, Cruz Vermelha De Moçambique in Portuguese) has learned that existing houses can be strengthened with fairly simple means and their own existing knowledge. CVM is planning to implement a "pilot within the pilot" program to minimize the impact of cyclones on households within a limited lead time of three days, taking into account the specific context in Mozambique. Specific measure to be taken include the reinforcement of the most affected infrastructures like homes and the classrooms of primary schools, as well as the distribution of chlorine, buckets and educational pamphlets to communities. Measures also include trainings in these topics for CVM and CLGRC volunteers and the community.

## **10** BANGLADESH

Who? Raymond Zingg, German Red Cross Bangladesh

What? Two EAP simulations have been held in order to test the identified early actions for cyclones and floods. For cyclones, 100 households were evacuated within a 30-hour lead time and the beneficiaries were transported to shelters where food, water and a basic first aid kid were distributed. For floods, 1617 of the 2580 beneficiaries identified received cash within 1 day via the Post Office within a 10-day lead time. These outcomes were intended to target the most vulnerable population. The actions demonstrate a possible and appropriate response during extreme weather events such as cyclones and floods.

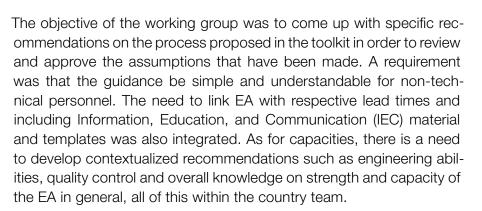


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#### Shelter from the Storm: Shelter Early Action Toolkit

The Shelter Early Action Toolkit aims to guide the development of Early Action (EA) for Shelter and Settlement. The toolkit aims to avoid shelter and settlement damage and mitigate the loss of assets, thus reducing the risk that families will have invested in shelters or other assets without any control over the outcome of disasters.



The working group identified two big challenges in the process of defining EAs. First, the processes of contextualizing the recommendations while putting into practice the process suggested in the toolbox. Second, the application of sound targeting is expected to be challenging.



Facilitator:
Wolfgang Friedrich,
German Red Cross

Aspects that could improve the toolbox and are missing so far are 1) drawing a connection between the toolbox and existing tools such as PASSA, including indicators to measure the EAs 2) looking further into concepts such as 'do no harm', preparedness and DRR as well as 3) linking the toolbox with other EAs and sectors.

# Forecast based Financing Research Concepts and Progress

In this working group, members of the UK NERC/DFID funded FATHUM and FOREPAC project teams presented their results addressing concepts that are important for Forecast-based Financing. This included work on how far in advance we can forecast droughts and floods, and why this is different in different locations and during different times of the year. Researchers highlighted that drought during the short rainy season in Kenya is more predictable than other seasons, and identified specific flood forecasting methods that are most useful at the seasonal timescale.



#### Facilitators:

**Dr. Liz Stephens** *Reading University* 

Dr. Erin Coughlan de Perez

#### Interinstitutional Cooperation to enable Early Action

The working group aimed to show cooperation examples from the Red Cross Red Crescent, the UN, and Start Network to enable early action. For the participants, to enable meaningful and effective cooperation ahead of a climate shock does not require new systems or parallel processes, but instead that existing structures be understood and augmented with communication and technical/scientific support processes that are missing. The goal is to provide a common plan and message using agreed upon terminology and harmonized objectives at global, regional, and country-levels.

One examples is the Mongolia Red Cross Society and FAO's work together in conjunction with the government to utilize the Mongolian Dzud¹ risk map (an approximation of impact based forecasting) to provide a joint message regarding plans to help communities better prepare for the Dzud. Moreover, this collaborative work allowed each agency to focus their limited resources on a more sustainable community early-action plans that included destocking, cash transfer, and food for livestock a few months before the expected shock.

Also, the Start Network's Forewarn group assesses risk for conflict/natural hazards and activation of early action based on the common multi-institution agreement. The Interagency Standing Committee's work on establishing interagency standard operating procedures for El Niño/La Niña episodes was highlighted as a vanguard of global collaboration that enabled early action based on forecast and risk anal-



#### Facilitators:

Catalina Jaime RCCC

Jesse Mason WFP



ysis, as it includes NGOs and research institutions. This innovative collaborative work is the backbone for developing sustainable early actions based on community needs, supported by scientific analysis. Lastly, in Ecuador, the Red Cross has positioned itself, alongside key government agencies, as a player in early action to mitigate the effects of volcanic ash fall, ENSO and floods. Identification of incentives for achieving meaningful cooperation between the Red Cross and the Government has been the focus of the National Society leadership; in that regard, one of the incentives is the role thousands of Red Cross volunteers play in reaching the most vulnerable people.

#### Big City Life: Developments in the Urban Context

More than half of the world population lives in cities, and this figure grows by roughly 1.4 million people every week. The adverse impacts of disasters, climate change, protracted conflicts, and pandemics are felt most acutely in cities. The aim of the session was to discuss the specificities of implementing FbF in urban contexts. Key aspects included the need to identify and engage with multiple stakeholders and to better capture the extreme variation of vulnerability amongst the city population.

The FbF pilot project on heatwaves in Hanoi has started to design the FbF project by assessing stakeholders and vulnerable people. Tools include vulnerability, exposure, and hazard mapping, as well as social network analysis. For example, this analysis identified motorcycle taxis as one potential key group to meet recipients of FbF assistance, as they suffer from the heat, are dependent on income, and are also well organised in a strong union. Urban FbF in Dar es Salaam highlighted successes and challenges of engaging a diversity of stakeholders to achieve government ownership. Participants agreed that the FbF community should be pro-active in acquiring the capacity necessary to engage cities and share knowledge, using different avenues including IFRC's Urban Collaboration Platform and the Urban FbF Task Force.



#### Facilitators:

Eddie Jjemba RCCC

Jerome Faucet German Red Cross Vietnam

Thomas Smarczyk German Red Cross



# Cash in FbF: Challenges and Opportunities for Early Action

The session highlighted the need for a Global Cash Agenda to scale up cash-based assistance if and when possible. Some challenges regarding Cash and FbF were also identified: beneficiary data management system, contracting with financial service providers, ash SOPs & customized toolkit, mobile data collection, data-forward solutions, climate & meteorological data, data-driven decision making, guidance and toolkit for using cash in early action and prepare for cash preparedness.

The main points of the discussion included acting in vain when using cash, the determination of transfer value, the use of the existent data or the National Social Safety Net, as well as the prepositioning of cash modalities, such as credit cards or sim-cards, as well as a potential overlap of financial inclusion and FbF. The discussion also considered flexible targeting when using an impact-based forecasting approach.

The working group also identified other important challenges and bottlenecks that differ to Cash-based Assistance (CBA) in other disaster cycles. Those are as follows:

- 1. Pre-registration: it is time-consuming, arduous, and brings up issues of data storage, privacy, and validation over time.
- 2. Blanket distributions versus vulnerability-targeting, real-time registration: it needs to be limited to cash in envelopes or SWIFT remotely activated cards, but might raise concerns over fraud and proper documentation practices post-distribution.

**3.** Government databases: plugging into social protection networks or other government lists, but often issues with access and completeness of lists arise.

#### Outlook

RCRC Movement and a group of interested practitioners will jointly work on guidance and tools to help developing forecast-based cash-assistance and to start building up a network of FbF cash implementers.



#### Facilitators:

**Lisa Williams** *American Red Cross* 

Mareike Tobiassen German Red Cross



6<sup>th</sup> Global Dialogue Platform on Forecast-based Financing



#### Panelistas:

**Dr. Thorsten Klose**, Desk Officer, German Federal Foreign Office **Dr. Maarten van Alst,** Director, Red Cross Red Crescent Climate Centre

**Dr. Nicola Ranger,** Senior Disaster Risk Financing and Insurance Advisor, DFID

Florence Pichon, Senior Research Officer, ODI Davaajargal Batdorj, Director of Programmes and Operations, Mongolian Red Cross Society



#### Facilitation:

Pablo Suárez Red Cross Red Crescent Climate Centre

Kara Siahaan IFRC Geneva

→ The session was divided into two main activities: short intro-courses and a panel discussion. The objective was to introduce the concept and instruments of disaster risk financing and develop a common understanding on what is needed for anticipatory risk financing and how to promote it within the climate, development and humanitarian sectors.

# First, short courses were organized to familiarize the participants with the basics of:

- Forecast-based Action by the DREF, presented by Sune Bulow, Manager of the DREF at IFRC
- Social Protection for preparedness or early response, presented by Federico Spano, Social Protection and Resilience Specialist at FAO
- African Risk Capacity Replica Insurance, presented by Clare Harris,
   Technical Lead, Disaster Risk Financing from the Start Network
- Fundamentals of Disaster Risk Financing by Nicola Ranger, DFID

#### Then...

Experts then led a panel discussion and presented their point of view on how to better prepare for both climate and disaster risk, reduce humanitarian impacts, and assist vulnerable populations to recover faster. They expressed that financing is the "glue" to assure that early action is taken ahead of a disaster based on scientific decision-making process.

#### Dr. Thorsten Klose

Federal Foreign Office

Mr. Thorsten Klose laid out how in an increasingly complex environment of disaster risk financing coordination between the humanitarian and development is required to enable the financing of early action. The humanitarian sector is a cornerstone of support to government and development aid financing. Dr. Klose also recommended that different approaches of risk financing be kept separate so that all approaches are not mixed up, particularly in the light of FbF. Ultimately, humanitarian financing is obligated to human needs and not political considerations.

#### Dr. Maarten van Aalst

Red Cross Red Crescent Climate Centre

Maarten van Aalst affirmed the need to integrate the humanitarian mandate into global climate finance discussions and to leverage the anticipatory approach. He explained that anticipatory action is driven by forecasts and by vulnerability analyses, while global climate finance discussions are often driven by politics. Van Aalst also mentioned that humanitarian actors should promote a focus on the most vulnerable.



#### Dr. Nicola Ranger

Department for International Development, United Kingdom

Nicola Ranger talked about motivating factors in setting up financing for risk reduction, preparedness and adaptation. She explained that inaction in anticipated disaster can often be explained by human nature, and that donor money for post-disaster activities tends to distort incentives for anticipative action. She expressed confidence that FbF and the DREF are able to change this system through creating certainty that there will be financial resources to act early. Mrs. Ranger highlighted a lack of determination with regards to taking responsibility for preparedness activities, and also encouraged the audience to challenge donors to fund more preparedness mechanisms.

#### Florence Pichon

Overseas Development Institute, United Kingdom

Florence Pichon outlined four challenges faced by preparedness actions: First, funding for preparedness is still vastly inadequate for addressing the existing challenges. Second, contingency planning needs to be improved, and third, risk information must be monitored more efficiently. Fourth, the capability to access funding should not solely depend on leadership and monitoring capacities.

#### Davaajargal Batdorj

Mongolian Red Cross Society





#### Return on Investment for Forecast based Financing

The Return on Investment (ROI) WG was led by FAO and WFP covering two studies completed by each organization with the goal to provide both qualitative and quantitative benefits of investing in Forecast-based Financing. In Nepal, WFP assessed the benefits of FbF over a 20-year period against a scenario without FbF investment. The Nepal ROI study found significant gains from FbF, even when contrasted against the investment cost and time needed to scale-up. It identified cost savings, time savings in response, carbon savings, and improved qualitative indicators such as appropriateness, effectiveness, coverage and coordination of response. In terms of quantitative indicators, the report from WFP on return on investment of this South Asian country states that while the response cost without investment costs 32 million US Dollars, the scenario with investment costs 10 million US Dollars, a savings of 22 million US Dollars. Those numbers resulted from the implementation of an FbF-project in 14 flood-prone districts which benefited around 175,000 affected people.



Facilitator:
Jesse Mason
WFP

In contrast, the FAO study looked at the direct benefits gained by beneficiaries contrasted against a control group at household level. Similar to the WFP study, both quantitative and qualitative impacts from acting early were assessed in Mongolia, Sudan, Kenya, and Madagascar for a variety of natural hazard impacts. In all four of these study cases, evidence for investing in FbF was clearly supported in both quantitative and qualitative indicators with respect to cost savings and reduced impacts to livelihoods. Together, the two evidence-based reports are contributing to a much needed area of work in advocating for FbF and creating the evidence for continued support in this innovative approach.

# A new guide to Trigger Methodology for Forecast based Financing

This session included the presentation of two Red Cross teams showing how the new trigger methodology for FbF can be applied. This included a demonstration of how risks were analysed to identify the likely impacts of a forecast, and what kind of actions would be relevant for those impacts. Then, the teams showed how they combined forecasts with vulnerability and exposure information to select the most at-risk districts for intervention. This was followed by a panel including UKMO, the Nepal Department of Hydrology and Meteorology, and the Emergency Operations Centre of the Dominican Republic. Panellists discussed the use of Impact-based Forecasting for FbF and the mandates of organizations working together on this. The audience shared stories and asked questions about the combination of forecast hazard, vulnerability, and exposure data.



#### Facilitators:

Catalina Jaime RCCC

Erin Coughlan de Pérez RCCC

# Harnessing Humour & Art for FbF Innovation and Consolidation

How can we capture the attention and the imagination of potential partners in Forecast-based Financing? FbF requires creative approaches to boost knowledge and dialogue. The Climate Centre has been exploring two unconventional approaches to engage people and organizations: humour and art. In this intensely interactive session, participants experienced communication that makes people smile, reflect, and wonder. How famous works of art that evoke and channel brainpower and emotions can relate to anticipatory humanitarian work was the theme of exploration. Furthermore, the group discussed the theory behind the predictable, proven power of humour to reveal gaps, how to improve communication, enable bonding, and enhance problem solving. The facilitator presented recent creations developed for FbF, including heatwave flashmobs, DataSculptures, a session on humour and disaster preparedness with NASA, and DataFashion (including an FbF raincoat that warns people of imminent storms, and an El Niño skirt). Importantly, the wrap up consisted on additional ideas to mobilize the power of humanity to enhance anticipatory funding while having serious fun.



Facilitator:

Pablo Suárez RCCC



# Early Actions: Why do we always end up with Chlorine Tablets?

During this working group, the participants were asked to develop a strategy and decide the most relevant actions that could be taken in Mozambique housing being affected by cyclones happening on the coastal area of that south-eastern African country. After reviewing the information provided, the group was divided in three teams and discussed their ideas. The following discussion yielded three conclusions:



#### **Facilitators:**

Arielle Tozier de la Poterie German Red Cross Mozambique

Stefanie Lux German Red Cross

- 1. The selection of early actions is not as simple as identifying actions and applying criteria across the board. It is an iterative process. Actions may be identified, considered, but eventually eliminated because they are not feasible. It is a process of gradually narrowing actions based upon the context.
- 2. It may be helpful to pre-screen the hazards selected for FbF in each country to see if there are early actions that meet a real need and make sense for the Red Cross (or other organizations).
- 3. There is a need to work with other stakeholder to establish support and determine where and how early action can fit within existing disaster management structures and complement existing longer-term preparation and response.



#### The FbF great debate: Integration or Independent?

Four experts formed a panel discussion in which they shared their views on integration and separation. For the integration, two experts discussed the importance of interagency cooperation, which is seen as a key to make Early Action more visible. Advocacy and communication were also essential points to deal with donors and governments and the decrease of project costs by sharing information. The coordination between humanitarian action and development was also emphasized. In this line, another panelist offered as example the integration of FbF in the Philippines and the close coordination that the Philippines Red Cross has with the national government. Two other panelists argued for independence, citing that FbF currently maintains a strong momentum and has funding. Furthermore, they also stated that coordination creates complex layers of bureaucracy and it is costly and inefficient with regards to time. They added in closing that coordination limits independent innovation.

Important points were debated by the participants, such as the flexibility towards uncertainty, the use of existing coordination mechanisms, the changing nature of FbF until today, the use of synergies rather than integration, and the confusion of FbF with preparedness for emergency response, which suggests that frequently a full change of mindset has not yet occurred.



#### Facilitators:

**Greg Grimsich** *UN OCHA* 

Alexandra Rüth German Red Cross Afterwards, the group was divided into two teams. One discussed the coordination of FbF at the national level in which it was recognized that it leads to ownership, encourages a new mindset (Active to proactive), is context-based, and let to initially control the process. One challenge identified was instability within government system.

#### The main findings discussed were:

- FbF is transitioning out of the pilot phase and therefor it is important to increasingly collaborate with government and national partners and integrate the FbF approach where appropriate in national planning.
- The importance of collaborating with national counterparts in government with knowledge and data in regard to risks and vulnerability which aid in the design of an EA/FbF programme.
- Integration helps ensure greater degree of ownership of the FbF EA project from community to local and state government bodies, (Integration means ownership by beneficiaries).
- There are no one-size-fits-all solutions, so where integration into national processes may be important for success in one setting it may not apply in another setting (some conflict settings or where state structures are weak, for example). Each FbF/Early Action programme should be tailored and context specific.
- When considering scaling up at national level or even regional level (across border) there will be increasing need to engage with government bodies. (What experiences are there with regional approaches to FbF?)
- Challenges:
  - Mind-set. Paradigm shift from being reactive to proactive humanitarians. Many at national level are still reactive and not yet ready for more proactive pre-event early action approaches.
  - In some circumstances, unstable government staffing. When introducing a new programme to government counterparts, it is a fact that great personal changes in the next election or other political/security processes can occur.
  - Another challenge is the quality of local/national forecasting bodies and in some cases there may be a need to consider outside private sector forecasting systems/bodies or other origins.
  - The importance of level expectations regarding how FbF/EA will be integrated – what is expected of the government counterparts, what information government will need to have, how is targeting going to take place, etc...
  - The need to consider security and safe access for staff and project implementation when designing EA programmes.



The second group discussed the interagency processes around the set-up and implementation of a FbF system:

#### Inter-agency integration

- There is a need to define what criteria are to determine if something is FbF/EA vs. preparedness or response. A common definition will help FbF practitioners agree on what evidence there is that EA/FbF is effective and how it works.
- Recognize that there are inter-agency mechanisms on Risk such as the EWEA analysis work stream of the IASC reference group, however, this group focuses on risk and does not look further. The EWEA group provides an impact-based forecast but the analysis does not identify triggers for early action. This gap should be addressed.
- Contingency Planning provides risk analysis but does not go so far as identifying triggers for early action. This inter-agency planning mechanism before an event is an opportunity for humanitarian partners to collectively consider triggers and potential early action priorities.
- Not acting maybe you have information regarding a risk but if you do not yet have a determined trigger or predefined thresholds for early action then it will be more difficult to act collectively in an effective way. By taking up a more FbF/EA approach, a country team can avoid this scenario (which can lead to no action or delayed action).





→ During the Open Space session, participants decide themselves what they consider important to discuss. Everyone was free to pitch an issue in the plenary. The objective being to bring people together, share knowledge and propose ideas, plans, programmes, and actions.

#### Cash Transfer in Preparedness and Early Action

Unfortunately, there was no CTP expert present in the session who had actual experience in implementing CTP in early action to answer the questions the group was discussing. If you have experience and can answer some of the questions, feel free to get in touch with Robert.



These were the questions the group had on Cash Transfer in Preparedness/Early Action:

- How is CTP in preparedness different from CTP in response?
- How much did each beneficiary get and how was the amount determined?
- How the cash was distributed and were there challenges?

#### FbF and Evidence

The group discussion was focused on why is it important to work on evidence for FbF. First of all, it is essential to show how FbF works and to demonstrate that the processes set-up functions properly and, most importantly, to document what difference it makes to people's lives. The evidence should lead to more informed donors and partners and help to improve FbF programming by continuously learning and adapting the methodology. The ideal way to do so is through mixed-method designs post-event/EA, first with explorative qualitative processes, followed by surveys, using control groups and past events as reference. Forming a community of practice (FbF M&E), to share resources, to develop general guidelines, and to consider development of a research network with a higher research agenda is needed.



Hosted by:
Patrick Bolte
Consultant



#### Copernicus - Emergency Management Service

The session presented the free and open services and products available under the Copernicus Emergency Management Service (CEMS, https://emergency.copernicus.eu/), potentially useful for the data analysis side of FbF projects. The Copernicus Emergency Management Service (EMS) provides information for emergency response in relation to different types of disasters, including meteorological hazards, geophysical hazards, deliberate and accidental man-made disasters, and other humanitarian disasters; as well as prevention, preparedness, response, and recovery activities. The CEMS is composed of (1) an on-demand mapping component including the provision of rapid maps for emergency response as well as risk & recovery maps for prevention and planning; and, (2) the early warning and monitoring component which includes systems for floods (European Flood Awareness System - Global Flood Awareness System), droughts (European Drought Observatory - Global Drought Observatory), and forest fires (European Forest Fire Information System - Global Wildfire Information System).



#### Hosted by:

**Vera Thiemig** *JRC European Commission* 

**Liz Stephens** *University of Reading* 



#### FbF by the DREF Q&A

The discussion in this session was focussed on the 4 main issues raised by National Red Cross Red Crescent Societies:

- The relevance of FbA by the DREF: concerns were raised regarding the relevance of issuing FbF through the DREF. The Climate
  Centre and IFRC team explained that it is going to be experimental
  and if it succeeds then the combined approach will be scaled up.
- The delays in the triggering phase since normal DREF operations are plagued with enormous delays that compromise the efficiency of DREF operations. The IFRC team believes that signing a Memorandum of Understanding (MoU) with a 5-year duration in advance will mitigate the possibilities of long delays.
- Default in strengthening HNS capacities, through FbA by the DREF, IFRC is trying to mobilize one NSs funds to try to help another one. By seeking to play an intermediary role between them and not letting them work directly and learn from one another, IFRC is undermining the prospect of peer-to-peer learning.
- EAP validation: the concept of FbA by the DREF requires that each EAP will be validated by the DREF team in Geneva. National



#### Hosted by:

Nouhoum Maiga Mali Red Cross Society societies therefore have to develop the EAP following the guidelines provided by the IFRC and the Climate Centre team. Once the EAP is validated, a MoU with a 5-year duration will be signed between the NS and IFRC. Most participants were in agreement with that process and believed that it is an opportunity for NSs to have quality EAPs.

One of the main conclusions of the session is that the FbA by the DREF concept needs dissemination within National Societies so they can better understand its implications and make confident use of this IFRC tool.



# Money Issues: The Role, Use and Application of Private Capital in FBF

Private capital can be structured to fund FbF and other early action. As an example, the Catastrophe Bonds (an analogous financing tool) have an annual volume around \$50bn. The ethics and morality of using private capital to support humanitarian work was discussed, as was conceptions of the greater good and whether, or how, it was different from accepting donations from corporates or governments, which in itself can often carry enormous ethical questions. It was also debated whether it is acceptable to make a profit from humanitarian activities. Subsequently, the current sources of FbF programmes were reviewed and, in considering the funding required in the future, the group agreed that a significant gap exists. It was therefore recognized that private capital will be needed to fill that current gap. Finally, the group talked about the nature of the available funding for FbF and whether relying on donation/institutional donor funds to fund FbF were sustainable or scalable. The group did not present any tangible outcomes.



#### **Past Collaboration Possibilities**

The group talked about historical examples of FbF in action and examples of success to show what good collaboration looks like. They used examples from Vietnam, Mongolia, Philippines, Ethiopia and Peru as outline examples of best practice. We will take these conversations further to collaborate operationally to act early.



## Roadmap - What is next?

The last discussion from the Dialogue Platform sought to find new ways of working by asking what comes next and where are we going. Exhorting the participants to give thought to the future of the Forecast-based Financing mechanism and to classify their ideas according to "I will do..." and "Someone should do..." until the next Global Dialogue Platform.

## | \/\/|| |

Research on how early action can bring long term benefits

Organize Dialogue Platforms at country level in order to build interest on FbF

Improve the lead time of forecasting

Connect and use available data for improved service

Support to develop cash guidelines for FbF

Extend the implementation of FbF to NS country-wide

Research approaches to decisionmaking under uncertainty

Continue to communicate formally and regularly with other financing mechanisms

Work with RCCC/DFID to develop research/capability roadmap

Develop case studies on my work

Simplify DREF by FbF mechanisms

Communicate better with communities

SOMEONE SHOULD

Fund a research proposal to consolidate the lessons on FbF in different contexts

IFRC should conduct more trainings on FbF by DREF

Do policy coordination and methodology mainstreaming

Make sure there is a global Focal Point that facilitates cross regional learning and a similar structure at local and regional level Promote Early Action Financing Mechanisms within national governments

By 2019, should present collaborative anticipatory action between the Red Cross and the Start Network

Conduct an external evaluation to show evidence on FbF

Collaborate close to scientists and research community

→ If you want to be that "someone" who can do one of the above, don't hesitate to get in touch!



Harmonisation of vulnerabilites/ risk data

## Feedback



"I really enjoyed getting to know the vast variety of issues related to FbF to get a better understanding of the complexity of the concept."

> "I liked the very dynamic moderation and hearing more about different people's work – as well as having such international participation."

"The Dialogue Platform is very informative, giving lots of ideas and opinions that make FbF work and function at different levels."

"I liked the format of the event, the balance between formal and interactive sessions and time for networking."

"The collective will and momentum of all participants to grow and mainstream FbF is fantastic!"

"I like the passion from everyone to push this agenda, the warm welcome I got as a newcomer and non-Red Cross member as well as the diversity of participants."



6<sup>th</sup> Global Dialogue Platform on Forecast-based Financing

# DAY THRE



# Using risk data for early action: Case studies, lessons and opportunities

→ How are we (the FbF community) using risk data in the framework of the new trigger methodology? – What are the opportunities and limitations of the current risk analysis process?

Van den Homberg started the session with an overview of the challenges and opportunities of data preparedness for informing where and when early action should take place and why. The Climate Centre, German Red Cross and 510 developed A guide to trigger methodology for FbF to which many other organizations also provided technical feedback. The five steps of the methodology (see Figure 1) are also reflected in the Early Action Protocol. The essential first step is an analysis of risk. Here, especially data on vulnerability and historical impacts is required at sufficiently disaggregated level. The short-term hazard forecast can subsequently be superimposed on the hazard, exposure and vulnerability layers to predict (humanitarian) impact. Apart from superimposition, more advanced statistical modelling is possible. Resources need to be balanced in accordance with what is possible given available data and what is an acceptable impact forecast.



#### Hosted by:

Catalina Jaime Sanchez
Climate Centre

Luke Caley IFRC

Marc van den Homberg 510

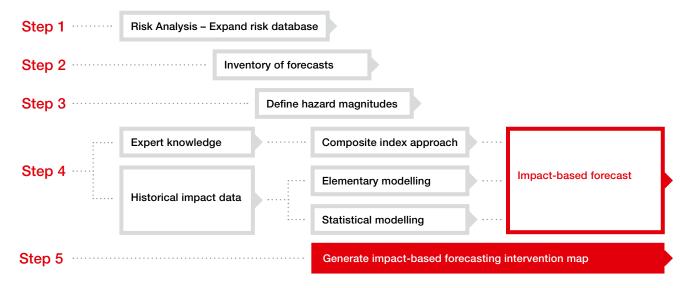


Figure 1. Concept of Impact-based forecasting showing the five steps and the phasing.

Subsequent ignite talks addressed the opportunities of existing information management tools/methods/initiatives in supporting impact-based forecasting. The question posed was as follows:

What are the existing tools/methods/initiatives in information management that would be useful to improve the quality of the risk data used for the trigger models?

#### Missing Maps

Melanie Eckle, Hot Board and Heidelberg GIS Unit

Eckle from Humanitarian OpenStreetMap and Heidelberg Institute for Geoinformation Technology/GIScience showed cutting edge developments in volunteered geographic information such as the machine-assisted human mapping tasking manager, machine learning for quality in mapping and validation, Digital Elevation Model data into OSM 3D, as well as adding attributes on housing quality to already existing maps, carried out by local volunteers on the ground.

#### GO Platform

**Luke Caley,** International Federation of Red Cross and Red Crescent Societies

Caley, Lead for Information Management at the IFRC, introduced GO (https://go.ifrc.org/), a web platform to channel emergency operational information for the Red Cross Red Crescent network. GO channels information on emerging crises from National Society field reports and automated notifications from humanitarian partners, as well as provides a way to organize key information from on-going emergency operations, including situation reports, surge deployment alerts, contacts, and dashboards.

#### 3 Pronged Approach tool called 3PA

#### William Vigil, World Food Program

Vigil presented the 3PA Approach, which consists of an initiative to strengthen the effectiveness of interventions in food security, livelihoods, emergency preparedness and integrated territorial development for effective disaster risk management. ADAM (Automated Disaster Analysis and Mapping system) is another tool that generates automatic maps with wind speed projections and possible physical and population area to be impacted before a hydro meteorological hazard strikes. WFP also incorporates the reactive social protection in emergencies through the management of programs and capacities of national social protection systems to serve the affected population.

The 3PA tools guide the emergency operational plans of local and national authorities due to its ability to target quickly and precisely. Integrated Context Analysis (ICA), Livelihoods Seasonality, ADAM and Participatory Strategic Planning, with a Reactive Social Protection to Emergency perspective, are useful tools for early response preparedness to extreme hydro meteorological or other events. These tools would be useful for the country's National Disaster Risk Management System for early warning preparations for extreme hydro meteorological events, as well as for development plans and multiple-cause emergencies.

#### Start Fund Crisis Anticipation Window

Sarah Klassen, Start Network

Klassen from the Start Fund Crisis Anticipation Window explained why an action grant of up to £ 10.000 was created. She reported that it was disbursed nine times since March 2017 and covered the development of quality anticipation alerts for various hazards: conflict & displacement (such as for anticipating violence in Kenya in July to November 2017), volcanic eruptions and drought. Existing challenges are how to ensure decision makers can use the risk information and how to communicate uncertainty, which is unavoidable when data is gathered in a short time period.

#### Population Movement Data in Disasters

Helen Welch, American Red Cross

Welch showed how anonymized population movement data, as collected via a cooperation with Facebook, can help in understanding where people move from/to and when they make that move during a disaster, by using reconnecting families during the Hurricane María in Puerto Rico as a use case.



# Un-solving real case challenges: the Hackathon and the way forward

- → The objective of the session was to find solutions for four different real-life challenges
- identification of recipients for early action for cyclones in the Philippines,
- using dynamic vulnerability information in Bangladesh,
- using early flood warning for FbF in Nepal, and
- understanding gaps and opportunities in implementing FbF when targeting SMEs.

Some of the conclusions of the groups were:

Philippines: Focus on community actions rather than household actions and involve local government and communities for the selection of recipients.

Bangladesh: Develop a data management structure for the local Red Crescent chapters and create a regional technical working group on data availability and collection with governments and key stakeholders. Nepal: Use a mapping approach with satellite imagery and mapathons to create a building footprint that can be updated with local data from sample surveys in villages.

FbF for SMEs: Their solutions comprised a set of possible questions to ask during a feasibility study. E.g. "would forecast based action be collective or individual?," "what are businesses already doing for early action?," and "how do hazards affect the value chain?"

## A클카

#### Hosted by:

**Annegien Tijssen** *Deltares* 

Marc van den Homberg

### **Understanding Forecast science**

→ 'Is this a "good" forecast?' – This session taught forecast skill and verification in an interactive way.

Forecast quality can be assessed by their consistency, value and quality. Forecasts are consistent when they match what a forecaster thinks. Forecasts have a good value if they are specific (example: forecast a sales number instead of a statement such as "will sell well), contain some uncertainty (example: Laos will not get Olympic Gold in downhill skiing) and if they contain value, i.e. if they are salient. The quality of a forecast can be determined when the forecast expresses the correct thing, for example forecasts the winner of a sports match or the exceedance of a flood danger level. Probabilistic forecasts also express probability; this should be reliable, so that the historic track of the forecast matches the stated probability. Additionally, forecast should be sharp, this means be distinguishable from the quality offered by historical averages - such as climatological statistics.





#### Hosted by:

Erin Coughlan de Pérez RCRC Climate Centre

(based on Simon Mason, IRI)

# **IMPRESSIONS**











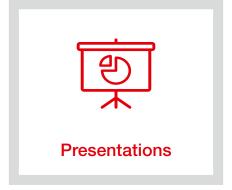


# LINKS TO DOCUMENTS

Presentations, photos and information from the Global Dialogue Platform on Forecast-based Financing in Berlin.

#### Click the icons to visit the websites.





For more information about the FbF projects of GRC and the setting up of an FbF project, please visit our website and the FbF online manual:





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