



Forecast based financing for food security

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Disaster risk financing has the potential to increase welfare, reduce exposure to hazards and promote mitigation prior to a shock. Therefore, timely ex-ante cash transfers can be more cost-effective than relying on ex-post disaster relief to respond to food insecurity when leveraged by a credible plan, pre-agreed triggers for action, and pre-arranged financing. To ensure adequate financial action one needs to have the right information to guide fast and evidence-based decision-making. Key enabling aspects are an understanding of the potential/upcoming food security impact, the resources needed to address it, and an insight into the associated costs, beneficiaries' preferences, and lead times. A lack of evidence and information exists to support such hypothesis.

As the winner of the recent Challenge Fund Round 3 – an initiative of The Global Facility for Disaster Reduction and Recovery, the World Bank, the UK Department for International Development, and the Centre for Global Disaster Protection – the Forecast-based Financing for Food Security (F4S) project proposes to fulfil some of these gaps. Therefore, the F4S project aims to generate evidence to better guide forecast-based cash transfers in three pilot areas in Ethiopia, Kenya, and Uganda by:

- Developing an impact-based probabilistic food insecurity forecasting model using Machine Learning algorithms and datasets of food insecurity drivers;
- Collecting local evidence on food insecurity triggers and information on individual preferences on key design elements of cash transfer mechanisms;
- Evaluating the cost-effectiveness of different cash transfer mechanisms;
- Exploring the potential channels of operationalization, to disseminate the knowledge gained within the previous tasks and to make a first step towards operationalization.

While aligning its activities and seeking for synergies with ongoing efforts in the region, the F4S project milestones are ultimately linked to the goal of promoting and supporting a shift towards evidence-based ex-ante humanitarian aid. In result, we hope to create a deeper understanding of how forecast information could be routinely used as a basis for financing early action for food insecurity risk.