

International Federation of Red Cross and Red Crescent Societies



Forecast-based Financing

Scoping alternatives for early action in the Pacific



Dr. Olivia Warrick warrick@climatecentre.org



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CLIMATE CEN





FbF: an anticipatory humanitarian system

Many humanitarian actions could be implemented in the window between a forecast and a disaster.





Why FbF?

Key bottlenecks in 'Early Warning Early Action':

1. Lack of **funding** available to be used in window between an early warning and before a disaster



2. Lack of **operational protocols** for mobilizing action in this window

3. Acting early is often more **cost effective** then waiting to respond



Methodology

Low disaster probability = 'low regret' actions

	Three month	One month	Weekly	ACTIONS
Low	 El Nino forecasts: Sea surface temperature anomaly: 2°C (indicates El Nino) 10% probability that El Nino will be 'extraordinary' Seasonal rainfall forecasts: 20% probability of top 10% of rainfall 40-50% probability of top 20% of rainfall 	Sub-seasonal rainfall forecast: • An anomaly of 4- 6mm/day over the coming month	\$\$	 SOP 1: Community volunteer training Sanitation and health awareness Clean community campaign SOP2: Train communities in early warning and evacuation

Methodology

Higher disaster probability = 'higher regret' actions

	Seasonal	Monthly	Weekly	ACTIONS
High	 El Nino forecasts: Sea surface temperature anomaly: 3°C (indicates El Nino) 20% probability that El Nino will be 'extraordinary' Seasonal rainfall forecasts: 40% probability of top 10% of rainfall 70-100% probability of top 20% of rainfall 	Sub-seasonal rainfall forecast: • An anomaly of 10+mm /day over the coming month	Flood forecast: • 68% probability of exceeding the 10 year return period flood threshold of GloFAS* model Medium-range rainfall forecast: •> 30mm/day absolute values	 SOPs 3-6: Clean drinking water First aid kits Assist district government in fumigation, hygiene kits, sanitation Strengthen vulnerable houses SOP 7 Building temporary houses Evacuation

- Where activities/distributions take place
- Starting point for evacuation

Scoping FbF in the Pacific

- Fiji, Papua New Guinea, Solomon Islands:
- What's the forecasting capability for various hazards?
- What's the risk profile for each hazard in different regions?
- What early actions could be taken within an SOP and do they add value?
- What's the interest and buy-in of key institutions and what's their absorptive capacity?
- Are there existing programs into which FbF could be built (e.g. DRR or Early Warning Systems)?







Use of Forecast-Based Financing in the Pacific: A Scoping Study Australian Red Cross and Red Cross Red Crescent Climate Centre August 2016





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Scoping FbF in the Pacific

Hazard:

FbF for drought/dry spells is highly feasible
FbF for tropical cyclone more problematic
Flood forecasting ability currently limited

Actions:

- Inclusion of institutional-level actions e.g. activation of multi-agency partnerships
- Many community-level options based on traditional knowledge
- Remoteness an important consideration

Institutions and partners:

Strong national and regional interest
 Clear need to embed FbF in a national government system
 Clear need for mult-agency implementation partnerships at country level