Forecast-based Financing (FbF)

From Global Pilot Projects to Indonesian Policy Context

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I. Background

- Early Action: opportunity to reduce human casualties and save assets, cost lesser money
- Hydrometeorological hazard can be predicted
- Require Good Forecast
  - Good forecast for flood & tropical cyclone (1-3 days), drought (several weeks)
- List of Early Action: activation emergency preparedness team, socialization to community, activation community team, mobilization heavy equipment and safety tools, monitoring EWS, water infrastructure, distribution first aid kit (and food), distribution of clean water
- Early Action is not Preparedness/DRR
Forecast–based Financing (FbF):
A mechanism that uses climate and weather forecasts to enable timely disbursement of funds to implement advanced preparedness actions before a potential disaster happens and early response intervention.
I. Background...(2)

Challenge and Required Competence:

- **Forecast Capability**: on various forecast product and lead-time
- **Policy/Governance**: scope of DM, financial availability, institutional arrangement
- **Organization Capacity**: commitment, skilled human resource, knowledge on forecast, available risk information, access and understanding forecast, EAP.

II. Initiative of Red-Cross Red-Crescent Society

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II. Initiative of Red-Cross Red-Crescent Movement

- Since 2007, RCRC movement has been developing this concept; pilots of the FbF mechanism in more than 15 countries.
- The German government has supported several FbF pilot projects (2015-2019).
- In Haiti, Peru, Uganda, Zimbabwe, Bangladesh, Philippine, Nepal
- On drought (El Nino), flood, tropical cyclone, heat-wave
- Case of Bangladesh:
  - Cyclone forecast 2 days before hit
  - hit on different anticipated villages
  - cash transfer during lead time
- Outcome of the Pilots: EAP, learning and best practice, revised-threshold criteria
- Forecast-based Financing pot established within IFRC (2018)
Early Actions

- **Hygiene Kit**
- **Mosquito nets**
- **Chlorine pills and 20 liters water containers**
- **Community first-aid kit**

**SAT**
- Community early alert

**CTP (Cash transfer program)**

**Early actions in the Amazon Region**

- Raise awareness on health and sanitation
III. Indonesian Context

a. Financing Aspect

- Disaster Law Year 2007: Early Action /Emergency Preparedness ("Siaga Darurat") and its funding is included
- Funding from State Budget secured at National DM Agency (BNPB) for all stage of disaster (pre, during, after).
- The funding can support provincial government and district/city when requested.
- MoHA Decree: local budget for disaster management activities during and after disaster only
- Two stream of supervision on DM activities at sub-national level
III. Indonesian Context...(2)

b. Institutional Arrangement

- Decentralization policy: local DM Agency part of provincial, district, city government
- Role of MoHA and BNPB to DM activities at sub-national level:
  - MoHA provide guideline and supervision on governance of sub-national government (incl. spending using local budget for DM activities)
  - A guideline could be customized in 507 districts and cities
III. Indonesian Context...

**c. Reference for Declared Emergency Situation**

- Early Action (Siaga Darurat) on flood, land-slide, drought, forest fire, cyclone have been declared by provincial, district and city government.
- Forecast Information
  - Based on seasonal forecast (period of rain season) and reported early impact at city/district level: West Java, Central Java, Jogjakarta Province
  - Based on weather forecast (rainfall quantity): Jakarta Province and Makasar City
- Stated in contingency plan and governor/major decision
- Spending using emergency budget require declaration
- Stratified declaration
- Common Early Action: coordination among government unit, socialization to public, activation of emergency team, mobilization of heavy equipment and tools, logistical and (when needed) distribution of first air kid, hygiene supply and foods.

**Jakarta Case:**

Decided (in contingency plan Sept 2016) that emergency preparedness for **10 days** on February 2 to February (peak of rainy season). Precipitation level on this period should reach **100 — 200 mm/ten days**, that makes water level at three observation gates on Alert Level 2 and 1, and also sea level at Observation Post reach 200-250 cm.
III. Indonesian Context...

d. Issues

- MoHA Decree: Local budget (Un-expected Expense) is for during and after disaster
- Rely on national budget (from BNPB)
- One month process at the fastest
- Some province declared emergency preparedness status for flood, landslide and drought based on seasonal forecast.
- Village level impact vs provincial/district level un-declared emergency (Jakarta Case)
- Decentralization: National-level Guideline to be customized at Sub-National → require a large number of policy dialog to sub-national government

Minister of Environment and Forestry supported revision of MoHA Decree to allow local budget to fund emergency preparedness
III. Indonesian Context...(6)

d. Opportunity

- Village Fund since 2015
- MoHa and Mo Village Development: eligible for disaster management activities
- MoHA Decree 2018: require Major and Regent Decision to define and develop criteria for “disaster management”, “urgent situation’, “emergency condition” and “vulnerable group”
- Opportunity to fund emergency preparedness/early action
- Opportunity to fund Village-level Emergency Respond
- CSO to build dialog and support district and city to develop the criteria
IV. Next RCRC Agenda in Indonesia

1. Include FbF approach into Zurich Flood 2.0 Program and Partnership for Resilience (PfR) Program.
2. Develop Long List Distinct and Needed Early Action
3. Encourage adoption FbEA and EAP
5. Encourage revision of MoHA Decree on Local Budget for DM.
Thank You...!!

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