









CONSULTATION MEETING ON HELP-GWP CONSULTATION ON DRAFT PRINCIPLES ON INVESTMENT AND FINANCING FOR WATER-RELATED DISASTER RISK REDUCTION

Consultation Report

Date:	22 March 2019
Place:	Hanoi, Vietnam
Number of participants:	44 from 11 countries (Cambodia, Malaysia, Myanmar, Indonesia, Lao PDR,
	Philippines, Thailand, Vietnam, USA, Australia, India)

Background

In the Southeast Asia region, prone to many disasters such as cyclones, floods and droughts, many efforts are being made to build capacity, influence policies and develop strategies to better equip member states to prevent and address disaster. Given the need and importance of paying attention to water-related disasters, the High-level Experts and Leaders Panel on Water and Disasters (HELP), drafted 'principles on investment and financing for water related disaster risk reduction', which was launched during the 8th World Water Forum in Brazil. Building on a cooperation between the Global Water Partnership (GWP), the HELP and Japanese government, a session on DRR is organized with the main objective to consult on investment and financing for water related disaster risk reduction principles.

This consultation is organized as part of Viet Nam wAter Cooperation Initiative (VACI) 2019¹ as this initiative is closely related to the VACI's objectives, which was designed to share and co-create innovative water solution with emphasis on Vietnam and tropical water issues. Stakeholders from the global water industry gather at VACI to share not only business opportunities and showcase the latest water technologies, but also the strategic policy to manage and allocate the water resources effectively between conflicting users. The expectation is that the degradation of water resources is prevented step by step, as well as minimizing water related disaster risk. Finally, a water sustainability management mechanism will be built in Vietnam and the region.

ASEAN partners are invited to consult the principles to address practical experience in their country. The draft principles comprise the following:

- Water-related disaster risk reduction is indispensable for socio-economic development

¹ VACI is organized as a Vietnam based global partnership workshop where scientists, engineers and policy maker from local University, Institute and Foreign Partners can meet, share and work together to provide water solutions in Vietnam and the region. The symposium is a part of VACI Initiative seeking to bring together water-related expertise in areas of academic, design, engineering, and governing of water infrastructure and those engaged in development of innovative water solutions and tools for sustainable development and management of water resources in Vietnam and beyond.













- Ex-ante measures of water related disaster risk reduction should be prioritized
- Governments should improve their fiscal systems and allocate sufficient budget for water related disaster risk reduction
- The international community should expand financing for water related disaster risk reduction
- Financing for science and technology should be strengthened to support sound investment decisions

Objectives

The objective of this consultation is to gain inputs from experts and practitioners in Southeast Asia region on the draft principles, allowing these principles to serve as the practical guidance for decision-makers and practitioners in their effort in reducing water-related disaster risk.

The final principles will be tabled for endorsement by global leaders during the 4th United Nations Special Thematic Session on Water and Disasters, planned on 24 June 2019.

Specific objectives:

- to collect comments on the proposed Principles on Investments and Financing for water-related disaster risk reduction
- to discuss the Principles and their operational value

Consultation Proceeding

Welcome and Opening Remarks

The consultation meeting participants were welcomed by Professor Hoang Thai Dai, the Steering Committee Member of Vietnam Water Partnership and second secretary of Japan Embassy for Socialist Republic of Vietnam Mr. Takuya Kudo. Both remarks emphasized the importance of water-related disaster risk reduction (DRR) amid the heightened uncertainties due to climate change. With the vast experience in managing disasters for many years, the Japanese government sees the importance of investment and financing for DRR especially in water-related disasters. Japanese government fully supports the international effort to formulate principles of financing and investment for water-related DRR and share its experiences, lessons learned and best practices to raise awareness of countries to put more attention on this matter.

Setting the Scene

In this session, Professor Kenzo Hiroki coordinator of HELP (High-level Leaders and Experts Panel on Water and Disaster), professor of GRIPS (The National Graduate Institute for Policy Studies) presented "Global and Asian Challenges on Water-related Disasters and Position of Principles on Investment and Financing for Water-related Disaster Risk Reduction". Several key messages were highlighted:

- 1. We must learn from the crisis that we have been through.
- 2. Disasters are increasing in numbers and impacts.













- 3. The highest impact of disasters are experienced by the most vulnerable group. And therefore, water and disasters is strongly linked to poverty issue.
- 4. Of all disasters that have happened, water-related disaster accounts for 95%.
- 5. Anybody on earth will be hit by disasters twice in his/her life time on average, mostly by water-related disasters, sometimes fatal.
- Related to climate change context, water-related disasters are increasing faster. at the Pampanga River under Climate Change Scenario, it is estimated that the inundation area will increase by 20%, damaged area will increase by 16%, and economic loss will increase by 4% according to ICHARM study (2017).
- 7. Disaster management is gaining importance within governments. 70% of countries think disasters have become more important among the government priorities.
- 8. One of the four Priorities for Action of Sendai Framework is investing in disaster risk reduction for resilience.
- 9. High Level Panel on Water (HLPW) has agreed to shift focus of disaster management from response to preparedness and resilience, and therefore the formulation of draft principles on investment and financing for water-related DRR and resilience.
- 10. Some challenges for the principles adoption have been foreseen, however it should not decrease the effort to promote preparedness and resilience.

Key Note Speech: Water and DRR in Southeast Asia

Key note speech was delivered by the Dr. Vong Sok assistant director of Sustainable Development – ASEAN Secretariat. Several key messages were highlighted:

- 1. The ASEAN Communities are facing numerous water-related disaster risks.
- Water-related disaster risk threatens the region development process and business through the
 disruption of production flows of goods and services, worsening the balance of payments and
 government budgets, derailing economic growth and poverty reduction, which eventually give
 negatively effects on both the region short and long term development plan.
- 3. Climate change adds a level of uncertainty to water availability and leads to increasing frequency and intensity of extreme floods and drought events in the region. It also causes alteration of river flow regimes, loss of wetlands and floodplains, and salinity intrusion in river deltas due to sea level rise.
- 4. The main threat to water availability and water quality in most ASEAN member states (AMS) is poor management, coordination and awareness. Rapid urban development and poor spatial planning leads to encroachment of the built environment into flood-prone areas and serious degradation of catchments.
- 5. Under the blueprint of ASEAN 2025: Forging ahead together, one of the key results area emphasized on the importance of resiliency:
 - a. A disaster resilient ASEAN that is able to anticipate, respond, cope, adapt, and build back better, faster and smarter
 - b. A safer ASEAN that is able to respond to all health-related hazards including biological, chemical, and radio-nuclear, and emerging threats













- c. A climate adaptive ASEAN with enhanced institutional and human capacities to adapt to the impacts of climate change
- d. Strengthened social protection to reduce vulnerabilities in times of climate changerelated crises, disasters and other environmental changes
- e. Enhanced and optimised financing systems, food, water, energy availability, and other social safety nets in times of crises by making resources more available, accessible, affordable and sustainable
- f. Endeavour towards a "Drug-Free" ASEAN

<u>GWP's activities related to water and DRR: Development of Water Related Disaster Risk Reduction</u> <u>Preparedness Facility</u>

This presentation was made by Mr. Fany Wedahuditama the Global Water Partnership Southeast Asia (GWP-SEA) Regional Coordinator. Several key messages were highlighted:

- 1. The shift of disaster management response to preparedness and resilient amid heightened uncertainties due to climate change is an urgent step to be taken by all countries.
- 2. Preparedness must be measured, because "preparedness is the mother of luck".
- 3. GWP-SEA is developing a tool that will enable country to assess their readiness status.
- 4. By having the readiness status mapping, it is expected that countries can develop their preparedness roadmap for water-related DRR which eventually leads to financing and investment plan for water-related DRR.
- 5. The mapping of readiness should also be linked to a systematic support system which will be coordinated under the water-related DRR facility and by GWP-SEA.
- 6. It is expected that the facility can start to operate within one or two years.
- 7. The benefit of having country's preparedness or readiness mapping is that it can help to direct international support to the most needed country.

The purpose, expectations and contents of the draft Principles on Investment and Financing for Water-related Disaster Risk Reduction

The draft principles on investment and financing for water-related DRR was presented by Mr.Tomoyuki Okada from the Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Japan. Several key messages were highlighted:

- 1. The goal of the principles are: to double the investment and financing for water-related disaster risk reduction; and to shift international assistance from disaster response to preparedness from the current practice ratio of Emergency Response/Rehabilitation: Disaster Risk Reduction/Preparedness (9:1 to 1:9).
- 2. The draft principles:
 - I. Water-related disaster risk reduction is indispensable for socio-economic development:
 - 1) Water-related disasters can be prevented or mitigated by disaster prevention infrastructure, including levees, reservoirs, resilient infrastructure, or green infrastructure.













- 2) Countermeasures implemented in advance against water-related disasters are not a cost, but an investment for the future.
- 3) Water-related disaster risk reduction is a key component of Integrated Water Resources Management (IWRM), providing multi-faceted benefits, such as efficient water use and enhanced biodiversity.

II. Pre-disaster prevention measures should be prioritized.

- 4) Frequent water-related disasters should be forestalled by preventive structural measures at lower cost than recovery.
- 5) Devastating damages to society and economy should be prevented, while prioritizing the protection of human lives.
- 6) "Build Back Better" approach should be incorporated into recovery and reconstruction.
- 7) Various sectors should support "mainstreaming disaster risk reduction."
- 8) Climate change is predicted to intensify disaster damages. Investment should be enhanced for adaptation measures.
- 9) Investment for the maintenance and management of infrastructure should be secured to cope with its aging issues.

III. Governments should improve their fiscal systems and secure sufficient budget

- 10) Governments must prepare the legal, budgetary and administrative systems for disaster risk reduction. The central government should assist local governments whose capacities are overwhelmed by disasters.
- 11) Responsibilities of all stakeholders, including residents, local and central governments, should be defined, empowering the local governments and communities.
- 12) Local and central governments should secure and record budget for pre-disaster risk reduction.
- 13) Emergency reserve fund can be swiftly disbursed after disasters.

IV. Various funding sources should be mobilized

- 14) Mobilization of private funds can support increasing demand for resilient infrastructure. Cooperation with other sectors, such as water resources management and urban planning, helps diversify funding.
- 15) Incentives for awareness raising and self-prevention measures by the private sector should be explored with subsidies and tax exemptions.
- 16) Flood insurance is effective for the speedy recovery of daily life. However, it does not physically reduce flood risks.

V. International community should expand financing for disaster risk reduction

- 17) International cooperation in disaster prevention should be strengthened under the international frameworks. Even a single disaster in one country creates ripple effects to the world through supply chains, migration, etc.
- 18) Surplus fund in emergency assistance should be utilized for further disaster risk reduction.

VI. Science and technology should support decision making on better investment.

- 19) Data and knowledge on disaster losses and impacts should be improved to evaluate the effectiveness of investment.
- 20) Cooperation and alliances among science communities should be enhanced.













After the presentation of Mr. Okada, participants were given sufficient time to complete questionnaire. Completed questionnaires were collected by Vietnam Water Partnership staff.

Discussion (summary of the group discussions)

All participants were divided into 3 smaller groups each with a facilitator and a rapporteur to discuss:

- the Principles and their operationalization
- citizens' perceptions about recovery from mega-disasters.

Discussion 1: On Principles and its operationalization

Group 3

- Pooling of financing for investment of water-related disaster especially from the government budget will require scientific and evidence-based information to convince the government to allocate it. So the main question here is who will gather all the evidences and to present it to the decision-makers. Would it be Civil Society Organizations (`) or a multi-stakeholder platform like country water partnership?
- To be able to secure financing and investment of water related DRR, it is important to have a very high
 public awareness on the importance of preparedness and resiliency. Therefore, empowerment/
 capacity building on the importance of preparedness and resiliency on water-related DRR should be
 prioritized.
- Legislation should incorporate the disincentive/punishment mechanism for activities that will increase the possibility of water-related DRR.
- In terms of structural measures (infrastructures), the government will know which kind of infrastructure to go for. Therefore, it requires a transparent management so that the public can be convinced to allocate fund for water-related DRR.
- Support for disaster also need to be guaranteed to reach the most vulnerable group.
- Different solution for different impact groups.
- Disaster insurance to cover different water-related disasters is important.

Group 2

- There is already on-going investment for water-related DRR. However, we need to increase the budget allocation for that. This of course will need some efforts. For example, the need to link the local initiative with the global initiative.
- The need to balance on the national focus and local focus as disasters happen at the local level. There is
 also competing agenda to go for more rapid development rather than focusing on water-related DRR
 (many countries are also having a top-down approach without understanding the local capacity to
 implement).
- We need integrated planning from different water-related sectors to support investment plan (it is already mentioned in the principles but need to be clearly elaborated)
- Part two of the principles does not clearly elaborate the importance of early warning system. It is suggested for the principles to explicitly inform this.
- Differentiation between relative, frequent, and least frequent is not important. Disaster is disaster.













- Build back better should not only focus build better the infrastructure after the disaster, but also incorporate retrofitting existing infrastructure. However, this will need some systematic empowerment/education.
- Budget allocation for water-related DRR should be safeguarded from potential corruption. It needs to be clearly mentioned in the principles.
- The government mandate on DRR should be clearly understood by the public so they know what the roles of the government and the public itself are.
- Private sectors involvement for water-related DRR should be given special attention as they can be both the one who causes or the one who is impacted.
- Strong leadership from the government is important rather than strong private sector leadership on water-related DRR. The case of business continuity management in Thailand is one of the example where the private sector takes lead to carefully shift from disaster respons to preparedness and resilience.
- Another example that needs attention too is what if the disaster is caused by the private sector. Would the government budget is allowed to be used for rehabilitation? (case of Indonesia: LAPINDO The Sidoarjo Mudflow).

Group 1

- Principles should consider the specific country context. Some countries have higher GDPs so it is easier to set aside funding for water-related DRR. Therefore, international support can be targeted for those countries that do not have capacity to do that.
- How we can have legislation and constitution developed for Asian countries. The issue of state-local government role/sovereignty (decentralization of mandate) should be taken into consideration. Above these issues, the understanding of decision-maker at all levels must be ensured (buy-in), otherwise the regulatory framework will be in place.
- The principles should clearly mention the vulnerable groups.
- Principles also should consider drought as the other form of water-related disaster.
- IWRM is a holistic approach, we should look at all the different aspects.
- Data sharing to get buy-in from decision maker and for better water-related DRR efforts.
- Sharing expertise on water-related DRR should be made affordable and easy to access

Discussion 2: On citizens' perception about recovery from mega-disasters (on effective disaster response)

Presentation 1: Malaysia experience

- In general, most common natural disasters in Malaysia are floods, landslides, cyclonic storm or strong wind, forest fire (peat forest fire), haze, and droughts. However, recently we are exposed and affected by localised earthquake and tsunami.
- There is an urgency for everyone to understand the pattern of La Nina and El Nino and how these caused by climate change.
 - Global patterns of climatic variability tend to recur periodically with enough frequency and with similar characteristics over a sufficient length of time.
 - > One such pattern is called El Niño. In recent decades, scientists have recognized that El Niño is linked with other shifts in global weather patterns. The intensity and duration of El Niño events are varied and hard to predict. They typically last anywhere from fourteen to twenty-two months, but they can be much shorter or longer. El Niño often begins early in the year and peaks between the following November and January, but no two events in the past have behaved in the same way.













- La Niña is the counterpart of El Niño and represents the other extreme of the cycle. La Niña cold event years often (but not always) follow El Niño warm event years.
- > The occurrence or severity of a particular drought or flood in a particular location depends on a lot of things, including natural climate patterns like El Nino. So, What are the effect of these climate conditions to our country?
- El Niño warm (surface) water from in the eastern equatorial Pacific region along the coasts of Peru and Ecuador lasts from 12 to 18 months.
- La Niña colder than-average sea surface temperatures (SSTs) in the central or eastern equatorial Pacific region
- The benefits of the integration of flood risk management into wider development management, urban planning and climate change adaptation are clear;
- The most successful long-term flood risk management strategies will balance the implementation of shortrun, quick gain, non- structural measures with a vision of the best suite of structural and non- structural measures to be implemented for the longer term;
- Understanding the required resources, the best and worst case scenarios and the tipping points at which action becomes imperative, rather than justified, can lead to better decisions.

<u>Presentation 2: Cambodia experience</u>

- The NCDM (1995) comprises 22 members from 17 Ministries, the Cambodian Armed Forces, the Civil Aviation
 Authority and the Cambodian Red Cross. The NCDM is supported by a Secretariat that acts as the point of
 contact.
- A Community Based Disaster Risk Reduction Strategy was prepared after extensive consultation with vulnerable communities, and presented to the Cambodian Disaster Risk Reduction Forum.
- The process adopted for developing the action plans were highly consultative and was led by the respective provincial and district committees for disaster management with active support from other stakeholders working in the area.
- Gaps and Challenges related to CC issues:
 - Lack of inventories of existing climate information & vulnerability assessments;
 - Lack of consistent climate scenarios and limited cross-sectoral collaboration on climate adaptation programming at sub-national and national levels;
 - Lack of clear CC policy and legislation;
 - Limited technical and institutional capacity;
 - Data availability, reliability and management issues;
 - limited CC awareness, limited understanding about future CC & its impacts, and its GHG mitigation potential;
 - Limited connection between research results, policy formulation and proposed actions.
- Water-related natural disasters:
 - Extreme flooding, flash floods and droughts are water-related natural disaster events that regularly impact Cambodia's economic growth, natural environment and urban and rural livelihoods (caused by storms and typhoons in the upper river basins, and the rising of water levels in the Mekong River floodplains and the Tonle Sap Great Lake).
 - Flood benefits: environmental, social, and economic benefits of flooding in the lower MR are greater than in any other river basin in the world. The annual flood pulse drives the basin's fisheries and other ecological responses. Floodwaters are stored for use in the dry season, particularly for













irrigation. Flood-deposited sediments improve soil fertility across the floodplains. Finally, floods flush and dilute stagnant and polluted waters, recharge groundwater tables, and maintain river morphologies.

- Drought: can result in food and water shortages, loss of income, and higher levels of disease, damaging to agriculture, especially rice and can result in a total loss of crops, livestock and fisheries. High frequency of severe drought in Cambodia can cause greater damages than those of flooding.
- Disadvantages: cause death to many people, ruin crops, damage water supply and sanitation infrastructure, increase spreading of water-borne diseases, prolong lack of access to water, disrupt social and economic activities and displace many people. In the Lower Mekong River region, Cambodia and Viet Nam commonly account for approximately two-thirds of the region's total annual flood damage.

Presentation 3: Philippines experience

- National Plans:
 - > 2007 National IWRM Plan Framework

A directional plan that serves as roadmap and collaborative platform for all stakeholders and water-related agencies to effectively work together to achieve Water for All in a sustainable, equitable and ecologically-balanced manner. One of its strategic theme is "Managing and mitigating risks from water-related disasters and climate change"

- National Climate Change Action Plan (2011-2028) provides key actions that enhances adaptive capacity and resilience of communities and natural ecosystems to climate change and outlines specific programs and strategies for adaptation and mitigation. Addresses seven thematic priorities, including Food Security, Water Sufficiency, Ecological and Environmental Stability, Human Security, Climate-smart Industries and Services, Sustainable Energy and Knowledge and Capacity Development.
- National Disaster Risk Reduction and Management Plan (NDRRMP) (2011-2028)

 RA 10121 provided the preparation and implementation of this Plan. It covers disaster prevention and mitigation, disaster preparedness, disaster response and disaster rehabilitation and recovery. Efforts were now being made to integrate the NDRRMP to national plans/policy and expected to have contributed to meeting the Sustainable Development Goals and the Hyogo Framework for Action.
- Building Blocks/ Action Areas (and what has been implemented in the Philippines so far):
 - 1) Water Governance/Institutional Reforms
 - 2) Financing/ Investments Programming
 - 3) Action Projects/ Technologies to service water-vulnerable communities
 - 4) Database/ Knowledge Management Systems
- Project NOAH (Nationwide Operational Assessment of Hazards) is the Department of Science and Technology's (DOST) response to the call of the former President Benigno S. Aquino III for a more accurate, integrated, and responsive disaster prevention and mitigation system, especially in high-risk areas throughout the Philippines. The Project will harness technologies and management services for disaster risk reduction activities.
- National Geo-hazards Mapping and Assessment Program aims to identify areas in the country which are susceptible or vulnerable to various geo-hazards. The program also seeks to provide information to various stakeholders in order to lessen or mitigate the impact of these events.













- Flood Management Master Plan for Metro Manila and surrounding Areas: A comprehensive flood risk management plan for Metro Manila to determine a set of priority structural measures, which will still undergo individual feasibility studies and detailed design prior to implementation, including non-structural measures that will provide sustainable flood management up to a designated safety level and serve as the roadmap/vision of the Government from 2012-2035.
- Pending Action Areas:
 - Improving knowledge management and information systems (informed by risk/vulnerability assessments and monitoring and evaluation and vice-versa, which shall be used for planning and investments programming; integrative)
 - Strengthening research, development and demonstration for water-related disaster and climateresilient technologies
 - Maximizing/Accessing climate and disaster financing opportunities (i.e. Green Climate Fund)
 - Programmatic capacity-building program and communication platforms
 - > Enhancing planning and institutional coordination mechanisms and linkages

<u>Presentation</u> 4: Thailand experience: Innovative Disaster Management Knowledge HUB

- Why do we need to be KNOWLEDGE HUB?
 To better link and influence at policy level for the supporting of inclusive and sustainable water resources management.
- Linking on the ground experiences, best practices, lesson learned, innovation with the policy development processes at the national level in order to have a down-to-earth national policy.
- Some Showcases linked to Policy level:
 - Post Disaster Needs Assessment (PDNA): National Action Plan 1-Disaster Risks Reduction (DRR); In action –PDNA by Academics and Civic groups
 - Community-based Risk Reduction:
 - a) Five Sub-projects to bring academic to practical knowledge;
 - b) Undertake the lesson-learned and report (with recommendation) to the line agencies responsible and involved in disaster risks reduction: Department of Disaster Prevention and Mitigation, and Department of Local Administration, Ministry of Interior.

Closing

The consultation meeting was officially closed by Prof. Hoang Thai Dai and followed up by group picture of sponsored participants













PHOTO GALLERY



























































































