



Regional Workshop on Framework and Toolkit Development

Piloting Anticipatory Action for Floods in Cambodia

Peter Khallil Ferrer (RIMES)

27 November | Bangkok, Thailand

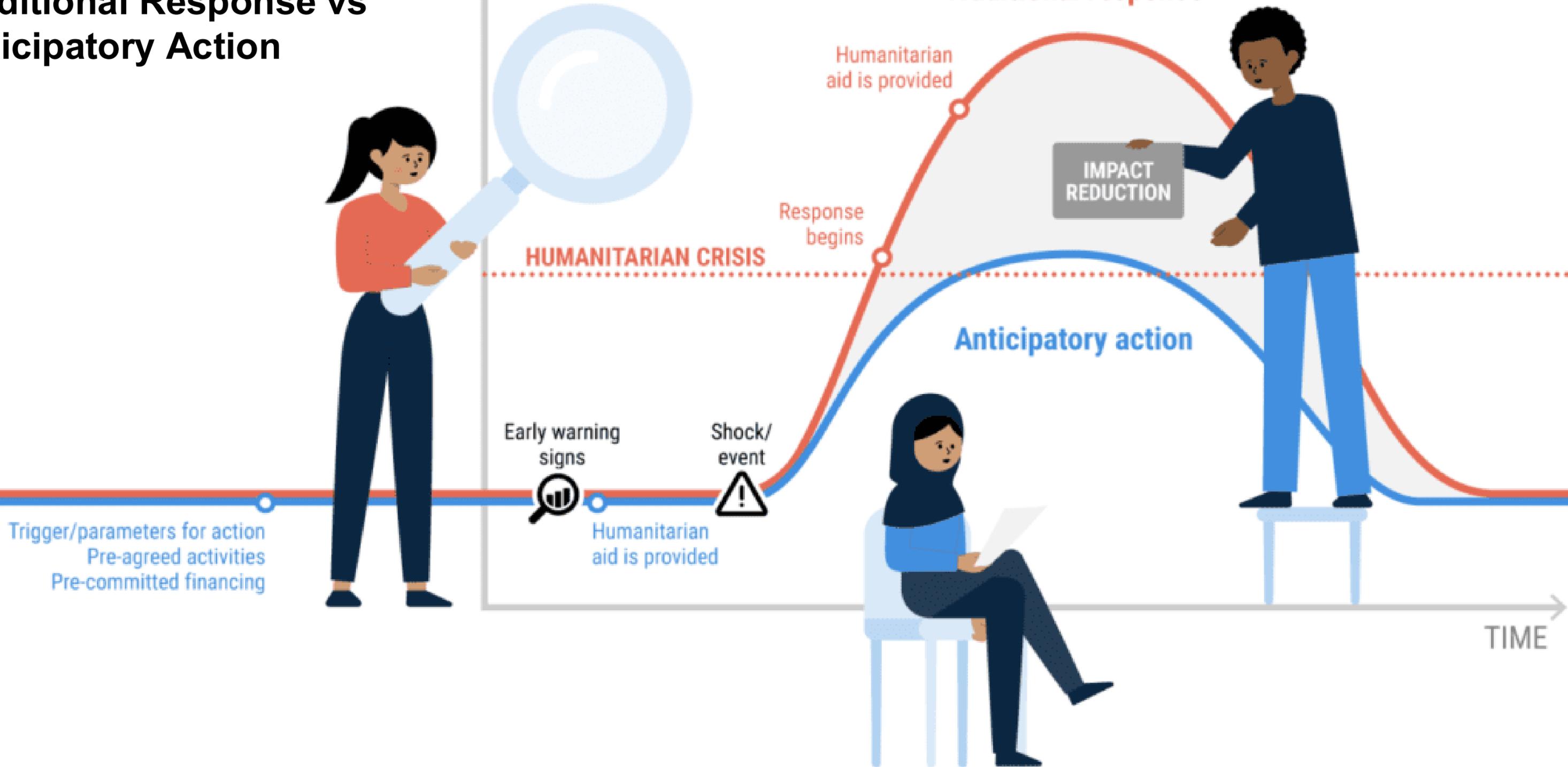
Background

- An assessment was carried out under the Climate Risk and Early Warning Systems (CREWS) project in 2023 in collaboration with WMO, MOWRAM & RIMES to better understand the state of hydrometeorological forecasting and early warning system
- There was a mid-term recommendation on co-developing thresholds and triggers for impact-based forecasting, warning and advisory to enhance the Forecasting, Warning and Advisory services.
- WFP Cambodia CO partnered with RIMES to strengthen EWS in Cambodia and pilot Anticipatory Action for floods and in close cooperation with relevant government institutions.

Traditional Response vs Anticipatory Action

HUMANITARIAN NEEDS

-  They are time bound
-  They have a protective intent
-  They rely on pre-agreed and risk-informed triggers



Trigger/parameters for action
Pre-agreed activities
Pre-committed financing

Early warning signs

Shock/
event

Humanitarian aid is provided

Humanitarian aid is provided

Response begins

IMPACT REDUCTION

Traditional response

Anticipatory action

TIME

Anticipatory Action in the Disaster Risk Management Cycle



Case studies from different AA found that the investment in AA returns 2-14 times higher in terms of risk minimization and reducing losses.

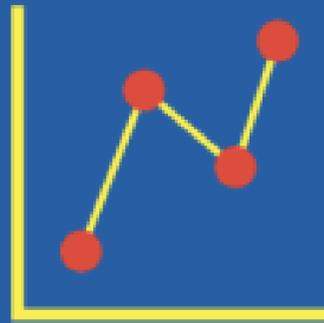
2-14\$



Return of Investment



Buildings Blocks of AA



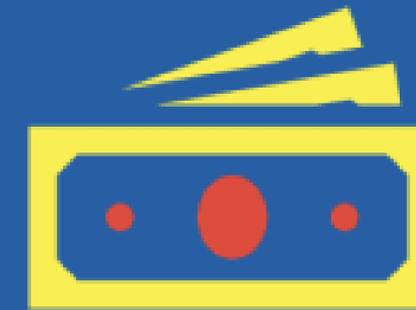
Risk information, forecasting and early warning systems

- Weather forecasts
- Seasonal outlooks
- Impact analyses
- Situational monitoring
- Pre-disaster risk assessments



Planning, operations and delivery

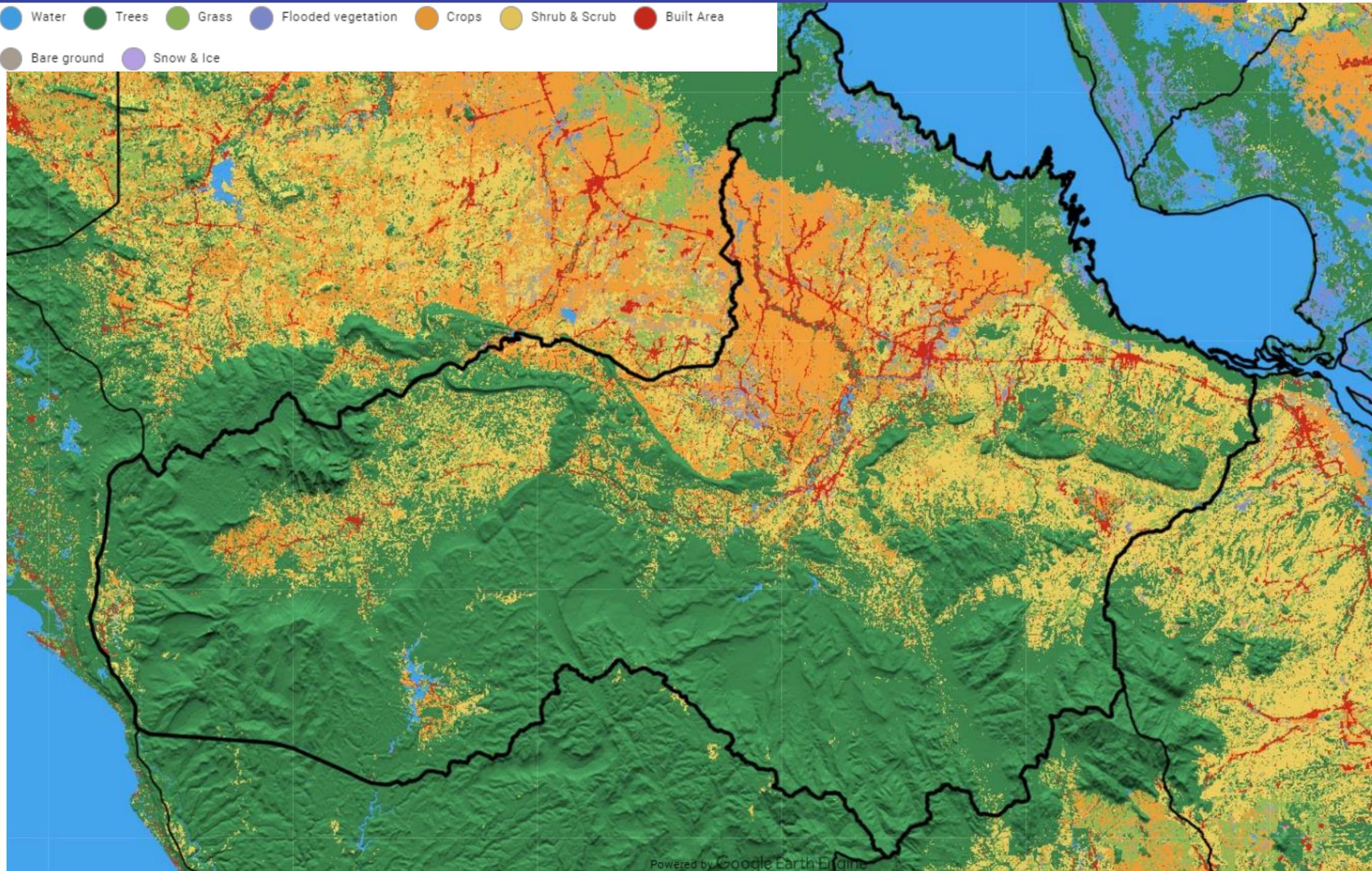
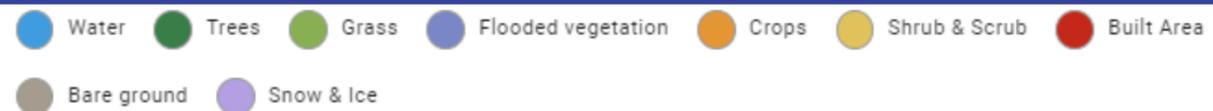
- Standard Operating Procedures
- Menu of potential AAs
- Sectoral AA plans
- AA Protocols in contingency plans



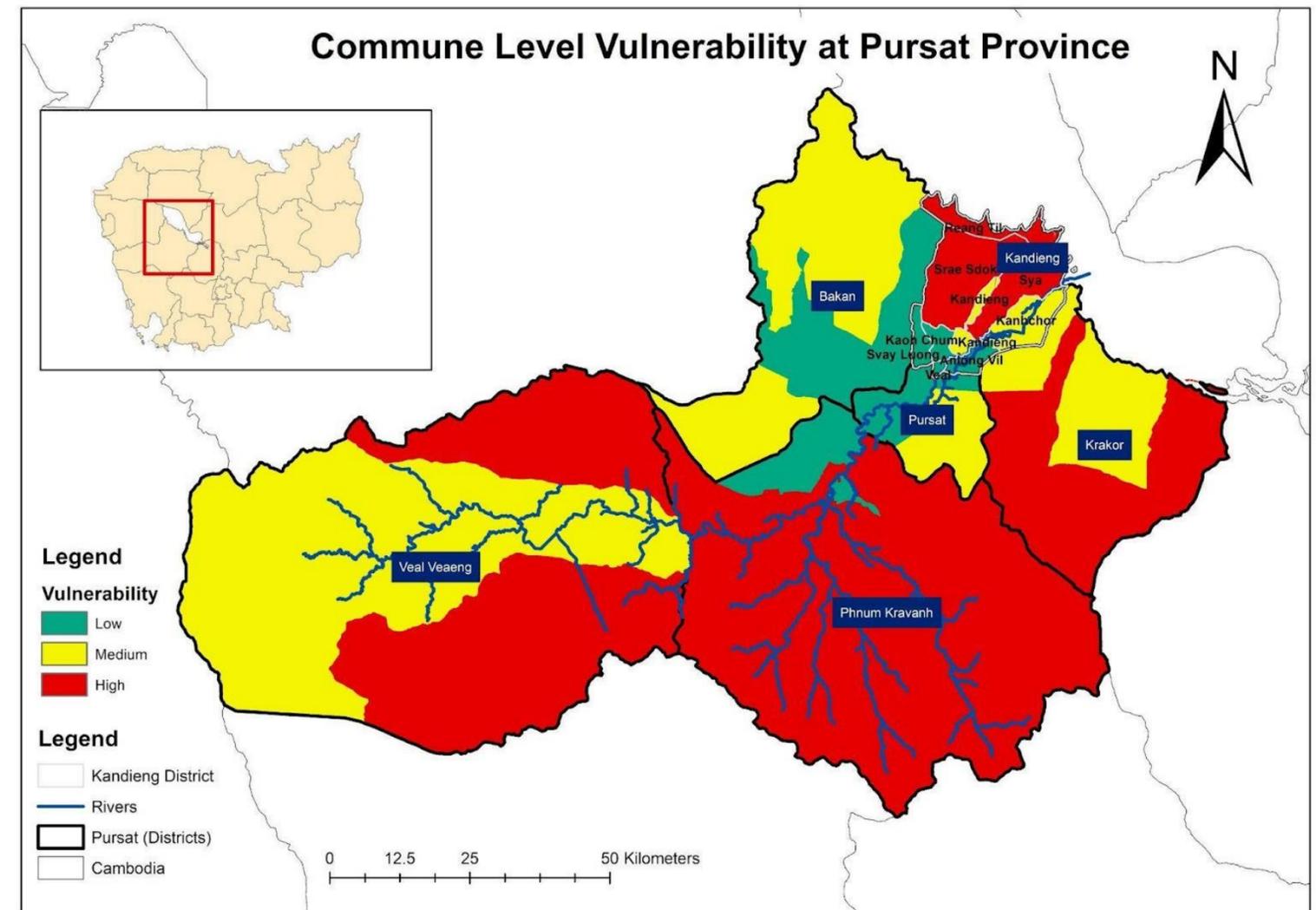
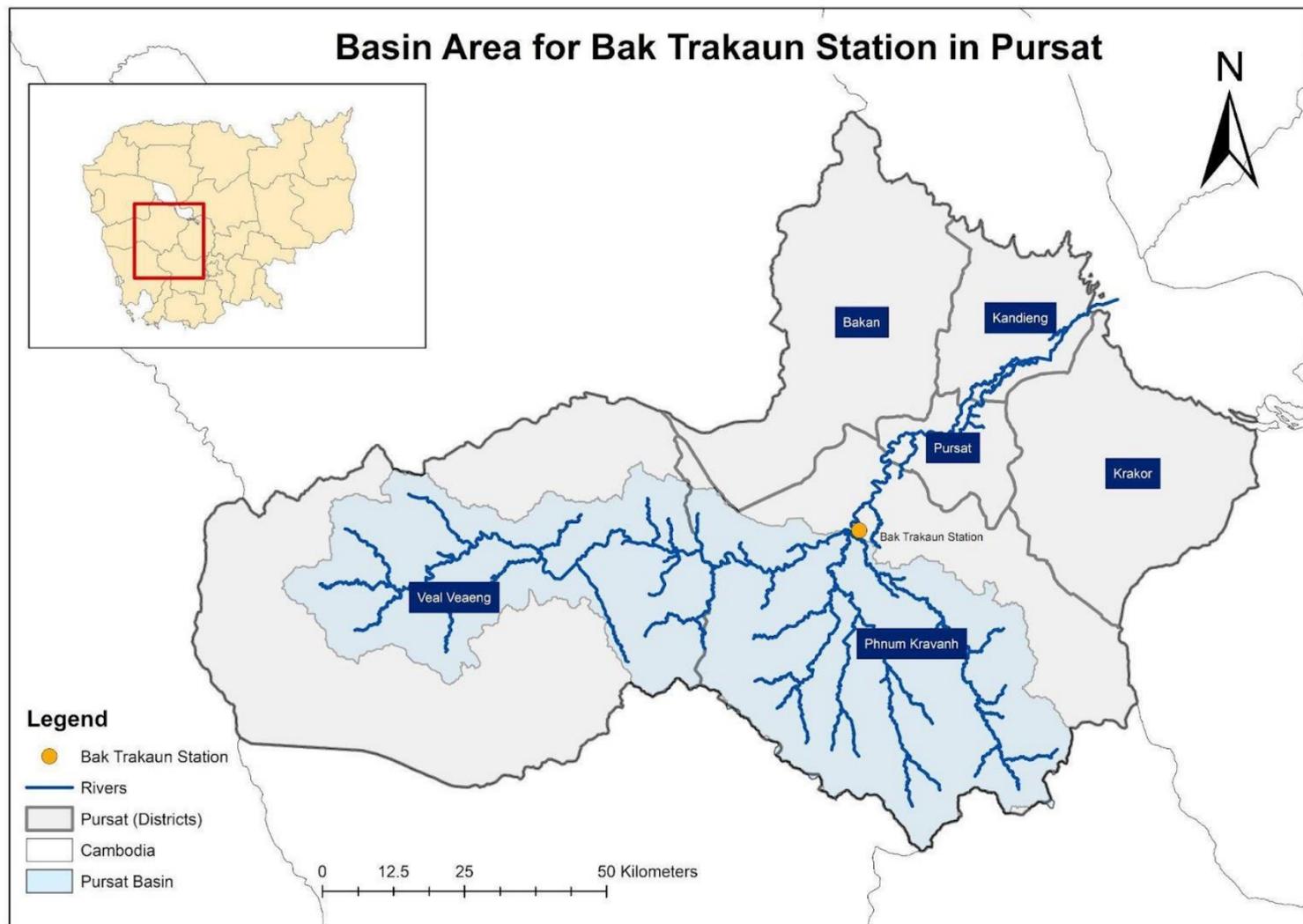
Pre-arranged finance

- Dedicated AA funds in DRM budgets and contingency plans
- DRF instruments include AA and link to AA triggers/protocols

Co-Development of AAP in Pursat



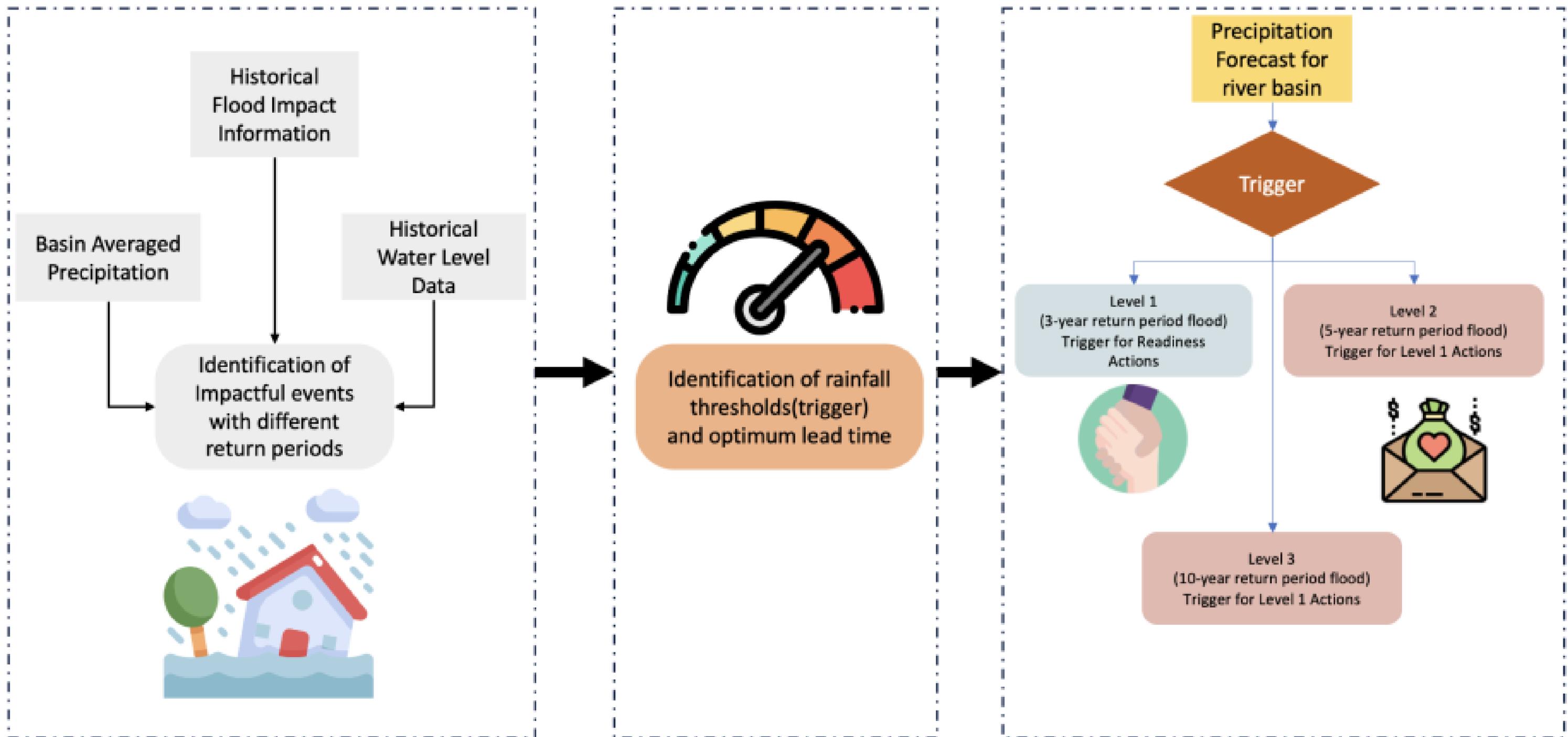
Co-Development of AAP in Pursat



Co-Development of AAP in Pursat



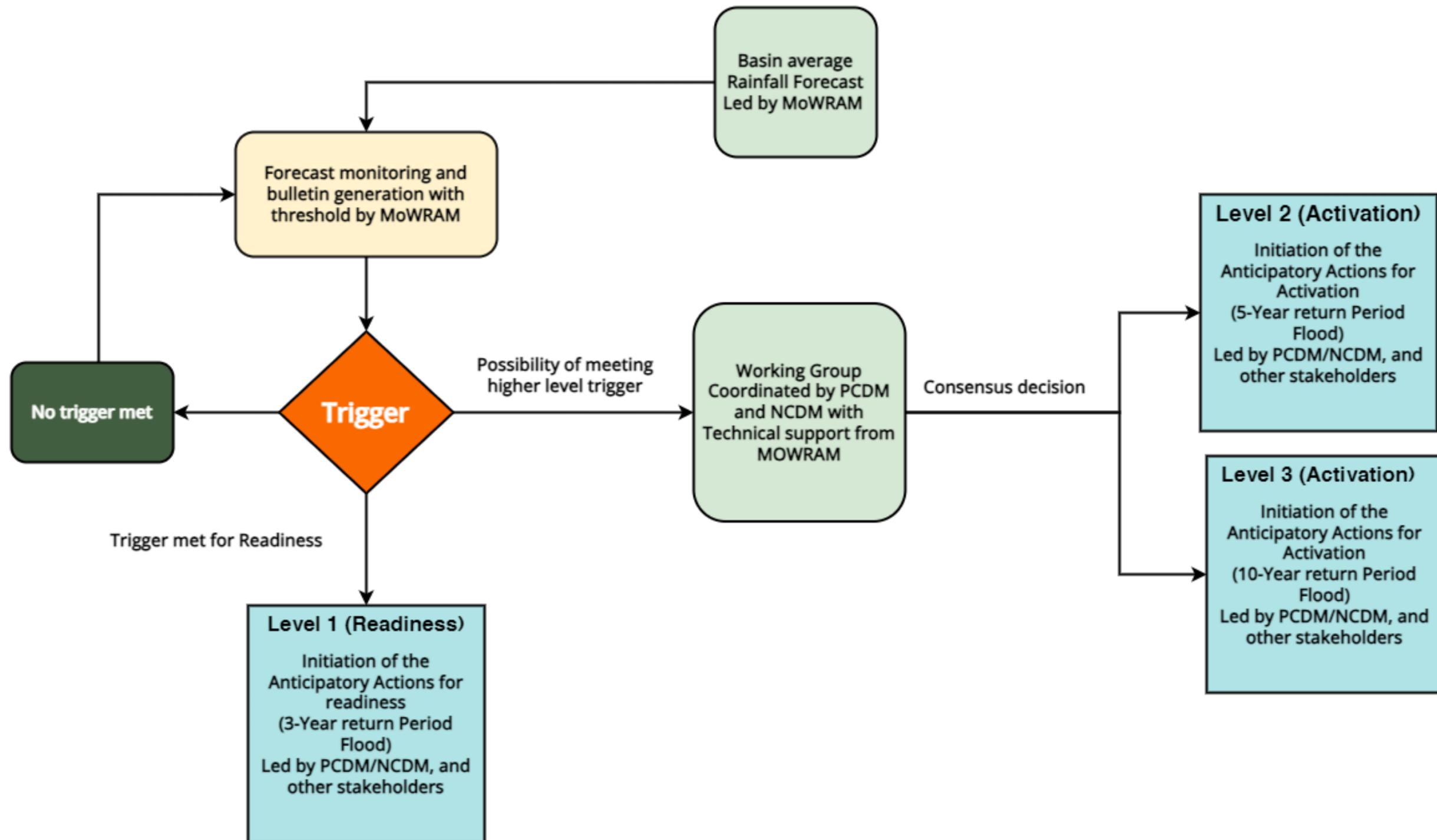
Triggers & Thresholds Dev't



Scenario Matrix for AAP

Trigger Level	Lead Time	Trigger Statement	Anticipatory Actions based on triggers (Example)
Readiness trigger Level 1	5-7 days	When there is 60% or more probability that the basin average rainfall threshold at Pursat Basin corresponding to the 3-year return period flood would be exceeded at Bak Trakoun station.	<ul style="list-style-type: none"> • Raise public awareness of the possible incoming hazard through the EWS1294 • Identify most vulnerable households • Minor repair of embankments, hydraulic structures • Convene meetings of PCDM & DCDM for preparing to act early • Informal shelter preparation • Arrange stock of dry food, fodder, emergency medicines, NFIs
Activation Trigger Level 2	3 days	When there is 80% or more probability that the basin average rainfall threshold at Pursat Basin corresponding to the 5-year return period flood would be exceeded at Bak Trakoun station.	<ul style="list-style-type: none"> • Issue special flood bulletin with scenario-based actions • EWS 1294 Warning Dissemination via mobile phones and/or mass media, social media. • Anticipatory multi-purpose cash distribution to target communities • Issue special advisories on crop and livestock management • Provide transportation support to remote communities
Activation Trigger Level 3	2-3 days	When there is 80% or more probability that the basin average rainfall threshold at Pursat Basin corresponding to the 10-year return period flood would be exceeded at Bak Trakoun station.	<ul style="list-style-type: none"> • Support evacuation of most vulnerable households • Issue special flood bulletin with scenario-based actions • EWS 1294 Alert Dissemination via mobile phones and/or mass media, social media. • Anticipatory multi-purpose cash distribution to target communities • Distribution of WASH kits/NFIs, fodder and emergency medicines

Proposed SOP for AA Pilot



Capacity Building of Relevant Government Agencies



Key Lessons

Triggers must reflect realistic lead times

Data continuity is essential.

Scenario matrices support real decisions

Human decision layers remain important





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