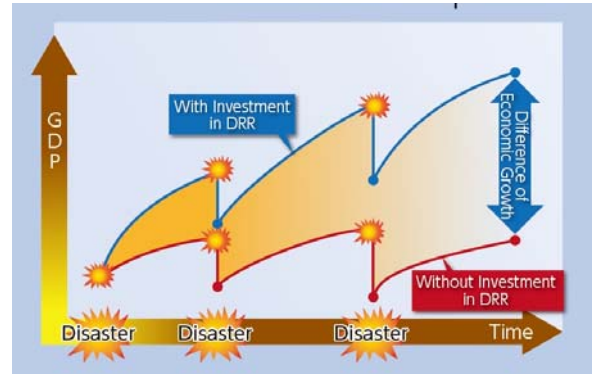


Progress of JICA Project phase-2 (IFMP for disaster management cycle and disaster investment)



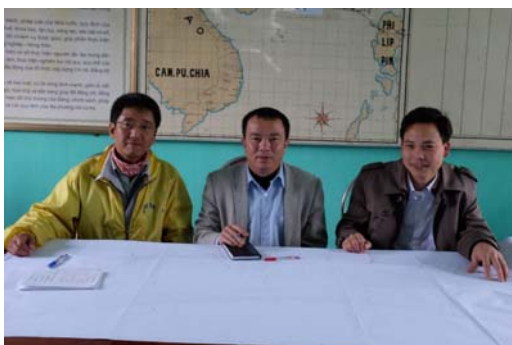
7 July 2015 Dr. Matsuki Hirotada, JICA Chief Advisor



Discussion in QB



2014 Annual seminar in QB



Discussion in HT



Survey in NA



2014 C/P training in Niigata, Japan



2015 C/P training in Kyushu, Japan



Field seminar in QB



Construction site in HT

Contents

1. Project design matrix (PDM)
2. IFMP in Japan
3. IFMP in Vietnam

Project Design Matrix

Narrative Summary	Objectively Verifiable Indicators
<p>Overall Goal</p> <p>Resilience of society against water-related natural disasters is strengthened under the integrated flood management (IFM) system.</p>	<ol style="list-style-type: none"> 1. Central government initiates to develop legal systems necessary for introduction of IFM (especially regarding river basin management). 2. Financial arrangements are secured for IFMP implementation (Hue and Quang Binh Provinces)
<p>Project Purpose</p> <p>Capacity for IFM planning and implementation is strengthened at central level and in target provinces.</p>	<ol style="list-style-type: none"> 1. Central government initiates to review legal systems necessary for IFM (especially regarding river basin management). 2. Joint Action Plan developed under Output1 is implemented. 3. Promptness of real time river information data sharing between MONRE and MARD is increased. 4. Authorities of target provinces initiate to find measures to secure funding for IFM implementation.
<p>Outputs</p> <p>[Output 1] Institutional arrangements for IFM is strengthened at the central level.</p>	<ol style="list-style-type: none"> 1-1. Multi-ministerial action plan for improvement of quality of flood forecasting and warning services, developed under activity 1-4, is authorized by central government as reference material. 1-2. Output inventory and Promoting IFM Manual are formulated through Output 2 to 5

5



Project Design Matrix

Narrative Summary	Objectively Verifiable Indicators
<p>[Output 2]</p> <p>Capacity of DARD for formulating IFMPs are strengthened in QB. (Gianh River and Nhat Le River)</p>	<ol style="list-style-type: none"> 2-1. IFMP formulated for selected river basins (Gianh River and Nhat Le River) is approved by the provincial government. 2-2. DARD and relevant agencies staff (10 persons) gain deeper understanding on the process of IFMP formulation.
<p>[Output 3]</p> <p>Capacity of DARDs for flood risk analysis is strengthened in NA/HT.</p>	<ol style="list-style-type: none"> 3-1. DARD and North Central Regional & Provincial Hydro Meteorological Center (NCRHMC/PHMC) staff (10 persons in NA, 10 persons in HT) are capable of conducting flood risk analysis.
<p>[Output 4]</p> <p>Structural measures for flood resilience are strengthened in NA/HT/QBin NA/HT/QB/Hue./Hue.</p>	<ol style="list-style-type: none"> 4-1. DARD staff (10 persons) and community people including district officers (100 persons) who participated in the pilot projects in HT & QB gain deeper understanding on riverbank protection works. 4-2. Infrastructure and/or important facility are protected from riverbank erosion by structural measures (in HT & QB) 4-3. Developed reservoir operation manuals of four existing dams are approved as a reference by QB. 4-4. Developed embankment inspection manual in NA is approved as a reference material by MARD. 4-5. Budget planning and institutional arrangement for IFMP implementation are initiated in Hue.
<p>[Output 5]</p> <p>Non-structural measures for flood resilience are strengthened in NA/HT/QB/Hue.</p>	<ol style="list-style-type: none"> 5-1. CBDRM facilitators from target communes (at least 4 persons for each commune) are trained by the Project. 5-2. CBDRM activities are conducted at 4 communities based on the Guidelines developed by the Phase I of the project and other projects.

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Project Design Matrix



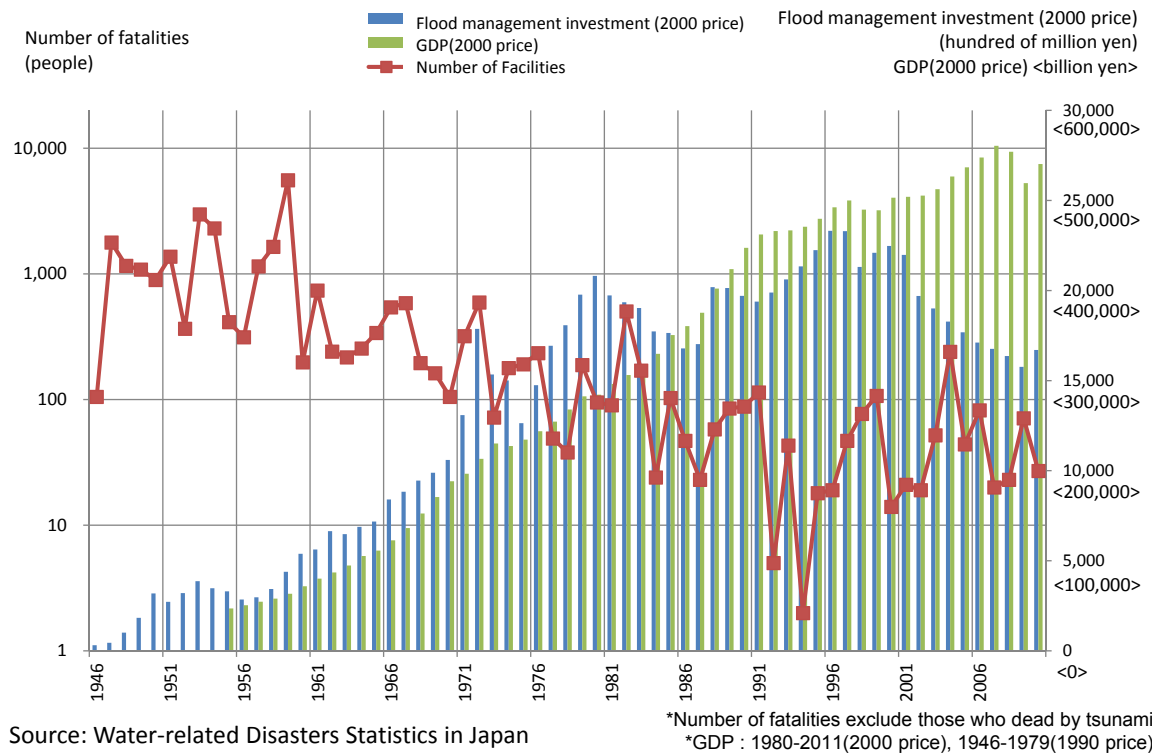
Activities
1-1. Conduct baseline study to analyze current problems / constraints for flood and disaster management in MARD/DARDs and related organizations (including MONRE/DONRE, NHMS, and CCFSC).
1-2. Clarify institutional arrangements (from central to commune level), including roles and responsibilities, required for implementation of IFM based on the results of the baseline study conducted under activity 1-1.
1-3. Clarify issues and challenges as well as good practices of IFMP implementation to consolidate into MARD through Output 2 to 5.
1-4. Formulate an action plan at the central level jointly with MARD and MONRE to improve hydro-meteorological information services including monitoring, collection and utilization of river information (such as rain falls, water level of rivers and ponds, other info. required for IFM), as well as flood forecasting.
1-5. Consider improvement of legal systems for IFM (especially river management)
2-1. Conduct baseline survey on natural and social conditions, as well as basic information including flood disaster records, hydro-meteorological data, run off analysis and flood simulation.
2-2. Conduct flood disaster impact analysis based on flood hazard risk mapping of different scenarios.
2-3. Formulate plan(s) of structural and non-structural measures based on the results of risk and impact analysis.
3-1. Conduct trainings on run off analysis and flood simulation in NA and HT.
3-2. Conduct flood disaster impact analysis based on flood hazard risk mapping of different scenarios.
3-3. Conduct OJTs on effective use of satellite information in flood forecasting in NA.
4-1. Implement small-scale, low-cost river bank protection works in HT and QB.
4-2. Develop operation manual(s) for effective use of existing four (4) major reservoirs in QB.
4-3. Develop embankment inspection manual in NA.
4-4. Conduct on-the job trainings (OJTs) on bathymetric survey in NA.
4-5. Provide recommendation for implementation of IFMP in Hue.
5-1. Conduct community-based disaster risk management (CBDRM) activities in selected communes.
5-2. Conduct disaster education activities in coordination with CBDRM under activity 5-1.

Project Design Matrix



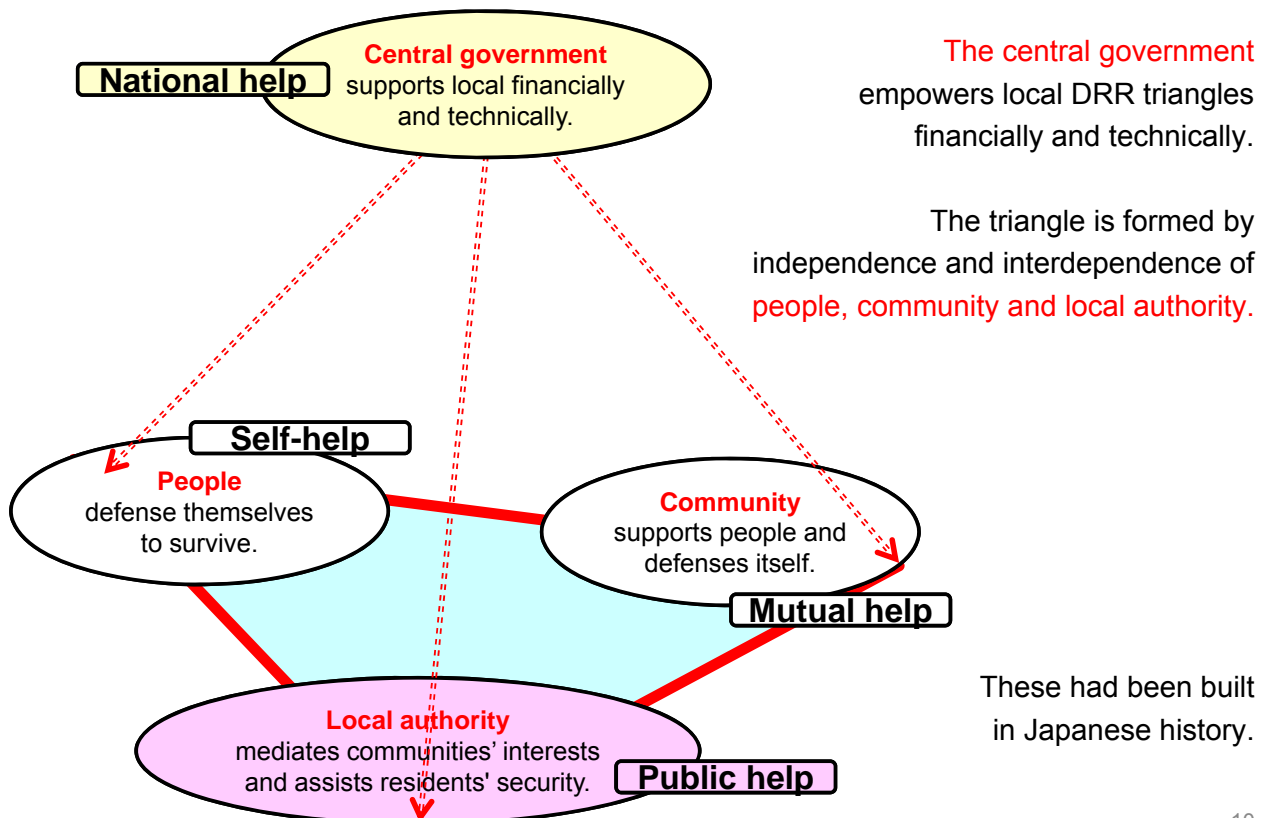
Achievement							
1-1. Baseline survey in central							
1-2. Institutional clarification							
1-3. Challenge clarification							
1-4. MARD-MONRE action plan							
1-5. Legal improvement							
2-1. Baseline survey in QB							
2-2. Flood impact analysis in QB							
2-3. IFM planning in QB							
3-1. Flood simulation training		NA					HT
3-2. Flood impact analysis in NA/HT	NA						HT
3-3. Satellite information OJT in NA							
4-1. Riverbank protection in HT/QB						HT	QB
4-2. Dam operation manual in QB							
4-3. Dyke inspection manual in NA							
4-4. Bathymetric survey OJT in NA							
4-5. IFMP recommendation for Hue							
5-1/5-2. CBDRM with education	NA	HT/QB			Hue		

Mainstreaming of disaster risk reduction (Investment for flood management and GDP growth)



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Collaboration between the central governments and various actors (DRR pyramid on DRR triangle)



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Investment in DRR from the long-term perspective

(Learn from the past, prepare for the next)

Once a disaster occurs, we undertake

- i) responses to the emergency situation,
- ii) rehabilitation and reconstruction based on lessons from the disaster,
- iii) prevention and mitigation measures to prepare for future disasters, and
- iv) improvement of preparedness for disasters.

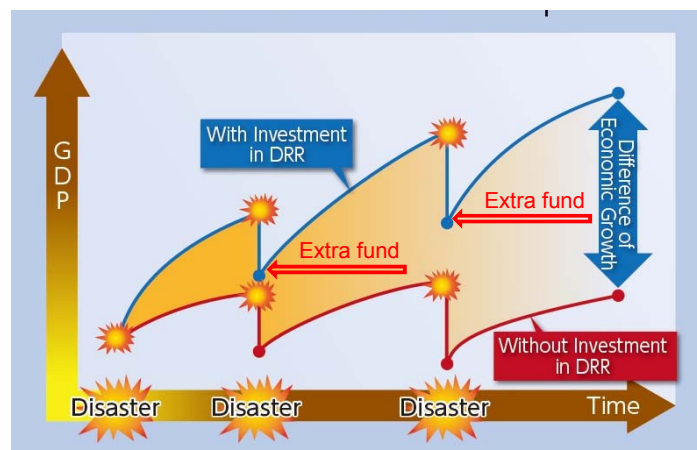
These four phases are called the “Disaster Management Cycle,” and Japan has been providing assistance in all of these phases.



11

Build Back Better

(Quick response and intensive rehabilitation)

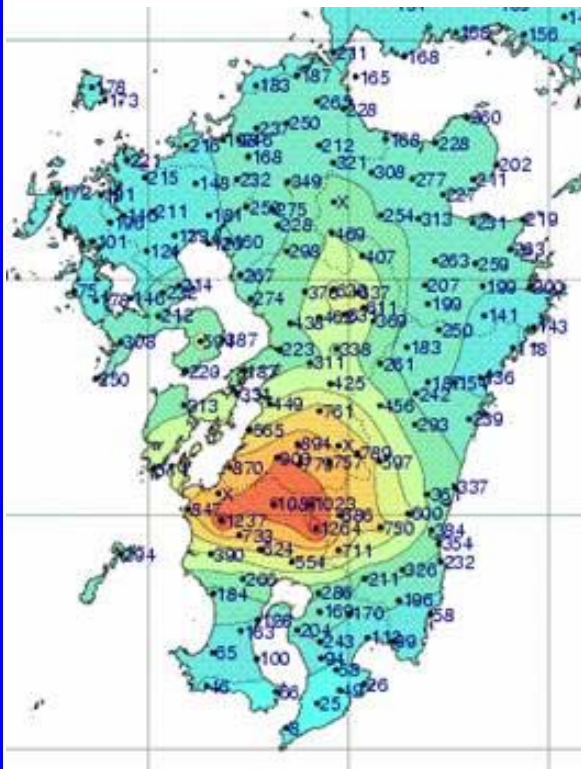


In order to reduce disaster risks, it is important to make investments in disaster risk reduction prior to disasters, and when a disaster occurs, to “Build Back Better” aiming to build a society which is more resilient to future disasters, based on the lessons learned from the disasters.

Likewise, it is necessary that all stakeholders such as the national government, local governments, companies, local communities, and civil society engage in disaster risk reduction in a responsible manner.

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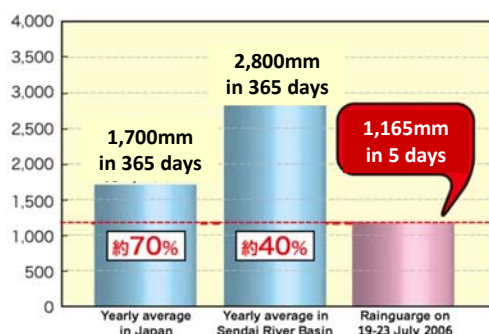
Record-breaking rain fell on Sendai River Basin on 22 July 2006



Over 1,000 mm rain fell on red-colored areas in Sendai river Basin on 22 July 2006.

The amount exceeded annual average and broke the record at 20 observation stations.

A rain gauge station at Nishinono recorded 1,165mm in 5 days.



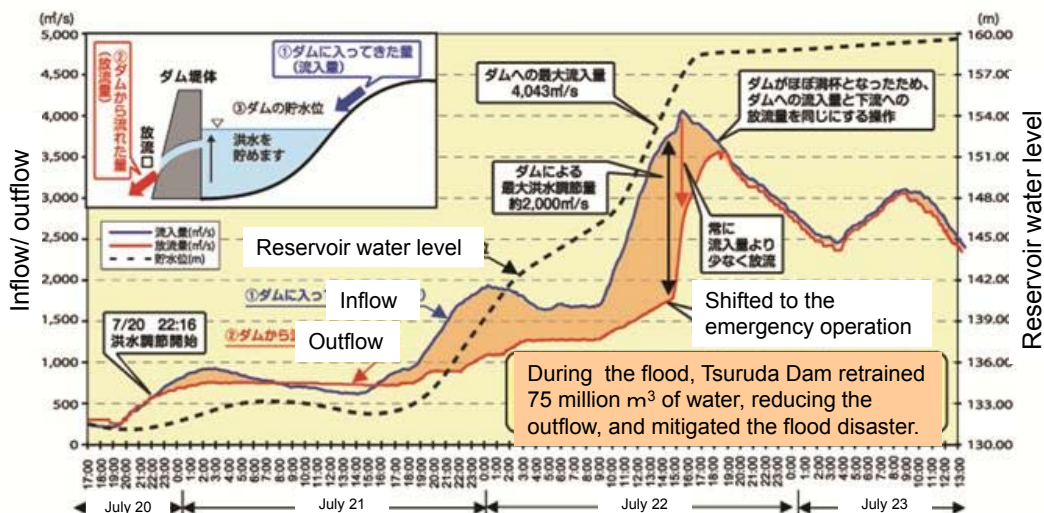
Tsuruta Dam tried to control discharge downstream

To cope with the record-breaking heavy rain,

Tsuruta Dam reserved water higher than the design and shifted to the emergency operation to prevent flood downstream.



Tsuruta Dam under emergency operation



Sendai River GEKITOKU Project was applied on 4 Oct. 2006

The central government decided "Sendai River **GEKITOKU** Project" on 4 October 2006, 2.5 month after the disaster.



35.6 billion yen (365 million USD) budget in total
5 years (2006-2010) project period
37 sites taking upstream-downstream balance
human resources allocation from MLIT
technical advices from institutes



Act on Special Financial Support to deal with Extremely Severe Disaster (5 years extra budget)

GEKITOKU Act (1962)

Article 1: This act stipulates **special financial support by the central government for local authorities** and victims to be relieved urgently **after an extremely severe disaster**. The corresponding disaster is defined by the disaster management basic act.

Article 2: **A decree under this act designates the disaster**, which has heavy impact on the national economy and requires much recovery cost exceeding the local financial capacity or extraordinary help for victims.

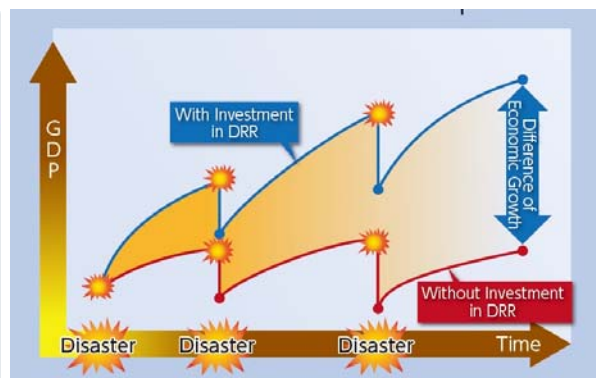
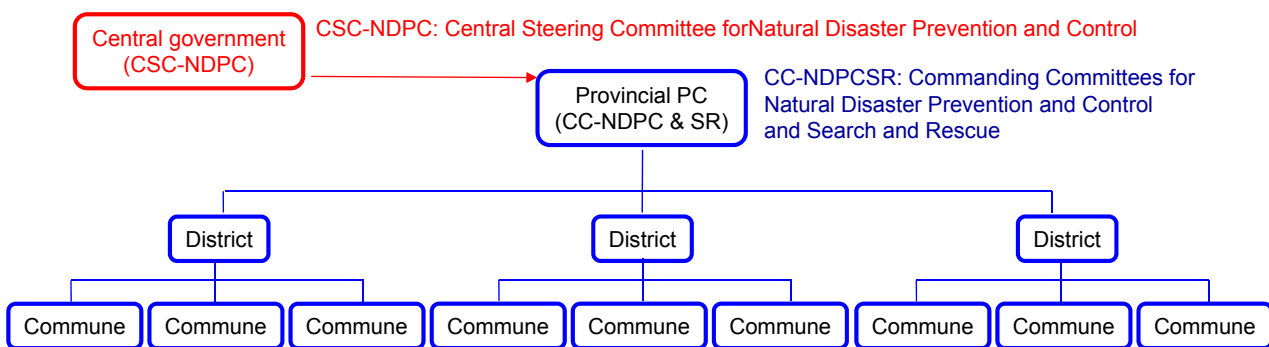


Law on National Disaster Prevention and Control
(Annual expenditure budget and extra preventive fund)

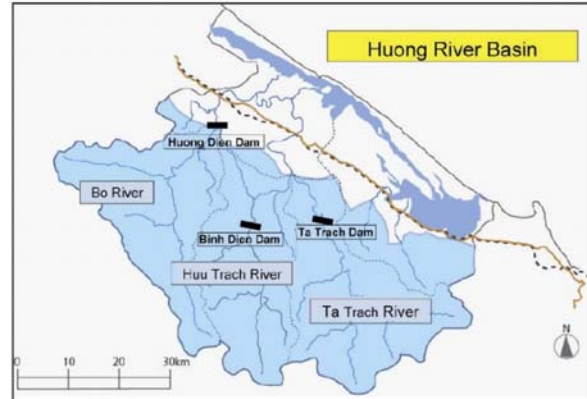
Article 9. State budget for natural disaster prevention and control

1. State budget for natural disaster prevention and control includes annual expenditure budget and extra preventive fund.
2. **Annual expenditure budget** is used for
 - elaboration of natural disaster prevention and control strategies and plans;
 - construction, renovation and upgrading of disaster preventive works;
 - natural disaster prevention and control activities; and
 - regular operations of state management agencies at different levels.
3. **Extra preventive fund** is used according to the followings:
 - a/ To support the response and remediation for natural disasters;
 - b/ Based on response activities, the extent of damage, relief needs and prescribed regimes and policies, **People's Committees of each level shall decide to allocate local preventive fund** to meet urgent needs, **which are not covered by the approved annual expenditure budget**;
 - c/ In case the local budget is used up but still insufficient to meet urgent needs, provincial-level People's Committee chairpersons shall request support to the Prime Minister. The Central Steering Committee for Natural Disaster Prevention and Control shall summarize the damage, support needs of localities and propose the support to the Prime Minister for decision.

Disaster Management Cycle an Disaster Investment in Vietnam
(under Lao on Disaster Prevention and Control)



Hue-Integrated Flood Management Plan (IFMP)



Hue-Integrated Flood Management Plan (IFMP)

(Members of IFMP formulation group)

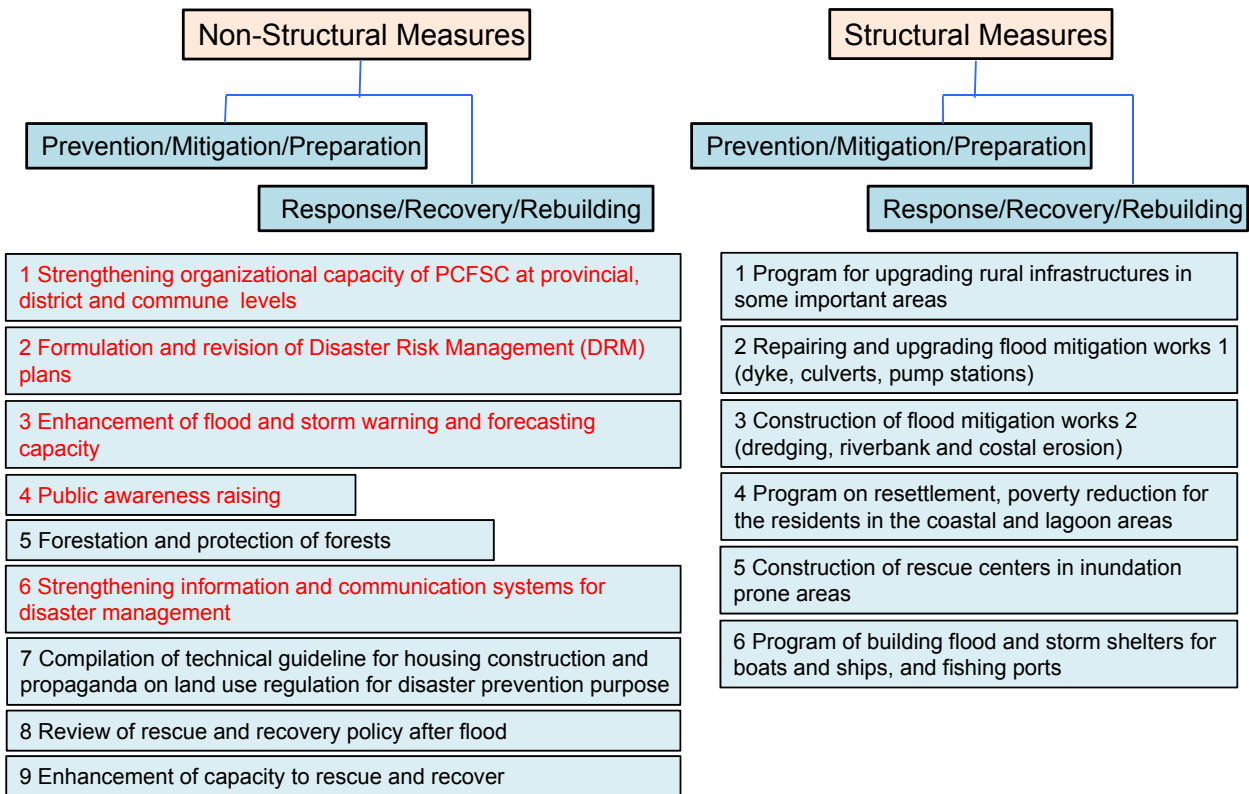
1. Background:

The IFMP of the Huong River basin in the Thua Thien Hue province to 2020 has been formulated by **the IFMP formulation team of 10 relevant agencies** with the support of the JICA Expert Team from the beginning of May to the beginning of September 2011. The IFMP, focusing on floods and storms in the Huong River basin, makes up one part of the IDMP to 2020 in the province.

1	DARD	Department of Agriculture and Rural Department
2	PPC	Provincial People's Committee
3	DOIT	Department of Industry and trade
4	BIFSC	Bureau of Irrigation and Flood & Storm Control
5	PHC	Provincial Hydrometeorology Center
6	DIC	Department of Information and Communications
7	DONRE	Department of Natural Resources and Environment
8	DOT	Department of Transport
9	DOF	Department of Finance
10	DPI	Department of Planning and Investment

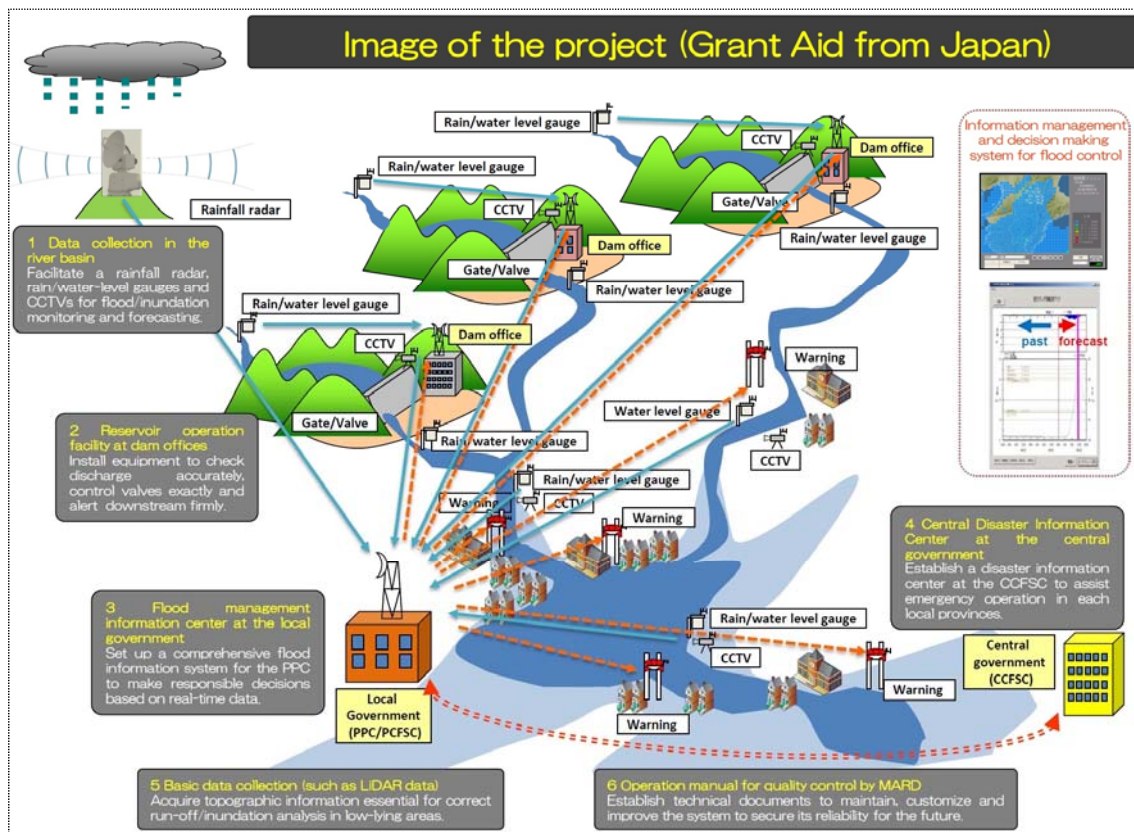
Hue-Integrated Flood Management Plan (IFMP)

(Framework for non-structure and structure measures)



Comprehensive Disaster Management Information System

(Implementation of Hue-IFMP)



Stand-by Emergency Credit for Urgent Recovery (SECURE)

(Disburse fund quickly, develop DRM capacity)

SECURE will provide quick fund disbursement for recovering from the natural disaster, by signing **Exchange of Notes** and **Loan Agreement** in advance.

【Purpose】

- **Quick fund disbursement** at recovery stage after natural disaster in the partner countries
There used to be a time gap between disaster occurrence and emergency funding for reconstruction under ODA. SECURE supports Build Back Better by quick fund distribution.
- **Capacity Development** on disaster risk reduction of partner country
Through application of Japanese DRR knowledge, experience and/or human resource, SECURE support resiliency building in the most effective way.

Target country	Lower Middle Income Countries categories or above
Ceiling amount	In principle, 10 bil. JPY or 0.25 % of GDP (whichever is less)
Disbursement period	3 years (Extendable)
Repayment period	40 years
Grace period	10 years
Interest rate	0.01%
Fee	Front-end fee: 0.5% of commitment amount Renewal fee: 0.25% of undisbursed amount
Precondition (IFMP)	- Sound macroeconomic and public financial management - Having an experience/plan of utilizing Japan's technical cooperation for disaster prevention - Policy matrix on disaster risk management programme
Withdrawal Trigger	Eg. Emergency declaration caused by natural disaster



Stand-by Emergency Credit for Urgent Recovery (SECURE)

(from IFMP to SECURE)

IFMP is a pre-disaster action to manage annual budget and extra fund.
A natural disaster triggers SECURE which assists build back better financially.

