Viet Nam: Country Case Study Report

How Law and Regulation Support Disaster Risk Reduction

International Federation of Red Cross and Red Crescent Societies May 2014



Case Study:

IFRC-UNDP Series on Legal Frameworks to support Disaster Risk Reduction





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About this report

This report was commissioned by the IFRC and prepared by Henk Tukker and Ngo Cong Chinh, project consultants. It is one of a series of case studies the IFRC has undertaken with UNDP as part of a global research project to learn about how law and regulation supports disaster risk reduction, particularly at the community level. For more information about the project and various case studies as they become available, please visit http://www.drr-law.org.

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Cover photograph: Community hazard mapping exercises are an integral part of disaster preparedness and prevention in Viet Nam. Ngo Cong Chinh, 2010.

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Disclaimer

This report was prepared using English translations of Viet Nam's law, in consultation with Vietnamese researchers and consultants. Although every effort has been made to ensure that the translated laws and regulations used were as accurate as possible, only the original Vietnamese laws and regulations are legally valid.

The field research for this report was completed prior to the adoption of the New DRM Law on Natural Disaster Prevention and Control of 2013. The text of the report has been updated to describe the changes to be brought about by the New DRM Law, but may not reflect implementing regulations or decisions passed subsequently and does not assess steps to implement the New DRM Law.

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Geneva, May 2014

Contents

Ex	Executive Summary				
Ac	know	/ledge	ments	8	
Lis	t of A	Abbrev	iations	9	
1.	Introduction				
	1.1.	Case s	study objectives	12	
	1.2.	Backg	round	12	
	1.3.	Summ	ary of main natural hazards and risks in Viet Nam	13	
	1.4.	Gover	nmental and law-making structure	14	
2.	Me	thodol	ogy	16	
3.	Findings On Regulatory Frameworks For DRR And Their Implementation				
	3.1.	DRR ir	disaster management law and institutions	20	
		3.1.1.	DRR in current legislation	20	
		3.1.2.	International instruments	25	
		3.1.3.	Law and regulations for mobilising financial resources for DRR	26	
		3.1.4.	Implementation and practice	27	
		3.1.5.	DRR in disaster management legislation: good practice and gaps	32	
		Key fin	ding 1: DRR in disaster management law and institutions	33	
	3.2.	Respo	nsibility, accountability and liability for natural disaster risk reduction	34	
		3.2.1.	Legislation on compensation	34	
		3.2.2.	Individual obligations, rights, and prohibitions	35	
		3.2.3.	Government accountability	36	
		3.2.4.	Natural disaster insurance	36	
		3.2.5.	Responsibility, accountability and liability for DRR: good practice and gaps	37	
		Key fin	ding 2: Responsibility, accountability and liability	38	
	3.3. Law on specific hazards		38		
		3.3.1.	Earthquakes and tsunamis	38	
		3.3.2.	Fires	39	
		Key finding 3: Law on specific hazards			
	3.4.	. Early warning systems and risk mapping			
		3.4.1.	The legal framework for early warning	41	
		3.4.2.	Risk mapping law and regulations	44	
		Key fine	ding 4: Early warning and risk mapping	46	

.....

	3.5.		46
		3.5.1. Building codes	46
	Key finding 5: Building codes		
		3.5.2. Land tenure and land use planning laws	49
		Key finding 6: Land tenure and land use planning	51
		3.5.3. Informal and precarious settlements	51
		Key finding 7: Informal and precarious settlements	52
	3.6. Regulation of the natural and rural environment		52
		3.6.1. Human risks in environmental change	52
		Key finding 8: Human risks in environmental change	53
		3.6.2. Forest management and exploitation	54
		Key finding 9: Forest management and exploitation	55
		3.6.3. Drought and food security	55
		Key finding 10: Drought and food security	57
	3.7.	DRR education and awareness	57
		Key finding 11: DRR awareness and education	60
4.	Conclusions and Observations		31
•••••	4.1.	Good practices and examples	62
•••••	4.2.	Gaps in the legal framework for DRR	63
•••••	4.3.		63
•••••	4.4.	Conclusion: How law and regulation support DRR in Viet Nam	65
Anr	nex I	- List of principal contacts made in Hanoi	66
Anr	nex II	- Key informants in Nghe An Province	59
Anr	nex II	I – Bibliography	71

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Executive Summary

Viet Nam is prone to many different types of natural hazards. They are mainly hydro-meteorological, such as recurring floods and storms, but also include low to moderate risks of droughts, earthquakes, tsunamis, forest fires, cold and heat waves, and animal disease epidemics. Apart from their devastating impact on human lives and health, these disasters can cripple different sectors of the economy, from agriculture to industry, energy to education. Laws and regulations play a crucial role in reducing these disaster risks and building safer and more resilient communities.

This case study explores the extent to which legal frameworks in Viet Nam support national and local disaster risk reduction (DRR) efforts against natural hazards. It covers a wide range of law and regulatory issues including the integration of DRR into disaster management laws, institutional arrangements, liability, early warning systems, infrastructure, building codes, land use planning, environmental management/climate change adaptation, awareness-raising and education.

The study is also part of a global project initiated by the International Federation of Red Cross and Red Crescent Societies (IFRC) and United Nations Development Programme (UNDP) on how law and regulations support DRR. The global project aims to analyse best practices and common gaps, and provide ideas and data for states wishing to facilitate DRR through legislation.

This Viet Nam study was conducted in two stages, starting with a national law desk survey of DRR-related legislation, which was then followed by interviews and further research by the consultants in Viet Nam. The methodology of interviewing key stakeholders at national, sub-national, local and community levels, allows for a better understanding of the way legal frameworks are implemented throughout all levels of society.

DRR in national disaster risk management

Laws and regulations regarding DRR in Viet Nam remain diverse, extending over many different instruments that are frequently updated, although the new Law on Natural Disaster Prevention and Control 2013 (New DRM Law), which entered into force on 1 May 2014, has rationalised this by bringing more areas of DRR regulation under one umbrella law. Although dispersed, and despite some gaps, this legal framework has been vital in Viet Nam's substantial achievements in the area of DRR.

Legislation on early warning, with clearly defined responsibilities for different government agencies, has contributed significantly to reducing the risk of floods and storms in coastal and delta areas. The legal framework is implemented through the Central Committee for Flood and Storm Control (CCFSC), which plays a prominent role in the coordination and mobilisation of resources when floods or storms are forecast. With established and active committees at national, provincial, district and commune levels, this system provides the institutional framework through which early warning communications are channeled to communities. Although this particular version of the CCFSC was repealed by the New DRM Law, the law provides for similar regulations to be made (sections 46-47). The Dyke Law has strengthened efforts in reinforcing structural measures against floods and storms, such as the upgrading of dykes, drainage systems and construction of water reservoirs, which are all areas within the mandate of the Ministry of Agriculture and Rural Development (MARD). Combined with the protection of mangrove forests in the Forest Law, this framework supports a key system of physical barriers of coastal communities against storms from the sea.

5

The legal framework also provides compensation for individuals and households that suffer damage from natural hazards, which operates as a form of public insurance against natural disasters. Legal accountability of government officials in disaster risk management (DRM) is included in the legal framework, although, in practice, sanctions are rarely applied.

New Law on Natural Disaster Prevention and Control 2013

To further strengthen the legal framework, the Viet Nam National Assembly with the support of MARD, developed a new law for DRM during the period 2010 to 2012. The new Law on Natural Disaster Prevention and Control was officially adopted in June 2013 and was scheduled to come into effect on 1 May 2014. The New DRM Law maintains existing good practices and addresses a number of gaps in the prior legislative framework for DRM. The primary impetus behind the development of the New DRM Law was to bring together the main elements of the disaster response and risk management system in Viet Nam, which was based on a range of different instruments. Focusing on natural hazards, the New DRM Law provides, among other things, for:

- the establishment of a Central Steering Committee for Natural Disaster Prevention and Control (CSCNDPC) with a wider mandate than the current standing CCFSC;
- the expansion of early warning to other hazards and to mountain areas;
- the zoning of natural hazards and references to 'resilient constructions';
- DRR public awareness-raising and mainstreaming of DRR into school systems and socio-economic and sectoral development;
- the construction of dual-purpose public buildings that can serve as shelter during evacuations;
- rights and obligations of individuals with respect to DRM, and;
- policies to offer incentives and promote the use of insurance to recover from natural disaster losses.

DRR in construction, land management and other sectoral laws

This study also identifies that in some cases, while sectoral laws on construction and land management may promote the integration of DRR, other factors such as a lack of capacity or financial resources, can serve as barriers to successful implementation. For example:

- The Law on Construction requires permits for construction in urban areas and buildings of more than two storeys in rural areas, providing an opportunity for authorities to ensure resistance to earthquakes and storms. However, the Ministry of Construction (MOC) has insufficient capacity at a local level to conduct inspections on all of the many construction sites once permits have been issued, so that compliance with the building codes cannot always be ensured. These codes also require detailed flood risk maps from an authorised agency, which are generally not available.
- The 2003 Law on Land provides opportunities to use land use planning as a tool for DRR. However, the law has so far not been systematically implemented to support DRR, in part because it does not require that reducing the impact of natural hazards must be part of land use planning at all levels.
- Environmental protection laws also do not currently make explicit reference to DRR or require the inclusion of DRR in environmental impact assessments, so there is an opportunity to enhance the legal framework in this regard. Some of the challenges include limited resources at MARD

- for effective implementation of the Forest Law, especially for the protection of mangrove forests. Other policies however, such as the Climate Change Strategy, do make DRR a core activity.
- Fires are often not listed as a natural hazard in the context of disasters, and the Law on Fire Prevention and Fighting 2001 is a completely separate regime. The CCFSC has not had responsibilities for response or prevention of fires, and fire is not mentioned in the New DRM Law.
- Earthquakes and tsunamis are low to moderate risk in Viet Nam. However, prime minister (PM) decisions on earthquake and tsunami response have contributed to prevention and mitigation measures, including the mapping of earthquake risks that has been completed by the Geophysics Institute
- Legislation on food security, including areas designated for rice production, contributes to maintaining national food reserves against the event of drought, storm damage or insect infestations.
 The legislation on safety nets also ensures distribution of basic food requirements across the whole population.

Community Level DRR

As the Viet Nam Red Cross Society (VNRC) and international non-governmental organisations (INGOs) continue to support community-level DRM projects, there also is a need for a stronger focus on long-term prevention and mitigation, as well as coordination and harmonisation between different government agencies and external organisations. While the New DRM Law does outline clear responsibilities for different government agencies, additional decrees or secondary legislation is required to provide further details for coordination and implementation. The 'scaling up' of DRR projects and allocation of resources for DRR initiatives may be enhanced through the regulatory framework to achieve longer term sustainability. For example, policies addressing education and awareness on DRR are currently applied on a project basis only. However, the New DRM Law does cement the role of the Ministry of Education and Training (MOET) in the integration of disaster risk knowledge into the curricula at all education levels, which is promising for the future. Legislation on relocation of at-risk communities could also give priority to community participation to ensure that new safe settlements are planned in line with people's needs.

Conclusions

The study concludes that law and regulation is crucial to the current successes in DRR in Viet Nam. Although there remain some gaps in both the legal framework and its implementation, the New DRM Law seems likely to address many of these gaps. This study finds that many effective DRR mechanisms in Viet Nam are supported by legal frameworks developed over time, which detail the institutional framework, implementation methods, allocation of financial resources, and clearly defined roles and responsibilities. Responsibilities are now more clearly allocated and defined under the New DRM Law, but the well-established implementation mechanisms through responsible ministries and People's Committees (PCs) remain in place under the New DRM Law. These mechanisms assist in the integration of DRR principles into the legal and policy environment in Viet Nam, which in turn contributes to sustainable development and community resilience in the face of natural hazards.

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Partners

This case study was developed as a contribution to a global project on legislation for DRR jointly organised by the IFRC and the United Nations Development Programme (UNDP). It was carried out in Viet Nam in close partnership with the Viet Nam Red Cross Society (VNRC).

Contributors

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List of Abbreviations

1993 Ordinance	Control of Floods and Storms and Implementation Provi- sions (No. 09-L/CTN), 20 March	Fire Law	Law on Fire Prevention and Fighting (No.27/2001/QH10)
		GDMH	General Department for Me- teorology and Hydrology
	1993	HFA	Hyogo Framework for Action
AADMER	ASEAN Agreement on Disaster Management and Emergency	ICE	Information, Communication and Education
AMDI	Response Asian Management Develop- ment Institute	IFRC	International Federation of Red Cross and Red Crescent Societies
ASEAN	Association of Southeast Asian Nations	INGO	International Non-Govern- mental Organisation
CBDRM	Community-Based Disaster Risk Management	MARD	Ministry of Agriculture and Rural Development
CBDRM 1002	Prime Minister's Decision, Approving the Scheme on Im-	MOIC	Ministry of Information and Communication
	provement of Community	MOC	Ministry of Construction
	Awareness and Community- Based Management of Natural Disaster Risks (No. 1002/QD-	MOET	Ministry of Education and Training
	TTG), July 2009	MOF	Ministry of Finance
CCFSC	Central Committee of Flood	MOIC	Ministry of Information and
	and Storm Control	Sectoe PAP	Communication
CSCNDPC	Central Steering Committee	MOIT	Ministry of Industry and Trade
	for Natural Disaster Preven- tion and Control	MOLISA	Ministry of Labour, Invalids and Social Affairs
CFSC&SR	Committee for Flood and Storm Control and Search and	MONRE	Ministry of Natural Resources and Environment
DARD	Rescue Department of Agriculture and	MoU	Memorandum of Understanding
•••••	Rural Development	NA	National Assembly
DM	Disaster Management	National	National Red Cross and Red
DMC	Disaster Management Centre	Societies	Crescent Societies
New DRM Law	Law on Natural Disaster Prevention and Control (No.	NGO	Non-Governmental Organisations
	33/2013/QH13), effective 1 May 2014	PC	People's Committee
•••••		PM	Prime Minister
DRM	Disaster Risk Management	Strategy 2020	National Strategy for Natural
DRR Food Security	Disaster Risk Reduction Resolution on National Food Security (No. 63/NQ-CP), issued by the Government, 2009	<i></i>	Disaster Prevention, Response and Mitigation to 2020
Resolution		TOR	Terms of Reference

UN	United Nations
UNDP	United Nations Development
	Programme
UNICEF	United Nations Children Fund
UNISDR	United Nations Interna-
	tional Strategy for Disaster
	Reduction
VCA	Vulnerability and Capacity
	Assessment
VNRC	Viet Nam Red Cross Society
WFP	World Food Programme

1. Introduction

1.1.	Case study objectives
1.2.	Background
1.3.	Summary of main natural hazards and risks in Viet Nam
1.4.	Governmental and law-making structure

1. Introduction

1.1. Case study objectives

This Viet Nam case study analyses the extent to which legal frameworks in Viet Nam support national and local efforts towards DRR. The study covers a broad scope of laws and regulations relevant to DRR for natural hazards, including issues such as the integration of DRR into disaster management laws, institutional arrangements, responsibility and liability, early warning systems, infrastructure, building codes, land use planning, environmental management/climate change adaptation, early warning systems, and awareness-raising and education. Its methodology of interviewing stakeholders at national, sub-national and local levels is also intended to provide a better understanding of the way the legal framework is implemented in practice.

The focus in this study is on reduction of risk from disasters caused by natural hazards. Disasters always have a human element as it is the combination of natural hazards, vulnerability and limited capacity that causes a disaster. There can also be human elements in the triggering of natural hazards, such as landslides caused by deforestation. However, this study does not extend to essentially human-made disasters, such as large industrial accidents, environmental hazards, or conflicts. Epidemics and health regulation are also outside the scope of this study.

This study is part of a broader project that is being undertaken by IFRC and UNDP on how law and regulation supports DRR. The purpose of the country studies as a whole is to assist IFRC and UNDP in compiling a global synthesis report on DRR and legislation, which will identify good practices and common gaps, and provide ideas and baseline data for states wishing to facilitate DRR through legislation. The results of the global study will be used in wider consultations towards the development of a 'Checklist for lawmakers' wishing to better adapt the legislative framework for effective DRR implementation in their own countries. This Viet Nam case study therefore has the dual objective of providing country level information and analysis for the global initiative, as well as providing insights into the implementation of the legislative framework for use in Viet Nam.

1.2. Background

In January 2005, a United Nations (UN) Conference of over 4,000 representatives of governments, non-governmental organisations (NGOs), the Red Cross and Red Crescent Movement, UN agencies, academic institutes and the private sector adopted the 'Hyogo Framework of Action 2005-2015: Building the resilience of nations and communities to disasters' (HFA), consisting of a set of commitments and priorities to take action to reduce disaster risk. The first priority set out by the HFA was to "ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation", notably through "policy, legislative and institutional frameworks for disaster risk reduction".

In the years following, a significant amount of new legislation has been adopted in various parts of the world aimed at strengthening the focus on risk reduction. However, important gaps still remain, particularly with regard to follow-through at the community level. This was confirmed in a number of reports prepared around the time of the mid-term review of the HFA,1 and subsequently, including country case studies by the IFRC.2 Communities were found not to be well enough informed, engaged and resourced to take an active part in reducing risks, and it was noted that rules to deter risky behaviours (particularly in construction and land use) often go unenforced. While legislation is certainly not the only way to address some of the issues, it can be an important part of the puzzle. In 2011, the state parties to the Geneva Conventions took up the issue at the International Conference of the Red Cross and Red Crescent. Their resolution encouraged states, with support from their National Red Cross and Red Crescent Societies, IFRC, UNDP and other relevant partners to review the existing legislative frameworks in light of the key gap areas identified in the IFRC background report to the Conference, and to assess whether they adequately establish DRR as a priority for community-level action, based on the following key aspects;

- promote disaster risk mapping at the community level;
- promote communities' access to information about DRR;
- promote the involvement of communities, National Societies, other civil societies and the private sector in DRR activities at the community level;
- allocate adequate funding for DRR activities at the community level;
- ensure that development planning adequately takes into account local variability in hazard profiles, exposure, and vulnerability and cost-benefit analysis;
- ensure full implementation of building codes, land use regulations and other legal incentives; and
- promote strong accountability for results in reducing disaster risks at the community level.

1.3. Summary of main natural hazards and risks in Viet Nam

Located in a tropical monsoon region with a coastline of around 3,440 km, combined with a diverse and complex topography, Viet Nam is prone to many different types of natural hazards, mainly hydro-meteorological, such as floods and storms. Tropical storms occur frequently and typhoons regularly hit the coastal areas. Besides recurrent impacts on human lives and health, the resulting disasters affect multiple sectors of the economy, from agriculture to industry, and energy to education.

The risk of floods and storms is extremely high in Viet Nam and they are almost certain to recur in the future.³ From 1980 to 2010, Viet Nam had an annual average of 4.46 disasters caused by floods and storms, while, in the same period, the occurrence of drought was just 0.16 and fires 0.03.⁴ In this period, there were no disasters reported for earthquakes, tsunamis or insect infestations.

- UNDP, A Global Review: UNDP Support to Institutional and Legislative Systems for Disaster Risk Management (2007); Global Network of Civil Society Networks for Disaster Risk Reduction (GNDR), "Clouds but Little Rain" Views from the Frontline: A Local Perspective of Progress Towards Implementation of the Hyogo Framework for Action (2009); IFRC, Hyogo Framework for Action: Red Cross and Red Crescent Mid-Term Review (October 2010); UNISDR, Hyogo Framework for Action: Mid-Term Review (2010-2011); GNDR "If We Do Not Join Hands" (2011)
- 2 IFRC, Analysis of legislation related to disaster risk reduction in Brazil, (2012); IFRC, Analysis of legislation related to disaster risk reduction in the Dominican Republic (2012); IFRC, Analysis of legislation related to disaster risk reduction in Nepal (2011); and IFRC, Analysis of legislation related to disaster risk reduction in South Africa (2012) all available at: http://www.ifrc.org/en/what-we-do/idrl/research-tools-and-publications/disaster-law-publications/
- 3 In this document the term "storms" refers to storms, tropical storms and typhoons
- 4 PreventionWeb, Viet Nam Disaster Statistics, available at www.preventionweb.net/english/countries/statistics/?cid=190 (last accessed 12 February 2010)

The risk of floods and storms is highest in the coastal and delta areas. The Mekong delta is often affected by the seasonal monsoon slow-onset floods, which can last for several months. The central coastal area is most prone to storms, and faces frequent sudden floods, which last less than a week. The mountainous areas are particularly prone to flash floods and landslides caused by heavy rainfall. Storms and floods (including landslides caused by heavy rain) accounted for 87% of the disasters which occurred between 1980 and 2010, and these caused 100% of the disaster deaths recorded. Most of the legislation and DRR activities in Viet Nam deal with these two hazards.

Cold waves and heat waves also occur regularly in Viet Nam. These have an adverse impact on people's health and on agricultural production. Frost can heavily affect crops in the northern mountainous areas.

Earthquakes and tsunamis are considered low to moderate risk hazards. While more than 16,000 people were killed by weather-related disasters, including landslides, from 1980 to 2010, there were no deaths from earthquakes or tsunamis in the same period. The most severe earthquakes recorded in Viet Nam were the submarine volcanic earthquake in 1923, the earthquake in Dien Bien in 1935 and the Tuan Giao quake in 1982, all measuring more than 6 on the Richter Scale. The area most at risk of earthquakes is the north-west and in particular the province of Dien Bien.

There is also a risk of earthquakes occurring in the East Sea (South China Sea) which could result in a tsunami along the entire coast of Viet Nam. Earthquakes of a magnitude of 8 in the Manila Trench can cause a tsunami which could reach the central Vietnamese coast within 2 hours. This risk is highest from Quang Binh Province up to Binh Thuan province. The few, mainly offshore volcanoes in the southern part of Viet Nam are not considered a hazard risk.

Forest fires are rarely mentioned as a disaster risk in Viet Nam. Only one fire disaster occurred from 1980 to 2010. Most forest fires are localised and of small to medium size. Large forest fires are a risk during hot and dry spells, but this risk is low in comparison with floods and storms.

Lastly, insect infestations have occurred in Viet Nam, but these have never been as devastating as in some other parts of the world, such as in the Sahel region of Africa, and are not recorded in national statistics. A more serious hazard is the risk of animal disease epidemics, in particular during cold waves.

1.4. Governmental and law-making structure

Pursuant to the 1992 Constitution of the Socialist Republic of Viet Nam (as amended in 2001), the government structure consists of the executive branch, legislative branch and judicial branch. Constitutionally, the National Assembly (NA) has the power to draft, adopt and amend the constitution and to make and amend laws. Laws and resolutions of the NA must be approved by more than half of its total membership. Following the promulgation of a law, governmental decrees are issued to

- 5 Ibid
- 6 Prevention Web op. cit.
- 7 Nguyen Hong Phuong, Presentation Seismic Hazard Studies in Viet Nam, Institute of Geophysics, available at www.tec.earth.
- 8 Bui Cong Que and Nguyen Hong Phuong, Earthquakes and Tsunami Hazard Assessment in Coastal Areas of Viet Nam and Measures for Seismic Risk Reduction, Institute of Geophysics, Viet Nam Centre for Science and Technology, Presentation 2012
- 9 Prevention Web op. cit.

guide its implementation, and different ministries will subsequently issue circulars to guide the implementation of the decrees within the scope of their responsibilities.

The Law on the Promulgation of Legal Acts¹⁰ of 2008 lists a range of legal instruments issued by different state bodies and their legally binding effects, but does not outline their hierarchical structure. Although the hierarchy of laws is not set out in any legal instrument that could be identified during this study, according to national lawyers consulted during the study, in practice it is commonly understood that the hierarchy of laws is as listed below.

Legal instruments relevant for DRR include:

- The Constitution issued by the NA
- Laws and resolutions issued by the NA
- Ordinances, and resolutions issued by the Standing Committee of the NA
- Orders and decisions issued by the President of State
- Decrees issued by the government
- Decisions issued by the prime minister
- Circulars issued by ministers
- Legal acts issued by the People's Council and People's Committee (PC) (local government levels)

Each year, new legal instruments are issued to modify, replace or add to the existing framework. There are more than 100 legal instruments relevant to DRR. This study has reviewed all the key elements of this legal framework.

For the purpose of this study the term 'law' is used for laws, resolutions and ordinances (primary legislation), while the term 'regulation' is used for decrees, decisions, circulars and legal acts of the prime minister, the People's Council and the PC at the provincial, district and commune level (secondary legislation). The term 'legal framework' in this report refers to a collection of laws and/or regulations that regulate a particular field of activity, and the term 'legal instrument' is used to refer to a law or regulation.

Government structure

According to the Vietnamese Constitution there are four administrative levels; the national level, provincial level, district level and commune level. Viet Nam is divided into 58 provinces and five centrally-governed cities. The latter are considered the same administrative level as provinces. Districts consist of a number of communes, which in turn consist of a number of villages. Communes in cities are referred to as urban wards. For the purpose of this study the term provinces, districts and communes refer to both the rural and urban equivalents.

The Law on the Composition of People's Council and People's Committees establishes these institutions at the provincial, district and commune level. 11 Most ministries have representation at the provincial and district level, and at sub-national level the ministry is referred to as departments.

¹⁰ The Law on Promulgation of Legal Acts (No. 17/2008/QH12), 3 June 2008

¹¹ Law on the Composition of People's Council and People's Committee (No. 11/2003/QH11)

2. Methodology

2. Methodology

This case study was conducted in two stages. It started with a national law desk survey in which the relevant legislation was identified and described. This part of the study was completed in July 2012 and resulted in a background report with an inventory of the relevant legal framework and identification of gaps. ¹² Most laws and regulations in Viet Nam are published on government websites in Vietnamese and English, so it was possible to conduct the initial survey online in English.

The results of the desk survey were the starting point for the field study conducted in November and December 2012, with the dual purpose of identifying additional legal instruments not included in the survey and, most importantly, gaining an understanding of how these laws and regulations are applied in practice at all levels and the extent to which this has contributed to DRR. In this context, DRR is defined according to the United Nations International Strategy on Disaster Risk (UNISDR) terminology: "The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposures to hazards, lessened vulnerability of people and property, wise management of land and environment, and improved preparedness for adverse events".18

Many earlier studies on disaster legislation in Viet Nam, and indeed worldwide, have focused on the response and preparedness side. In this study, priority is given to prevention and mitigation, in which the former is defined as the "outright avoidance of the adverse impact of natural hazards and related disasters" and the latter as "lessening or limiting the adverse impact of natural hazard and related disasters". 14

The field study was undertaken by one international consultant who carried out an in-country study over a period of five weeks and one national consultant who supported the work of the international consultant. Both consultants have worked regularly on DRR in Viet Nam for more than a decade, conducting extensive field research and project evaluations on DRR at all levels, including numerous focus group discussions with community groups. Their prior knowledge and experience of DRR practice in Viet Nam was therefore another source of information for this study.

At the national level, a number of meetings were held with key stakeholders from national and international governmental and civil society organisations (CSOs). These included the General Department of Water Resources and the Disaster Management Centre of MARD, MOET, VNRC, Viet Nam Women's Union (VWU), UNDP, IFRC, World Bank, other National Societies supporting VNRC, INGOs and national consultants involved in the development of the new disaster management legislation (a complete list is provided in Annex I).

The interviews were held in a semi-structured way. The starting point for each interview was the research questions for consultants attached to the Terms of Reference (TOR) (Annex II). It was not possible to cover all themes in one interview, and depending on the field of work of each interviewee, one or more themes were selected. During the meetings, questions were asked and issues for discussion raised. Sufficient space was given for interviewees to provide other information and express their views related to DRR law and regulations.

¹² IFRC, Background Report Law and Regulation for the Reduction of Risk from Natural Disasters in Viet Nam: A National Law Desk Survey (2012) (forthcoming publication)

¹³ UNISDR, Terminology on Disaster Risk Reduction (Geneva, 2009)

¹⁴ Ibid

The study included a one week field visit outside Hanoi to obtain a sample 'vertical profile' of law, regulations and their implementation down through all government levels – provincial, district, and commune level – and at community level. For this purpose, the province of Nghe An was selected. Situated 300 km south of Hanoi, this province was selected on the criteria of being one of the most disaster-prone provinces of Viet Nam, while also being a good distance from the capital. The most disaster-prone district Dien Chau was selected within the Nghe An province, and within that district, the highly disaster-prone coastal communes of Dien Ngoc and Dien Bich. These communes have experienced serious disasters caused by floods and storms in the past and are still facing high risk levels. In the province and district, meetings were held with VNRC and a representative from the Committee for Flood and Storm Control and Search and Rescue (CFSC&SR).

Meetings were held with representatives from VNRC and the PC in Dien Ngoc and Dien Bich. In each commune, focus group discussions were conducted with 12 community members consisting of six women and six men. The community members were from both low and middle income households. The guidance for community focus groups in the TOR was used as the source for structuring the focus group discussions. The issues to be discussed were adapted to the hazards the communities face and the DRR laws and regulations relevant to them. The discussions started with the community's historical experience of disasters, awareness of hazards, their impact on the community and DRR-related activities, such as early warning systems, evacuations, dyke maintenance and protection, resilient house constructions, land use planning, and mangrove planting. Each of these activities was then linked to the relevant legal frameworks.

Several secondary sources were used as inputs for this study. Two documents were particularly valuable; the UNISDR draft HFA Monitoring and Review through a multi-stakeholders process (2011-2013); and the CCSFC Progress report on the Implementation of the National Strategy for Disaster Prevention, Mitigation and Response to 2010 (reporting period 2007-2010). Other important sources were the reports produced by a legal team for the MARD/UNDP project on Strengthening the Institutional Capacity for Disaster Risk Management including Climate Change Related Disasters (2010).15

In June 2013, the new Law on Natural Disaster Prevention and Control (New DRM Law) was passed by the NA, and was scheduled to take effect on 1 May 2014. 16 As noted above, the research and bulk of the analysis for this report was conducted prior to the adoption of the New DRM Law. This report was subsequently updated to include some analysis of the New DRM Law's provisions. It does not, however, extend to any other enactments of regulations, ordinances or decisions made since the New DRM Law was adopted, or to the experience of implementing the New DRM Law.

¹⁵ MARD/UNDP, legal team, Unpublished reports, Project on Strengthening the Institutional Capacity for Disaster Risk Management including Climate Change Related Disasters (2010)

¹⁶ Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), 19 June 2013

3. Findings on regulatory frameworks for DRR and their implementation

3.1. DRR in disaster management law and institutions
3.2. Responsibility, accountability and liability for natural disaster risk reduction
3.3. Law on specific hazards
3.4. Early warning systems and risk mapping
3.5. Regulations for the built environment
3.6. Regulation of the natural and rural environment
3.7. DRR education and awareness

3. Findings on regulatory frameworks for DRR and their implementation

3.1. DRR in disaster management law and institutions

3.1.1. DRR in current legislation

Until the New DRM Law came into effect in May 2014, there was no stand-alone law on disasters in Viet Nam. Most of the laws and regulations on natural hazards dealt with the high risk hazards of floods and storms, while other hazards were dealt with in separate laws and regulations. The legal framework on floods and storms dated back to 1946 when the Central Dyke Protection Committee, the forerunner of the present Central Committee for Flood and Storm Control (CCFSC), was established by decree of President Ho Chi Minh.¹⁷

That framework included the Ordinance on Prevention and Control of Floods and Storms of 1993¹⁸, the decree of 1996¹⁹ providing details for its implementation, the 1996 Decision on the Establishment of the CCFSC²⁰ and the amendments of the Ordinance in 2000. The low to moderate risk of earthquakes and tsunamis was regulated in the PM Decisions of 2006²¹ and 2007²². The Decree on Civil Defence of 2008 dealt with all natural and man-made hazards and specifies the structure and role of civil defence forces at national, provincial, district and commune levels.

These laws and regulations defined the functions and responsibilities of different agencies for disaster response, rather than DRR. For example, Article 21 of the 1993 Ordinance states that, "When there is a danger of serious flooding or storm, the Chairperson of the People's Committees at different levels shall have the authority to mobilise human resources, materials and means to be used for rescuing people, property and infrastructure as defined by the law". Article 22 contains a provision to request the PM to make a decision to mobilise resources from all sectors.

The disaster prevention and mitigation measures laid down in the abovementioned laws and regulations were mainly for short-term action. They dealt with measures to prevent or mitigate the impact of forecasted hazards by taking actions such as early warning for sea crew and communities, evacuation of people and property from areas at risk, closing disaster-prone areas, preventing ships from going out to the sea, directing ships to safe-shelters and guarding dykes. However, there were some long-term disaster prevention actions identified in the 1993 Ordinance. In particular, it required the development of prevention plans for each area, construction of flood and storm prevention and mitigation infrastructure, planning for resettlement, and the promotion of DRR awareness within the population. The separate law on dykes also provided more details on the infrastructure.

- 17 RCC 5 Report, Fifth Meeting of the ADPC Regional Consultative Committee on Disaster Management (2005)
- 18 Ordinance No. O9-L/CTN on Prevention and Control of Floods and Storms (20 March 1993)
- 19 Decree No. 32-CP of the Government Providing Details for the Implementation of the Ordinance on the Prevention and Control of Floods and Storms (20 May 1996)
- 20 Decision No. 299-TTg of the Prime Minister on the Establishment of the Central Committee for the Prevention and Control of Floods and Storms (13 May 1996)
- 21 PM's Decision No. 264/2006/QD-TTg Promulgating the Regulation on the Earthquake/Tsunami Warning
- 22 PM's Decision No. 78/2007/QD-TTg Promulgating the Regulation on Earthquake and Tsunami Prevention and Control

The decrees of 2006 and 2007 on earthquakes and tsunamis were issued following the disastrous Indian Ocean tsunami at the end of 2004. These decrees included measures for prevention and mitigation, such as defining the areas prone to earthquakes and tsunamis, building forecasting infrastructure, and improving public awareness and education.

New Law on Disaster Prevention and Control 2013

The New DRM Law became effective in May 2014, superseding the 1993 Ordinance and the 2000 Amendment of the Ordinance, which are now no longer in force.²³ The New DRM Law encompasses all natural disasters, both hydro-meteorological and geophysical. A natural disaster is defined as an "abnormal natural phenomena which may cause damage to human life, property, the environment, living conditions and socio-economic activities". The law does not make a distinction between natural disasters and natural hazards.

While the 1993 Ordinance mainly dealt with disaster response and short-term prevention, the New DRM Law has more provisions on long-term prevention and risk management. The New DRM Law deals, as the title suggests, with natural disaster prevention and control, which is defined in the law as a systematic process involving the prevention of, response to, and remediation of consequences of natural disasters. Although the term 'disaster risk reduction' is not used as such in the New DRM Law, it still deals in fact with DRR in Viet Nam and refers to 'risk' in numerous provisions.

Chapter II of the New DRM Law specifically addresses long-term prevention, with section 1 outlining the key aspects and activities related to natural disaster prevention. This includes "Integrating natural disaster prevention and control contents into national and local socio-economic development master plans and plans and sectoral development master plans and plans". Besides this provision on mainstreaming DRR in socio-economic development, there are a number of provisions on the development of DRR policies and strategies, mapping of disaster risks, assessing climate change impact and physical infrastructure for DRR.²⁴

The New DRM Law also deals comprehensively with the "remediation of natural disaster consequences". The long-term response does not only refer to the repair and restoration of physical infrastructure for preventing disasters, but also to "upgrading" 25, which implies to "build back better". Although the term "build back better" is not used in the New DRM Law, it has provisions for increasing resilience in the aftermath of a disaster, for example not only restoring the dykes after floods, but building them stronger.

DRR committees on floods and storms

The 1993 Ordinance provided for the establishment of the CCFSC, which has representatives from all the relevant government agencies and VNRC. The CCSFC has had a standing office at MARD, which is the leading agency for CCFSC. The CCFSC was established with representation at the national ministry level as well as all three administrative levels of government - the provincial, district and commune level. The Department of Agriculture and Rural Development's (DARD) offices provide a

²³ The 1993 and 2000 Ordinances are nevertheless discussed in some detail in this report in order to provide background on the legislative experience in Viet Nam. These are the only instruments that were expressly superseded by the text of the New DRM Law, although there were a number of other pre-existing instruments that address DRR issues, as discussed further below

²⁴ Law on Natural Disaster Prevention and Control (No. 33/2013/QH13)

²⁵ Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), articles 30 and 32

²⁶ Decree No. 14/2010/ND-CP on the Organisation, Tasks, Power and Coordination Mechanism of Central Steering Committee for Flood and Storm Prevention and Control, Committee for Flood and Storm Prevention, Control, Search and Rescue of Ministries, Agencies and Localities

permanent presence for the CCFSC at the provincial and district level. The Viet Nam Government has issued several decrees on the establishment of the Committee's structure. The 2010 Decree²⁶ provides the organisation, functions, competencies and coordinating mechanisms of the different committees at both central and local levels. This decree deviates from the 1993 Ordinance by expanding the mandate of the CCFSC to other natural hazards²⁷, such as earthquakes and tsunamis. There is also a National Committee for Search and Rescue with its standing body at the Ministry of National Defence²⁸, but at the lower government levels these parallel committee structures are merged into the CFSC&SR.

There are also a number of departments under MARD that act as technical agencies. The Department of Dyke Management and Flood and Storms Control is responsible for dyke construction and maintenance, and plays a key role in all weather-related disasters. The Disaster Management Centre (DMC) is specially assigned to implement community-based disaster risk management (CBDRM). MARD is also the agency responsible for DRR related to forest fires and animal disease epidemics. The Ministry of Defence is responsible for search and rescue, while the Ministry of Health is responsible for human health epidemics.

The New DRM Law foresees the establishment of the Central Steering Committee for Natural Disaster Prevention and Control (CSCNDPC) as the successor of the CCFSC. This Committee had not yet been established at the time of the preparation of this report. According to the law, the new CSCND-PC will be responsible for disaster response in coordination with the National Committee for Search and Rescue, and natural disaster prevention with relevant ministries and localities. At the province and commune level there will be commanding committees for natural disaster prevention and control and search and rescue. These committees are to decide on disaster response and short-term prevention measures, such as early warning, evacuation, "rationally operating reservoirs and water supply works", and preventing salt intrusion. 30

The CSCNDPC will have the task of interdisciplinary coordination and support to the Prime Minister in organising and directing natural disaster prevention and response nationwide. Members of the CSCNDPC include representatives of leadership from related ministries and agencies working on a part-time basis.³¹ MARD will act as the standing body of the CSCNDPC. Details about members and the operation of these committees will be defined in the implementing decrees to be drafted by MARD.

National Strategy 2020

The National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020 (Strategy 2020) which was given legal backing by a PM Decision in 2007³², regulates in detail the longer-term aspects of DRR. It applies a comprehensive multi-risk approach, including earthquakes and tsunami risks, although most of the focus is still on floods and storms. It is the first policy in which DRR is linked to socio-economic development. The introductory chapter of Strategy 2020 states that "disaster prevention, response and mitigation shall be integrated in every socio-economic development

- 27 UNDP, unpublished report, Review of Viet Nam Legislation on Disaster/Natural Hazard Risk Management
- 28 Decision No. 76/2009/QD-TTg on Strengthening National Committees on Search and Rescue and Search and Rescue Systems at Ministries and Local Authorities
- 29 Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 44
- 30 Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 26
- 31 Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 44 (1a)
- 32 PM's Decision No. 173/2007/QD-TTG to Approve the National Strategy for Natural Disaster Prevention and Mitigation to 2020

master plan and planning of every region and sector nationwide". To support the implementation of the Strategy, a requirement to mainstream disaster prevention and mitigation in socio-economic development is now included in the New DRM Law.³³ Strategy 2020 places a high priority on the development of:

- a draft Disaster Prevention and Response law based on the 1993 Ordinance (the New DRM Law that has since been drafted and adopted).
- human resource development through the training of human resources in disaster prevention, mitigation and response, and increasing public awareness as well as including basic knowledge in the school curriculum on how to respond to disasters and how to help families and communities in disaster situations.

Strategy 2020 is tailored to the different geographical conditions in Viet Nam as follows:

- a) In the Red River Delta, the priorities are strengthening the river and sea dyke system; planting mangrove trees to protect sea dykes; investing in flood drainage structures; upgrading water reservoirs; and increasing the safety of reservoirs (including the development of operation procedures, in particular for multipurpose water reservoirs regulating the water level for floods, drought and salt intrusion).
- b) In the Central Coast and Central South, the priorities are land use planning of residential, industrial and tourist areas; adaptation of crops and animal husbandry to the natural hazards of the region; preservation of the natural sand dunes along the coast to protect against sea surges, tsunamis and salt intrusion; strengthening of dykes; construction of water reservoirs; improvements in drainage; and reforestation. Safe shelters for boats are also to be constructed.
- c) In the Mekong River Delta, the priority is to construct residential clusters and infrastructure above the flood level; improve drainage construct dykes; and prevent salt water intrusion.
- d) In the mountainous areas, priority is given to mapping areas prone to flash floods, landslides and geological hazards. Other priorities are drainage and other structures to prevent flash floods, and management of mineral exploitation to prevent landslides.

DRR law and the role of communities

DRR at the community level is addressed in the PM's Decision 1002, passed in 2009, in which the Scheme on Improvement of Community Awareness and Community-Based Management of Natural Disasters is approved. This Scheme is generally referred to by stakeholders as the CBDRM 1002. It gives a high priority to capacity-building at all government levels to enable them to support communities in prevention, mitigation and response activities. The main emphasis is on non-structural activities such as awareness-raising, risk assessment, and development of an early warning system. It is intended to provide the legal framework for community-based DRR initiatives supported by INGOs.

Related to community involvement is the 'four on-the-spot' motto which includes "leadership on-the spot, forces on-the-spot, means and materials on-the-spot". The 'four on-the-spot' are included in two regulations; the Decree of 200635 and Strategy 2020. The latter states clearly that "natural disaster prevention and mitigation should be implemented using the four on-the-spot motto in order to assist people to actively prevent, respond in a timely manner to, and promptly and efficiently

³³ Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 4

³⁴ PM's Decision No. 1002/QD-TTg 2009, Approving the Scheme on Improvement of Community Awareness and Community-Based Management of Natural Disaster Risks

³⁵ Decree No. 8/2006/ND-CP, Chapter III, article 10

recover from natural disasters". The 'four on-the-spot' applies to the local government agencies participating in the CFSC&SR and households.³⁶ It delegates the responsibility for management and resource mobilisation to the lower levels.

The 'four on-the-spot' motto is maintained in the New DRM Law, which also has a provision on DRR at the commune level. Article 15 outlines the content of commune-level natural disaster prevention and control plans. Appropriate measures to be taken for each natural disaster type have to be identified in the plan, paying specific attention to vulnerable groups. Measures include organising a committee, identifying dangerous areas, preparing evacuation sites, organising drills, training and community awareness-raising on DRR.³⁷

DRR law and civil society

VNRC is the only organisation outside the governmental system whose role for disaster response and prevention is specifically mentioned in legal instruments. VNRC's role is not stipulated in the DRR legislation, but rather in the separate Law of Red Cross Activities. This law provides the mandate for VNRC to be involved in DRR activities. MARD and VNRC have also signed a Memorandum of Understanding (MoU,) which regulates the coordination and cooperation between both parties for the implementation of the CBDRM 1002 Decision. Another CSO involved in DRR is the Viet Nam Women's Union (VWU), which has also signed an agreement with MARD. The DRR laws do not mention the VWU specifically, but do note that NGOs and other mass organisations must participate in DRR. The VWU is a mass organisation similar to the VNRC in structure, and the Youth Union is also considered a mass organisation.

The New DRM Law refers generally to the role of CSOs, though the term 'civil society' is not used. Article 36 sets out "the rights and obligations of agencies, socio-political organisations, socio-political-professional organisations, social organisations and socio-professional organisations". 40 It provides for the right to access information published by competent agencies, participate in the elaboration of prevention and response plans, participate in disaster awareness programmes and improve knowledge on the subject. Each socio-political, social-political-professional, social, social, socio-professional organisations referred to in Article 36 has the obligation to reduce disaster risks of the physical structures under their management and to elaborate and implement DRR plans. Foreign and international organisations have the same rights and obligations. In addition, these organisations should "conduct registered operations" according to the rights mentioned in the Article 36 and "comply with Vietnamese law". There is no article on the specific role of VNRC or other mass organisations in the New DRM Law. The specific role of VNRC is mentioned only once, in Article 33, relating to the mobilisation, allocation and coordination of resources for disaster response. The separate Red Cross Law will continue to regulate the role of VNRC after the New DRM Law is effective.

Local law and regulations

The Provincial PCs have limited authority to issue regulations. The study did not identify any local DRR legal frameworks, except decisions and circulars of the PCs, that were based on central laws and regulations and in which a few details were added for local implementation. Vietnamese law does not recognize customary law and it did not exist in the two coastal communes included in this study.

- 36 Joint Advocacy Network Initiative (JANI), Four On-The-Spot Motto in Disaster Management: Key contents and Actual Application
- 37 Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 15
- 38 Law on Red Cross Activities (No. 11/2008/QH12)
- 39 Memorandum of Understanding between the Ministry of Agriculture and Rural Development and the Viet Nam Red Cross Society on the Implementation of the Community Awareness and Community-Based Disaster Management project, December 2011
- 40 Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 36

Law and regulation on reporting of progress on DRR

Besides the implementation of Strategy 2002 and the CBDRM 1002 Decision, there is no specific monitoring and reporting mechanism for the legal instruments cited above. The CCFSC reported on the progress of Strategy 2020 for the first year of its implementation and for the period of 2007 to 2010. At the end of each year, meetings are organised in all government sectors and levels to review progress and lessons learnt. CCFSC has also organised review meetings at all levels after all major disasters to evaluate the effectiveness of the response.

3.1.2. International instruments

The Viet Nam Government has signed and ratified the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) as did 9 other ASEAN member countries. 41 The objective of the agreement is to provide effective mechanisms to achieve substantial reduction of disaster losses in lives and in the social and environmental assets of the ASEAN countries. It mainly deals with disaster response. However, Chapter III Article 6 deals with prevention and mitigation, stating that:

"The Parties⁴² shall jointly or individually, develop strategies to identify, prevent and reduce risks arising from hazards.

Each Party shall undertake measures to reduce losses from disasters, which include:

- Developing and implementing legislative and other regulatory measures, as well as policies, plans, programmes and strategies;
- Strengthening local and national disaster management capability and co-ordination;
- Promoting public awareness and education and strengthening community participation, and;
- Promoting and utilising indigenous knowledge and practice;

The Parties shall co-operate in developing and implementing regional disaster prevention and mitigation programmes to complement national-level efforts."

The Viet Nam Government has also endorsed the HFA, which requires states to allocate sufficient funds to DRR-related activities as a sustainable means to prevent and respond to disasters.

Chapter V of the New DRM Law deals with international cooperation, but does not make specific references to either AADMER or HFA. It confirms in Article 38 the principle of compliance with treaties to which Viet Nam is a contracting party and at the same time refers to the principle of respect for independence and non-intervention in internal affairs. It lists the priorities for international cooperation as "training, scientific research and technology transfer, sharing of experiences and coordination in search and rescue; investment, construction and upgrading of natural disaster prevention and control works". These priorities are mainly related to the long-term prevention of disaster risks. Information exchange for early warning, cooperation in search and rescue and humanitarian relief are other areas of international cooperation. 44 The focal point for international cooperation is

⁴¹ ASEAN Agreement on Disaster Management and Emergency Response, Association of Southeast Asian Nations member countries are: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Viet Nam

⁴² Parties refers to ASEAN member countries that have acceded to the Agreement

⁴³ Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 38 (4)

⁴⁴ Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 39

MARD and their responsibilities, and those of other ministries and agencies for international cooperation are defined. The New DRM Law consolidates good practice and also adds new elements such as designating the Ministry of Foreign Affairs as the focal point for Viet Nam's assistance to other countries in response to disasters. Other ministries and government agencies are in charge of search and rescue, forecasting and early warning. Although AADMER is not specifically mentioned, the law provides an enabling environment for the Viet Nam Government to respond to disasters in other ASEAN states in line with AADMER, as well as accept assistance from ASEAN states.

3.1.3. Law and regulations for mobilising financial resources for DRR

Vietnamese laws and regulations referring to financial resources for DRR are spread over several documents. In the 1996 Decree regulating the details of the 1993 Ordinance, it is stated that:

"The Ministry of Finance shall be responsible for managing and disbursing regular funds for the work of maintaining and reinforcing dykes, forecasting and warning people of floods and storms and overcoming consequences of flood and storms."

More specific percentages and amounts are provided in the budgetary legislation, Strategy 2020 and CBDRM 1002 Decision.

The budgetary legislation in Viet Nam provides a clear mandate to budget for DRR and response. The Decree of 2003⁴⁵ on Guiding the Implementation of the State Budget Law states:

"The expenditure estimates of the central budget and the budgets of the local administration at all levels shall be entitled to include a reserve of between 2% and 5% of the total expenditure for spending on prevention, combat and overcoming of consequences of natural calamities, fires, on the performance of important defence and security tasks, and other urgent tasks, which arise beyond the estimates."

The government decides on the use of central budget reserves and the PCs on local budget reserves.

The CBDRM 1002 Decision identifies an amount of 546 billion VND (about 26 million USD) to be obtained from the state budget for implementing this project until the year 2020. The New DRM Law, from Articles 8 to 11, elaborates on three financial sources for natural disaster prevention and control:

- 1. State budgets
- 2. Natural disaster prevention and control funds
- 3. Voluntary contributions of organisations and individuals

According to the New DRM Law, the state budget has an annual provision for DRR activities, including for the construction, renovation and upgrading of physical structures and operational costs incurred by state agencies in charge of natural prevention and control.⁴⁶

All local government levels have to make a provision in their budgets, but for disaster response and recovery, rather than for DRR. Should these funds be insufficient in meeting local needs, the

- 45 Decree No. 60/2003/ND-CP Guiding the Implementation of the State Budget Law
- 46 Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), articles 8 and 9(1), (2)

provincial level can request additional support from the national level. Similarly, Article 11 requires the provincial PCs to set up National Disaster Prevention and Control Funds through compulsory contributions from local and foreign organisations based in the area and individuals. However, the prescribed use of the funds are all related to disaster response and recovery.

The New DRM Law consolidates the different financial resources for DRR, which were previously regulated in different legal instruments. Besides funding for physical infrastructure, there are now legal provisions for the funding of all natural disaster prevention and control activities from the state budget. This means that the funding of community-based activities, awareness-raising, training of government staff, and DRR education are now backed by law. The New DRM Law however, does not mention any amount or percentage for the allocation of financial resources. How these provisions are implemented in practice will depend in part on implementing decrees to the New DRM Law as well as on the requirements of State Budget Law. As indicated above, the priority for the use of local government funds remains on disaster response rather than prevention.

3.1.4. Implementation and practice

Early warning and disaster response in practice

While this report is focused on DRR rather than response, it is difficult to separate the two when discussing the issue of early warning. The previous laws and regulations on DRR established an institutional framework for disaster response, in particular to floods and storms in the coastal and delta areas. Active CFSC&SRs have been established at the provincial, district and commune levels, headed by the chairman of the PCs, in flood and storm prone areas. All relevant ministries and government agencies (and VNRC) are members of these committees and this institutional framework supports the response coordination among the different sectors. The State Budget Law provides the possibility to access 2% to 5% of the budget for disaster response at all levels. The laws and regulations enable the PCs to mobilise the necessary resources to rescue people, property and infrastructure without having to wait for authorisation from higher levels. This is particularly important, if communications channels between different government levels have been cut off as a result of the disaster.

During floods, the local CFSC&SRs have been able to provide early warnings, charter boats to rescue people from floods, mobilise vehicles from government sectors and the private sector (with compensation), assist in the evacuation of people and property, and assist in damage assessment and reporting. The army and police forces have also been mobilised to ensure safety, prevent boats going out to sea, close dangerous areas, assist in strengthening dykes and assist in evacuation and search and rescue. In order to ensure food security, communities are urged to harvest crops before the floods occur. The local PCs have released financial resources to address urgent relief needs. The CFSC&SRs have also played a key role in the coordination of relief distribution and early recovery support provided by different sectors. During serious floods when the CFSC&SRs have been unable to cover all relief and early recovery needs, additional support has been requested from INGOs and VNRC. The Viet Nam Government's response is generally focused on the recovery of infrastructure, such as the restoration of electricity supply and irrigation systems, and repair of roads and dykes. While governmental relief distributions target all affected households, the quantity of support is often limited. VNRC and INGOs target affected vulnerable households based on needs assessments and select beneficiaries based on defined criteria.

The quality of the performance of the CFSC&SRs has varied from area to area, depending on factors such as previous exposure to disaster response and capacity building. MARD, with support of UNDP, has developed a set of Guidelines for Emergency Response and Early Recovery, which have been

approved and published by CCSFC and are used for the training of CSFC&SR staff.⁴⁷ The guidelines consolidate the various existing laws and regulations into one practical document.

The New DRM Law builds on elements of earlier legislation by maintaining good practice in disaster response and early warning, and also including a number of additional provisions. For example, besides damage assessment, the New DRM Law identifies needs assessment as one of the key response activities. Article 30b states one of the remediation activities as: "Making statistics of and assessing damage caused by natural disasters, needs for relief and support, and proposing plans to remedy consequences". New provisions also refer to the importance of stabilising the market, with Article 30(d) requiring: "Providing supplies and essential commodities and taking price management and market stabilization measures".

The targeting of relief beneficiaries is also included in the New DRM Law. Article 32(1b) states: "Relief beneficiaries include injured persons and households of dead persons, households and individuals that lose their homes, have no food, drinking water and other essentials and face life and health risks, paying special attention to vulnerable groups".

Awareness of laws and regulations

Awareness of the existence and content of laws and regulations varied amongst stakeholders interviewed. Almost all stakeholders interviewed were aware of the existence of the 1993 Ordinance, although national level informants generally had more detailed knowledge than those at other levels.

Most laws and regulations are published on the Viet Nam Government websites and the internet makes the legal framework easily accessible for both national and provincial staff. In Nghe An Province the provincial government and VNRC staff were well aware of most of the relevant current laws and regulations. The district and communal government staff were well aware of the Ordinances 1993 and the Law on Dykes 2006.48 The 'four-on-spot' motto is widely known among all provincial, district and commune CFSC&SR members. However the government interviewees at the district and commune level were not familiar with Strategy 2020 (a finding that was confirmed by the review of the Strategy for the period of 2007-2010). Nor were they aware of the CBDRM 1002 Scheme, which started with capacity-building at the national and provincial level and has yet to deliver at district, commune and community level.

Nevertheless, there appears to be quite a high level of awareness of legal frameworks in Viet Nam. Vietnamese organisations often refer to legislation when writing official letters or developing guidelines, indicating the legal framework pertaining to the issues addressed. For example, the VNRC Standard Operational Protocol for Disaster Response refers to the Red Cross Law and two decrees.⁴⁹

The interviewed community groups could not cite any law or regulation by name but were generally aware of the existence of the 1993 Ordinance and the Dyke Law. However, there was little awareness at the provincial level in Nghe An Province, and none at the district and commune level, of the New DRM Law being drafted at the time of the interviews. Three provinces were included in the national consultation process for drafting the New DRM Law but Nghe An Province was not one of those included.

- 47 UNDP/DMC, Guidelines for Emergency Response and Early Recovery, Hanoi 2010
- 48 Law on Dykes (No. 79/2006/QH11)
- 49 Viet Nam Red Cross, Standard Operating Protocol (SOP) for Disaster Response (2012)

The local stakeholders are generally aware of the content of legislation that is relevant for their work or personal situation. Most of the articles in the legislation deal with the functions and responsibilities of different government agencies. These articles are very relevant for government staff at the national, provincial and district level and to a certain degree for the local government at commune level. For the community, these articles are of little relevance and, as one might expect, the community members in the focus groups were not aware of their contents. The communities in Dien Ngoc and Dien Bich were, however, very aware of regulations directly affecting them, such as early warning, the role of defence forces in providing assistance for evacuations, and regulations protecting dykes. For example, they were well aware of regulations that prohibit the cutting of mangrove trees that protect dykes, the construction of buildings on dykes, or shrimp farming within 200 metres of dykes. Although the interviewed community groups could not name any laws, they were aware of relevant regulations that affect their personal situations before or during disasters.

The international and national DRR staff of INGOs and other National Societies working in Viet Nam who were interviewed were all aware of the content of the CBDRM 1002 Decision and to a certain degree the Strategy 2020, 1993 Ordinance and the drafting of the New DRM Law. Several of these interviewees emphasised the importance of any national legislation being followed by circulars explaining further details regarding the implementation of the law and regulations and the allocation of financial resources.

Most of the support from INGOs and other National Societies is provided on a project basis and the staff are not always fully aware of the legal context of their project activities. Such projects need to fit into the current legal framework not only for the period of implementation, but must also take into consideration the broader legal framework that might ensure sustainability of the projects' achievements. For example, the many DRR school education projects are not yet sustainable due to gaps in prior legislation concerning the mandate of the education system. This legal gap is addressed in the New DRM Law and discussed further in the chapter on DRR education and awareness, below.

Practice - structural DRR

The 1993 Ordinance, Dyke Law and Strategy 2020 have provided the framework for significant achievements in the mitigation of impacts of natural hazards. Efforts in prevention and mitigation are mainly in the area of structural measures to prevent floods and storms, with most efforts being focused on the construction and upgrading of dykes. A sea dyke is being built from Quang Ninh to Quang Nam and there are wider plans to cover the whole coastline with dykes to protect communities living near the sea. Water reservoirs have been constructed upstream in rivers and safe harbours built with loans from the World Bank. The upstream water reservoirs in the Red River and the upgrading of dykes along the river have reduced the risk of flooding. According to MARD, the risk of flooding in Hanoi is reduced from once in 200 to once in 500 years based on historical data on flood levels. The risk of floods from the Red River is now considered low, except in the city quarters along the river inside the dyke system. From 2007 to 2010, the government spent 636 billion VND (approximately 30 million USD) on dyke maintenance.

The dykes of Dien Ngoc and Dien Bich have been recently strengthened to protect communities from storms up to Category 10 (wind speed up to 102 km/hour). The dykes are protected by mangrove forests planted by VNRC. However, according to the communities in Dien Ngoc and Dien Bich, the dykes are not high enough to withstand a category 12 storm or higher (wind speed of more than 118 km/hour), which is typhoon strength.

50 UNIDSR, draft HFA Monitoring and Review through a multi-stakeholders process (2011-2013)

Water reservoirs are often multi-purpose, as they may be built for flood control, irrigation and generation of hydro-power. The Son La Water Reservoir contributes to the flood control of the Red and Thai Binh Rivers and contributes to reduce risk in the highly populated Red River Delta, including Hanoi. Hundreds of other water reservoirs have been built all over Viet Nam. Despite the positive impact, there are environmental concerns, including the destruction of forests and salt intrusion at the estuaries. According to the Viet Nam News, a water reservoir in Quang Nam is said to have caused local earthquakes, damaging houses and causing fear among nearby residents. A number of interviewees reported that the Viet Nam Government had recently stopped issuing permits for water reservoir construction and withdrew some permits due to environmental concerns. While water reservoirs have contributed to flood control in the Red River Delta, this is not yet the case in central Viet Nam and the Central Highlands. The hydro-power water reservoirs are under the management of the Ministry of Industry and Trade (MOIT), while the reservoirs for flood control and irrigation are under the control of MARD. There are conflicting priorities in managing water, as the priority for energy supply has sometimes prevailed over the priority of flood control. Stakeholders have expressed different opinions as to whether the cause of insufficient use of water reservoirs for flood control is due to inadequate legislation, or the lack of its application by water resource managers. UNDP is supporting the government in undertaking a forthcoming study on the existing legislation on water reservoir management and operational practice.

In addition, MARD completed the construction of 13 regional storm shelters and 85 local shelters along the coast for ships. MARD also works at their research stations on the development of crops which are more resistant to droughts and floods. Another key effort is the promotion of a shift in seasonal crop production to reduce hazard impact. 51 Other structural prevention measures are in the area of forestry, including mangrove planting, and construction, which are discussed separately below.

Practice - non-structural DRR

In the past, prevention has been mainly structural, but in recent years more and more non-structural measures have been implemented. For example, CSFC&SRs have been strengthened through human resource development. Over the years, awareness among government staff and communities has shifted gradually from response to the prevention and mitigation of natural disasters. This is reflected in the fact that, more than before, DRR is being mainstreamed into socio-economic development plans. The majority of sectoral development plans and socio-economic development plans at the national and provincial levels for the period of 2011 to 2015, as well as master plans for the period of 2011 to 2020 have integrated some elements of DRR. All ministries in the CCFSC have developed action plans for the integration of DRR within their sectors. All 63 provinces in the country have also developed DRR action plans.

The early warning system has been strengthened and risk mapping has been undertaken. Other non-structural DRR measures have been implemented with support from INGOs, VNRC or UN organisations, such as DRR education. However, the non-structural activities of the government are still limited due to limited budget allocation. Although the 2020 Strategy clearly identifies non-structural action as a priority area, to date this was not reflected at the level of a national law. The New DRM Law, however, has several provisions related to non-structural measures including risk assessment, preparation of plans, community awareness creation, identification of evacuation centres and routes, drills, training and education. More legislation and implementation guidance may be required to mandate and facilitate such non-structural DRR measures.

51 CCFSC, Progress report on the National Strategy for Disaster Prevention, Mitigation and Response to 2020, period (2007-2010)

Practice – Community-based DRR

INGOs and VNRC, with support from IFRC and other National Societies, have implemented CBDRM projects since the 1990s. Most of these projects have common characteristics, such as starting with a participatory Vulnerability and Capacity Assessment (VCA), the preparation of a commune DRR plan in cooperation with the PC of the commune, and participation of different target groups, including women and the poor. Actions in the plan usually include awareness-raising on DRR within the communities or in schools, strengthening the early warning system, establishing evacuation routes, and small-scale mitigation measures such as building dual-purpose shelters, and also improving water and sanitation. Besides the common characteristics, there are differences in approaches. Oxfam gives a very high priority to promoting gender equality, while IFRC and National Societies have placed a high priority on strengthening VNRC's capacity at each level. VNRC has published a manual on VCA, which is considered by many stakeholders as the leading source for the implementation of participatory VCAs in communities in Viet Nam.

These CBDRM projects were implemented without specific legislation until 2009. The scope of existing laws like the 1993 Ordinance and the Red Cross Law provided sufficient legal framework for civil society to implement CBDRM projects supported by funds from abroad, however the lack of specific legal framework on CBDRM reduced the sustainability of the projects. Without a specific legal framework, local government staff had insufficient mandates to participate in CBDRM and consequently were sometimes reluctant to involve themselves in these activities. The laws and regulations did not mainstream the commune DRR plans into the socio-economic development plan of the district, and without a specific legal framework it was difficult for local governments to allocate a budget for CBDRM. For example, while a new commune dual-purpose public building (one purpose being an evacuation centre) could be constructed with support from INGOs, there was no legal framework to allocate the additional funds required from the state budget for its construction. Previously, there was no legal requirement for the allocation of government budgets for constructing public buildings that can serve as disaster shelters. However, these gaps are addressed in the New DRM Law. DRR is now mainstreamed in socio-economic development planning from commune up to national level and Article 20 states: "[t]he construction and upgrading of schools, health stations, working offices, community cultural houses and other public work in natural disaster-prone areas must take into account the use of these works as places for people's evacuation when natural disasters occur".

Since 2009, the CBDRM 1002 Decision has provided a strong legal framework for CBDRM activities. The government has noted the advantages of CBDRM and it plans to implement CBDRM in 6,000 disaster-prone communes, which is more than half of the communes in Viet Nam. However, the government still lacks capacity itself to implement the CBDRM 1002 Decision and so looks to support from civil society. VNRC is the most experienced Vietnamese organisation in CBDRM and has a pool of trainers specialised in CBDRM. MARD and VNRC formalised their cooperation in a MoU which enables the government to mobilise VNRC for the strengthening of capacity at provincial, district and commune government levels, and creates an opportunity for VNRC to access funds from the CBDRM 1002 Decision.

In moving forward, VNRC plans to implement CBDRM activities in 500 communes from the total of 6,000. The CBDRM 1002 Decision has supported a more common approach among the different stakeholders and provides the legal basis to involve local governments and to mainstream DRR. The New DRM Law will provide an even stronger legal framework for these activities.

31

Practice - financial resources

Most structural measures are funded from regular budget lines at MARD and from the World Bank or other loans. However, there are limited funds available for non-structural measures. In principle the legal framework allows the use of 2% to 5% of the local budget for prevention measures, however according to a number of those interviewed, in practice, this budget is used primarily for disaster response or other unforeseen circumstances and is rarely allocated for prevention measures. The CBDRM 1002 Decision budget has, to date, financed capacity-building for CBDRM at the provincial and district level, although in the Decision it is not clear whether government contribution should come from the state budget at the national level or from local government budgets.

The New DRM Law states the different resources for prevention and mitigation, but does not specify a percentage or amount. The final Article 47 states that "the Government shall detail and guide the implementation of articles and clauses of the Law as assigned", thus the percentage or amount will most likely be fixed by a decision or decree.

Practice - international instruments

The Viet Nam Government endorsed the HFA, and the DMC at MARD is responsible for the implementation of HFA activities. The progress of each action is monitored online by UNISDR, to which both the authorities and HFA focal points have access. Less follow-up however, has been given to the AADMER. The New DRM Law does make reference to international cooperation in disaster prevention and control, although it does not refer to any specific international agreement.

3.1.5. DRR in disaster management legislation: good practice and gaps

Legislation on DRR in Viet Nam has traditionally been complex. The legal framework related to DRR was spread over more than 100 instruments. The many documents amending, supplementing or detailing earlier legislation have gradually improved the legal framework for DRR in Viet Nam; however, the number of these also made it more difficult to access.

The laws and regulations can be said to have contributed to a response system that has significantly reduced the impact of natural hazards on people and property. The 1993 Ordinance and subsequent decrees and decisions have enabled the establishment of CSFC&SRs at all levels, representing all relevant government agencies and VNRC. The laws and regulations give these committees the mandate to mobilise resources locally and to implement prevention measures to reduce the risk in the days prior to forecasted floods and storms. Prevention and mitigation is included in the ordinances, though most of these activities are regulated by secondary legislation such as decrees or decisions.

The fragmentation of the existing legal framework was a primary driver for the development of the New DRM Law. The New DRM Law maintains the good practice of the earlier legislation such as the early warning system, evacuation arrangements and delegation of responsibilities to the local level. The New DRM Law also establishes the CSCNDPC, which will succeed the current CCFSC, and lists the responsibilities of the following ministries: Defence, Public Security, Transport, Industry and Trade, Construction, Finance, Planning and Investment, Education and Training, Health and Labour, War Invalids and Social Affairs. The coordination and harmonisation mechanisms between these ministries are not yet set out in sufficient detail for implementation. Article 44, however, provides that the government shall define the organisational structure and tasks of the CSCNDPC, and specify the coordination mechanisms between the CSCNDPC and the National Committee for Search and Rescue. While there is a chapter on financial resources, this chapter also needs further details on the percentage or amount and additional regulations to ensure regular funding streams.

The VWU and international stakeholders advocated to see gender issues addressed in the New DRM Law, and consequently there are two references to gender: Article 4 states that "Humanity, fairness, transparency and gender equity must be guaranteed in natural disaster prevention and control", and the Ministry of Labour, War Invalid and Social Affairs (MOLISA) is designated responsible for providing guidance for the integration of gender considerations.

The New DRM Law makes five references to climate change, an important issue for Viet Nam, as any rise in sea level will affect dykes and cause sea water intrusion. Climate change predictions include the likelihood of more extreme weather events, so that hazard risk mapping can no longer be based on only historical data but also needs to take these factors into account. Article 4 states that "Natural disaster prevention and control activities must be based on scientific grounds, combining traditional experiences and scientific and technological advances, combining structural and non-structural solutions; protecting the environment and eco-systems and adapting to climate change." ⁵² In the other articles climate change is not linked to disaster risks, but to possible impact on development activities. It is also not currently clear which ministry is responsible for linking disaster risks with climate change issues.

Much of the discussion on the development of the New DRM Law focused on how detailed it needed to be. Several stakeholders advocated that the law should provide a broad legal framework and that the details should be dealt with in subsequent decrees and decisions. This would thereby create more flexibility as it could take several years to change a law and much less time to issue decrees and decisions. Consequently, the New DRM Law in Article 47 requires the government to "detail and guide the implementation of articles and clauses of the Law" through the development of implementing decrees and rules.

Key finding 1: DRR in disaster management law and institutions

The law and regulations regarding DRR in Viet Nam have been spread across many different legal instruments which have been frequently updated. Despite the diverse forms of regulation and some existing gaps, this framework has been crucial in supporting achievements in the area of DRR. The legal framework has supported the establishment of committees at all levels with responsibilities for disaster response, prevention and mitigation. The committees play a prominent role at all levels in the coordination of different government sectors and mobilisation of resources when floods and storms are forecasted, and in disaster response. However, the committees have yet to play a more active role in the coordination and harmonisation between sectors for long-term prevention and mitigation.

The standing office of CSFSC is based at MARD, and most of the significant prevention and mitigation achievements have been within the mandate of MARD, while other government agencies have been less active. This difference can be attributed largely to a gap in the mandates and resources provided for in the previous legislation. The New DRM Law closes a number of legal gaps by spelling out the different responsibilities of relevant ministries, with the main responsibility remaining with MARD. The New DRM Law however, still does not detail coordination and harmonisation mechanisms between the sectors, thus additional secondary legislation will be required to effect implementation.

The Dyke Law has supported significant achievements in the upgrading of dykes, drainage systems and construction of water reservoirs, which are all areas within the mandate of MARD. Strategy 2020 includes non-structural prevention and mitigation measures, however, the achievements under this strategy have so far been limited due to, among other reasons, the lack of legal framework and guidance for implementation. CBDRM 1002 is in the process of supporting capacity-building in community-based approaches at the provincial government level, but has yet to deliver at the community level. INGOs and VNRC continue to support CBDRM projects and the CBDRM 1002 Decision has provided them with the necessary legal framework to facilitate cooperation with local governments.

The New DRM Law also contains provisions on non-structural prevention and mitigation and on mainstreaming DRR in socio-economic development. These were previously only regulated at the level of decisions and decrees. The upgrading of the above issues to national law level in 2014, will most likely lead to less constraints in DRR practice caused by legal gaps.

3.2. Responsibility, accountability and liability for natural disaster risk reduction

3.2.1. Legislation on compensation

While not directly addressing the issue of risk reduction, post-disaster compensation does have an impact on the vulnerability and resilience of persons potentially affected. Viet Nam's legal framework for DRM provides compensation in case of loss of life, missing persons, serious injury and damage to houses from natural disasters or other circumstances such as accidents and fires. Households are further entitled to compensation for loss of their productive assets, to alleviate hunger caused by food shortages, and if relocation is required due to landslides or inundation risks. The compensation is regulated in the Social Protection Decree of 2007, which provides the policy framework for support to disadvantaged persons.53 Article 6(i) defines the persons entitled to compensation due to natural disasters or other force majeure circumstances, and Article 12 specifies the compensation amounts. For example, households with dead or missing persons will receive 3,000,000 VND per person (about 144 USD), with seriously injured persons 1,000,000 VND per person (about 48 USD) and for loss of home or compulsory relocation, a compensation of 5,000,000 VND (about 240 USD) per household is payable. Food allowance is 15 kg of rice per person per month for between one to three months. The source of funding for compensation is primarily local government budgets and secondarily donations from outside the government. When these funds are insufficient, the chairmen of PCs can report this to MOLISA and the Ministry of Finance (MoF), which shall submit the requests to the PM for consideration and decision to use the central budget location. MOLISA is responsible for implementing the social protection decrees while MARD and PCs are responsible for carrying out assessments of the damage to living conditions and food shortages.

In 2009, the PM approved a decision stipulating the mechanism and policies for providing support of seeds, livestock, animal and fishery breeding for the recovery of production in areas affected by disasters, insect infestation and animal epidemics.⁵⁴ It provides a clear mechanism to financially support farmers affected by natural hazards. The compensation for rice fields is 1,000,000 to 1,500,000 VND per hectares (ha) depending on the rice variety cultivated. This decision is effectively a "free insurance" policy for farmers.

⁵³ Decree No. 67/2007/ND-CP on Support Policies for Social Protection Beneficiaries (13 April 2007), and Inter-Ministry Circular No. 24/2010/MOLISA MOF to implement the agreement (dated 18 August 2010)

⁵⁴ PM's Decision No. 142/2009/QD-TTg

Besides compensation for those affected by disasters, there is a regulation in the 1993 Ordinance for compensation for involvement in disaster response. Those organisations or individuals whose labour, vehicles or equipment are mobilised for disaster response will also be compensated.

The New DRM Law not only maintains the 1993 Ordinance for compensation, but also mentions a right of individuals and households "to receive relief and support in accordance with law when suffering from damage caused by natural disasters".⁵⁵

Compensation in practice

While the scope of the present study did not allow for study of the practice of compensation, from the consultants' experience in previous field visits in Viet Nam, the normal practice is that compensation is in fact paid in the case of death, injury or loss of houses, and that government food distributions have been implemented in disaster-affected areas. Although the food distributions were carried out without specific target groups and often in smaller quantities than 15 kg per person, there are no known cases of persons who have died of hunger in Viet Nam as a result of a recent natural hazard. Commune PCs have also supported households that do not have other coping mechanisms. Organisations and individuals who have had their private resources mobilised have also been compensated, however this does not always conform to market value.

3.2.2. Individual obligations, rights, and prohibitions

Article 24 of the 1993 Ordinance required citizens to participate actively in recovery efforts after floods and storms in order to reduce the impact and quickly restore livelihoods. Article 36 provided the right for individuals to appeal, if flood and storm prevention and control laws are violated. The New DRM Law has a separate chapter on the rights and obligations of agencies, organisations, households and individuals in natural disaster prevention and control. Households and individuals have the right to access information, participate in the elaboration of local plans and participate in communication, information and education programmes. The obligations for household and individuals include reducing damage risks for their houses and other assets and not to build houses or live in areas which can be severely affected by natural disasters. While these rights and obligations are clearly set out in the New DRM Law, details on how they will be upheld is not included.

The New DRM Law lists 10 prohibited acts. One such act particularly related to disaster prevention is the act of increasing natural disaster risks without counter measures. Examples mentioned in the law include cutting down protection forests, encroaching on river banks and river beds, obstructing water currents, and illegally exploiting sand, gravel or minerals causing riverbank or coastline erosion. Another clause is the prohibited act of "[o]perating irrigation reservoirs, hydropower reservoirs, sluices and pumping stations in contravention of approved operation processes, except in special cases as directed by competent persons". For A relevant clause for disaster response is the prohibited act of taking advantage of natural disasters to speculate and increase the prices of goods, supplies, means, equipment and essentials for self-seeking purposes, causing damage to people's lives. The Dyke Law also contains several prohibited act relating to the protection of dykes, such as the provisions limiting construction and cultivation near dykes.

⁵⁵ Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 34 (1e)

⁵⁶ Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 12

Practice

The community in Dien Bich expressed the opinion that the government should warn them when a disaster is forecast and also assist them with evacuation. They appeared to consider access to information and assistance with evacuation as their right (although they did not use rights-based language). On the other hand, the community was also aware of their obligations, such as following evacuation instructions and providing labour and equipment, if required. They were aware that the authorities have the power to mobilise resources. Forced mobilisation was not considered an issue in the two communes as many people said that they felt obliged to assist within their ability when disaster strikes.

In terms of enforcement, there are a collection of cases where individuals have been prosecuted for violating the Law on Dykes. In the period of the study, three farmers in another province were brought to court for cutting mangrove forests, which protected a sea dyke, for the purpose of shrimp cultivation.

3.2.3. Government accountability

Generally government agencies may be held liable for irresponsible actions leading to serious consequences in accordance with administrative law. In specific legal instruments regulating prevention of certain disasters, there are also articles on rewards and sanctions. Government authorities can be held liable for failure to fulfil their obligations stipulated in these documents. There might be both individual and collective sanctions, depending on the case.

The New DRM Law handles violations in Chapter V. Included in the list of responsibilities for each of the 14 ministries and the provincial PCs is a provision for every ministry "To examine, inspect, settle complaints and denunciations, and handle violations of the law on natural disaster prevention and control according to its competence".⁵⁷

Practice

Administrative sanctions or criminal prosecutions of government agencies or individual staff for violating disaster laws are very rare. In the study, only one case since 1993 concerning the failure to act was identified, which led to administrative sanctions for the individual staff member concerned. More often violations will be dealt with during the annual evaluation meetings held at the end of the year.

3.2.4. Natural disaster insurance

There is no compulsory insurance against the effects of natural hazards. However there is a decision establishing a programme on agricultural insurance that started in July 2011.⁵⁸ One of the objectives of this programme is to support farmers to actively recover and obtain compensation for financial losses caused by natural disasters and diseases.

The New DRM Law has two articles referring to insurance. Article 5 provides for policies on insurance "to offer incentives to and encourage insurance businesses to provide insurance against natural disasters." ⁵⁹ In Article 42, MoF is given the responsibility to promulgate legal documents relating to the policy on insurance against natural disaster risks.

- 57 Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 42 (3)(i)
- 58 Decision No. 315/2011/QD-TTg on Piloting Agricultural Insurance in 2011-2013 (dated 1 March 2011), and MARD Circular No. 47/2011/TT-BNNPTNT on Guiding the Implementation of Decision No. 315/2011/QD-TTg
- 59 Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 5

Insurance in practice

In Viet Nam, 60% of the population finds its employment in agriculture, a sector which faces high risk from natural hazards like floods, drought, storms, landslides, insect infestations and animal epidemics. Insurance could be an effective tool to increase the resilience of communities' livelihoods. However, insurance against natural hazards is still very limited in Viet Nam and accounted for only 0.01% of the total amount spent on insurance in Viet Nam in 2009, according an SNV and AMDI study. Several earlier piloted insurance programmes failed for various reasons, among others the lack of an insurance culture amongst the rural population. However, another major reason could be that the government's compensation framework discussed above operates effectively as an insurance policy and so farmers have less incentive to contract private insurance.

3.2.5. Responsibility, accountability and liability for DRR: good practice and gaps

Compensation is mainstreamed in the social security system and related legislation, together with Decision 2009⁶¹ provides the mechanisms and policies to support farmers and contributes to a safety net for those seriously affected by natural hazards. As a result of these social safety nets, there are no records of fatalities caused by insufficient access to food.

Accountability of government agencies and staff for failure to act is referred to in several documents. It is very rare, however, for government agencies or staff to face administrative sanctions or criminal prosecution due to violations of disaster laws. According to the New DRM Law, each ministry must handle violations within its competence and there is no reference to other administrative laws dealing with violations.

Individual rights and obligations were insufficiently covered in the previous disaster legislation. The New DRM Law addresses this gap by having a separate chapter on rights and obligations and includes essential rights such as the right to information, participation in planning and compensation. The New DRM Law is also more explicit about individual and household rights and obligations. Details on how these will be enforced however, are not clear.

According to the SNV and AMDI study cited above, the existing legal framework has laid down the fundamental foundation for risk financing mechanisms, in particular, agricultural insurance. A number of legal instruments regulate the competitive insurance market and encourage the participation of all economic sectors in providing diversified insurance services and fostering an insurance culture in Viet Nam, particularly in the rural areas. However, Viet Nam still lacks a specific and comprehensive legal instrument regulating risk financing programmes (e.g. agricultural insurance, micro-insurance). Currently these are partially regulated in existing laws, decrees, circulars, etc. The safety net created by Decision 2009 might be a constraint for the further development of insurance as many farmers might feel that the safety net provides sufficient coverage for natural hazard risks and as a result, may opt out of contracting private insurance. While the New DRM Law refers to insurances for natural disaster risks, the necessary policies and implementation documentation have yet to be developed.

⁶⁰ Ngo Cong Chinh, MPA, Team Leader and Colleagues, Research Centre for Disaster Risk Reduction and Climate Change, Study on Resilient Financing Mechanism for Agricultural Livelihoods in Climate Change Context (2011)

⁶¹ PM's Decision No. 142/2009/QD-TTg

Key finding 2: Responsibility, accountability and liability

The Vietnamese legal framework has a collection of provisions relating to compensation for individuals or households affected by natural hazards. Compensation is provided for loss of life, serious injury, destruction of houses and farmers are compensated for the loss of crops and livestock. The New DRM Law includes these types of compensation, recognises the right for emergency relief and also includes early recovery for farmers and cooperatives or companies such as providing seeds and samplings, equipment and technologies, and agricultural necessities to recover production.

Government agencies and staff can be held liable for failure to fulfil the obligations stipulated in the DRR laws and regulations. However, in practice, administrative sanctions or criminal prosecutions are rarely applied.

The New DRM Law contains significantly more provisions on the rights and obligations of individuals and households than in previous legislation, though further detail may be required for effective enforcement.

While there is legislation addressing natural hazard insurance, this type of insurance has not yet become common practice. A specific legal instrument regulating risk financing mechanisms which harmonises commercial insurance and other government safety net regulations could contribute to the further development of natural hazard insurance. As set out in the New DRM Law, further details on the development of policies and implementing decrees for natural disaster risk insurance is expected to be developed by MOF in due course.

3.3. Law on specific hazards

Previous legal instruments on disasters in Viet Nam mainly dealt with weather related hazards such as storms, sea surges, floods, flash floods, whirlwinds and landslides together, whereas earthquakes and tsunamis are dealt with in separate instruments on geological disasters. The New DRM Law addresses all these natural hazards, with Article 3 stating that "Natural disasters include typhoon, tropical low pressure, whirlwind, lightning, heavy rain, flood, flash flood, inundation, landslide and land subsidence due to floods or water currents, water rise, seawater intrusion, extreme hot weather, drought, damaging cold, hail, hoarfrost, earthquake, tsunami and other types of natural disaster". Forest fires, however, are not specifically mentioned in the New DRM Law.

3.3.1. Earthquakes and tsunamis

There are two PM decisions regulating geological disasters. The Decision of 2007 on Promulgating the Regulation on Earthquake and Tsunami Prevention and Control⁶² provides regulations on how to respond to earthquakes and tsunamis, how to reduce the consequences after disasters and the obligations of ministries and local authorities. An earlier Decision in 2006 regulates methods for collecting and distributing information and warnings about earthquakes and tsunamis, and details the responsibilities of ministries and PCs of coastal zones.

62 PM's Decision No. 78/2007/QD-TTg on Promulgating the Regulation on Earthquake and Tsunami Prevention and Control

Practice

Since the Decision on Earthquakes and Tsunamis became effective, there has not been an earthquake or tsunami of significant magnitude requiring a disaster response. The PM Decisions have, however, contributed to significant prevention and mitigation measures as well as the development of the tsunami early warning system. At the national level, the mapping of earthquake risks has been completed by the Geophysics Institute.

Earthquake risks are low to moderate in Viet Nam, and the area most at risk is the north-west, particularly the province of Dien Bien. The MoC has issued technical requirements for the construction of earthquake-resistant buildings, however, more study is required to adjust these to the Vietnamese context and to assess vulnerabilities.

Earthquakes and tsunamis: good practice and gaps

The studies of the Geophysics Institute focus on seismic hazards, however, little is known about the vulnerability to them, with the exception of a few damage reports of past earthquake impacts. In the mountainous North West area of Viet Nam, there has been a shift from wooden single-level house construction towards more stone and concrete constructions and high-rise buildings, which presents a new area of potential vulnerability to earthquakes. The number of water reservoirs has also expanded significantly, forming another trend that could contribute to an increase in vulnerability to earthquakes.

Under the previous legislation, the standing CCFSC office was based at MARD, which does not have a mandate in earthquake and tsunami management. Consequently, most vulnerability studies have been directed towards weather-related hazards. Under the New DRM Law, the CSCNDPC is designed to overcome this gap, though the Steering Committee will again have its standing body established within MARD. As the coordination mechanisms are not very clear at this stage, it is hoped that further detail will follow on how the committee will ensure that all hazards are sufficiently addressed.

3.3.2 Fires

Fires are often not listed as natural hazards in the context of disasters. The Law on Fire Prevention and Fighting 2001 (Fire Law) is completely separate from other hazards. The CCFSC has no responsibilities for response or prevention of fires and the New DRM Law similarly makes no mention of fire. The Fire Law establishes the responsibility for handling large fires with the commune-level PCs. In cases where the handling of the fire exceeds the local administration's jurisdiction, the Minister of Public Security must assume prime responsibility and coordinate with ministries, ministerial-level agencies, agencies attached to the government and relevant PCs. For particularly serious cases, the Minister of Public Security must report to the PM for further decisions to be made. An additional decree was also adopted in 200364 to provide further implementation details for a number of articles.

Additionally, a separate Decision of the Minister of MARD was adopted in 2007 on Promulgating Operation Regulation of Central Steering Committee on Urgent Issues in Forest Protection and Forest Fire Prevention and Control. 65 This Decision regulates the responsibilities of the members of the

⁶³ Law on Fire Prevention and Fighting (No. 27/2001/QH10), article 39

⁶⁴ Decree No. 35/2003/ND-CP Detailing the Implementation of a Number of Articles of the Law on Fire Prevention and Fighting (4 April 2003)

⁶⁵ Decision No. 08/2007/QD-BNN of the Minister of MARD on Promulgating Operation Regulation of Central Steering Committee on Urgent Issues in Forest Protection and Forest Fire Prevention and Control

Central Steering Committee and composition and responsibilities of the Steering Committee Office. In terms of enforcement, the Fire Law includes provisions on penal liabilities for heads of agencies and organisations or fire-fighting units who "due to lack of responsibility in organizing, managing or inspecting the fire prevention and fighting activities, let fires occur" or cause serious consequences in performing their fire-fighting duties. The Decree of 200666 on Forest Fire Prevention and Control deals with financial resources and lays down sanctions, both administrative and criminal, against individuals or organisations failing to fulfil their obligations as stipulated in the decree.

There is no provision for an early warning system in the above mentioned fire legislation, although Decree 2006 mentions taking early notice and warning of locations where forest fires are likely as methods of preventing and fighting forest fires.

Fire: practices and gaps

The scope of the study did not allow for an assessment of fire legislation in practice, as this involves a different group of stakeholders from those who were the focus for the interviews. However, based on public information through newspapers and internet websites, it can be noted that warnings are given by MARD when there is an increased risk of forest fires due to hot and dry spells. The warnings are given on a scale of one to five.

As the New DRM Law does not address fire, it is not yet clear whether CSCNDPC will be responsible for handling forest fires and how the agency will relate to the current Central Steering Committee on Urgent Issues in Forest Protection and Forest Fire Prevention and Control.

Key finding 3: Law on specific hazards

The risks for earthquakes, tsunamis and forest fires have been regulated in separate legislation from meteorological disasters. The Decision on Earthquakes and Tsunamis has contributed to the establishment of the early warning system for tsunamis, the mapping of earthquake hazards and the study of the possible occurrence of tsunamis along the coastal areas in Viet Nam. The mapping and studies have mainly focused on the hazards however, and additional study is needed on reducing vulnerability to earthquakes and tsunamis. Furthermore, as the New DRM Law now addresses earthquakes and tsunamis, these hazards will need to be addressed through the new CSCNDPC.

The legal framework for forest fires is completely separate from the mainstream legal DRR framework in Viet Nam. The reduction of risks from forest fires lies outside the mandate of the CCFSC and has its own coordination committee, and is similarly not addressed in the New DRM Law.

3.4. Early warning systems and risk mapping

3.4.1. The legal framework for early warning

The initial legal instruments on early warning and risk mapping addressed only storms and floods. In 2006, following a decision of the PM, early warning and risk mapping was expanded to cover earthquakes and tsunamis.

The Ordinance on Floods and Storms Control 199367 and its subsequent amendments, decrees and detailed decisions addressed early warning for storms and floods. This legal framework specified the different responsibilities of the Vietnamese Government agencies in charge of early warning.

The General Department for Meteorology and Hydrology (GDMH) at MONRE was put in charge of forecasting rainfall, storms, floods and sea water rises. GDMH was required to provide timely, accurate and complete information for the planning of storm and flood prevention measures. In case of storms, the Department was to provide information hourly to the CCSFC. The mass media was required to issue the content of the information provided by the GDMH when they transmit information to the public on storms and floods.⁶⁸

The CCSFC was to be in charge of issuing warnings in the entire country, while the PCs at the provincial level were in charge of warnings in their area. In mountainous and remote areas the district PCs could decide themselves to issue warnings, provided they inform the higher levels. The postal service was in charge of ensuring uninterrupted communication on these networks even as storm and floods occur. The service was to announce maritime meteorological information according to the current maritime rules.⁶⁹

The legal framework also addressed, in particular, warnings for sea crews. Article 17 of the 1993 Ordinance requires all boats and ships setting out to sea to be equipped with signals, communications equipment, rescue kits for boats and people, and to abide by the warning regulations. Crews were required to have knowledge of storms and floods and relevant maritime laws so they will know what to do when they receive warnings. 70

Since 2006, the Institute of Geophysics under the Viet Nam Academy of Science and Technology has been responsible for building the seismography network and collecting information from both domestic and foreign sources to warn against earthquakes and tsunamis. The Institute has been responsible for being on duty 24 hours per day to collect and distribute information on earthquakes. The National Centre for Hydro-meteorological Forecasting under MONRE has been responsible for building the network for monitoring and data transfers to support the Institute of Geophysics in carrying out early warnings.

- 67 Ordinance No. 09-L/CTN on Prevention and Control of Floods and Storms (20 March 1993)
- 68 PM's Decision No. 381-TTg on Promulgation on Flood and Storm Warning (July 1997)
- 69 Decree No. 32-CP of the Government Providing Details for the Implementation of the Ordinance on the Prevention and Control of Floods and Storms (20 May 1996), articles 10 and 11
- 70 Ordinance No. 27/2000/PL-UBTVQH10 Amending and Supplementing a Number of Articles of the Storm and Flood Ordinance (24 August 2000)
- 71 PM's Decision No. 264/2006/QD-TTg on Promulgating the Regulation on Earthquake/Tsunami Warning, articles 3, 4 and 8
- 72 PM's Decision No. 78/2007/QD-TTg on Promulgating the Regulation on Earthquake and Tsunami Prevention and Control, article 9.1

The early warning system was further strengthened under the National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020, backed by the PM Decision of 2007.⁷³ One of the specific objectives of the Strategy was to "[e]nhance the capacities of forecasting flood, storm, drought, seawater intrusion, informing of earthquakes, warning of tsunamis and extreme hydrometeorology phenomena, of which the focus is given to increase the early warning of storms and tropical depressions to 72 hours in advance". The Strategy further aimed to expand the warning systems to communes and villages in mountainous areas and the Central Highlands and to strengthen cooperation with neighbouring countries in disaster forecasting and warning.

The CBDRM 1002 Scheme⁷⁴ provided for the establishment of an early warning and communication system for natural disaster prevention, response and mitigation at community level in all disaster-prone communes.

The New DRM Law covers warnings for all natural hazards and builds on the good practice contained in earlier legislation. MONRE is made responsible for hydro-meteorological forecasting and the Viet Nam Academy of Science is assigned responsibility for forecasting earthquakes and tsunamis. Warnings on these hazards are to be communicated directly to the mass media. The PM, CSCNDPC and National Steering Committees will communicate the actions to be taken at different levels. A new clause has also been included, which states that where necessary, warnings will be broadcast in ethnic minority languages.

Early warning practice

In recent years, the GDMH of MONRE has provided timely forecasting and warnings in the coastal areas and deltas in Viet Nam. MONRE issues warnings for storms and possible flooding due to sea surges or heavy rainfall and communicates this information to CCSFC, the Communist Party, the government, relevant ministries, and the mass media, as well as publishing it on their website. The CCSFC not only warns the provincial CFSC&SRs, but also indicates the actions to be taken to mitigate the impact of storms and floods. The warnings include instructions such as calling back boats and ships to safe shelter, preventing boats and ships from setting out to sea, inspecting and strengthening dykes, and evacuating people and property from disaster-prone areas.

The CCSFC warnings are channelled through the CFSC&SRs at each government level. These committees are established and active in each disaster-prone province, district and commune in the coastal and delta areas. At the commune level, the most commonly used method for warning the population is through loudspeakers. Messengers are required to go to households in disaster-prone areas, which cannot be reached by loudspeakers. Early warnings for remote villages and households, which are out of reach of loudspeakers, is an area that still needs further improvement. The CBDRM 1002 Scheme has built capacity at the national and provincial level, however it has yet to deliver at the community level. The CBDRM 1002 Decision has provided the legal framework for INGOs, National Societies and VNRC to support early warning in communities. Setting up early warning systems in each commune, which reaches all individuals at risk, is supported by many INGOs and other National Societies in Viet Nam. The Spanish Red Cross Society has supported VNRC in setting up a system which encourages neighbours to take the responsibility to inform each other and pay particular attention to disabled persons who cannot hear messages spread by loudspeakers.

⁷³ PM's Decision No. 172/2007/QD-TTg to Approve the National Strategy for Natural Disaster Prevention, Response and Mitigation to 2020

⁷⁴ PM's Decision No. 1002/QD-TTg to Approve Community Awareness Raising and Community-Based Disaster Risk Reduction Project (2009)

Within the government, improvements for longer-term forecasting are being made in order to ensure the desired full 72 hours advance warnings of incoming storms. Additionally, the flood forecasting has improved due to the installing of a greater number of hydrological monitoring stations.⁷⁵

In the local communities visited for the case study, the warning systems were reported to function as follows. The local community is warned through loudspeakers by the commune CFSC&SR in Dien Nuoc and Dien Bich in Nghe An province. The warnings are repeated regularly, if a storm or flood is forecasted. The villagers were very much aware of the need for timely warning and considered it an obligation of the CFSC&SR to issue timely warnings to people and assist in the evacuation of the elderly, disabled, women and children living close to dykes. The mass media plays an important role as a prime source for early warning, as the community considered local broadcasts of TV and radio as their main source of information.

Fishing and the processing of sea products is the main source of income in both communes. Warning fishermen out at sea is of great concern to both communes. The women in the focus group expressed their grave concern about timely warnings for their loved ones out at sea. In Dien Nuoc, the commune PC purchased radio equipment from the commune funds to communicate with fishermen. However, this radio equipment has a medium range and does not reach boats that go far out on the East Sea (South China Sea). Not all fishing boats are equipped with radios for communication, so fishermen rely on warning each other when a warning is received.

The General Directorate of Fisheries of MARD has distributed 7,000 radio receivers to low-income fishermen in 28 coastal provinces and has approved a project to distribute 3,000 satellite receivers. The Ministry of Communication has expanded the coverage of radio and TV in Viet Nam, and Viet Nam TV provides satellite coverage, DTH and mobile TV.76

The Centre for Earthquake and Tsunami Warning has been equipped and is able to complete a tsunami report within 10 to 15 minutes after an earthquake occurs in the East Sea. The estimated time for a tsunami caused by a strong earthquake in the Manila Trench near the Philippines to reach the coastal areas of Viet Nam is 2 hours, leaving only a short period to provide warnings. It is not clear whether the early warning system in place for floods and storms is able to warn the coastal population in sufficient time for tsunamis. As a result, mass media will have to play a crucial role in providing tsunami warnings. The coastal area from Quang Binh to Binh Thuan province is at risk from tsunamis, with the provinces of Danang and Quang Ngai most at risk. It is possible that these areas could be affected by waves of more than 6 metres, although the chance of this happening is low. In Danang, sirens have been placed along the coast for warnings. The communities of Dien Nuoc and Dien Bich are insufficiently aware of – and not prepared for – tsunami risks, despite there being a small risk of 1 meter high tsunamis occurring.

Early warning: good practice and gaps

The legal framework has contributed to an effective early warning system for floods and storms in the coastal disaster-prone provinces in Viet Nam. The early warning system together with effective action such as evacuations in flood-prone areas in the coastal zone, the prevention of ships going out to sea and the strengthening and building of dykes and safe shelters, has contributed to a significant

⁷⁵ UNISDR, Draft HFA monitoring and review through a multi-stakeholder engagement process (2011-2013)

⁷⁶ CCSFC, Progress Report on the Implementation of the National Strategy for Disaster Prevention, Mitigation and Response to 2010 (reporting period 2007-2010), chapter 6.5

⁷⁷ Vu Thanh Ca and Nguyen Dinh Xuyen, Tsunami Risk Along Vietnamese Coast, Journal of Water Resources and Engineering, No. 23 (November 2008)

reduction in the number of deaths caused by storms and floods in the coastal and delta areas. In particular the number of deaths among fishermen caused by tropical storms and typhoons has declined significantly over recent decades.

The early warning systems, however, are not yet sufficiently developed for flash floods and landslides in mountainous areas, nor is there a system for whirlwinds. While a system for early warning for tsunamis has been set up, it remains to be seen whether the actual communication systems established for storm warnings will be sufficient for tsunami warnings.

3.4.2. Risk mapping law and regulations

The Ordinance on Floods and Storms Control 1993 did not provide specific regulations for 'risk mapping' in those terms, but it included elements of risk mapping. Article 11 listed the annual flood and storm prevention activities as including the development of "plans for prevention of damage caused by floods and storms for the whole region, for each vulnerable area, for each area identified for special attention and preparation for floods and storms." MONRE was made responsible for providing essential information for planning, such as the potential for flash floods and storms as laid down in Decree No. 32, which provided details for the implementation of the Ordinance. In this Decree each ministry was responsible for the planning of disaster prevention activities within its mandate, for example MARD for maintaining dykes and PCs for prevention planning in their areas of responsibility.

Risk mapping is included in Strategy 2020, specifically in Chapter V, Action Plan (C). Two key activities listed are to "define and map areas highly prone to flash floods, river and sea erosion, storm, earthquake, sea level rise, and tsunami", and "map out the flood areas to assess risks for flood and drought".

Some of the tasks included in the CBDRM 1002 Decision include "[m]aking maps of natural disasters and the vulnerability of each community (the maps will be made by communities themselves based on the guidance of task forces in charge of community based natural disaster management); making posters, maps and boards of instruction on major steps to prepare, cope with and overcome consequences of natural disasters at the centre of each community".

The Ordinance does not explicitly specify that risk maps should be included in disaster plans, although Strategy 2020 and the CBDRM 1002 Scheme clearly include the development of risk maps. The New DRM Law does not use the term risk mapping, but the similar term "zoning of natural disaster risks". Article 13 refers to "identifying, assessing and zoning natural disasters and monitoring and supervising natural disasters" as a component of natural disaster prevention. Article 17 deals with the assessment and zoning of natural disaster risks and the preparation of natural disaster warning maps, for which MONRE is responsible. The identification of dangerous areas is mentioned as part of the plans at commune, district, provincial and national levels. 78

Practice

MONRE is responsible for the mapping of floods and is also the focal point for climate change in Viet Nam. At the national level, MONRE has developed a map of flood prone areas for the northern mountainous region and a drought map for the South Central and Central Highlands. Several provinces have also actively developed disaster risk maps. For example, Phu Tho province has prepared flood risk and landslide hazard maps, while Binh Thuan province has developed mapping for potential flash floods.⁷⁹

⁷⁸ Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 14

⁷⁹ CCSFC, Progress Report on the Implementation of the National Strategy for Disaster Prevention, Mitigation and Response to 2010 (reporting period 2007-2010), chapter 7.1

MARD, as the ministry hosting the standing CCSFC, has developed several initiatives on risk mapping. While MONRE provides information on the risk of natural hazards, MARD connects the hazard with the vulnerabilities in communities. The risk mapping is mainly done on a project basis.

UNDP has provided support to MARD through the implementation of a nationwide risk assessment to identify 6,000 communes for the CBDRM 1002 Scheme. Subsequent research led to the development of multi-hazard risk assessment including different determinants of vulnerability in the communities, such as storms, floods and drought as well as other hazards. The risk assessments have resulted in various sets of maps downscaled to commune level, however, this has yet to be completed nationwide

The CBDRM 1002 Scheme of the government has yet to deliver at the commune level and has not yet used a participatory approach involving communities themselves. INGOs and National Societies are supporting the PCs and VNRC at the commune level to conduct VCAs and to prepare risks maps at the village and commune level. This support is given within the legal framework provided by the CBDRM 1002 Scheme, however the financial resources are obtained from abroad. To date, relatively few communes have been assessed.

Risk mapping: good practice and gaps

The legal framework establishes the responsibilities of different agencies in risk mapping. MONRE is responsible for assessing and providing information on the risks for floods and storms. The Geophysics Institute is responsible for assessing and providing information on the risks for earthquakes and tsunamis. MARD is responsible for linking this hazard information with vulnerability information. Each ministry is responsible for implementing assessments for their sector. There have been a number of valuable initiatives at commune, district, provincial and national level by MARD and MONRE. However, the legal framework does not sufficiently regulate the coordination and harmonisation of risk assessments between the different ministries.

In reality, most of the risk assessments are conducted on a project basis within one ministry, mainly by MARD and MONRE, covering rural areas and environments. Despite rapid urbanisation in Viet Nam, the risk assessments are still mainly focused on rural areas. Information on risks is maintained by different sectors. Each sector develops its own hazard maps, creating significant overlaps. There is no central database to store hazard maps and data, and these are currently stored in different places within different ministries or government agencies.⁸⁰

Many stakeholders agreed on the need for more coordination and harmonisation between MARD and MONRE in the area of risk assessment. The New DRM Law puts MONRE in charge of the assessments and data collection for weather related disaster risks (Article 14, 6a). The Viet Nam Academy of Science is responsible for assessing and providing information on the risks of earthquakes and tsunamis. The planned CSCNDPC could play a role in the coordination and harmonisation of risk assessment between different sectors. The mechanisms for coordination and harmonisation between the different sectors for risk assessments are not yet clear in the New DRM Law, nor is it clear how natural hazards assessment will be linked to assessments of vulnerabilities by other ministries. Legislation on risk mapping is an area which needs further attention in the development of implementing decrees and regulations.

Key finding 4: Early warning and risk mapping

The legal framework on early warning has contributed significantly to reducing the risk from floods and storms in coastal and delta areas in Viet Nam. The Ordinance and supplementing amendment, decrees and decisions have defined the responsibilities of the different government agencies involved in early warning. The established and active CFSC&SR at national, provincial, district and commune levels provides the institutional framework through which early warning communications are channelled to communities. Support from and involvement of the mass media is an essential component of the regulated early warning system.

The New DRM Law will maintain these good practices for warnings against floods and storms, and intends to expand the coverage to include other hazards. The CBDRM 1002 Scheme will address the gap that not all households are adequately warned by the loudspeakers in the communes. The legal framework on risk mapping could be improved providing further detail on the coordination and harmonisation mechanisms of different ministries' initiatives.

3.5 Regulations for the built environment

3.5.1. Building codes

The Law of Construction of 200381 regulates the constructions of buildings in Viet Nam, and addresses individuals and organisations that both invest in construction and conduct construction activities. The Law provides an inclusive list of general requirements on work and construction designs. Examples include standards on fire and explosion prevention and fighting, environmental protection and relevant standards, and human safety following a construction incident.

The Law makes no direct references to DRR or to ensuring the resilience of buildings to natural hazards, though it does refer to safe and sustainable living environments. On one reading, this could be interpreted as requiring the construction of hazard-resilient buildings, but it is not explicitly stated in the law.

Detailed building codes or construction standards are found in a number of decisions and other legal documents issued by MOC, such as the Decision No. TCXDVN/375/2006 Promulgating Viet Nam Construction Standard "Design of structures for earthquake resistance".82 While building codes do exist for the resilience of high rise buildings to typhoons, specific building codes for flood resilient constructions could not be located.

Pursuant to the Law of Construction, investors must obtain construction permits prior to the commencement of construction work, with some exceptions. In this respect, the law differentiates between urban and rural areas. No permit is required for "separate dwelling houses in deep-lying and remote communes not in urban area, densely populated quarter/rural area or rural population quarter" and for "small-size technical infrastructure in deep-lying and remote communes". The Law further stipulates that, "[f]or separate dwelling houses in rural areas, regulations on construction permits must conform with actual situation of such localities. The district level PC shall specify the densely populated quarters in geographical areas where construction permits are required". The permits in rural areas classified as densely-populated are issued by the commune PCs.

- 81 Law on Construction (No. 16/2003/QH11)
- 82 Decision No. TCXDVN/375/2006 Promulgating Viet Nam Construction Standard, "Design of structures for earthquake resistance"
- 83 Law on Construction (No. 16/2003/QH11), article 62

The Law on Construction further states that the "Construction Inspectorate has responsibility for building inspections, the compositions and operation of which, is regulated by Government" and "[s] anctions might be imposed, if individuals or organisations fail to fulfil their obligations stipulated in the law. Sanctions include compensation, tearing down the building and both administrative and criminal liability".

Practice

While there are building codes, challenges remain in implementing them. In urban and some rural areas, as set out above, a permit must be obtained before construction can start, and a requirement for this is the submission of a construction design. Once the permit has been issued however, MOC has insufficient capacity to conduct inspections to ensure that construction is implemented according to the approved design. MOC also lacks the resources and experienced staff to effectively oversee and control the many construction sites.

According to the draft HFA84 report, "MOC has developed several hazard-resilient housing and building models, but there is need for adequate resources to enable the widespread employment of these standards and techniques. For disaster-affected households, this is usually due to higher costs of building a more disaster proof house, or a low level of awareness of other options, or difficulties in procurement of appropriate construction materials."

In the communes of Dien Ngoc and Dien Bich, there is no other requirement to construct a house besides proof of land use rights. MOC's building codes are not applicable in the communes except for constructions of three storeys or more – but as this type of building does not currently exist in the communes, these regulations do not have practical application at present. Nevertheless, community members in the focus group discussions stated that they consider flood and storm resilience when deciding on the design of a new house. One of the trends observed is to construct a concrete flat roof rather than the more storm-prone roof of wood with tiles. The community members also ensured there was a higher storage place in their houses to store food and valuable items in times of floods. The number of two-storey buildings which can be used as a safe place in times of floods, however, is still limited in the commune.

In several flat coastal areas prone to floods, there is no higher ground for evacuation. In this case, buildings with two storeys or more are essential as evacuation sites for sudden floods. Due to the geographical features of these areas, flood levels can rise several meters in a few hours after heavy rains occur up-stream. Several public buildings in the flood-prone areas of Dien Chau district have two storeys but this is not yet common practice. While dykes in the district provide a certain degree of protection against floods, should the dykes break or overflow, floodwater could descend more rapidly, making higher buildings even more important for residents to seek shelter in.

Building codes: good practice and gaps

While the construction law and building codes may have contributed to improvements in the design of buildings to adjust for possible risks of earthquakes and storms, the extent to which this contributes towards more hazard resilient constructions is not clear. MOC currently lacks the capacity to effectively inspect the booming construction sector in Viet Nam. Additionally, building codes are often adapted from other countries, making their application not entirely suitable in the local Vietnamese context.

84 UNIDSR, draft HFA Monitoring and Review through a multi-stakeholder process (2011-2013), p13

According to statistics from CCSFC, every severe flood and storm that has occurred has resulted in many collapsed and damaged houses and public buildings, such as schools and health clinics. It is evident that greater resilience can be achieved through the development and enforcement of stronger building codes. Building codes for earthquakes and storms are easier to implement, as it is possible to map out these hazards and indicate the risks for certain geographical areas. However, as the risk of floods varies strongly from one location to another, the enforcement of building codes for resilience to floods requires very detailed risk maps, which are not yet available. Although local communities are often able to provide information about historical floods, the effective enforcement of building codes requires risk information from authorised government agencies.

Legislation on the construction of dual-purpose public buildings, which can serve as evacuation centres, was absent in the previous legal framework. However, this gap is addressed by the New DRM Law, which contains a clause on dual-purpose buildings.85

More can be achieved in the area of resilient construction. While MOC has taken a number of important initiatives, further investment and multi-sectoral coordination is needed. As the New DRM Law has provisions on construction and provides a wider mandate to the new CSCNDPC, this could contribute to increased achievements in DRR constructions.

Article 19 in the New DRM Law deals with construction; besides references on observing laws on environmental protection, construction and urban planning, the article requires that investment projects are appraised on "assurances of natural disaster prevention and control requirements" before these are approved. This concerns investment projects on upgrading urban centres, rural residential areas and infrastructural works. Households and individuals are also encouraged to build disaster-resilient buildings. Article 19 has a provision to mainstream disaster resilience in the construction sector, with the final clause stating that "When formulating standards and technical regulations on the construction of works, ministries shall include the contents on assurance of safety during natural disasters". MOC is responsible for the promulgation of legal documents to enhance the safety of constructions during natural disasters. The articles on building resilience in the New DRM Law and the wider mandate of the new CSCNDPC will significantly reduce the legal constraints for resilient constructions. However, it will not remove the constraint of MOC's limited resources and capacity to effectively enforce building codes.

⁸⁵ Law on National Disaster Prevention and Control (No. 22/2013/QH13), article 2(2)

⁸⁶ Law on National Disaster Prevention and Control (No. 33/2013/QH13), article 42(9)

Key finding 5: Building codes

The law makes no direct references to DRR or to ensuring the resilience of buildings to natural hazards, though it does refer to safe and sustainable living environments. MOC has issued several decisions providing detailed building codes for earthquake and storm-resilient high rise buildings. Construction permits are required in urban areas and for more than two storey houses in rural areas. One of the requirements to obtain a permit is a construction design, which provides the opportunity for authorities to inspect the design in terms of resilience.

The New DRM Law mainstreams DRR in the construction sector and reduces existing legal constraints. It will not however, solve the problem faced by MOC, which is insufficient capacity at local level to inspect the many construction sites once permits have been issued.

Enforcing legislation on resilient constructions requires risk maps issued by an authorised agency. The risks for flooding requires very detailed authorised risk maps and as long these do not exist, it is not possible to enforce building codes for flood resilience.

3.5.2. Land tenure and land use planning laws

The Law on Land of 2003 regulates the use and management of land. In Viet Nam, land belongs to the people and is managed by the state on behalf of the people. The state decides on the use of land through land use plans and assigns "the land use rights to land users in the form of land assignments, land lease and recognition of land use rights to stable users" and describes the rights and obligations of land users.⁸⁷ Land use rights are registered and the law allows the government to "recover" land for public purposes.

In Article 20, the Law requires the drawing of land use status quo maps every 5 years and land use planning maps every 10 years. Article 20 states that "[t]he Ministry of Natural Resources and Environment directs the surveys, measurement, drawing and management of land use status quo maps, land use planning maps nationwide and organizes the drawing of land use status quo maps and land use planning maps of the whole country". The PCs are responsible for the same in their localities. In Article 21, a number of principles for land use planning are laid down, such as:

- Being compatible with the strategies, overall planning, plan on socio-economic development, defence and security
- Thrifty and efficient use of land
- Rational exploitation of natural resources and environmental protection

Article 22 provides more details on the content of land use plans. Land will be reserved for infrastructure, construction, industrial and service development, urban and residential quarter development, defence and security.

Article 74 aims to protect the areas under wet-rice cultivation by restricting changes in use. If it becomes necessary to make such a change in a certain area, the state has to supplement other areas or enhance rice production in existing wet-rice areas. Land users are not allowed to change wet-rice cultivation into perennial crops, forest, aquaculture or other purposes without permission from competent state agencies.

87 Law on Land (No. 13/2003/QH11), article 5 on Land Ownership

Practice

Land tenure legislation does not create barriers for the implementation of prevention and mitigation measures in Viet Nam as the government possesses the legal instruments to intervene if this were to happen.

In rural areas in Viet Nam, not all individuals have received land use certificates. Individuals in Dien Ngoc and Dien Bich were allowed to construct houses without land use certificates if the plot had been in use for generations by the family. In this connection, while again reaching somewhat beyond the question of DRR, it should be noted that if land use certificates are made a precondition for support in post-disaster recovery programmes, the lack of these certificates can cause delays in providing support to poor affected households to reconstruct their damaged houses.

Land use planning has been mainly instrumental in economic development and has not yet been fully utilised for its potential as a tool to promote DRR. While there are concerns that urbanisation will lead to the increased risk of local floods, 88 there are also examples where locally-produced risk maps are used as tools for land use planning, such as in An Giang, where risk mapping is used for the planning of infrastructure and relocation. 89 In Nghe An province, land use planning is used to identify high flood-risk areas where no constructions are permitted to be built. These conditions also apply to high flood-risk areas in the communes of Dien Ngoc and Dien Bich, which have been identified by the PC. These communities are well aware that they are not allowed to construct houses in these areas. The land area surrounding sea dykes in the communes is reserved for mangrove forests and this is strictly enforced by the PCs.

By legally restricting the use of land designated for wet-rice cultivation, it contributes to the maintenance of food security and Viet Nam's position as the second largest rice exporter in the world.

Land tenure and land use planning: good practice and gaps

In Viet Nam, there is no individual land ownership, only land use rights. The land tenure legislation does not form a constraint for effective DRR measures. The Law on Land provides the government with the opportunity to utilise land use planning as an instrument for DRR. There are provisions requiring land use planning to be compatible with socio-economic planning, security, rational use of natural resources and environmental protection. According to the progress report on Strategy 2020, there were at least 8 provinces which used land use planning in association with disaster prevention. However, the existing laws make no specific references that land use planning should be used to reduce natural hazard risks. As a result of this, land use planning is used as an instrument for DRR, but is not addressed systematically.

There are no articles in the New DRM Law that directly link with the Land Law or refer to land use planning. Article 16, which addresses the mainstreaming of DRR into socio-economic development and sectoral development plans, indirectly implies the mainstreaming of DRR into land use planning. Apart from these legal gaps, it is also worth noting that there are also capacity issues at local levels to use hazard risk mapping for land use planning.

⁸⁸ HFA progress report, p49

⁸⁹ HFA progress report, p27

Key finding 6: Land tenure and land use planning

Land tenure legislation is not a constraint for the prevention and mitigation of natural hazard risks in Viet Nam. The 2003 Law on Land provides opportunities to use land use planning as a tool for DRR, however this is not systematically applied. For more systematic and effective application of land use planning as an instrument for DRR, legislation should specify the reduction of natural hazard risks as a requirement for land use planning in disaster-prone areas at all levels. Further, there is a need to cross link the legislation on land use planning and DRR legislation. The New DRM Law does not explicitly state the need to mainstream DRR into land use planning.

3.5.3. Informal and precarious settlements

The PM's Decision on National Housing Development Strategy to 202090 includes an objective to decrease the proportion of slums and informal settlements to less than 5% and to completely erase slums and simple settlements by 2020. This Decision does not make any reference to DRR considerations. The earlier mentioned Strategy 2020 more specifically deals with the prevention and mitigation of natural hazards and the resettlement of households living in disaster-prone areas. One of the specific objectives is to "complete the relocation, arrangement and stabilization of the life of people living in disaster-prone areas according to the planning approved by authorised agencies. Up to 2020[,] manage to reallocate all people living in flash flood and landslide high risk areas and dangerous areas to safe[] places". With this is mind, Article 13 in the New DRM Law refers to the activity of "reviewing and elaborating plans on the relocation of inhabitants in areas with a very high natural disaster risk", but no further details are elaborated on the relocation issue.

Relocation practice

According to the progress report on the Strategy 2020, 80% of all provinces have prepared a master plan for relocation. The plans have identified the need to relocate 369,000 households in the period of 2006 to 2015, of which 173,000 households are located in high-risk areas and need to be relocated urgently. By 2010, 89,000 households were relocated, the majority of which are in the Mekong Delta. Seven provinces created 129 residential clusters in flood safe areas. In Nghe An province, only a few households were relocated.

The quality of the resettlement areas varies. There are those which were planned with community involvement, thus resulting in safe residential clusters which were more in line with the needs of the communities. Others resettlement areas were designed and built without involvement from the communities, with insufficient resources and were built with very little space between the houses or far from people's source of livelihoods. During the case study, there were reports in the Viet Nam News that some people in the Mekong Delta had sold their newly obtained house and moved back to their original location.

Informal and precarious settlement legislation: good practice and gaps

The relocation of people living in disaster-prone areas is one of the prevention measures that contributed to a significant reduction in the number of deaths as a result of the Mekong Delta floods in 2011, in comparison with the floods in 2001, which had similar floodwater levels. While legislation

⁹⁰ PM's Decision No. 2127/QD-TTg on National Housing Development Strategy to 2020

⁹¹ CCFSC, Progress Report on the Implementation of the National Strategy for Prevention, Mitigation and Response to 2020, (reporting period 2007-2010), p27

has contributed to this result, more fine-tuning measures are required, such as community involvement in relocation planning and the allocation of sufficient resources to create safe residential clusters for people to relocate to.

Key finding 7: Informal and precarious settlements

Legislation on relocation has contributed to the preventing and mitigating of flood risks, mainly in the Mekong Delta area, and this will be further reinforced by the New DRM Law, which contains a provision on relocation. However, additional regulations and financial resources are required to ensure that the new safe cluster areas are planned with community involvement and are in line with people's needs.

3.6. Regulation of the natural and rural environment

3.6.1. Human risks in environmental change

The 2005 Law on Environmental Protection⁹² does not contain explicit references to human risk factors or to assessments of natural hazards, but provides for environmental impact assessments for certain investments. There is no legislation, however, that explicitly requires an analysis of the possible impact of human activities on vulnerability to natural hazards within environmental impact assessments.

In the New DRM Law, most of the references to the environment deal with sanitary and hygiene issues in disaster response. A more general reference to environmental issues is made in Article 16, which deals with the mainstreaming of disaster prevention in development. In the article, it is stated that based on the results of risk assessments and mapping, the activities which should be integrated in development plans include "Identifying and implementing measures to mitigate adverse impacts on the environment and prevent the increase of natural disaster threats". This clause still does not explicitly state that environmental impact assessments should always include possible impact on disaster risks. It could however, be the basis for the development of additional legislation on this issue.

DRR is included in the PM's Decision to Approve the National Climate Change Strategy of 2011 (Climate Change Strategy). Yiet Nam is one of the countries most likely to be affected by climate change. The expected rise in sea levels will have serious impacts on low-lying areas such as the Mekong Delta, and it is predicted that extreme weather events will occur more frequently due to climate change. The rising sea water and upstream water reservoirs are already contributing to salt intrusion in some areas close to the coast. The Climate Change Strategy deals with both adaptation measures for climate change and the reduction in emission of greenhouse gases. MONRE is the leading government agency for tackling climate change issues.

The Climate Change Strategy defines 10 tasks. The first task is "Proactive Disaster Preparedness and Climate Change Monitoring". The Climate Change strategy deals with issues such as early warning for natural hazards, promoting the 'four on-the-spot' motto and implementing specific measures for effective disaster prevention, especially flash floods in mountainous areas. The second task deals with food and water security and the third with rising sea levels. The other seven tasks deal with greenhouse gas emission reduction and institutional arrangements.

⁹² Law on Environmental Protection (No. 52/2005/QH11)

⁹³ PM's Decision No. 2139/QD-TTg to Approve the National Climate Change Strategy

The New DRM Law contains several references to climate change. For example, Article 15, dealing with natural disaster prevention and control plans, states that the ministerial level plan has to include "Identifying and assessing natural disaster risks and levels of natural disaster risks that frequently occur and the impact of climate change on sectoral developments". As climate change can have a very diverse impact and the possible increase in natural disaster risks is just one of them, the New DRM Law and implementing decrees could be more explicit on the links between disaster risks and climate change.

Practice

Large infrastructural construction such as roads and water reservoirs could increase vulnerability to natural hazards. There have been cases where roads have blocked water drainage and contributed to floods, and recently a water reservoir in Quang Nam province triggered local earthquakes, damaging houses. While existing legislation does not explicitly require an assessment of the impact of the activity on vulnerability to hazards, this does not necessarily mean that vulnerability impact is not assessed in practice. The case study was not able to study the practice in more detail.

The planned disaster prevention activities in the Climate Change Strategy for which MONRE is the leading agency are largely overlapping with the Strategy 2020 for which MARD is the leading government agency. The main difference is that the prevention activities planned in the Climate Change Strategy are linked, as one could expect, to climate change, while in the Strategy 2020 the links to climate change are limited.

Human risks in environmental change: good practice and gaps

Environmental legislation could contribute more to DRR if all investments requiring environmental impact assessments also required an assessment of their impact on vulnerability to natural hazards, if situated in a disaster-prone area. For this purpose, detailed hazard risk maps need to be available.

MONRE has taken the initiative to link climate change with DRR, however the coordination and harmonisation mechanisms with the DRR initiatives of MARD are not very clear and there appear to be overlaps. The New DRM Law could contribute to better coordination and harmonisation between the sectors, provided the details on the mechanisms are effectively promulgated. The climate change capacity at MONRE could be used to mainstream climate change into DRR, for example not only by using historical flood data for risk assessment, but also considering possible future extreme weather events due to climate change.

Key finding 8: Human risks in environmental change

The Law on Environmental Protection does not make explicit references to DRR. Environmental impact assessments could contribute to DRR, if the possible impact of human activities on vulnerability to natural disasters is included in assessments in disaster-prone areas. The Climate Change Strategy includes disaster prevention as one of its core activities. However, the mechanism for coordination and harmonisation between the environmental sector that deals with climate change and other sectors involved in DRR are not sufficiently clear. The New DRM Law refers to climate change, but additional legislation will be needed to provide more details on the links between DRR and climate change.

3.6.2. Forest management and exploitation

The 2004 Law on Forest Protection and Development⁹⁴ (Forest Law) provides for the management, protection, development and use of forests and forest rights and obligations. In Article 4, forests are classified under four categories including "Protection forest", which is defined as forests "which are used mainly to protect water sources and land, prevent erosion and desertification, restrict natural calamities and regulate climate...". However the law does not contain any other reference to natural disasters. The 2006 Decree on the Implementation of the Law on Forest Protection and Development⁹⁵ lays down the primary responsibility for forest management and protection with MARD.

Articles 29 and 30 of the Forest Law provide for the assignment of forests to village population communities and their rights and obligations respectively. Village population communities that have a close community association with forests in their production, life, culture and belief and are capable of managing forests can be assigned forests by the PCs of rural or urban districts, provincial town or cities. Village population communities are defined as "all households and individuals living in the same village, hamlet or equivalent unit". Forests are also assigned to households, PCs, private and state organisations.⁹⁶

The Decree on Handling of Law Violations in the Domain of Environmental Protection issued by the government in 2009⁹⁷ addresses the violation of regulations on sea environment protection in Article 23, and also stipulates fines for violations of the protection of mangrove forests.

Practice

The case study looked into the practice of management and exploitation of mangrove forests. Mangroves play an important role in the protection against storms and floods along coastal areas. Mangroves break waves before they reach sea dykes and also contribute to the livelihood of coastal communities. There has been a strong decline in mangrove forests in previous decades. Despite awareness-raising on the importance of mangroves for DRR, areas planted with mangroves have been destroyed for seafood farming or other economic developments. In the 1990's, VNRC with support from National Societies, IFRC and other organisations supported the planting of mangrove trees to protect the coast and provide an income source for poor households from aquaculture. The lack of legislation on the protection and management of mangrove forests, however, was an issue from the start of the mangrove planting programmes.

Since 2009 and the adoption of the Decree on Handling of Law Violations in the Domain of Environmental Protection, there have been several criminal court cases involving individuals who have illegally cut mangrove forests to establish shrimp farms.

The Dien Ngoc and Dien Bich communes in Nghe An province have participated in VNRC's mangrove planting programme with support from the Japanese Red Cross Society since 1997. The mangrove trees have reached a height of 2 meters or more and cover a wide area protecting the sea dykes. The PCs of the communes are assigned to manage and protect the mangroves in their area. The PCs

- 94 Law on Forest Protection and Development (No. 29/2004/QH)
- 95 Decree No. 80/2006/ND-CP, Detailing and Guiding the Implementation of a Number of Articles in the Law on Environment Protection
- 96 Slady Hawkins, et al, *Roots in the Water: Legal Framework for Mangrove PES in Viet Nam*, Country Study Series, Forest Trends, Katoomba Group's Legal Initiative (Washington DC, USA, 2010), available at *www.fao.org*
- 97 Government Decree No. 117/2009/ND-CP on the Handling of Law Violations in the Domain of Environmental Protection
- 98 IFRC, Breaking the Waves: Impact Analysis on Coastal Afforestation for Disaster Risk Reduction (2011)

receive a small budget from the DARD to employ part-time forest guards to protect the mangrove forest in the commune. The cutting or harvesting of mangrove trees is strictly forbidden in both communes. In one commune, all members are free to harvest the natural seafood, while in another, people were not allowed to enter the forest at all. Dien Bich has 80 ha of mangrove forest and the PC has assigned four guards to protect it, however, they face the difficulty in overseeing this large area without watch towers. While awareness in the community on the importance of mangrove forests is high, not everybody is yet convinced of the benefits.

Forest management and exploitation: good practice and gaps

Legislation on forestry has played an important role in the protection of forests. The protection of mangrove forests which were planted by VNRC was a challenge before the introduction on the legislation. In particular, the 2009 Decree forms a crucial instrument to maintain the protection of forests by creating a legally enforceable obligation. However, there are still challenges ahead. While MARD is responsible for the protection of forests, MONRE is responsible for the management of land. 99 The implementation of land use planning by MONRE has been mainly instrumental for economic development, however, the mainstreaming of DRR into land use planning will also be essential for the protection of mangrove forests. The only reference the New DRM Law makes to forests can be found under prohibitive acts which includes "cutting down protection forest".

Key finding 9: Forest management and exploitation

The law and decree on forestry contribute to the protection of forests, including mangroves. The law, decree and legislation on handling violations have contributed to the sustainability of planted mangrove forests, which protect sea dykes and coastal communities.

There are still challenges such as limited resources at MARD for the effective protection of forests. DRR will have to be mainstreamed into land use planning to ensure that economic development and prevention measures such as mangrove protection are properly balanced. Again this would require clear coordination and harmonisation mechanisms between MARD and MONRE. The New DRM Law provides the mandate to the CSCNDPC to handle the task of interdisciplinary coordination. Further guidance will be required to provide details on the coordination and harmonisation between MARD and MONRE.

3.6.3. Drought and food security

Irrigation has a long history in Viet Nam in preventing and mitigating drought in the agriculture sector. The Viet Nam Government website on Legal Normative Documents lists 51 documents related to legislation for irrigation. 100 There is, for example, the Ordinance on the Exploitation and Protection of Irrigation Works and its amendments. 101 The complexity of irrigation and its relation to DRR justifies a separate study.

⁹⁹ Slady Hawkins, et al, *Roots in the Water: Legal Framework for Mangrove PES in Viet Nam,* Country Study Series, Forest Trends, Katoomba Group's Legal Initiative (Washington DC, USA, 2010), available at *www.fao.org*

¹⁰⁰ Legal Normative Documents website, searched on "irrigation", available at www.vbqppl.moj.gov.vn (last accessed on 7 February 2013)

¹⁰¹ Ordinance No. 32/2001/PL-UBTVQH10 on the Exploitation and Protection of Irrigation Works (4 April 2001)

Food security is regulated in two key documents: The Resolution on National Food Security issued by the government in 2009¹⁰² (Food Security Resolution); and the Decision on the Establishment of National Committee for Food Security of 1997. The Food Security Resolution states as a general objective "By 2020 with a vision towards 2030, to ensure adequate food supply sources with an output higher than the population growth rate; to put an end to food shortage and hunger and raise meal quality; to ensure that rice producers earn profits average more than 30% over production costs". The Resolution prescribes that "In order to ensure national food security, by 2020 and a vision towards 2030, the rice land acreage shall be kept at 3.8 million ha, including 3.2 million ha of land under two or more rice crops a year with complete irrigation works". The Food Security Resolution further plans "to expeditiously complete the construction of systems of warehouses for food reserves and preservation in rice production regions, ensuring a rice and paddy reserve of 4 million tons". Additionally, it contains provisions on scientific and technological development and application, for issues such as development of high-yield crops, high-quality crops resistant to salinization, drought and water logging, and disease-free production zones and fisheries.

The Food Security Resolution also includes an article on social policies for food security. It commits "to continue with policies of providing rice export for people in regions struck by food shortage and hunger due to natural disasters and epidemics". Chapter 5 states that "[t]he Ministry of Finance shall study and propose reasonable rice volumes for national reserve and for circulation reserve in case of natural disasters and for market stabilization". The Decision establishes the National Food Security Committee which is responsible for the coordination of different organisations at all levels in the implementation of national policies on food security. The Committee is chaired by MARD and together with several relevant ministries, the Viet Nam Farmers Association and the VWU are also members of the Committee.

Practice

Drought is mainly an issue in the areas where agriculture is still rain-fed and no irrigation is available. Rice is the staple food in Viet Nam and despite the high local consumption, Viet Nam is the second largest rice exporter in the world. There has not been a shortage of food nationwide for a long period of time. Most of the rice is produced in the Red River Delta in the north and the Mekong Delta in the south, which have extensive irrigation networks. Drought can hit the central Viet Nam and mountainous areas. While many farmers have coping mechanisms to overcome a drought, vulnerable groups can sometimes adopt negative coping mechanisms, such as incurring serious debts. Legislation contributes to maintaining high rice production levels, expanding the areas under irrigation and building a safety network for those who have no access to food. Arguably, as a result of these measures, nobody starves in Viet Nam from insufficient access to food. Due to the high level of food security, the World Food Programme has withdrawn its office from Viet Nam. Malnutrition is still present, particularly among children in rural areas, but the rate of the population affected by malnutrition is gradually reducing, while the rate of obesity in urban areas is growing fast.

Drought and food security: good practice and gaps

Irrigation does contribute to reducing drought risks in the agricultural sector. Irrigation has strong links with other infrastructural works related to floods, such as dykes, water reservoirs, canals and drainage systems. Irrigation itself is also vulnerable to floods and all serious floods in Viet Nam have caused damage to the irrigation systems. This study is limited in its scope to assess how irrigation legislation contributes to the reduction of drought risk and how legislation on irrigation

102 Government Resolution No. 63/NQ-CP on National Food Security (23 December 2009)

infrastructure can positively and adversely impact floods. Another issue worth studying is the extent to which legislation has contributed to the initiatives of "build back better" after irrigation works were destroyed by floods.

There is a high level of food security in Viet Nam, though it is admittedly difficult to definitively establish the extent to which legislation on food security has contributed to this. Legislation on the agricultural sector is very much related to food security and this sector has produced sufficient quantities of food for national consumption and a surplus on rice that is exported. The legislation on national food reserves and on the social safety net contributes to the high levels of access to food in Viet Nam

Drought is mentioned in the list of natural disasters in the New DRM Law. In Article 26 dealing with methods to respond to natural disasters, basic measures are outlined to respond to drought and seawater intrusion. These measures relate to agriculture, rational operation of water reservoirs and supply, prioritising supplies for pumping stations and appropriate regulation of the closure and opening of sluices.

The New DRM Law also addresses food relief in disaster situations. Long-term food security remains outside the scope of the New DRM Law and is dealt with in separate laws and regulations. The same applies for the legal framework for irrigation.

Key finding 10: Drought and food security

Viet Nam has a high level of food security. The agricultural sector produces sufficient quantities of food for domestic consumption and export. Legislation on food security contributes to maintaining national food reserves and legislation on safety nets contribute to the fact that nobody starves in Viet Nam due to insufficient access to food. Malnutrition however, remains an issue in particular among children in rural areas, although the rate is gradually being reduced.

3.7. DRR education and awareness

The 1993 Ordinance contained provisions to warn households if there was an immediate risk of a disaster. There were no provisions in the Ordinance, however, requiring DRR education to be taught in schools or requiring awareness-raising in communities, nor does the Law on Education of 2005¹⁰³ call for the inclusion of DRR awareness in the school curriculum. Despite these gaps, a number of provisions were included in the CBDRM 1002 Decision and Strategy 2020. One of key objectives of the CBDRM 1002 Decision is to improve community awareness. It aims to disseminate knowledge about flood and storm prevention and control, and natural disaster mitigation to 70% of the population in communes in disaster-prone areas. It further stipulates that the Ministry of Education and Training (MOET) is responsible for working in collaboration with MARD and CCFSC to prepare teaching materials that integrate disaster prevention, response and mitigation into formal curriculum or extracurricular activities at primary and high schools levels. 104

Strategy 2020 calls for the inclusion of basic knowledge about natural disaster prevention, response and mitigation into the school curriculum. To this end, Strategy 2020 Decision assigns to MOET a programme designed to include knowledge related to natural disasters into the curricula of secondary schools from 2007 to 2020. It also encourages the promotion of "activities for information dissemination, education, awareness and disaster response capacity building for communities". The Decision stipulates a programme to "conduct training on natural disasters for communities living in disaster-prone areas".

MOET, with the support of UNICEF, has prepared an action plan for the implementation of Strategy 2020, which is enforced by a decision 105 issued by MOET. The specific objectives of the plan are:

- "a) By 2015, 100% of staff and officers of education management agencies and managers of education establishments will have high awareness on natural disaster prevention, control and mitigation. By 2020, dissemination of information and awareness-raising for education establishments and communities in particularly vulnerable areas will have been accomplished so that officers, teachers, students and communities understand and know how to respond to natural disasters.
- b) By 2020, training on capacity building on natural disaster prevention, control and mitigation will have been conducted for 100% of managers of education establishment and staff in charge of natural disaster response in the education sector. By 2015, 100% of education establishments in particularly vulnerable areas have established a work plan to prevent, control and mitigate natural disasters. A Steering Board for natural disaster prevention, control and mitigation will provide skills and knowledge on natural disaster prevention, control and mitigation as well as an effective communication system.
- c) By 2015, the integration of basic knowledge on natural disaster prevention, control and mitigation into education programmes and extra-curricular activities will have been accomplished. From the year 2016, all activities will be conducted in accordance with the specific work plan of MOET.
- d) By 2015, the organisation of training courses for natural disaster prevention, control and mitigation will have been accomplished.
- e) By 2012, the study and design of natural disaster courses will have been accomplished; by 2015, pilot natural disaster prevention, control and mitigation courses will have been accomplished in some selected areas; from 2016 to 2020, a universal model of natural disaster prevention, control and mitigation will have been applied in accordance with the specific work plan of MOET".

While the plan does not include a budget for its implementation, it lists several financial resources for implementation. The main sources mentioned are the state budget, contingency budget of MOET (accounting for 1% to 3%), MOET budget for administrative costs for management and urgent support, foreign development assistance and contributions from domestic organisations and individuals.

The New DRM Law includes a number of progressive provisions on DRR education and awareness. Article 21 of the New DRM Law which addresses Information, Communication and Education (ICE) on natural disaster management, states that:

"Information, communication and education about natural disaster prevention and control aim to provide knowledge about types of natural disasters, impacts of natural disasters, measures to prevent and control natural disasters, responsibilities of organisations and individuals in natural disaster prevention and control activities and relevant laws".

¹⁰⁵ Decision No. 4068/QD-BGDDT on the Promulgation of the Action Plan to Implement the National Strategy on Natural Disaster Prevention, Control and Mitigation in the Education Sector in the 2011 -2020 period

It lists a wide scope of media channels to conduct ICE for different target groups. The New DRM Law also contains a provision to integrate natural disaster prevention and control knowledge into the curricula at all educational levels. 106

Several ministries are responsible for the implementation of ICE. MARD is responsible for DRR awareness among the public, while MOET is responsible for the integration of DRR in educational curricula. The Ministry of Information and Communication (MOIC) shall "direct and guide mass media agencies in conducting information and communication about natural disaster prevention and control".

Practice

The practice of DRR education and awareness-raising dates back to the 1990s, when VNRC with the support of IFRC implemented awareness-raising measures among the public and introduced DRR education at schools. The number of child fatalities during floods was relatively high and this was partly due to the fact that children were insufficiently aware of the dangers of floods. VNRC's programme developed materials and posters for public education, prepared illustrated education materials for primary schools and trained a core group of trainers. Since this initiative was launched, many other projects have been initiated on awareness-creation and DRR education, supported by Save the Children and other INGOs, and often mainstreamed into CBDRM projects. These projects have resulted in the development of curricula on DRR education and various teaching materials, the training of trainers and teachers, and the delivery of DRR education to many children in disaster-prone areas in cooperation with MOET. DRR education is also integrated into subjects like geography, civic education and extra-curricular activities.

According to interviewees, MOET considers all foreign-funded projects as pilots from which lessons learnt can be used for the improvement of DRR education. MOET intends to mainstream DRR into the education sector at all levels, with its potential reach of 25 million youths through its education system. It also plans to develop the DRR curricula and teaching materials based on materials developed by earlier initiatives and from experiences in neighbouring countries. MOET places a high priority on DRR education and plans not only to target pupils and students, but also sees a clear role for schools and staff to play in increasing awareness in the communities where the schools are located. In order to achieve this goal, additional funds are required, such as funds to print educational materials and train teachers, who will need additional remuneration to run these community extracurricular activities.

DRR education projects, among other measures, have proven to be effective during the recent floods in the Mekong delta. This can be seen through the significant reduction in the number of children who drowned or were missing as a result of the floods. 107

Despite the references to the state budget in the MOET Action Plan Decision, MOET has not been able to access funding from that avenue, and the implementation of the Action Plan is behind schedule due to these funding constraints, mainly at the local level. According to MOET, the relevant decisions were insufficient to authorise it to access funds from the state budget. This gap is partly addressed in the New DRM Law, which provides a clear mandate to MOET to mainstream DRR into the education curricula. However, the New DRM Law does not designate a role for MOET in increasing awareness in communities, for which the responsibility lies with MARD.

¹⁰⁶ Law on Natural Disaster Prevention and Control (No. 33/2013/QH13), article 21 (3c)

¹⁰⁷ CCFSC, Progress Report on the Implementation of the National Strategy for Prevention, Mitigation and Response to 2020, (reporting period 2007-2010)

MOET places a high priority on safe school buildings that are resilient to natural hazards such as floods, storms, earthquakes and fires. MOC and MOET are working together to develop a resilience model, and new, more resilient schools are already being built in some areas, though not in all. The application of resilient building codes requires expertise, additional resources and precise information on the risks present at construction locations from an authorised government agency, all of which are not always available at local levels. The New DRM Law contains provisions requiring the construction works of all ministries to be disaster-resilient, including school buildings under the management of MOET. 108 More detailed regulations will be required to implement this effectively.

UNICEF and MOET have expressed concerns that dual-purpose requirements which would enable schools to serve as evacuation centres might interrupt school programmes for excessively long periods. In the central coastal area, floods normally last for only a few days to two weeks, while in the Mekong delta, floods can last for several months.

The mass media also plays an important role in raising awareness among the public. Besides providing warnings at the onset of a natural hazard, they can run programmes aimed at raising community awareness on DRR, a particular example being the Voice of Viet Nam, which has broadcasted many radio programmes on DRR.

DRR awareness and education: good practice and gaps

The CBDRM 1002 Scheme and Strategy 2020 have provided a legal framework underscoring the importance of mass media engagement, community awareness and DRR education at schools. MOET's plan of action also provides a good strategic framework for projects in DRR education, although there is insufficient funding for implementation at local level. Legislation to ensure the sustainability of the various projects in DRR was previously lacking. However, the main legal constraint ceased to exist when the New DRM Law came into force, as it provides a clear mandate for MOET to mainstream DRR into education. The law and promulgation of the law will also likely enable MOET to access the state budget to finance DRR education.

Key finding 11: DRR awareness and education

In Viet Nam, there is a legal framework which contributes to the implementation of DRR awareness and education on a project basis. However, the previous legal framework was insufficient to mainstream DRR into the curriculum of the education system in Viet Nam. MOET can only access the necessary resources from the state budget for the mainstreaming of DRR into education if there is a provision in the law that designates the responsibility for DRR education to MOET. While the New DRM Law contains such a provision, more detailed regulations will be required to effectively implement DRR education and to promote the construction of disaster-resilient school buildings.

4. Conclusions and observations

- 4.1. Good practices and examples
- 4.2. Gaps in the legal framework for DRR
- 4.3. Effectiveness of community level implementation
- 4.4. Conclusion: How law and regulation support DRR in Viet Nam

4. Conclusions and observations

4.1. Good practices and examples

The legal framework for DRR in Viet Nam is complex. Prior to the adoption of the New DRM Law, there was no standalone legal instrument addressing the prevention, response to and mitigation of the impact of natural hazards. However, while the New DRM Law has brought specific regulation of disaster risk management activities under one law, the legal framework pertaining to DRR remains spread over a range of laws, amendments, ordinances, decrees, decisions and circulars. There has been a continuous upgrading underway, which has resulted in the amendment of laws and ordinances, and the issuance of additional decrees, decisions and circulars providing further details for their implementation. While this results in improvements, such a diversity of instruments also makes the legislation less accessible, despite the fact that the Viet Nam Government has published all the relevant laws and regulations on their official websites and most legislation is translated into English for external stakeholders. The New DRM Law integrates most of the legal issues related to DRR and will significantly improve access to legislation that supports DRR. However, there are still several DRR issues that are mainly regulated outside the New DRM Law, such as regulations concerning dykes, forest fires, food security and urban water supply.

The good practices in the currently operational legal framework are maintained in the New DRM Law. A good practice which can be emulated by other countries is the establishment of the CCFSC, the Central Committee for Search and Rescue at the national level, and integrated committees at the provincial, district and commune levels. All relevant government agencies and VNRC are members of these committees. Despite what their names suggest, these committees are no longer only responsible for DRR regarding storms and floods, but also for earthquakes and tsunamis. The CFSC&SRs play an important role in the coordination of prevention activities of different government sectors if a hazard is forecasted, early warning systems and disaster response and recovery. The New DRM Law will maintain these responsibilities for the new CSCNDPC and provide a wider mandate for long-term prevention.

This pre-existing legal framework has made it possible to mobilise labour, equipment and materials required for short-term prevention and response from organisations and individuals. It has enabled the CFSC&SR to arrange the evacuation of people and their property from high-risk areas under short notice, when storms or floods are forecasted. It has also provided the legal means to mobilise resources for emergency repairs on structural works to prevent the impact of floods.

The legal framework is also crucial for the early warning system for floods, storms and tsunamis. There is a clear division of tasks for early warning between MONRE and MARD. MONRE is responsible for forecasting hazards and communicating information regularly to CCFSC and the mass media. CCFSC will decide whether a warning will be given, and MARD, where the standing office of CCFSC is based, will provide warnings through the CFSC&SR channels. These warnings will not only provide information on the hazards, but also on measures to be taken to reduce their impact, such as calling back all boats at sea. The mass media are legally obliged to broadcast warnings on floods, storms and tsunamis provided by MONRE. These good practices are all maintained in the New DRM Law.

Another good practice is the legal framework for structural works to prevent the impact of floods and storms. The Law on Dykes and Strategy 2020 has contributed to structural prevention measures

such as sea and river dyke constructions, water reservoirs and drainages. Water reservoirs upstream and dykes in the delta have significantly reduced the risk of flooding in the Red River Delta in the north of Viet Nam.

In the south of Viet Nam in the Mekong Delta, structural works such as dykes, drainage and safe shelters, combined with non-structural measures have significantly reduced the impact of natural disasters. The non-structural measures which contributed to this are DRR awareness and education, timely evacuations, childcare centres to prevent children playing in the water without guardians, and relocation of people living in dangerous areas. According to MARD, while the flood level in the Mekong Delta in 2011 was similar to that in 2000, there were only 60 people recorded as dead or missing in 2011, compared to 600 in 2000.

Another good practice is the law and regulation protecting mangrove forests. Before the introduction of the pertinent laws, planted mangrove forests were occasionally transformed into seafood farms. The enactment of the Forest Law and the Decree on Handling Environmental Violations provided the instruments to stop the destruction of mangrove forests, which protect sea dykes and coastal areas.

Good practices are achieved in those areas which have been supported by laws over a longer period. Structural measures to prevent and mitigate floods and storms, evacuations, early warning systems and disaster response have a long history of being addressed by legislation. The measures are laid down in laws and decrees, while decisions and circulars have provided more details for implementation. These legal instruments also provide access to state and local level financial resources. However, much less progress has been achieved in areas which are only covered by lower legal instruments, such as the decisions for Strategy 2020 and CBDRM 1002, which deal with relatively new activities. Significantly less progress has also been made in the prevention and mitigation of earthquakes in the construction sector, improving DRR awareness and education, and CBDRM. To date, good practices in these areas have mainly been supported by foreign development assistance and not by the state budget.

The good practices in DRR that are funded by the Viet Nam state budget and local budgets are supported by legal frameworks that share the following common characteristics:

- The law clearly regulates the specific DRR tasks and responsibilities for each government agency or other stakeholders involved at national and local levels and the coordination between these agencies.
- The law has a provision on financial resources for DRR activities.
- The law lays down the sanctions for violations of the law and rewards for those who abide by it.
- The law is followed up by decrees, decisions and circulars that provide details for its implementation, including the allocation of financial resources for DRR activities.
- The law is regularly updated through amendments to adjust to new insights and developments.

The legal instruments that have been in place for early warning systems for floods and storms also have all the above characteristics. Although there is still room for improvement, this system can be considered an example of good practice. Activities that are regulated by secondary legislation such as decisions, are less systematically implemented, for example, DRR education programmes, the integration of DRR into socioeconomic development plans, or building codes for resilient construction. The New DRM Law fortunately addresses many these legal constraints.

4.2. Gaps in the legal framework for DRR

There are several areas in which the current legal framework could be further improved. As noted above, the legal framework is spread over a collection of laws, ordinances, decrees, and decisions, making it complex and difficult to access. The fragmented and dispersed nature of the legal framework was the main impetus for the drafting of the New DRM Law, though it has not superseded all of the relevant instruments.

Although a number of gaps were covered in the New DRM Law, there remain several issues which are not yet sufficiently addressed:

- Institutional arrangements such as the mechanism for coordination and harmonisation between different government sectors, in particular the mechanisms between MARD and MONRE for prevention and mitigation activities will need to be promulgated in additional regulations.
- Manmade disasters are not included.
- The terminology deviates from international practice.
- There is no provision explicitly requiring DRR to be mainstreamed into land use planning, only indirectly through the provision on mainstreaming DRR into socio-economic development planning.
- The link between climate change adaptation and DRR is not clearly integrated.
- There is no link between forest fire legislation and the DRR legal framework, neither is there a link with food security, though drought is listed as a natural hazard.

The final article in the New DRM Law states that "The Government shall detail and guide the implementation of articles and clauses of the Law as assigned". Additional regulations will be required to further stipulate the coordination mechanisms between different government agencies, the allocation of financial resources and sanctions and rewards.

4.3. Effectiveness of community level implementation

The 'four on-the-spot' motto which includes "leadership on-the spot, forces on-the-spot, means and materials on-the-spot" was included in the Vietnamese legal framework long before CBDRM initiatives became a more common approach. The 'four on-the-spot' motto mainly refers to the local government level, but also to household level. The PCs of the commune and the commune CFSC&SR are the lowest government levels to implement the 'four on-the-spot' motto. The motto is mainly applied in the prevention of the impact of disasters, if a storm or flood is forecasted and in disaster response. The CFSC&SR will reach out to communities through a network of village leaders and representatives of mass organisations.

More systematic community-based approaches, higher priority on long-term prevention and mitigation, and stronger emphasis on community participation were promoted by VNRC with support from IFRC and National Societies in the 1990s. Several INGOs also supported CBDRM in cooperation with local government and mass organisations. Due to the fact that most of these initiatives targeted a limited number of disaster-prone communes, this created "islands of excellence", leaving large disaster-prone geographical areas of the country uncovered.

The Viet Nam Government, realising the potential value-added of CBDRM approaches, launched the CBDRM 1002 Scheme, which was legalised by a PM's Decision. This Decision targets 6,000 communes,

more than half the communes in Viet Nam. UNDP is currently supporting this initiative by providing technical assistance. Besides the state budget and local government funds, the CBDRM 1002 Scheme foresees a continuation of support from VNRC, their partners and other INGOs. It also provides a legal framework for the support and contributes to the harmonisation of various approaches.

The Viet Nam Government still has insufficient capacity to implement the CBDRM 1002 Scheme at all government levels, but is building this capacity with technical and financial support from UNDP. Once local government capacity in CBDRM has been strengthened with assistance from VNRC, there are plans to conduct CBDRM initiatives on a full scale at the community level. The New DRM Law contains a provision on the "four on-the-spot" motto, and also contains provisions on community awareness-raising and DRR at the commune level.

4.4. Conclusion: How law and regulation support DRR in Viet Nam

Laws and regulations are crucial for DRR in Viet Nam. Good DRR practices in the country have been supported by a legal framework developed over a long period, which provides details on the institutional framework, implementation methods and allocation of financial resources. Legislation has contributed to good practices in areas such as early warning systems and structural measures against floods and storms. In other areas with less developed legal instruments, the DRR achievements have relatively lagged behind. For example, building codes are insufficiently enforced and land use planning could be utilised more as a tool for DRR. The limited progress in DRR from one sector to another is strongly related to the laws and regulations for DRR institutions, which in turn can only be modified through amendments in the legal framework.

In order to close the gaps in DRR practice, it will also be essential to close any existing gaps in the legal framework. Although laws and regulations are not a panacea, in order to achieve sustainable, sector-wide and nationwide results in DRR, the full incorporation of DRR principles into the national legal framework is important. The New DRM Law offers a very promising new start in that respect.

Annex I – List of principal contacts made in Hanoi

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Viet Nam Red Cross Society

Mr. Doan Van Thai Vice President, Secretary General

Mr. Vu Van Loc Director Disaster Management Department

IFRC Delegation Hanoi

Mr. Pascal Boucher Programme Coordinator, Safety and Resilience Mr. Dang Van Tao Programme Manager Disaster Risk Reduction

UNDP

Dr. Ian Wilderspin Formerly, Technical Specialist Disaster Risk Management UNDP

Viet Nam (currently DRR/CCA Adviser American Red Cross, Viet Nam)

Ms. Bui Viet Hien Programme Officer, Disaster Risk Management

Mr. Phan Manh Tuan Law consultant Mr. Dao Trong Tu Law consultant

Ministry of Agriculture and Rural Development (MARD)

Mr. Nguyen Xuan Dieu Deputy Director General, General Directorate of Water Resources

Mr. Dang Quang Minh Deputy Director, Disaster Management Centre

Ministry of Education and Training (MOET)

Mr. Pham Hung Anh Deputy Director General, Department of Infrastructure and School

equipment and children toys

World Bank

Mr. Dzung Huy Nguyen Disaster Risk Management Specialist

Food and Agriculture Organisation (FAO)

Mr. Ken Shimizu Operations Coordinator
Ms. Heini Utunen Programme Officer

UNICEF

Ms. Le Thi Minh Chau Education Specialist System Strengthening

Other National Red Cross Societies

Mr. Frank Küppers Country Representative, German Red Cross

Ms. Kara Devonna Sihaan DRR coordinator, German Red Cross

Mr.Paul van der Laan Country Representative, Netherlands Red Cross Society

Mr. Hoang Gia Yen Senior Program Officer, American Red Cross

INGOs

Mr. Le Van Duong National Humanitarian and Emergency Affairs Coordinator,

World Vision

Mr. Provash Mondal DRR specialist, Oxfam GB

Annex II – Key informants in Nghe An Province

Annex II – Key informants in Nghe An Province

No	Level	Location	Department	Position	Name	Title
1	Province	Nghe An	Hydro-meteorological forecasting	Vice Director	Nguyen Xuan Chinh	Mr
2	Province	Nghe An	Storm and Flood Control	Vice Director	Le Dinh Long	Mr
3	Province	Nghe An	Industry and Trade	Staff	Nguyen Thi Quynh Phuong	Ms
4	Province	Nghe An	Red Cross	Chairman	Bui Thi Mai	Ms
5	Province	Nghe An	Red Cross	Vice Chairman	Vo Dinh Vinh	Mr
6	Province	Nghe An	Red Cross	Vice Chairman	Le Thu Hien	Ms
7	District	Dien Chau	Red Cross	Chairman	Phan Thi Nguyen	Ms
8	District	Dien Chau	Red Cross	Vice Chairman	Nguyen Xuan Tho	Mr
9	District	Dien Chau	People's Committee	Office Manager	Pham Xuan Sanh	Mr
10	District	Dien Chau	People's Committee	Vice Office Manager	Tran Nguyen	Mr
11	District	Dien Chau	Storm and Flood Control, DARD	Vice Director	Cao Van Thai	Mr
12	District	Dien Chau	Industry and Trade, Construction, Transportation	Director	Hoang Van Ba	Mr
13	District	Dien Chau	Natural Resources and Environment	Director	Le Van Thuan	Mr
14	Commune	Dien Ngoc	People's Committee	Chairman	Dau Xuan Thuy	Mr
15	Commune	Dien Ngoc	Communist Party	Secretary	Nguyen Van Hoa	Mr
16	Commune	Dien Ngoc	People's Committee	Vice Chairman	Nguyen Van Dung	Mr
17	Commune	Dien Ngoc	Red Cross	Chairman	Nguyen Hai Au	Mr
18	Commune	Dien Ngoc	Red Cross	Vice Chairman	Nguyen Thi Mao	Ms
19	Commune	Dien Bich	Red Cross	Chairman	Vu Hong Ngon	Mr
20	Commune	Dien Bich	Red Cross	Vice Chairman	Le Viet Long	Mr
21	Commune	Dien Bich	People's Committee	Vice Chairman	Thach Dinh Nghia	Mr
22	Commune	Dien Bich	Communist Party	Secretary	Nguyen Viet Man	Mr

70



Annex III - Bibliography

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