
2.2 Disaster Risk Management Cycle

The disaster risk management cycle, shown in Figure 2.2, consists of four phases: Prevention/Mitigation and Preparedness in the pre-disaster stage, and Response and Rehabilitation/Reconstruction in post-disaster stage. In the “Prevention/Mitigation” phase, efforts are made to prevent or mitigate damage (*e.g.* construction of dikes and dams against floods). Activities and measures for ensuring an effective response to the impact of hazards are classified as “Preparedness” (*e.g.* emergency drills and public awareness) and are not aimed at averting the occurrence of a disaster. “Response” includes such activities as rescue efforts, first aid, fire fighting and evacuation. In the “Rehabilitation/Reconstruction” phase, considerations of disaster risk reduction should form the foundations for all activities. Examples of measures taken in each phase are listed in Table 2.1. Taking appropriate measures based on the concept of disaster risk management in each phase of the disaster risk management cycle can reduce the overall disaster risk.

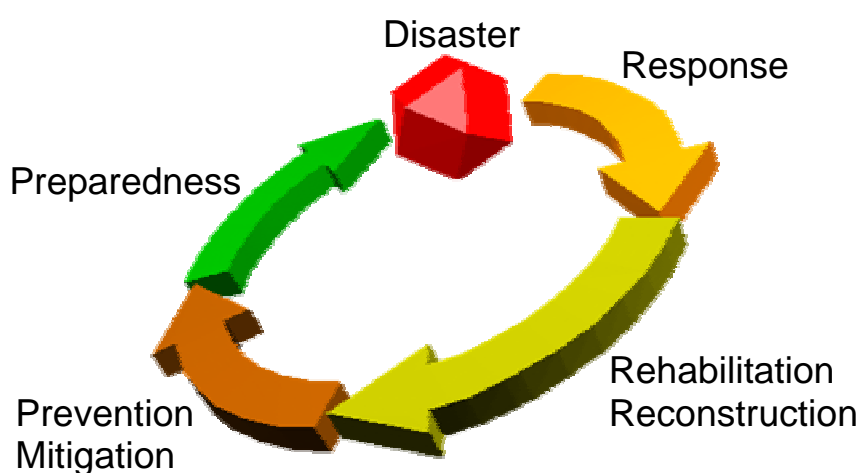


Figure 2.2 Disaster Risk Management Cycle

Table 2.1 Example of Measures in Each Disaster Risk Management Phase

Disaster Phase	Earthquake	Flood	Storm (cyclone, typhoon, hurricane)	Landslide
Prevention/ Mitigation	<ul style="list-style-type: none"> - Seismic design - Retrofitting of vulnerable buildings - Installation of seismic isolation/ seismic response control systems 	<ul style="list-style-type: none"> - Construction of dike - Building of dam - Forestation - Construction of flood control basins/ reservoirs 	<ul style="list-style-type: none"> - Construction of tide wall - Establishment of forests to protect against storms 	<ul style="list-style-type: none"> - Construction of erosion control dams - Construction of retaining walls
Preparedness	<ul style="list-style-type: none"> - Construction and operation of earthquake observation systems 	<ul style="list-style-type: none"> - Construction and operation of meteorological observation systems 	<ul style="list-style-type: none"> - Construction of shelter - Construction and operation of meteorological observation systems 	<ul style="list-style-type: none"> - Construction and operation of meteorological observation systems
	<ul style="list-style-type: none"> - Preparation of hazard maps - Food & material stockpiling - Emergency drills - Construction of early warning systems - Preparation of emergency kits 			
Response	<ul style="list-style-type: none"> - Rescue efforts - First aid treatment - Fire fighting - Monitoring of secondary disaster - Construction of temporary housing - Establishment of tent villages 			
Rehabilitation/ Reconstruction	<ul style="list-style-type: none"> - Disaster resistant reconstruction - Appropriate land use planning - Livelihood support - Industrial rehabilitation planning 			