## Draft Principles to Address Water-related DRR under COVID-19 Pandemics

Be aware that water-related disasters will definitely happen in countries ad cities even under COVID-19 pandemics. DRR actions with special attention to the current pandemic situation will protect disaster-affected areas from becoming epicenter of pandemic explosion and swiftly recover from disasters. The Principles are a set of practical advice urgently given to leaders and both mangers of DRR and those of COVID-19 to better address water-related disasters that may occur even tomorrow under the pandemics. The Principles are made to address water-related disasters but most of the items are applicable to the other types of disasters.

- 1. Enhancing leaders' awareness on DRR in the pandemic
- Be aware that water-related disasters will definitely happen in countries ad cities even under COVID-19 pandemics. Although situations in affected areas by both disasters and pandemics are sometimes complicated and in confusion, step by step decision making and action will certainly make progress to address either of the events. Avoid giving-up thinking or making decision although tasks may look too immense and complicated. Making DRR decision with pandemic situation in mind, and vice versa, will help avoid later confusion.
- Ensure to convene meetings in which DRR team and COVID-19 team share information. Make critical decisions by consulting the both. Integrated risk management is ideal. If not, place a liaison of DRR in COVID-19 team and vice versa.
- If a disaster happens, maintain or recover as quickly as possible basic services such as power, water and hygiene to prevent spread of decease and chain effect of disasters. Give protection to medical and DRR personnel from the twin risks.
- Request DRR managers now to start disaster management plans under the pandemic situation in case it happens. Ask them what protection is needed to hospitals and medical facilities.
- Include items in the Principles in national and community DRR plans and BCPs.
- 2. Strengthening integrated risk management governance of disasters and pandemics
- Include a liaison of COVID-19 management team in Disaster Management HQs.
- Share information among COVID-19 management team and disaster management team

on regular basis.

- Disaster management team should proactively obtain information on densely infected areas and facilities
- Provide hazard maps and DRR advice to hospitals and facilities addressing COVID-19 before disasters strike
- DRR managers should consult COVID-19 management team when giving critical advice to decision makers.
- Create overlapping map of disaster/COVID-19 affected areas. Risks of both infection and disasters can be reduced by avoiding visit of risk-prone areas.
- Conduct regular disaster risk awareness campaign in combination with COVID-19 awareness one.
- 3. Protecting scarce medical resources from disaster impact
- Avoid designating hospitals and medical facilities as places for evacuation. Remove those buildings and facilities from designated evacuation places in hazard maps and DRR plans if any.
- Prioritize protection of medical staffs, facilities, and equipment from disaster impact through, e.g.:
  - Provision of auxiliary power supply equipment to hospitals, health posts and medical facilities
  - Early dispatch of disaster management personnel to hospitals, health posts and medical facilities to ensure communication with and appropriate DRR advice to them
  - > Help moving essential medical equipment and materials to upper floors at early stage
  - Help creating evacuation plan for patients and medical staff members taking infectious zones into consideration
  - Prioritized provision of water (and hygiene equipment) to hospitals, health posts and medical facilities if water supply and sanitation services are disrupted due to disasters
  - ۶
- 4. Protecting disaster management stakeholders from threat of COVID-19.
- Provide basic advice to avoid infection to disaster management officials and volunteers (through advice leaflets, provision of webinar, etc.)
- Include in manuals and daily check list social distancing in DRR activities
- Obligate self-medical checks (e.g. every morning) by disaster management personnel to

prevent possible infection in their contact with colleagues and evacuees

- 5. Protecting disaster evacuees from threat of COVID-19
- Promote vertical evacuation, i.e., evacuating to the second or upper floor of evacuees' own building, as priority methods if safe whenever and wherever possible. This is needed not only to avoid accidents or encounter with disasters during evacuation but also to make evacuation shelters less dense with people and reduce risk of infection by the virus in shelters.
- Ensure to keep maximum ventilation of evacuation buildings/facilities to prevent cluster infection. Extra air conditioning methods might be necessary.
- Provide with separate buildings/facilities/areas of evacuation for self-quarantine patients.
- Provide clean water, soaps, and sanitary goods for evacuees.
- Conduct basic medical checks such as by thermometers to evacuees.
- Advise to citizens to include masks, wipes, soaps, towels, and thermometers in evacuation kits prior to disasters.
- Call for cash donation rather than materials which might be contaminated under the pandemics.
- 6. Protecting COVID-19 patients from threat of disasters
- Make protection plan for COVID-19 patients in self-quarantine or designated facilities which should include: means of communication and messages; evacuation plan to disaster-safe quarantine facilities; medical support after evacuation
- 7. Evacuation advice under locked down situation of cities and areas.
- Give special early warning to the locked down areas to ensure appropriate safety level against disasters and prevent panic actions
- 8. Global solidarity and international cooperation
- When a mega-disaster happens, share information on the disaster and its impact in transparent and accountable manners on regular basis, which will particularly help keep global trust to economy of the affected country.
- Special facilitation to International be DRR and Humanitarian Aid personnel and equipment: Even under entry restriction situation, international DRR and humanitarian aid personnel and equipment may enter affected countries and areas. Countries should pre-consider and plan such facilitation arrangement such as visa issuance and customs clearance. Dispatched teams should be equipped with protection kits. Medical briefing

should be given to such international assistance teams before entering into COVID-19 affected areas.