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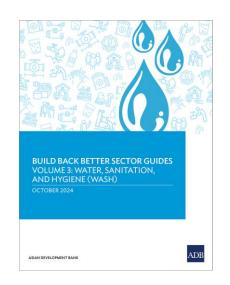


### BUILD BACK BETTER

Sector Dialogues



Thursday 27 February 2025, 3.30pm-4.30pm Manila





https://www.adb.org/publications/series/build-back-better-sector-guides

### **Objectives**

#### **BUILD BACK BETTER**

Sector Dialogues



Sustainable and adaptable solutions

> Establish new value chains

Safe, equitable, and affordable access



technology



## BUILD BACK BETTER Sector Dialogues

# **Examples of Water Sector Disaster Effects and Recovery Needs:**

	Disaster Effects (Damage and Loss) (\$ million) <sup>a</sup>		Recovery Needs (\$ million) <sup>b</sup>	
Event	Infrastructure <sup>b</sup>	Water	Infrastructure <sup>b</sup>	Water
Earthquake (Nepal), 2015 <sup>c</sup>	652	111 (17%)	743	181 (24%)
Cyclone Winston (Fiji), 2016 <sup>d</sup>	119	12 (10%)	136	12 (9%)
Floods and landslides (Sri Lanka), 2017 <sup>e</sup>	103	11 (11%)	170	56 (33%)
Floods (Lao People's Democratic Republic), 2018 <sup>f</sup>	219	8.33 (4%)	290	(3%)



### BUILD BACK BETTER

Sector Dialogues



# **Considerations for Post-Disaster WASH Implementation**



#### Phasing of implementation presents challenges

- Phased WASH programs are challenging due to coupling of human and natural systems
- Rainfall during reconstruction complicates efforts
- Temporary and long-term solutions need careful phasing



#### Incorporating temporary "work-around" solutions

- Often already be in place when WASH reconstruction begins due to urgency
- Work-around solutions must be either be upgraded and integrated into new WASH infrastructure design or replaced with permanent solutions.



#### Need to consider differentiated WASH requirements

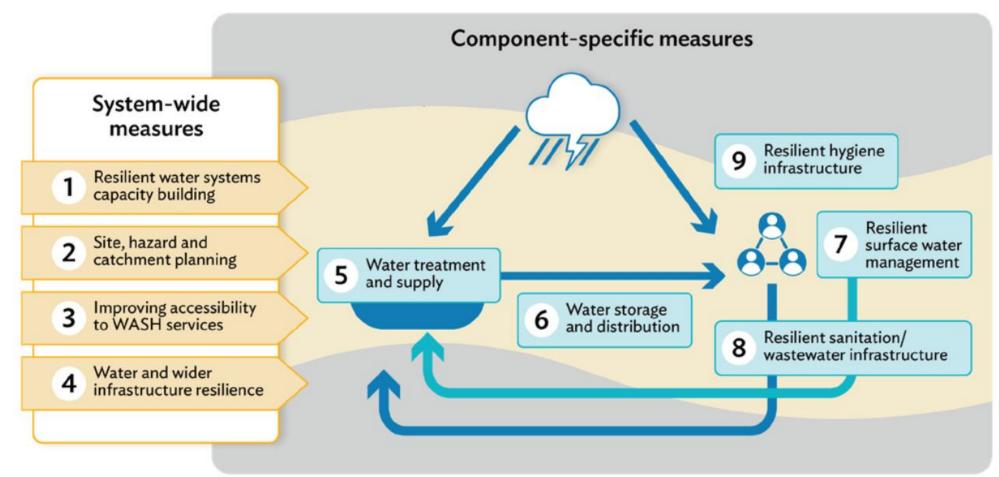
- The cultural and religious beliefs of the affected populations should be carefully considered in WASH solutions.
- Differentiated needs of local communities and displaced groups.

### BUILD BACK BETTER

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### **BBB Measures:**



# System-Wide Measures







#### **Water System Capacity Building**

- Develop understanding of all stakeholders involved in WASH value chain
- Analyse for opportunities to strengthen future resilience

#### Site, Hazard and Catchment Planning

- Site-specific multi-hazard risk assessment
- Regional catchment planning of up- and down-stream connected systems

#### Improving the Accessibility to WASH Services

- Ensure continued access to WASH services during recovery period and in hazardous conditions.
- Consider the needs of women, girls and other vulnerable groups especially those involved in water-related tasks
- Be aware of topics which may be taboo, such as menstruation.

#### Integration of WASH into Wider Infrastructure Systems

- Many other infrastructure systems rely on water systems for service delivery.
- Consider decentralised systems or built in redundancy to avoid cascading impacts of WASH system failure on other sectors.

2

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# **Component Specific Measures**





#### **Resilient Water Supply and Treatment**

- Independent, good quality raw water sources
- Seal wells and boreholes
- Size treatment systems for future needs or temporary demand increases
- Use robust materials for tanks and connection points

#### **Resilient Water Storage and Distribution**

- Decentralised potable water storage and supply with reserves
- Flow control valves
- Monitor and reduce consumption and nonrevenue water
- Prioritise gravity systems

## **Component Specific Measures**





7

#### **Resilient Surface Water Management**

- Stormwater drainage design informed by hydrological and hydraulic modelling
- Separate storm/greywater from sewerage
- Integrated flood risk management measures and Nature Based Solutions

#### **Resilient Sanitation and Wastewater Infrastructure**

- 8
- Prioritise basic needs and gradually improve "sanitation ladder"
- Formalise decentralised systems to prevent disease transmission and environmental degradation.
- Design wastewater structures to be hazard resilient

#### **Resilient Hygiene Infrastructure**

- 9
- Adequate handwashing facilities to prevent disease
- Resilient supply chain for hygiene products