Partnership Forum:
Innovation for Resilient and Smart Communities

# Community-based Disaster Risk Management (CBDRM) challenging in the Greater Mekong Subregion Flood and Drought Risk Management and Mitigation Project in Viet Nam

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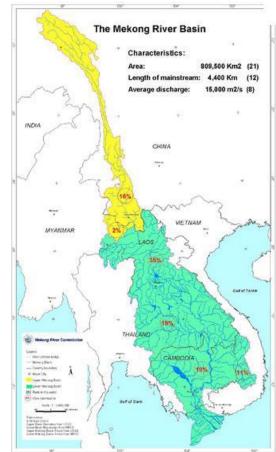
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# Project Overview: Background

The Greater Mekong Subregion (GMS) suffers two main hazards: Flood and Drought.

- The flood expands over very large zones, physically inter-related from upstream to downstream and, possibly, from downstream to upstream, due to the very flat area and poor slope of the Mekong delta.
- The drought affects seriously the people and the agriculture since conveyance of upstream fresh water is hardened by the poor slope and since the <u>low level of Mekong River facilitates</u> salinity intrusion in the river, branch rivers and ponds.
- The Project aims at addressing these two hazards, flood and drought, with both <u>structual</u> measures and non-structural measures.



Mekong River Watershed (China, Myanmar, Thailand, Lao PDR,

Cambodia, Viet Nam)

# Project Overview: Impact, Outcome and Outputs

- Impact: Reduced economic losses resulting from floods and droughts.
  - ✓ By 2020, <u>average annual economic losses reduced by 50%</u> in project areas from the baseline 2000-2010 average (\$40 million).
- Outcome: Improved capacity and preparedness to manage and mitigate the impacts of flood and drought events.
  - √ 46,000 ha of irrigation and drainage upgraded and operational (2012 baseline = 0).
- Output 1: Enhanced regional data, information, and knowledge base for the management of floods and droughts.
  - ✓ Support development of <u>design criteria for water control infrastructure</u> such as flood and drought risk mitigation schemes in the Mekong Delta.
  - ✓ Support assessment of <u>cross-border flood management options</u>.



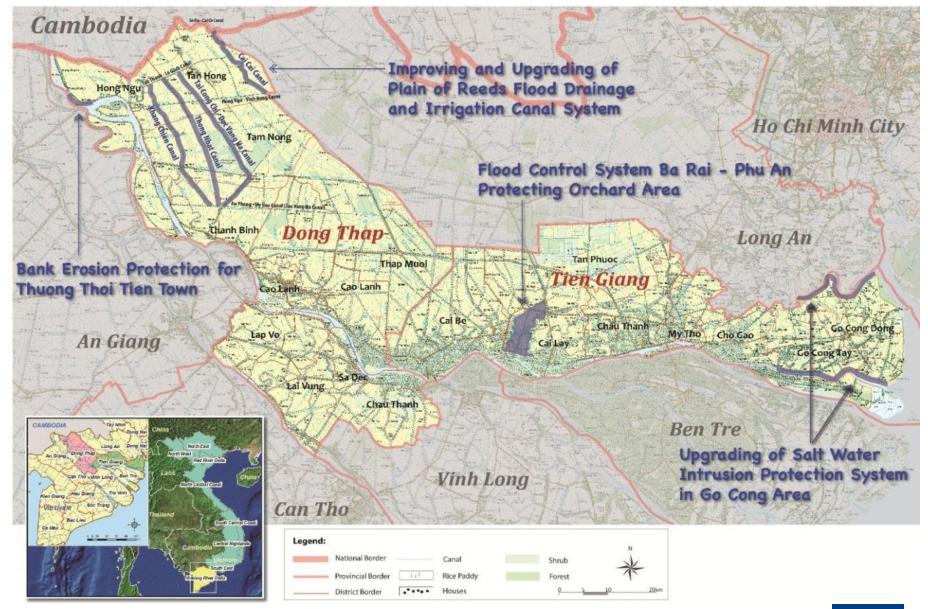
Output 2: Upgraded water management infrastructure.

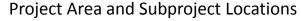
This component covers construction and/or rehabilitation of infrastructure for <u>four flood and drought risk management subprojects</u> in the Dong Thap and Tien Giang provinces.

✓ <u>Subproject 1</u>: <u>Upgrading the main canal system</u> to drain and irrigate Plain of Reeds area (Dong Thap) to rehabilitate four canals by dredging about 80 km of canals.



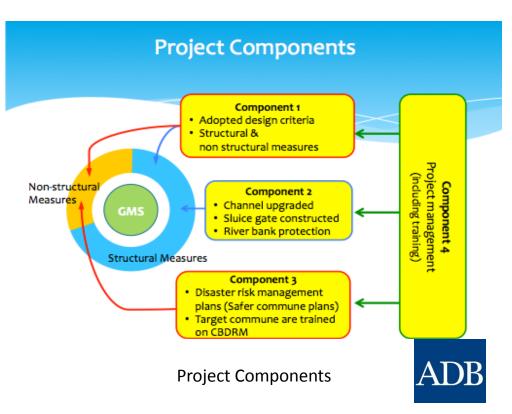
- ✓ <u>Subproject 2</u>: Thuong Thoi Tien <u>bank protection</u> (Dong Thap) to upgrade and strengthen about 3 km of flood embankments to stabilize the left bank of the Tien River in the vicinity of Thuong Thoi Tien town.
- ✓ <u>Subproject 3</u>: Control and mitigation of flood risk for the Ba Rai-Phu An area (Tien Giang) to <u>upgrade the flood control system</u> by constructing approximately 24 sluice gates to mitigate flood risks.
- ✓ <u>Subproject 4</u>: <u>Upgrading the salinity intrusion system</u> for the Go-Cong area (Tien Giang) to construct approximately three sluice gates to enhance control of tidal and brackish water movement from urban areas permitting flushing while retaining additional fresh water resources in paddy growing areas.







- Output 3: Enhanced capacity for community-based disaster risk management.
  - ✓ CBDRM activities will be implemented to ensure that <u>communities are able</u> <u>to obtain the full benefit</u> from improved water control infrastructure and improved flood warnings.
  - ✓ Community-driven flood and drought risk reduction measures will be implemented based on <u>participatory local level</u> flood and drought risk assessment and analysis and <u>disaster risk reduction and management plans</u>.
- Output 4: Effective project implementation.
  - ✓ Support the government staff to undertake overall project supervision and strengthen planning, implementation, and management capacities.



# Project Overview: Investment and financing plans

#### Project Investment Plan

ltem	Amount (\$ million)
A. Base Cost	52.52
• Output 1: Regional data and knowledge for the management of floods and droughts enhanced.	1.17
Output 2: Water management infrastructure upgraded.	42.71
Output 3: Capacity for CBDRM enhanced.	3.97
Output 4: Effective project implementation.	4.67
B. Contingencies	10.12
C. Financing Charges During Implementation	1.71
Total (A+B+C)	64.36

#### Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank (ADF Loan)	45.00	70
Government of Australia	5.89	9
Government	13.47	21
Total	64.36	100



#### **CBDRM: What is CBDRM?**

- ✓ CBDRM is a process in which at-risk communities, especially under the climate change context, actively engage in all activities of DRM from <u>risk identification</u> and <u>analysis</u>, <u>action planning</u>, <u>implementation and monitoring & evaluation</u> which aim at <u>reducing vulnerabilities</u> and <u>enhancing communities' disaster coping capacities</u>.
- ✓ The objective of CBDRM is to create a positive change from a
  "vulnerable community" to the community in which they are
  together in disaster prevention, response and recovery by using
  community resources.



# **CBDRM: Outcome and Outputs**

#### Outcome

✓ More resilient communities are developed, that means local people and authorities have adequate knowledge and skills for: (i) <u>preparing</u> for, (ii) <u>responding</u> to, and (iii) <u>recovering</u> from, <u>negative impacts of flood and</u> <u>droughts</u> and cope with <u>emergency situations or disaster events</u> quickly.

#### Outputs

- ✓ Commune CBDRM <u>Technical Working Groups (TWGs)</u> are established.
- ✓ <u>Risk assessment and analysis reports</u> of communes are prepared (including hazard maps).
- ✓ <u>Natural Disaster Prevention and Control (NDPC) Plans</u> are developed.
- ✓ <u>Small-scale infrastructures</u> (evacuation places, shelters, dikes and small drainage systems, tracks roads, bridges, etc.) are installed and <u>non-structural measures</u> are developed.



# **CBDRM: Target Communes**

#### Target Communes

- √ 66 communes in two provinces.
- ✓ <u>50 communes are directly affected by the infrastructure</u> <u>component</u>. Other 13 communes are to be identified according to selection criteria.

#### Main Selection Criteria

- ✓ Hazard assessment in the communes.
- ✓ Vulnerability assessment in the communes.
- ✓ Not targeted by other program.
- ✓ Availability of qualified Commune Facilitators (CFs).



## **CBDRM: Implementation Arrangements**

#### Technical Working Groups (TWGs)

- ✓ Review and conduct <u>due diligence</u> for the proposed measures from <u>technical</u> and <u>financial point of view</u>.
- ✓ Prepare <u>detailed investment plan</u>.
- ✓ Monitor the NDPC Plan implementation.

#### Commune Facilitators (CFs)

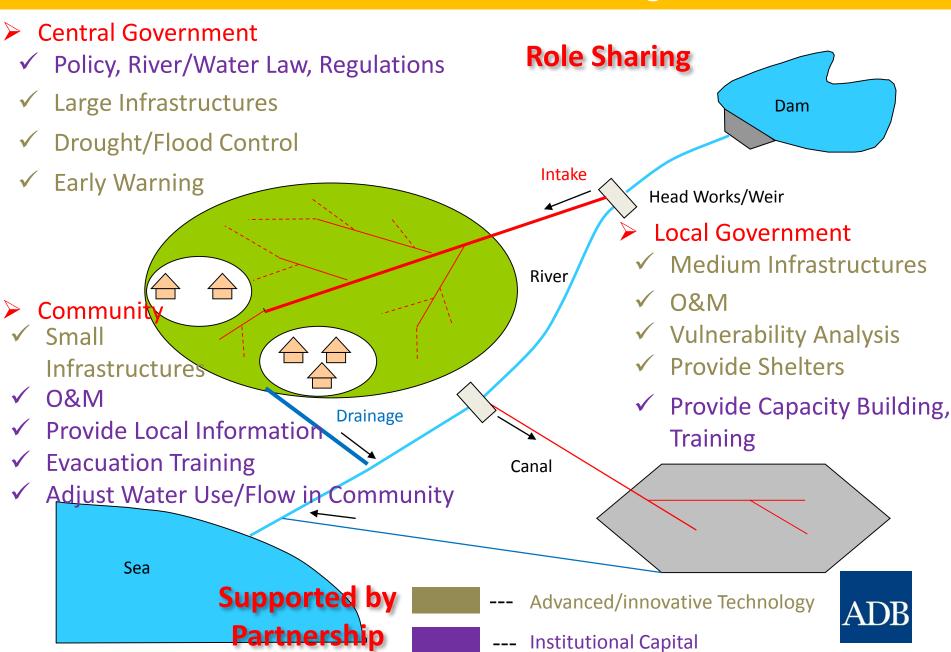
- ✓ Review the proposed measures from <u>community organization point of view</u>.
- ✓ Prepare <u>detailed action plan</u> with budget plan in coordination with commune.
- ✓ Adjust non-structural CBDRM activities (ex. Training) in the commune.
- ✓ Play a role of focal person of the commune in coordination with the CBDRM service provider.
- ✓ Monitor the NDPC Plan implementation.



# **CBDRM: Key Points on Implementation**

- ✓ <u>Raising awareness</u> among the community on hazards and associated risks.
- ✓ Since project completion, DRM activities in commune level are often undertaken on ad-hoc basis due to limited sources. Effort to link disaster management plan to commune socio-economic development and invest planning process in district and provincial level is required.
- ✓ Ensure <u>consultation</u> with target communes to <u>identify needs</u> of the population.
- ✓ Coordinate with the <u>Disaster Management Center</u> (DMC) and align with the <u>National CBDRM Program</u> of the Viet Nam government.

# River Basin Disaster Risk Management



# Thank you

