[Viet Nam] Group 1: Necessary National and Regional Actions for DRR and CCA Integration

Assessment category	1) Priority issues	2) Necessary actions and roles of relevant agencies	3) Proposed common approaches in ASEAN and available resources/institutions	4) Required technical assistance
4. Risk assessment 1) Disaster database 2) Hydro-meteorological data management and climate risk analysis 3) Hazard and risk mapping 4) Data sharing and dissemination 5) Early warning system and disaster risk communication	Coordination between agencies; Water resources: avoid overlaps between agricultural and environmental sectors; Available resource is limited;	Coordination office is required (a successful case in Ninh Thuan Province for WRM)	Learn from different models: e.g. from the Philippines	
	CC is cross-cutting; different sectors, different laws; CCA is not integrated in DRR yet; two different national strategies;	MONRE is the lead agency; two national committees on DRR and CCA need to be integrated; need a common national committee; need a single agency covering both;		
	Different layers of data need to be integrated; data sharing system; Sectoral barriers; vertical information sharing is not an issue;	DNDPC needs to incorporate other information in disaster and risk maps / database; including land-use change data, forest coverage data; DNDPC should also specify necessary data, indicators and parameters and direct other agencies; Forest data can be useful for hydro-mapping too; cross-sectoral data sharing should be promoted;	Smart phone apps; open source; software; private companies involvement; Data monitoring equipment; mobilisation of social capital;	

		Access to data by provincial government needs to be improved; National Steering Committee should facilitate inter-ministerial data sharing;		
	Generally local authorities are waiting for guidelines from the national government;	National strategy is required for CC;		
	Developing a river and sea dyke system does not look into CC; only technical specification to be fully complied;	Technical standard for infrastructure design incorporating CC risk is required;		
	Education of communities, to respond to additional risks is required;	Early warning and preparatory training (to prevent forest fire; cannot do much once the fire starts)		
	Capacity building needs at local level; quality of training matters;	Training program needs to be developed based on actual needs assessment using the 10-year experiences of CBDRM; it needs to be integrated in the socio-economic development plan;		

[Viet Nam] Group 2: Necessary National and Regional Actions for DRR and CCA Integration

Assessment category	1) Priority issues	2) Necessary actions and roles of relevant agencies	3) Proposed common approaches in ASEAN and available resources/institutions	4) Required technical assistance
4. Risk assessment 1) Disaster database 2) Hydro-meteorological data management and climate risk analysis 3) Hazard and risk mapping 4) Data sharing and dissemination 5) Early warning system and disaster risk communication	1)+3)+4) and 5) are the priority issues. 1) +3)+ 4): Fragmentation of information related to disaster among the different ministries due to lack of data sharing mechanism. Insufficient facility for disseminating information Hazard and risk maps need to be included in the database 5): Necessary more EWSs covering all kinds of natural disasters Insufficient communication with local people based on EWS	1)+3)+4): Develop national disaster database – Responsible agency: Directorate of National Disaster Prevention and Control (DNDPC) 3): Involvement of lots of agencies. Focal point: DNDPC MARD, MONRE, localities/ provinces with coordinator of GLDA. 5): Develop early warning system for all types of disaster and disseminate to vulnerable communities: MARD, MONRE, sectors, localities; Coordinator: Steering Committee. Necessary of the Ministry of communication for communication about disaster risks.	Information and data sharing. However, there are confidential data and limit of opening the data in Viet Nam. Discussion between ASEAN members, exchange experiences (DRR and CCA integration, techniques including risk assessment) Multi- and bilateral cooperation	

[Viet Nam] Group 3: Necessary National and Regional Actions for DRR and CCA Integration

Assessment category	1) Priority issues	2) Necessary actions and roles of relevant agencies	3) Proposed common approaches in ASEAN and available resources/institutions	4) Required technical assistance
4. Risk assessment 1) Disaster database 2) Hydro-meteorological data management and climate risk analysis 3) Hazard and risk mapping 4) Data sharing and dissemination 5) Early warning system and disaster risk communication	- Develop national disaster database: 2 main sources: monitoring - Standardize type and contents of database	- statistic, count - standardize database - Official data sharing mechanism - Host: DNDPC - cooperative agencies: sectors, localities	- The government should encourage volunteer for DRR: doctors, officers	- Localities develop E-mailbox to share report - Training courses on knowledges, equipment use - Trained, equipped - Countries send experts, share experiences on developing national database systems - Software for monitoring and transfer standardized database
	Capacity building for monitoring, automatic monitoring, socialize monitoring system Standardize and digitize base maps, remote sensing maps Implementation monitor mechanism, techniques, synthesized infrastructure and techniques, electrical government (national and	Host: TCKTTV, Cooperation: MONRE, MARD MONRE, MARD, MPI, sectors etc. National steering	Apply standard of WMO and MRC GIS Integrated suitable for ASEAN (internet, decentralization	Equipment, software (license) Standardize type, data structure, language (EL) Different levels of priorities High techniques, dissemination techs, forecast

	local levels) Toward impacted objects, objects need to receive information Dissemination methods: SMS Cooperation mechanism between network service providers, forecast agencies, receivers Capacity building on early disaster warning etc.	committee on disaster management and control, ministries, Telecommunication services	mechanism …, professional levels, community level..) Cooperation mechanism between agencies provide and disseminate information Sharing models in ASEAN Mobile SMS, APP store	
5. Planning and implementation 1) Guideline and standard	Suitable for areas: house, works that are adapting to disaster characteristics of each area, weather conditions … Equip skills to response to disaster for communities Determine risk levels to prioritize development areas	Each ministry has guidelines for specific areas and disseminated at local level Warning models for each area		Develop standards, guideline

2) Land-use and urban planning
 	
  3) Disaster-resilient investment
  4) Drought risk reduction
	Land using: forest protection
	
	Urban planning
		MPI, MOC, MARD		Planning techniques